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NAVAL WAR COLLEGE REVIEW

Spring 2003 Volume LVI, Number 2



Cover

Our painting of the centerboard sloop Shamrock, ca. 1890, sets the tone for our lead article by Dr. John Hattendorf examining the development and current status of the sometimes uneasy relationship between the U.S. Navy and maritime (including naval) history. It also signals the commitment of the Naval War College to the study of history—as recently evidenced by the foundation of a Maritime History Department, with Professor Hattendorf at its head.

Shamrock itself, built for the well-known yachtsman J. Roger Maxwell in 1887 by John Mumm, was one of the first vessels built to the New York Yacht Club's specifications for Class One. The vessel had an overall length of seventy-seven feet three inches, a waterline length of sixty-eight feet six inches, a beam of nineteen feet seven inches, and a draft of eight feet five inches. Shamrock was listed in the New York Yacht Club Register from 1888 to 1894. The artist is unknown, but the painting may be an original or a copy of a work by either James E. Buttersworth (1817-94) or Elisha Taylor Baker (died 1890).

Mr. and Mrs. Robert G. Morrison of White Springs, Florida, donated the painting to the Naval War College Foundation in 2000, to be placed on permanent loan to the College.

NAVAL WAR COLLEGE REVIEW

Spring 2003 Volume LVI, Number 2





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History in the Navy

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John B. Hattendorf

Maritime and naval history serve the needs of several "audiences" in and around the Navy. However, the service's approach to naval history is "disjointed, sporadic, [and] inconsistent." Despite various initiatives and widespread interest, the Navy lacks an integrated policy for employing naval history, and high-level interest will be required to make history the valuable resource it could and should be.

Fighting at and from the Sea

Certain classic functions of navies have disappeared (for the time being at least), others have changed, and a few new ones have emerged. In the new conditions, navies at war will strive to make sure that friendly ships and aircraft can get where they are needed when they are needed, and that those of the enemy cannot do these things. Furthermore, as occasion demands, navies will land forces, when possible in friendly ports, if necessary on or over hostile shores, and support them then and thereafter with fire and logistics.

Ethics and Law in Time of Conflict

Michael Ignatieff

The United States—the most carefree, happiest empire in history—now confronts the question of whether it can escape Rome's fate. The challenge can be localized, for a moment in Afghanistan, then in Iraq, but it is global in character. This nation has no choice but to exercise its imperial power, and how it does so will shape the emerging world order and test its own legitimacy as a democratic society.

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Regional commanders and their staffs must be vigilant to ensure that they attack only targets that are legal under the law of war, and only in legal ways. They must be equally vigilant, however, against nongovernmental activists who would so reinterpret the law as to make their tasks much more difficult, even impossible.

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The ability of Canadian warships to operate in U.S. aircraft carrier battle groups demonstrates that coalition network-centric naval warfare is possible. It has also shown, however, that the price of admission for coalition navies is high, in terms of technical interoperability, professional trust, and policy—above all, with respect to information transfer.

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Technological improvement is important but, pursued in isolation, will lead only so far. If we focus exclusively on technology, we will fail. Technological and conceptual change must be integrated in a manner consistent with the enduring nature of war—characterized by essentially dispersed information, chaos, complexity, nonlinearity, and uncertainty.

Research & Debate

At their most abstract, U.S. national interests are simple: to ensure the security and prosperity of the American people in the global environment. But distinguishing core strategic interests—those for which Americans would be willing to die—from significant interests that *might* require commitment of treasure, blood, time, and energy is almost never easy.

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The "President's Day Storm," 2003

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FROM THE EDITOR-IN-CHIEF

It is a great pleasure to announce that the present issue is the first to have been prepared under the supervision of a new editor of the Naval War College Press, Dr. Catherine McArdle Kelleher.

This is also an occasion for recalling the almost ten years of dedicated service of her predecessor, Dr. Thomas B. Grassey. Under Tom's editorship this journal underwent extensive changes: most conspicuous is a complete typographical redesign that first appeared in Autumn 2000; in 1996, the Naval War College Press, which publishes the *Review*, established itself on the World Wide Web; and shifts in editorial direction were made to support more closely the mission of the College and the needs of the Navy in the new century. A gifted teacher in the field of moral philosophy, Professor Grassey has been asked by the President of the Naval War College to become the College's first Chair of Ethics and Leadership.

I am delighted that Dr. Kelleher, of our Strategic Research Department, has agreed to oversee the Press. I can give here only an idea of her nearly four decades of impressive scholarship and public service: she has been director of the Aspen Institute Berlin, a deputy assistant secretary of defense, the Secretary of Defense's Personal Representative in Europe, defense advisor to the U.S. ambassador to NATO, a senior fellow at the Brookings Institution, and has taught at the Universities of Maryland and Denver, as well as the Naval War College, besides authoring and editing scores of substantive books and articles, and becoming recognized as a leader among women in the field of international security studies. We are truly privileged to have Catherine's exceptional abilities and experience available to us.

I am sure our readers join me in expressing thanks to Dr. Grassey and gratitude to Dr. Kelleher for overseeing the Press and *Review* at this important juncture.

man

ALBERTO R. COLL Dean of Naval Warfare Studies and Editor-in-Chief

Naval Academy. Initial assignments included deployments to Vietnam aboard USS Coontz (DLG 9) and USS Somers (DDG 34). He later commanded USS Antelope (PG 86), USS Callaghan (DDG 994), and USS Bunker Hill (CG 52). Among his shore assignments were the Naval Sea Systems Command as the initial project officer for the Mark 41 Vertical Launch System; Chief of Naval Operations (CNO) staff as the Aegis Weapon System program coordinator; director of the Prospective Commanding Officer/Executive Officer Department, Surface Warfare Officers Schools Command; and Director, Anti-Air Warfare Requirements Division (OP-75) on the CNO's staff. Rear Admiral Rempt also served in the Ballistic Missile Defense Organization, where he initiated development of Naval Theater Ballistic Missile Defense, continuing those efforts as Director, Theater Air Defense on the CNO's staff. More recently, he was Program Executive Officer, Theater Air Defense, the first Deputy Assistant Secretary of the Navy for Theater Combat Systems, the first Assistant Chief of Naval Operations for Missile Defense, and Director, Surface Warfare (N76) on the CNO's staff. Rear Admiral Rempt assumed duties as the forty-eighth President of the Naval War College on 22 August 2001.

Rear Admiral Rempt is a 1966 graduate of the U.S.

He holds master's degrees in systems analysis from Stanford University and in national security and strategic studies from the Naval War College.

PRESIDENT'S FORUM



"A man without a vision is like a ship's commander without a destination."

THIS APPROPRIATELY NAUTICAL QUOTE comes from business pioneer J. C. Penney, who reflected on the importance of vision nearly a century ago. As Mr. Penney astutely noted, a *man* without a vision is largely adrift, but this can be said with equal certainty about an *organization*. A bold step has been taken by the Navy's leadership to provide direction by crafting a comprehensive vision for the future of the service—"Seapower 21." In June 2002, for the first time in a public forum, the Chief of Naval Operations, Admiral Vern Clark, presented his vision for the U.S. Navy in a speech delivered at the Naval War College: "My thoughts on this ["Seapower 21"] have been evolving over the last couple of years through my visits to the War College, discussions with the Strategic Studies Group here, talking to the people at the Navy Warfare Development Command, talking to special groups set up by the President of the Naval War College here, working with groups in Washington, and talking about what our future is all about."

The details of this Navy vision have been widely published, and I will not attempt to reiterate them here (readers can find an executive presentation and an explanatory article at www.nwc.navy.mil). I would, however, like to reflect rather broadly on the degree to which this new vision is both revolutionary and transformational.

"Seapower 21" describes a future Navy that will provide the nation with a triad of capabilities that are unique to the naval service. These capabilities are designed to meet the challenges brought about by the political, strategic, and technological changes that have occurred since the fall of communism and the onset of the Terror War. Three fundamental concepts constitute the CNO's vision of the nation's maritime capabilities for the future:

- Sea Strike: the ability to project precise and persistent offensive power from the sea
- · Sea Shield: the ability to extend defensive assurance throughout the world
- Sea Basing: The ability to enhance operational independence and support for joint forces.

Aspects of each of these concepts will be recognized by naval strategists and operators as traditional missions for the Navy. On closer examination, however, "Seapower 21" provides a vision of the future in which the service has significantly transformed how it views itself and how it can contribute to solving national challenges.

Navy Roles and Missions—with a Difference!

Sea Strike. For over two centuries American sailors have reached inland from the sea to influence events ashore. Sometimes it has been direct influence, through cannon fire against a coastal fort or by putting sailors and Marines ashore. In other cases, the influence was more indirect in nature, through maritime block-ade and other means of interrupting seaborne commerce. The concept of Sea Strike recognizes that technology now allows naval forces to *influence decisively* events ashore, with a reach farther inland than was ever imagined by Mahan, Corbett, or even more recent naval strategists. Operational commanders will employ strike aircraft, cruise missiles, long-range gunfire, special operations forces, information operations, Marine (and other-service) ground forces, and other offensive capabilities from a secure and tactically agile afloat support base.

This capability has already been clearly demonstrated during Operation EN-DURING FREEDOM, where Navy and Marine Corps forces repeatedly and effectively engaged enemy forces in Afghanistan from ships operating hundreds of miles from their targets. In the first seventy-six days of operations, the United States flew 6,500 strike missions over Afghanistan, of which 75 percent were flown by Navy carrier-based aircraft. New systems and capabilities will provide the ability to strike or capture vital areas even farther inland in support of national objectives.

In the future, the Marines, supported from ships at sea, may be called upon to seize an inland airfield, hold it for a period of time, and ultimately turn it over to follow-on army and air forces. This was exactly the case in the closing months of 2001 when, during Operation ENDURING FREEDOM, the first conventional forces to be engaged in Afghanistan were U.S. Marines from Task Force 58. They established a forward operating base on a desert airstrip south of Kandahar and held this position until relieved more than sixty days later by elements of the U.S. Army's 101st Airborne Division. Such operations hark back to the operational concept of Marines "seizing and holding bases"—a concept that was planned (and gamed at the Naval War College) before World War II and then executed brilliantly in the Pacific campaigns of that war. The concepts embodied in Sea Strike take the traditional Navy/Marine Corps capabilities and significantly extend them in range, flexibility, lethality, and endurance.

Sea Shield. Since the days of John Paul Jones, the essence of naval defense has been the defense of ships and, later, aircraft from attack. The mission was largely "force protection," safeguarding the fleet so that it could carry out its offensive missions. This traditional "defense of the fleet" mission will continue to be important, especially in facing a terrorist threat, but the concept of Sea Shield extends naval defensive firepower far beyond the task force, "projecting" defensive power deep inland. It will provide a defensive umbrella for forces ashore in a contested theater and even on American shores themselves. Senior Navy leaders have stated, "Sea Shield will provide a layered defense to protect the homeland, sustain access to contested littorals, and project a defense umbrella over coalition partners and joint forces ashore in distant theaters" (Vice Admiral Mike Bucchi, USN, and Vice Admiral Mike Mullen, USN, "Sea Shield: Projecting Global Defensive Assurance," U.S. Naval Institute *Proceedings*, November 2002, pp. 56–59).

Sea Shield will have many features and interrelated capabilities, such as airborne surveillance and tracking, long-range ship-launched counter-air weapons, and the ability to engage cruise missiles well inland. Most significant will be the Navy's contribution to missile defense. It will be the early-arriving cruisers and destroyers that protect vital ports and airfields to enable our forces to enter safely theaters of operations overseas. Indeed, our entire national strategy relies on rapid airlift and heavy sealift to get our Marines, soldiers, and airmen to the fight. Our sailors will provide the initial defense to enable their comrades in arms to reach the battlefield. Sea Shield will also provide a protective umbrella over the continental United States. No task is more important, nor is any more difficult, than shielding the lives and property of American forces and the American people.

Sea Basing. A fundamental strength of naval forces has always been their ability to conduct military operations from the sea for extended periods of time. U.S. Navy ships have always been virtual "islands of sovereign territory" that operate free from the restrictions of base rights, overflight permission, or political entanglements. The universally recognized "right of free passage" through international waters provides the United States with the most independent and secure

maneuver space for joint military forces. A recent article in the U.S. Naval Institute *Proceedings* made this point:

Sea Basing will be increasingly central to joint military planning because the traditional *advantages* enjoyed by afloat forces—such as independence, mobility, and security—are becoming ever more important to military affairs, while traditional limitations of sea-based forces—including operational reach and connectivity—have been largely overcome by new technologies and concepts of operations (Vice Admiral Charles W. Moore, Jr., USN, and Lieutenant General Edward Hanlon, Jr., USMC, "Sea Basing: Operational Independence for a New Century," U.S. Naval Institute *Proceedings*, January 2003, pp. 80–85).

The Sea Basing concept brings together the capabilities of the Navy's combatant, command and control, and support ships with the impressive array of oilers, stores ships, ammunition ships, oceangoing tugs, hospital ships, and maritime prepositioning ships operated by the Military Sealift Command. Joining this force will be Coast Guard assets and the transports and logistics support ships operated by the U.S. Army. Netted together with improved C4I (command, control, communications, computers, and intelligence) systems, combatant commanders can operate from this powerful multiship "floating base," indeed an entire overseas fleet, which can remain on station in support of combat operations for extended periods. Many components of the Sea Basing concept exist today, but future capabilities will result from investment in modern focused prepositioning ships; faster and more capable vertical-lift aircraft; high-speed surface craft, such as the Littoral Combat Ship (LCS), for agile inshore transshipment; and new offload and in-stream cargo handling techniques. Developing the right ships to support a joint force operation in harm's way ashore is key to realizing fully the benefits to our nation of basing at sea.

A National Vision for the Future

Many nations see the oceans of the world as barriers, hostile territories they fear to tread. However, long-term investment in maritime power has made the United States a master of this challenging environment. Fully two-thirds of the earth's surface is covered by water, and "Sea Power 21" is a vision for the future that exploits our asymmetrical advantage in this realm. For centuries, the oceans served America as "moats" of great width that no enemy could easily traverse. Today, the notion of a defensive barrier has less meaning, but the oceans still provide a nearly unlimited maneuver space, from which our nation can be protected.

It is our nation's naval forces that provide national freedom of action for the application of military power in an increasingly uncertain and complex world. They provide a commander the greatest operational flexibility and tactical agility and offer more options than forces that require overflight permission or authorization to use ports or airfields in foreign lands. By using a combination of the *right* of freedom of the seas, and the *might* of U.S. forces to keep these sea-lanes open, naval forces enable the nation to take the fight to the enemy overseas.

Naval transformation is beginning to emerge as the catalyst for the transformation of how the nation applies military power. The ongoing transformation in the sea services is not solely technical, and it is not dependent on new ships, aircraft, weapon systems, or networks. Nor does this transformation radically alter the mission or essential characteristics of naval forces. Instead, the sea services are recognizing that the nation will increasingly project power from "afloat bases" constituted by battle groups, expeditionary forces, mission-specific action groups, and prepositioned ships.

Sea Power 21 is not just a vision for the Navy, it is a vision for the nation, and in many ways it represents our best hope in defending the American people and our cherished way of life.

Rear Admiral, U.S. Navy President, Naval War College

Professor Hattendorf, chairman of the Naval War College's new Maritime History Department, has served since 1984 as the College's Ernest J. King Professor of Maritime History. His service to the U.S. Navy extends over three decades-as an officer with combat experience at sea in destroyers, at the Naval Historical Center, and as both a uniformed and a civilian Naval War College faculty member. He earned his master's degree in history from Brown University in 1971 and his doctorate in war history from the University of Oxford in 1979. Kenyon College, where he earned his bachelor's degree in 1964, awarded him an honorary doctorate in 1997, and the National Maritime Museum, Greenwich, awarded him its Caird Medal in 2000 for his contributions to the field of maritime history. Since 1988 he has directed the Advanced Research Department in the Center for Naval Warfare Studies. He is the author, coauthor, editor, or coeditor of numerous articles and more than thirty books on British and American maritime history, including Sailors and Scholars: The Centennial History of the Naval War College, studies on Alfred Thayer Mahan and Stephen B. Luce, and America and the Sea: A Maritime History. His most recent works include coediting War at Sea in the Middle Ages and the Renaissance (2002) and a major exhibition catalog for the John Carter Brown Library, The Boundless Deep: The European Conquest of the Oceans, 1450-1840 (2003).

The author acknowledges with great appreciation the constructive criticisms made on an earlier draft of this article by Dr. Christopher M. Bell, Naval War College; Dr. Philip L. Cantelon, History Associates, Inc.; Dr. Rodney Carlisle, Rutgers University; Dr. William S. Dudley, Director of Naval History and Director, Naval Historical Center; Dr. Edward Marolda, Senior Historian, Naval Historical Center; Professor David A. Rosenberg, chairman, secretary of the Navy's Advisory Subcommittee on Naval History; Henry H. Gaffney and Captain Peter Swartz, USN (Ret.), Center for Strategic Studies at the CNA Corporation; and Jay Thomas, Navy Cultural Resources Officer, Naval Facilities Command. Notwithstanding their generous advice, the author alone is responsible for the views expressed herein.

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THE USES OF MARITIME HISTORY IN AND FOR THE NAVY

John B. Hattendorf

The knowledge of the past, the record of truths revealed by experience, is eminently practical, is an instrument of action, and a power that goes to the making of the future.

LORD ACTON (1832-1902)

here is an ever-present human tendency to think that all that went before is irrelevant and useless, especially in an era of transformation and change. Navies are particularly susceptible to this tendency since, in contrast to officers in other branches of service, naval officers, by and large, have tended to ignore the value of and advantages to be found in historical insight.

This negative attitude toward history within the Navy has its roots in the prevailing naval culture; it is shared widely among navies that have developed within the Anglo-American tradition. A dispassionate look at the patterns and process of innovation in the past, however, reminds us that such tendencies are to be determinedly guarded against. Maritime history is a central part of an understanding of the heritage and tradition of navies, but its value lies in more than heritage alone. Knowing what actually happened in the past is central to understanding the nature and character of naval power. It assists in knowing the limits to the usefulness of naval power as well as in understanding where we are today in the development and progression of the art of naval warfare. As every navigator understands, it is critical to know where we are and what external forces affected us on the way there if we are to lay the best course toward where we want to be.¹

These judgments have once again been reaffirmed in the most recent study of the uses of history by, for, and in the American navy. In 2000 on the recommendation of the Secretary of the Navy's Advisory Subcommittee on Naval History, Secretary Richard Danzig commissioned an independent evaluation of the Navy's historical programs. This report, completed in October 2000, concluded that the U.S. Navy "has failed to use the rich historical information available to it in order to manage or apply effectively those resources for internal or external purposes."² Moreover, "while history survives in isolated pockets the use of naval heritage history is disjointed, sporadic, inconsistent, and occasionally contradictory. Without a clear service-wide mission, history in the Navy has itself become an artifact, delivering traditional products for use in a Navy seeking other types of information." Subsequent meetings in 2000 and 2002—where representatives of the perceived stakeholders of naval history throughout the Navy and supporters of naval history outside the service joined in the discussions—reviewed early drafts for a proposed strategy and a five-year plan for implementing it.

Nonetheless, despite these initiatives, at the beginning of 2003 the Navy still lacks an integrated policy for employing naval history. The recommendations and requests of Dr. David A. Rosenberg, the chairman of the Secretary of the Navy's Advisory Subcommittee on Naval History, for a strong and detailed policy statement, establishment of requirements, and the directives necessary to reverse the current trend have not yet been answered.³

If this situation is to be rectified, the U.S. Navy's senior leadership needs to establish clear policy guidance. The establishment at Newport of the Maritime History Department this year is but one of the first steps to be taken throughout the Navy if we are to reap the rewards from the integration of history, its lessons and its cautions, into all aspects of contemporary naval thinking, doctrine, planning, and education.

THE PRESENT CONDITION

The stakeholders and supporters of naval history within the U.S. Navy are few. It has been left largely to civilian specialists at the Naval Historical Center at the Washington Navy Yard and the handful of academics and administrators in the Navy's twelve museums, at the Naval Academy, and the Naval War College. Naval history finds much more support outside the service, as can easily be seen in the keen interest in popular novels, films, and television programs with historical themes. A number of private organizations in the United States promote naval history and heritage, including the Naval Historical Foundation and the U.S. Navy Memorial Foundation in Washington, the Naval Order of the United States, the Historic Naval Ships Association, and the Center for Naval Analyses. Perhaps the most active publisher of work on U.S. naval history outside of the Navy is another private organization, the U.S. Naval Institute, which issues not only its monthly *Proceedings* but also, since 1986, the quarterly *Naval History*.

prize-winning books on maritime history. The institute has also established an important photographic archive, available to the public. Since 1969 it has been the leader in the field in oral history, producing more than two hundred bound volumes on recent naval leaders.

For those in, or who work for, the Navy, history is not some amorphous, abstract, and intellectual creation; it happens around them all the time. What naval professionals do every day is part of our nation's history, as is the work of their predecessors. Ships and shore stations are historic sites, as well as places where important tasks are carried out today and are prepared for tomorrow. Many naval buildings and reservations are historic and even contain archaeological sites of great cultural importance. Many offices and naval stations contain valuable objects, historic documents, artwork, and books, or official records destined for permanent retention in the National Archives. The Navy and Marine Corps represent a broad cross section of American history; the safekeeping of national heritage, as reflected in its material culture, has been left to those who manage the Navy's assets. In the National Historic Preservation Act, Congress made the Navy Department responsible to the nation for the preservation of the cultural resources that it owns. It is an awesome responsibility but one easily forgotten by people struggling with immediate problems. The Navy needs to balance its management of these important cultural assets with its responsibilities for national defense, and it must do so, as the act requires, "in a spirit of stewardship for the inspiration and benefit of present and future generations."4

Despite widespread interest and generous outside support, the uniformed Navy has yet to make full and effective use of maritime history as a resource. The practical challenge of implementing a Navywide policy for the support and practical use of maritime history in and for the Navy is a complex one. It involves promoting a range of interrelated but distinct levels of historical understanding as well as organizing and supporting a variety of responsibilities, tasks, and functions across the Navy. If such a program is to succeed, maritime history in the Navy will have to have the direct attention and the solid and continuing support of the flag officers who lead the service.

MARITIME AND NAVAL HISTORY DEFINED

To begin a vibrant historical program within the Navy, one needs first to understand what one means by "maritime" and "naval" history, respectively. There has long been confusion about the two terms, but in the past decade a consensus in usage has formed that clarifies the matter. Maritime history embraces naval history; it is the overarching subject that deals with the full range of mankind's relationships to the seas and oceans of the world. It is a broad theme that cuts across

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THE HISTORY OF HISTORY IN THE U.S. NAVY AND THE SEA SERVICES

- 1800 President John Adams orders the first Secretary of the Navy, Benjamin Stoddard, to gather books for a professional library, "to consist of the best writings in Dutch, Spanish, French, and especially English." This is the origin of the Navy Department Library (since 1970 it has been housed in the Washington Navy Yard).
- 1813 Thomas Clark publishes the first historical study of the U.S. Navy, basing it on personal communications with participants of the War of 1812.
- 1814 Congress establishes the Navy's first museum collection by directing that all captured naval flags be sent to Navy Department custody in Washington.
- 1833 Commander Matthew Perry is instrumental in establishing the U.S. Naval Lyceum, to "incite the officers of the naval service to increased diligence in the pursuit of professional and general knowledge." Following this lead, a similar institution would be established at Boston in 1842, and later another at Mare Island in California. The naval historical collections from New York and Boston will be donated to the Naval Academy Museum in 1892 and 1922.
- 1839 James Fenimore Cooper writes the first major history of the U.S. Navy.
- 1845–46 The newly established Naval Academy at Annapolis builds its first library and lyceum. Its permanent museum collection is founded three years later, with the transfer of the captured War of 1812 flags from the Navy Department.
- 1873 U.S. Naval Institute is founded. Two of its founders, Captain Stephen B. Luce and Commodore Foxhall Parker, will become among the earliest U.S. naval officers to advocate the professional study of naval history. James R. Soley launches the Naval Academy's curriculum first series of lectures on naval history.
- 1882 The Office of Naval Records and Library is founded. Its head, James Soley, first systematically compiles the Navy's records, rare books, and other historical materials. Comprehensive publication of operational documents and dispatches relating to the Civil War begin in 1894 and the Spanish-American War operational records are published in 1899.
- 1884 Rear Admiral Stephen B. Luce establishes the Naval War College at Newport. Luce values historical study for learning to deal with specific situations and developing generalizations; he recruits Captain Alfred Thayer Mahan to research naval history and thereby explain to rising senior officers the art and science of high command. Mahan's pioneering historical work will establish some concepts that retain value after more than a century.
- 1899–1900 Captain Charles Stockton of the Naval War College faculty examines the history of international law and produces the first codification of the law of naval warfare.
- 1905 The remains of John Paul Jones are ceremonially removed from Paris to Annapolis, reviving widespread interest in the country's early naval history.
- 1917 Rear Admiral William S. Sims, Commander in Chief, U.S. Naval Forces, Europe, creates the Navy's first historical section on a major operational staff, which will continue until the end of the war.

A separate historical section is also organized in Washington within the recently created Office of the Chief of Naval Operations.

- 1919 Major General Commandant George Barnett of the Marine Corps creates a Historical Section under the Adjutant and Inspector's Department. The first officer in charge is Major Edwin N. McClellan.
- 1921 Captain Dudley W. Knox becomes head of both the Historical Section in the Office of the Chief of Naval Operations and the Office of Naval Records and Library, launching a monograph series based on materials collected by the London Historical Section.
- 1926 The Naval Historical Foundation is founded to collect naval manuscripts and artifacts, eventually acquiring and donating to the Library of Congress the most important single collection of private naval papers in the United States.
- 1927 The Historical Section in the Office of the Chief of Naval Operations and the Office of Naval Records and Library in Washington merge.
- 1930 Dudley W. Knox assumes additional responsibility as Curator of the Navy. In 1934, in close personal cooperation with President Franklin Roosevelt, he will begin publication of a multivolume series of naval documents on the Barbary Wars and the Quasi-War with France.
- 1931 After overhaul, USS *Constitution* is recommissioned and sent on tour of American ports.
- 1938 Congress establishes Naval Academy Museum, authorizing tax-exempt gifts.
- 1942 Dudley W. Knox forms an Operational Archive to collect and organize wartime records. Separate from it, Samuel Eliot Morison of Harvard receives a direct commission as a lieutenant commander to prepare an operational naval history, receiving presidential carte blanche for travel and access. His fifteen-volume *History of United States Naval Operations in World War II* will appear 1947–62.
- 1943 Professor Robert G. Albion of Princeton is appointed to a part-time position to oversee 150 naval officers writing some two hundred studies on the Navy's administrative history during World War II, a project that will be completed in 1950.
- 1944 Secretary of the Navy James Forrestal establishes the Office of Naval History within the Office of the Secretary of the Navy. Its first director is retired Admiral Edward C. Kalbfus, twice President of the Naval War College. Knox becomes deputy director of naval history under Kalbfus.
- 1945 The Bureau of Ships establishes the Office of Curator of Ship Models at the David Taylor Model Basin, to oversee the continuing acquisition of a collection that dated to the 1883 requirement to build and retain exhibition-quality models of the Navy's newest ships. Now sponsored by the Naval Surface Warfare Center, the Naval Sea Systems Command, and the Naval Historical Center, it currently has over 2,100 models as a three-dimensional record of naval ship and aircraft design.
- 1947 The Civil Engineer Corp/Seabee Museum opens at Port Hueneme, California, with a command historian and archive.

- 1948 At the recommendation of Admiral Raymond Spruance, the Secretary of the Navy approves establishment of an academic chair of maritime history at the Naval War College, subsequently named in 1953 in honor of Fleet Admiral Ernest J. King. USS *Texas* (BB 35) becomes a memorial and museum ship at San Jacinto State Park, in Texas.
- 1949 The Office of Naval History merges with the Office of Naval Records and Library to create the Naval Records and Library Division of the Office of the Chief of Naval Operations. In 1952, it will become the Naval History Division, under the Director of Naval History.
- 1952 The Secretary of the Navy's Advisory Committee on Naval History, an independent group of experts on naval history, is founded to advise the Navy on its historical programs. Over the years, its members will include such distinguished American historians as Samuel Flagg Bemis, Francis L. Berkeley, James Field, John Kemble, Alan Nevins, and Walter Muir Whitehill, as well as retired senior flag officers and some of the country's leading art experts, museum directors, and librarians.
- 1957 The Navy transfers ownership of Admiral George Dewey's flagship, USS *Olympia*, to a private organization for preservation and display.
- 1960 The first Marine Corps Museum is opened at the Marine Corps Base at Quantico, Virginia. It will come under the control of the newly created History and Museums Division during 1972–73 and move to the first floor of the Marine Corps Historical Center in the Washington Navy Yard during 1976–77. It remains there today.
- 1961 The U.S. Naval Historical Display Center, the forerunner of the Navy Museum, is established in Washington, to open in 1963.
- 1963 The Naval Air Station Pensacola museum, now the National Museum of Naval Aviation, is founded.
- 1964 The Submarine Force Library and Museum is established at New London, Connecticut, with materials acquired from the Electric Boat Company's collection.
- 1967 The Coast Guard establishes a curatorial services department. The Coast Guard Academy establishes a museum at New London, Connecticut, to complement its teaching program; in 1971, it will become the U.S. Coast Guard Museum.
- 1970 The Naval War College creates Naval Historical Collection for its archives, manuscript collection, and rare books.
- 1971 The Naval Historical Center in the Washington Navy Yard is established, replacing the Naval Historical Division. Its director (a civilian since 1986), serves on the Navy Staff as the Director of Naval History.
- 1972 The U.S. Naval Academy holds its first naval history symposium, which soon becomes a biennial meeting and the most important regular academic conference within the field of U.S. naval history.
- 1974 The Naval Supply Corps School at Athens, Georgia, establishes a museum.
- 1976 The private, nonprofit USS *Constitution* Museum is established.
- 1977 The Naval Research Laboratory establishes its historical office and develops writing, research, and oral history programs. The Marine Corps Historical Center in the Washington Navy Yard opens its

doors to house the History and Museums Division of the Marine Corps, formed in 1973 under Brigadier General Edwin H. Simmons, USMC.

- 1978 A museum devoted to the history of aviation test and evaluation is founded at the Patuxent River Naval Air Station in Maryland. The Naval War College opens a museum in the College's first classroom building. The Marine Corps Aviation Museum is created (to be renamed the Marine Corps Air-Ground Museum in 1982–83) as a field activity of the History and Museums Division. It occupies several exhibit and storage buildings and hangars at Marine Base Quantico, Virginia, before closing to the public in anticipation of a new National Museum of the Marine Corps to be opened at Quantico in 2005–2006.
- 1979 U.S. Merchant Marine Academy at Kings Point, New York, establishes a museum to complement its teaching of maritime history. The Commander, Navy Region, Mid-Atlantic establishes the Hampton Roads Naval Exhibit devoted to the naval history in the Hampton Roads, Yorktown, and Norfolk, Virginia, areas. The Marine Corps Historical Foundation is established in the Washington Navy Yard.
- 1980 The Bureau of Medicine and Surgery establishes historical activities as an additional duty for the editor of the Navy Medical Department's journal, *Navy Medicine*. The editor developed writing, research, and oral history programs until the Office of Historian of the Naval Medical Department was established in September 2002.
- 1986 The Naval Submarine Base, New London, Connecticut, acquires the deactivated USS *Nautilus* for its Submarine Force Museum.
- 1991 The Naval Undersea Museum at Keyport, Washington, is established, devoted to the ocean environment and the history of U.S. torpedo, mine warfare, and submarine technology.
- 1995 The Civil Engineering Corps Seabee Museum establishes a branch on the Gulf Coast at Gulfport, Mississippi.
- 2000 The Museum of Armament and Technology at the Naval Weapons Center, China Lake, California, is established to display technology and weapons that have played an important role in the previous six decades of the service's history.
- 2003 The Naval War College creates a Maritime History Department, consolidating its activities and collection in the field of maritime history and establishing a research unit for basic and applied maritime history.

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academic boundaries and builds linkages between disciplines to form a humanistic understanding of the many dimensions involved. Maritime history involves in particular the histories of science, technology, cartography, industry, economics, trade, politics, international affairs, imperial growth and rivalry, institutional and organizational development, communications, migration, law, social affairs, leadership, ethics, art, and literature. The range is immense, and the possible vantage points and topics are many. Yet the focus is clearly defined ships and the sailors who operate them, with specific sets of scientific understanding and technological devices, in their hostile sea environment, which covers the greater part of the globe.

Within the broad field of maritime history, there are a number of recognized major subspecialties. Among them are the history of navigational and maritime sciences; the histories of ships and their construction, the aircraft that fly over the seas, and the submarines that pass under their surface; maritime economic history; the histories of merchant shipping, fishing, and whaling; the histories of yachting and other leisure activities at sea and on the seaside; the histories of geographical exploration and cartography; social and labor history, the health of seamen; maritime law, maritime art, maritime literature; and naval history. These subspecialties are interrelated within the framework of maritime history to varying degrees, but each is tied as well to historical subject areas outside the maritime field. Characteristically, a maritime subspecialty's relationship outside the field defines its perspective on, and approach to, maritime history.

War at sea and the development of its political, technological, institutional, and financial elements is, thus, the focus of the naval history subspecialty. Within the structure of maritime history, naval history relates to the other maritime subspecialties as a special case, a particular application of the histories of ships and shipbuilding, geographical exploration, cartography, social and labor issues, health, law, art, literature, and so on. It also connects to the study of agencies and sea services that cooperate or share responsibilities with navies, such as (in the United States) the Marine Corps, Coast Guard, Revenue Service, and Coast Survey. The last three have fulfilled under a variety of organizational names critical maritime functions as hydrography, policing and safety of navigation, piloting, and the licensing of mariners. Outside the maritime sphere, naval history is closely associated with, and has adopted the broad approaches of, such fields as military studies, international affairs, politics, government, and the history of technology.

Naval history specifically involves the study and analysis of the ways in which governments have organized and employed force at sea to achieve national ends. It ranges across all periods of world history and involves a wide variety of national histories, languages, and archival sources. (Most prominent among the latter are governmental archives, supplemented by the private papers of individuals who served in or with navies.) The study of naval history involves analysis of the ways in which decisions were reached and carried out, as well as of the design, procurement, manufacture, and employment of vessels, aircraft, and weapons to achieve the ends in view. As Admiral Sir Herbert Richmond succinctly put it, naval history includes the "whys" of strategy in all its phases, from the political sphere to that of minor strategy and tactics of fleets and squadrons: it includes the "hows" of actual performances: and, not less important, the "whys" of success and failure. It embraces all those elements of foreign diplomatic relations, of economics and commerce, of international law and neutrality, of positions, of the principles of war, of administration, of the nature of the weapon, and of personality.⁵

Naval history in the machine age faces the need to explain these matters comprehensively, placing individual decisions and the collective interactions of leaders within a wide context of technological, financial, and operational issues.⁶

A traditional work in the field of naval history traces the ways in which national leaders dealt with international situations and decided upon courses of action that involved employment of ships and weapons at sea, and the reasons why. It then follows the results of those decisions and examines the actual uses of naval force at sea and its consequences, often in terms of the biographies of particular admirals, specific battles, campaigns, or accounts of the actions of fleets, squadrons, and even individual ships and aircraft.

In contrast, modern naval historians have come to understand that navies and those who serve in uniform do not exist separately from other parts of society. In addition to seeing their actions in terms of leadership, tactics, and strategy, scholars must also understand them in terms of the external environment, domestic politics, bureaucratic politics, the state of technological development and capabilities, procurement issues, organizational culture, and the capacity of naval men and women (in a profession marked by rigid hierarchical structures) for innovation, change, and alternative approaches.⁷ Modern naval history looks at navies not only within their national contexts or as instruments of particular national states but also from wider international and comparative perspectives, in terms either of the chronological development of specific events or of the broad, long-term development of navies around the world.⁸ Clearly the actions of one navy cannot be considered in isolation from foreign influences, whether enemies, allies, or world developments.

Naval historians, as practitioners of the wider field of maritime history, are bound by the same general requirements and standards as apply to scholars who work, research, or write in any other historical area. Any historical project requires a wide understanding of the context in which the events under study took place, a deep appreciation of the historical literature addressing the subject and its broad field, and a thorough examination of the original documents and other primary source materials that establish authoritatively what occurred, how, and why.

THE AUDIENCES FOR MARITIME HISTORY

For the historical program to be successful, the Navy and its historians must be more strategic in their approaches, recognizing that they must appeal to a number of different audiences at once. Maritime history in the United States has four distinct audiences, each of which requires different approaches, levels of understanding, and vantage points: Congress and other government leaders, including uniformed members of the nonnaval services; the men and women of the U.S. Navy; academics; and the general public.

The first two audiences—Congress, government leaders, and uniformed men and women in all the armed services—look to a historical understanding that provides considerations and insight useful for the current and future development of the Navy. Their collective interest and approach may be described as applied history.⁹ The last two audiences, the general public and academe, form a related pair; they look toward broad understanding and evaluation of maritime and naval events as fundamental and as essential for understanding world history and national life. Their interests may be described as those of basic history.

The Decision Makers: A Focused Audience

The general public's understanding of maritime and naval affairs—developed, corrected, and expanded by the academic community—provides the foundation for at least the initial understandings of the people in charge of leading, building, funding, and developing the Navy. These decision makers, leaders of government, are those who make up an important audience for applied history. However, their needs in maritime and naval history are more detailed, specific, and technical than those of the public and academe, address professional interests beyond the scope of popular and academic interests, and typically need to be formulated and presented in different ways.

Congress and Government Leaders

Members of Congress, congressional staff members, and the uniformed men and women of services other than the Navy form a distinct audience for certain aspects of maritime history. This audience is widely varied but may include representatives from areas that have long-standing interests in maritime affairs, such as coastal states, states with traditional Navy ties, vocal groups of naval retirees or veterans, or states where assets for the Navy are produced or its bases are located. This part of the audience will have special interests in specific aspects of naval history that relate to their own state and its history, politics, or interests but may need specific information that builds on their traditional ties or broadens their regional outlook into a national perspective. Congress and government leaders also include those who do not have such built-in interests but need understandings of how and why the Navy has developed, if they are to carry out their responsibilities effectively.

A component of this audience of specific interest to the Navy comprises the Navy Department's senior civilian appointees, such as the Secretary of the Navy, the Assistant Secretaries of the Navy, and the noncareer deputy assistant secretaries. Most typically have short tenures with the Navy Department in the course of careers that take them to a variety of executive branch positions. Like many members of Congress and leaders in other services, they do not necessarily have previous exposure to naval matters. These leaders with important present responsibilities have a direct, practical need to know about the roles and functions of the Navy and when, why, and how it has been used, misused, or neglected in the past. As Sir Basil Liddell Hart once wrote, "History is a catalogue of mistakes. It is our duty to profit by them."¹⁰

Those who make decisions on present and future naval issues need to profit from past errors and problems. They always need a sense of the backgrounds of the difficult issues they are struggling to solve. The Navy's historians should provide historical understanding in ways that are accessible to busy leaders, who need specific information and interpretation focused on particular elements of maritime history in ways that provide insight into current debates over funding, policy making, and joint-service operational and technical planning. This type of information is likely to be precise and detailed, even quantified, pointing to specific incidents in American historical experience or drawing broad parallels to situations in American or world history.

The recent independent study commissioned by the Secretary of the Navy, History and Heritage in the U.S. Navy, found that the Navy does little to support decision makers by providing them with historical background to current issues. What is being done is scattered informally through a variety of activities, including the Center for Naval Analyses, the Naval Historical Center, the Navy Museum, the Naval War College, and several nongovernmental organizations and museums.¹¹ Plainly the audience of congressional and other government leaders is a neglected audience, but one neglected at great cost. Whenever the country faces war, Congress, civilian leaders in the executive branch, the leaders of other services that cooperate with the Navy, and, above all, the nation's statesmen critically need to know and understand, in terms of actual practice and experience, the fundamental roles, limitations, and practicalities of the Navy's organization and its ability to provide mobility for military forces, project power overseas, control and protect sea and air routes, serve the objectives of foreign policy, and carry out its variety of other functions. They need to understand also the typical challenges that the Navy faces and the reasons why a number of roles

that a statesman might be tempted to assign the Navy would be inadvisable, would distract it from its useful purposes. Leaders who have a broad understanding of and insight into maritime history and perceive the historical uses of and limitations upon fleets will be in a far better position to make proper decisions in regard to the present and future use of navies than those who have none.

Uniformed Men and Women in the Navy

The people who serve in uniform in the Navy provide a special audience with particular needs for history. For the uniformed Navy naval history is heritage, but at the same time professionals within the Navy need to analyze critically their profession's historical experience in ways that inform their thinking and decision making.

Understanding maritime history is part of naval professional identity. Understanding their own profession leads officers or enlisted personnel alike to feel a natural bond with other sailors, whatever their form of maritime endeavor or nationality. Today's sailors share a proud heritage that includes the world's great seamen and world explorers, such as Christopher Columbus, Ferdinand Magellan, and James Cook. Naval leaders, of course, are part of this professional maritime pantheon. Here we usually think of the great fighting commanders in the context of battles and fleet operations: Drake, Tromp, Blake, de Ruyter, Nelson, Togo, Jellicoe, and Scheer, and within our own navy, Farragut, Dewey, Nimitz, Spruance, and Halsey. But a navy, of necessity, is made up of people of many kinds of abilities. Those who specialize in one form of warfare or spend their careers in science, technology, education, and logistics offer modern sailors models of inspiration and devotion to their profession no less valuable than those of fleet commanders.

Among such other models about whom our professionals need to learn, and toward whom they should look, are the scientist and oceanographer Matthew Maury, the inventor John Ericsson, the thinker and strategist J. C. Wylie, the mathematician C. H. Davis, the salvage expert Edward Ellsberg, the gun designer John Dahlgren, the logistician Henry Eccles, the educator Stephen B. Luce, the naval engineer B. F. Isherwood, the civil engineer Ben Moreell, the intelligence officer J. J. Rochefort, the aviator William Moffett, the naval diplomatist Matthew Perry, and the submariner Charles Lockwood; Joy Bright Hancock, a pioneering advocate for women in the U.S. Navy; Grace Murray Hopper, the brilliant developer of computer languages; Charles M. Cooke and Forrest Sherman, operational planners; H. Kent Hewitt, the amphibious innovator; Sumner Kimball, of the Life Saving and Revenue Cutter Services; Ellsworth Bertholf, of the Coast Guard; Spencer Baird, of the U.S. Fish Commission; Alexander Bache, of the Coast Survey; the many examples to be found in the history of the Marine Corps, including Holland Smith, Edson, and Puller; and a variety of people in the enlisted ranks, whose lives and services to the nation in a variety of ratings need to be discovered and made available to professionals. There are even heroes for naval historians: Sir John Knox Laughton, Sir Julian Corbett, Sir Herbert Richmond, and Captain Stephen Roskill of Britain, alongside the Americans Alfred Thayer Mahan, Robert G. Albion, and Samuel Eliot Morison.

The professional naval audience has a particular practical interest in maritime history in the context of recruiting: inculcating and maintaining service pride and tradition during the indoctrination and initial training and education of enlisted recruits, midshipmen, and officer candidates. This also plays a key role in the naming of buildings and ships, and the creation of memorials. Dr. William S. Dudley—Director of Naval History on the staff of the Chief of Naval Operations and director of the Naval Historical Center—has reminded those in uniform who lead our sailors, "'Celebrate, commemorate, motivate,' these words suggest what history and heritage can contribute to the Navy's rich human potential."¹² With this idea in mind, Dudley suggests that the first need is to give those who serve in the Navy a ready awareness of service history, a foundation upon which to develop deeper professional understanding.

The use of history for patriotic and motivational purposes is very important and powerful. It is also, however, an approach that can be, and has been, misused by totalitarian regimes. In a democratic state, great care is required, as is particular attention to the ideals of academic history—critical analysis of documents, factual accuracy, and commitment to the truth of what actually happened. One of the principal reasons for a lack of quality in the subspecialty of naval history is the lingering suspicion that its practitioners somehow falsify it to achieve a government's political or institutional objectives.

Historians employed by governmental agencies in a democratic country have a special obligation to the historical profession in this regard. They must always bear in mind that the government belongs to the people and is, in its actions, responsible to them and to public judgment. Congress, the executive branch, and the courts have established laws and regulations mandating the freedom of public information, limiting government control over it, and laying out the responsibilities of agencies, including the National Archives, for the permanent preservation and eventual release of records. Unless lost, deliberately destroyed, or weeded out by archivists, information in government files sooner or later becomes available for public scrutiny and critical analysis. This very process requires that the government's historians serve the public interest, not varying political or institutional interest. American naval history is so rich in experience and contains so many fine examples of bravery, courage, and professional excellence that there is no need to embellish the record. Quite the contrary—an accurate relation of the historical events and their context underscores the real achievements.

Entertaining and instructive stories that define ideals and motivate professionals to achieve them is neither all that naval professionals need to know about maritime history nor all that historians can offer the Navy. As naval officers gain professional maturity and become involved in broader issues, the historical lessons they need begin to overlap with the kinds of information that government leaders use. Still, there is a professional naval dimension that differentiates their historical study from that of other users of naval history—the need to think critically about the naval past in order to deal with the problems of the present and future. To a greater degree than history used for motivational and leadership purposes, professional historical knowledge involves clear, critical, rational analysis of success and failure, in considerably more detail than the information that is normally useful or relevant to nonspecialist government leaders.

The present-mindedness of American naval culture typically leads serving professionals to consider as entirely new "bright ideas" that have in fact been tried before, in circumstances that may cast light on their applicability in a new and different context. History is particularly valuable for the insight it can bring to issues that recur only rarely, perhaps once in a generation: reorganization of the Navy Staff; the interrelationships of the offices of the secretaries of defense and the Navy, the Office of the Chief of Naval Operations; and the administration of the Navy's shore establishment by regions. Similarly, the Navy has long, useful experience in mine warfare countermeasures. Homeland harbor defense, a joint Army-Navy–Coast Guard concept that was applied in Vietnam and the Gulf Wars and is now arising again, was a "live" topic half a century ago but disappeared from view at the end of World War II.

Operational doctrine and the principles of war are attempts to distill such actual experience—historical experience, even if very recent—into "axioms" that can be readily applied to the present and future.¹³ There is no doubt wisdom in them, but the idea that human conduct can be effectively reduced to axioms is doubtful. Human actions and reactions do not conform to the laws of physics, mechanics, or the natural sciences. In the nineteenth century, many thinkers thought they might, but later analysts discarded such ambitions, decades ago. Such formulations and professional axioms of the past are merely "rules of thumb"; they cannot be used blindly. They must be continually and critically tested against experiences in differing contexts. A study of the past shows what has worked and what has failed, but no two events are ever quite the same. Historical analogies do not create axioms but, more valuably, suggest the questions that need to be considered and the range of considerations that pertain. American naval writers have been all too apt, in particular, to search the writings of Alfred Thayer Mahan for axioms of naval strategy, but he himself is a part of history, and his works need to be understood in terms of his intentions and of how they have since been used, misused, superseded, broadened, and modified.¹⁴ Historical study provides the practical basis of, and its approaches develop the intellectual tools for, an understanding of the nature of strategy and the process it involves.¹⁵ In this connection, historical understanding and knowledge of past events is not the object but rather one of several means to improve the ability of professionals to solve problems more wisely than arbitrary choice, pure chance, or blind intuition would allow.

The General Public

Far more than many academics are willing to grant, the general public's interest in the field of maritime history is significant and continues to grow. There is a large market for popular works across a wide range of media: biographies, narrative books and articles, heavily illustrated books and magazines, historical novels, feature films, television series on the major networks as well as such outlets as Public Broadcasting Service, the History Channel, and the Discovery Channel. This wide public audience includes former and retired members of the sea services, but it is not limited to them. A large number of people with no prior connection to the services are fascinated by naval events, are intrigued by warships, aircraft, and naval equipment, and admire and take an interest in those who go to sea and have accomplished feats of navigation or geographical exploration. This is an audience with interests that are wide and general but at the same time often focused on individual events, specific seamen, or heroic actions, ships, or weapons. The Navy meets the interests of this audience by supplying historical information; making available historical photographs, films, and other images; maintaining museums, opening its libraries and archives to the public, and making available experts who can assist in the production or editorial review of popular works and advise on their historical accuracy. The Navy also posts a great deal of information on websites, where it is easily accessible to the public. Most notable among them is that maintained by the Naval Historical Center in Washington, D.C.;¹⁶ on it can be found a wide variety of historical information, bibliographies, a guide to manuscripts located in repositories in Washington and throughout the country, and a guide to organizations, programs, and resources relating to the U.S. Navy's history. The website also includes links to numerous naval history-related sites outside the Navy.

In a democratic state, ordinary citizens need to understand why such vast sums of taxpayers' money are spent on their navy and what it achieves. They do not need to know all the technical details, but surely they need a basic sense of the importance of naval supremacy in international relations, as well as of the roles and functions of the navy in both peace and war, if they are to have a complete appreciation of the history of the nation. The wider public in the United States needs to understand the role of the sea in American history and the essential roles that mariners played in its colonization, settlement, and early national development. Among a wide range of other things, the public needs to understand the essential contribution of the French navy to the military decision at Yorktown, which won American independence. It needs to understand that nearly the entire income of the federal government in the early decades of the republic derived from tariffs on maritime trade. American citizens need to know, as a matter of their national heritage, about the role and influence of maritime power on the coasts and on rivers during the Civil War; about the terrific struggles and dramatic victories at sea in the First and Second World Wars; more recently, about how the Soviet naval threat during the Cold War was met; and about the roles and accomplishments of the Navy in the post-Cold War era, in the Caribbean, the Adriatic and Mediterranean, the Persian Gulf, and the Indian Ocean.

Moreover, to stimulate and maintain this broad audience, war monuments and veterans memorials may be found in virtually every county, if not every town, in the country. Comparatively judged, there are a large number of maritime museums in the United States. The American Council of Maritime Museums currently has some forty-two institutional members, and twenty-one other museums are affiliate members. Its membership currently includes two of the twelve museums that the U.S. Navy operates (the Navy Museum in Washington and the Naval Academy Museum) and the Navy's Curator of Ship Models. Three of the Navy's twelve museums have been accredited by the American Association of Museums as having reached high professional standards: the Navy Museum in Washington, the National Museum of Naval Aviation in Pensacola, and the Naval Undersea Museum at Keyport, Washington.

In addition, there are more than a hundred historic ships, operated by some seventy organizations, open to the public in the United States. Moreover, a variety of other museums and libraries draw large audiences to view major permanent or temporary exhibitions in maritime and naval history.

Not everything of historical interest, of course, can or should be saved, but neither should they be inappropriately destroyed or left unmanaged. Some things are intrinsically valuable; some are useful only for the information they contain; some are both, some neither. The variety is immense. But every item worthy even of consideration for preservation has a life cycle, comprising identification, preservation, interpretation, use, and disposition—perhaps, transfer to appropriate repositories, or disposal. Every historical object needs to be taken up by an institutional infrastructure that can manage and preserve it and make it useful and accessible for professional use or public knowledge. Even tactical and administrative computer systems that process potentially historic information should be designed from the outset to preserve that information for future use. To be a positive historical asset, an object must be placed in the context of a museum collection, an archive, a library, or some other specially formed collection with cataloging, identification, and retrieval systems.¹⁷ In order to do this in a way that meets modern professional demands, a major naval shore command may need a trained historical officer, who is educated in maritime history, serves as a resource, advises the commander, and coordinates with guidance from the Director of Naval History in Washington, the entire range of activities relating to maritime history that the particular command is likely to face—local history, archaeology, preservation of records, archives, rare books, charts and maps, art, historical commemorations, museums, and historical objects.

The Academic Audience

By contrast, the academic audience is small and generally limited to a relatively small number of students and faculty at colleges and universities, but it is an extremely important audience, far more so than its numbers suggest. Its importance lies in the fact that the independent thinking and scholarship of these researchers create the fundamental historical understanding of maritime and naval events that serves as the basis for those of all the other audiences. Other audiences may use the products of scholarly history in ways that academics might consider fragmentary or lacking in depth, but their understandings are ultimately based upon academic perceptions, debates, and prevailing interpretations.

The most important way in which the Navy interacts with the academic world is through direct discourse—its participation in academic research, writing, and professional evaluation of academic literature. This participation is undertaken largely by the research staff at the Naval Historical Center in Washington and through the research and publications of faculty members who specialize in naval history at the Naval Academy in Annapolis, the Naval War College in Newport, and the Naval Postgraduate School in Monterey, California.

The ability of historians within the Navy to publish historical studies that meet high academic standards and become part of the academic historical discourse is essential to the Navy's ability to inform the public about its contributions to national life and its role in international affairs. Additionally, the Navy makes an essential contribution to the academic audience by allowing its own academic historians to act as advocates within the service. It contributes also by publishing (on the basis of the professional knowledge and judgment of its historians) official documents on naval history and by declassifying and otherwise making available for scholarly research archival material and historical collections owned by the Navy.¹⁸

For a long time, the academic standard of maritime history in the United States was not of the highest quality; only a few college or university history departments in the United States provided courses in any aspect of the subject. Nonetheless, over the past decade there have been strong indications that this trend is being reversed.¹⁹ Mystic Seaport's general history America and the Sea: A Maritime History (1998) has apparently been adopted as a general textbook for this purpose on several campuses where the subject was not previously offered.²⁰ It is certainly used at Mystic Seaport in Connecticut, where the Munson Institute of American Maritime History offers accredited, graduate-level summer courses in maritime history.²¹ Today a sizeable number of individual scholars, scattered across the country in various universities, colleges, and research institutions, pursue professional research and writing interests in naval history and within the broader scope of maritime history. It is these established scholars, along with a growing number of graduate students researching master's and doctoral theses within these areas, who constitute the main academic audience within the United States. They are joined by a similar set of scholars in other countries, most recently in Australia, Britain, Canada, Denmark, France, Germany, Italy, India, Norway, the Netherlands, New Zealand, South Africa, Spain, Portugal, Sweden, and Latin America, who share interests in this field and bring to it invaluable perspectives from the vantage points of other cultures, navies, and maritime environments.

The Navy's single most important interaction with the academic historical audience is the Naval History Symposium, sponsored by the U.S. Naval Academy at regular intervals since the first was held in Annapolis in May 1972. Originally conceived as an annual event, it has been held biennially since 1973. Since the third symposium, in 1980, a volume of selected conference papers has usually been published after each conference, reflecting the new interpretations and perspectives in naval history of this forum, attended regularly by several hundred historians and graduate students.²²

The Navy's historians, librarians, and archivists assist academic researchers in finding materials they need for research. In addition to archival guides and official naval records made available for research at the National Archives and Record Services, the Naval Historical Center continually updates on its website a guide to manuscripts available for research in libraries and archives across the country.²³ Complementing this, the Naval War College, like other institutions, maintains on its own website a list of its manuscript and archival holdings (in its Naval Historical Collection) with a list of available research aids.²⁴

Two commands within the Navy and several civilian organizations have attempted to raise the standards of naval history and promote new academic work through the establishment of prizes. Among the civilian organizations, the New York Council of the Navy League of the United States, the Theodore Roosevelt Association, and the Franklin and Eleanor Roosevelt Institute have joined forces to recognize annually the best book in U.S. naval history with the Theodore and Franklin Delano Roosevelt Prize in naval history. In 2002, this award was made a cash prize of five thousand dollars. In addition, the nation's professional organization for maritime historians, the North American Society of Oceanic Historians (NASOH), awards annually its prestigious John Lyman Book Prizes for a range of subjects in maritime history, including one in the category of U.S. naval history.

The Naval Historical Center promotes new academic work through the establishment of the Rear Admiral John D. Hayes Pre-doctoral Fellowship in U.S. Naval History for civilian graduate students; Vice Admiral Edwin B. Hooper research grants for postdoctoral scholars and accomplished authors; the Samuel Eliot Morison Naval History Scholarship for active-duty naval and Marine officers engaged in graduate studies; and the Ernest M. Eller Prize, awarded annually for the best article on American naval history published in a scholarly journal.

In addition to these prizes, the Naval War College Foundation awards annually the Edward S. Miller History Prize for the best article on naval history to appear in the *Naval War College Review*. It also funds the Edward S. Miller Fellowship in Naval History, a thousand-dollar grant to assist a scholar using the College's archives and historical collections. The work of naval historians is also considered for the Samuel Eliot Morison, Victor Gondos, Moncado, and Distinguished Book Prizes awarded annually by the Society for Military History in the broad field of military history. The U.S. Commission on Military History provides two \$2,500 grants to encourage and support American graduate students seeking to present the results of their research in U.S. naval history topics at the annual overseas congress of the International Commission on Military History.

MARITIME HISTORY IN THE U.S. NAVY TODAY

A single broad historical theme might be presented to all four audiences, but it needs to be presented to each in a different way and by different means. Some audiences and groups may acquire their general knowledge through books and articles, but others are reached most effectively through images—films, videos, and dramatizations. An academic researcher may require original documents; a teenager, an interactive game; a member of Congress, a succinct tabulation of data; a career naval professional, a technical analysis. The detailed and technical information that makes maritime history useful for the professional audience makes it opaque and useless to the general public. Government leaders seeking critical analytical insight into current problems quickly dismiss elements of celebration and commemoration. Maritime historians and those who present their work must be aware of the differing needs of their audiences and the levels and approaches to history appropriate to each. There is no "off the rack" history. No one size and style fits all—but all styles are needed if history is to become more useful in and for the Navy than it is now.

The issue, however, is more than just a question of the audiences that will benefit from historical insight, and the differing styles they need. It is far more basic than that, and the situation is much more critical. In June 1999, the chairman of the Secretary of the Navy's Advisory Subcommittee on Naval History formally reported to Secretary Danzig that the U.S. Navy as an institution needed to put a much higher priority on preserving and using history-"The Navy places a far lower priority on history than the other services measured in competitive dollars and manpower."25 What money the Navy does receive for its current historical programs at the Naval Historical Center in Washington, it "stretches . . . very thin." The Navy employs fewer professional historians, archivists, or museum specialists than the other services and has nothing comparable to the separately funded U.S. Military History Research Institute (at the Army War College at Carlisle Barracks) or the separately funded Air Force's Historical Research Agency at the Air University, which complement the work of their Washingtonbased service historical offices. For the Navy, the Naval Historical Center in Washington has had the major burden, researching and writing history while also running the service's operational archive, the Navy Museum, an Underwater Archaeology branch that monitors naval ship and aircraft wrecks around the world, and the Navy's art collection. The other services have dispersed networks of historical offices to ensure that headquarters and operational history are preserved and recorded; the U.S. Navy has no similar system outside of Washington. There are no naval historians permanently attached to operational commands. The Naval Historical Center has only one naval reserve unit and a small naval reserve volunteer training unit to handle the job of gathering historical materials from deployed units to form the basis for the permanent historical record of the Navy's current operations. In the Navy today, operational history from deployed units is preserved only in summary form, through the annual ship, squadron, and unit command histories. These reports are often delegated to junior officers, who have little appreciation of the fact that they are preparing the permanent official records of their commands' activities. They sometimes treat the assignment as a public affairs exercise rather than a serious permanent record that documents commands' activities for the history of the Navy as well as for professional information and use in future decades. Unlike during World

War II or the Korean and Vietnam Wars, ships and major operational commands no longer submit action reports or keep war diaries; the annual command history was designed to replace these older methods of reporting, but operational commanders often overlook this responsibility.

Today, the Navy's key operational units are the numbered fleets, with their important battle fleet experiments, carrier battle groups, and amphibious ready groups, but few, if any, of these have ever produced command histories as permanent records of their operations. These operational commanders, of course, have wars to fight and win; nonetheless, the result of neglecting their historical obligation is that the nation has no permanent record of their operations for the benefit of professionals today or of future generations. Congress, government leaders, the general public, and uniformed and civilian professionals working within the Navy will entirely lack authoritative records of the contemporary history of our times, unless some action is taken to rectify the situation.

In some cases where recent records have been created, they have been put into a microcopy or electronic formats that are not useable on a permanent basis; the information that these systems were supposed to have saved is entirely lost. Information and raw data that could be used for future historical research and retrieval appears in e-mails and the electronic formats that the Navy uses every day, yet neither operational naval commands nor shore establishments have effective systems by which electronic archives can be routinely saved and delivered to safe and permanent archival storage, and the electronic data systems themselves saved for future use and reference. The paper copies of documents that naval commands have traditionally transferred to archival storage declined by 75 percent between 1981 and 1990, and the volume of archival acquisitions declined a further 50 percent in the following decade.²⁶ No effective electronic or automated means of permanent record keeping has yet been created to fill this void.

In December 2001, the chairman of the Secretary of the Navy's Advisory Subcommittee on Naval History reiterated these issues to Secretary of the Navy Gordon England and noted that

for too long the Navy as a whole has viewed history as "someone else's problem." As a result, much of our historical record over the last fifty years has been destroyed, and few of our Sailors know or appreciate our history. This mindset needs to be challenged. Every unit of the Navy shares responsibility for preserving records, understanding naval history and traditions, and drawing inspiration and wisdom from past accomplishments.²⁷

As a result of these repeated reports to the Secretary of the Navy, the Vice Chief of Naval Operations, Admiral William J. Fallon, issued an instruction in August 2002 to all ships and stations to establish a policy for the development and use of historical lessons learned and of historical resources to support and inform naval operations, plans, and programs.²⁸ Despite this clear and positive step, much remains to be done to implement a more effective and servicewide historical program for the U.S. Navy.

The Historical Center in Washington has a nine-million-dollar budget, which includes funding for USS *Constitution* but not the support of the museums outside of Washington and educational activities at the Naval War College and the Naval Academy. The Navy has not *completely* neglected maritime history, and budgets for the Naval Historical Center have not been cut to the extent that the budgets for other naval commands have been cut in recent years. At the same time, millions of dollars in the Navy's funding have gone into the review and declassification of archival records of many Navy commands. All this gives some strength and support to maritime history as it is broadly construed. The primary issue is not one of increased funding or additional manpower; the major challenge is one of changing the Navy's current mind-set and culture, which result in failure to conserve a permanent record of recent activities. They tend, specifically, to consider the Naval Historical Center as the only agency with any responsibility for the Navy's historical interest and to disregard the historical assets that are already at hand.

The historians who work for and advise the Navy can only point out, as they have repeatedly done in recent years, that the Navy and the country are in jeopardy of losing the record of a significant portion of their recent past and that the Navy is not making effective use of its historical assets and information. Only those who bear direct responsibility, the U.S. Navy's senior civilian and uniformed flag officers, can ever hope to change this mentality. Changing a servicewide attitude toward something so fundamental as history is no easy task, but it can be done if flag officers throughout the Navy actively engage themselves in the process. Even so, however, it cannot happen overnight. To understand how a professional can use history effectively requires education, reading, reflection, and knowledge.

The lack of general historical understanding within the U.S. Navy and its current inability to use history effectively is emblematic of the larger issue that the Navy faces in graduate and professional education as a whole. At least 90 percent of the general officers in the other U.S. armed services have attended both an intermediate and a senior service college, where historical understanding plays an important role in educating senior officers in policy, strategy, and the nature of warfare. In contrast, only around 30 percent of the serving flag officers in the U.S. Navy have attended even one senior service college, while less than 5 percent have attended both an intermediate and a senior service college.²⁹ Thus, even at the highest level, naval professionals lack education in the whole range of disciplines that provide enhanced critical thinking and decision skills for dealing with our modern world, with its increasing complexity and potential for information overload.

It is astonishing that anyone would seriously argue that historical insight is irrelevant to professional understanding, but that is a view one often finds today in the U.S. Navy. Among the many uses of historical understanding in and for the Navy, perhaps the most important is the need that our highly technological and interconnected society creates for an interdisciplinary education.³⁰ Precisely because our world is highly technological, education in technology and science alone is insufficient. Among all the disciplines and forms of understanding that naval professionals can and should use to broaden their outlook and to sharpen their abilities to deal with the present and the future is history, particularly maritime history—a resource and tool with which the U.S. Navy has made limited progress. Much more could and should be done for and with maritime history.

MARITIME HISTORY AT THE NAVAL WAR COLLEGE

At its founding in 1884 and for its first half-century, the Naval War College was a major force in promoting naval historical understanding. Alfred Thayer Mahan's books, The Influence of Sea Power upon History and Influence of Sea Power upon the French Revolution and Empire, were the published versions of lectures that he delivered to Naval War College students while serving as the College's President. At Admiral Luce's instigation, Mahan returned to the College on active duty in 1910 to revise another set of his earlier college lectures for publication, as Naval Strategy. Thereafter the culture of present-mindedness in a faculty that was then limited to active-duty officers serving short tours of duty gradually eroded the role of innovative historical research at Newport, although the classics of military and naval history remained part of the curriculum. In 1930, the College established its first Research and Analysis Department, which in 1931 began research on the history of warship types; a study of grand strategy of World War I; studies on naval actions in that war (including Jutland and the Gallipoli campaign); translations of the official German naval history of the war; and translations of the writings of important foreign naval strategists, such as Wolfgang Wegener and Raoul Castex.

In 1948, as part of his concept to widen the education of naval officers, Admiral Raymond Spruance, President of the College, recommended that the Secretary of the Navy approve a plan to employ civilian academics to teach the social sciences, political affairs, and naval history. As the College's chief of staff explained to Spruance's successor, a professor of history was to be the "means by which we clarify our thinking on the significance of sea power and maritime transportation in modern civilization. He will be one means by which the Naval War College will regain, maintain, and exercise world leadership in naval thought." That goal remains a daunting challenge by any standard and for any academic, but in the event, the chair, authorized by the secretary on 29 December 1948, remained unfilled until 1951. In 1953, the Secretary of the Navy named the chair in honor of Fleet Admiral Ernest J. King (with the admiral's personal approval). Over the next twenty years the chair was occupied by a succession of the country's leading maritime and military historians—such prominent historians as John H. Kemble, Charles Haring, James Field, Theodore Ropp, Stephen Ambrose, and Martin Blumenson-who came to Newport on one-year visiting appointments.

This practice changed in 1972, when Vice Admiral Stansfield Turner created a large civilian faculty with longer-term appointments. Turner also explicitly revived

the ideals toward which Luce and Mahan had striven nearly a century before, by making intensive use of historical scholarship a key element of the College's academic program, designed to educate midcareer officers for leadership roles in high command and as advisers to national leaders. Under his guidance, the new Strategy and Policy course carefully selected historical case studies that illustrated the recurring and major problems in the formulation of national policy and strategy.

The College's two other core courses, Joint Military Operations and National Security Decision Making, also use in-depth case studies in maritime history. In addition, a variety of optional electives have been offered in maritime history, including one-trimester courses on naval warfare in the age of sail, the Second World War in the Pacific, underwater archaeology, and the classics of naval strategy. All these form part of the curriculum for the master of arts degree program in national security and strategic studies, for which the College was accredited in 1991.

Turner also made innovations to promote the value of the history of the Navy. He established a Naval Historical Monograph series, to be published by the Naval War College Press; its first volume appeared in 1975, and a fifteenth, *The Memoirs of Admiral H. Kent Hewitt*, is being prepared for press at this writing. Building on the initiatives of the College's archivist, Anthony S. Nicolosi, who from 1970 had begun to reconstitute the school's scattered archives and develop a rare book and manuscript collection, Turner approved a concept to establish a research center for naval history. This original plan was only partially implemented, but in 1978 the College reacquired its original building from the Newport Naval Station, arranged for it to be designated as a national historic landmark, and renovated it as the College's museum, under Nicolosi's direction.

In the first months of 2003, Rear Admiral Rodney Rempt, current President of the College, revived the unfulfilled plan of his predecessor of a quartercentury earlier and established the Maritime History Department within the College's Center for Naval Warfare Studies. Chaired by the Ernest J. King Professor of Maritime History, this department is designed to include a research unit with faculty members equipped to do both basic and applied history and to coordinate all of the College's activities in maritime history—including the Naval War College Museum and the Naval Historical Collection of rare books, manuscripts, and archives of the Henry E. Eccles Library. The new Maritime History Department underscores the Naval War College's long-standing commitment, dating back to the College's conception and founding in 1884, to make effective use of maritime history for professional purposes in and for the Navy.

NOTES

- The classical statements of the argument in this essay were written by Sir John Knox Laughton, "The Scientific Study of Naval History," *Journal of the Royal United Services Institution* 18 (1879), pp. 508–27, and Admiral Herbert W. Richmond, "The Importance of the Study of Naval History," *Naval Review* 27 (May 1939), pp. 201–18, reprinted in *Naval Review* 68 (April 1980), pp. 139–50. Their ideas are subsumed and extended herein.
- History Associates Inc., *History and Heritage in the U.S. Navy* (Rockville, Md.: 16 October 2000), p. 3.
- 3. Ibid., executive summary, p. 3.

- 4. As quoted from the National Historic Properties Act in H. T. Johnson, Assistant Secretary of the Navy (Installations and Environment), memo to Vice Chief of Naval Operations and Assistant Commandant of the Marine Corps, 16 November 2001.
- 5. Richmond, p. 201.
- James Goldrick, "The Problems of Modern Naval History," in *Doing Naval History: Essays toward Improvement*, ed. John B. Hattendorf (Newport, R.I.: Naval War College Press, 1995), p. 11.
- 7. Robert Jervis, "Navies, Politics, and Political Science," in ibid., p. 46.

- N. A. M. Rodger, "Considerations on Writing a General Naval History," in ibid., pp. 117–28.
- 9. For the application of the distinction between basic and applied history to naval history, I am grateful to Dr. Rodney P. Carlisle and Dr. Philip L. Cantelon and the work of History Associates, Inc., Rockville, Maryland, in the report of their independent evaluation for the under secretary of the Navy, History and Heritage in the U.S. Navy: A Status Report, 16 October 2000, p. 5. Some writers have used the terms "public history" and "applied history" interchangeably to describe all historical work outside academia. In this article, I argue that there is a need to make a distinction between "public history" that is designed to inform the wider public outside academia and "applied history" that is used for highly specialized purposes with a profession. In the case of the Navy, this involves the development of professional pride as well as using the assistance of historical findings in developing policy.
- Basil Liddell Hart, *Thoughts on War* (London: Faber and Faber, 1944), p. 138.
- 11. History Associates, Inc., p. iv.
- William S. Dudley, "Reinventing Naval History," *Shipmate*, July–August 2002, p. 40.
- See D. W. Knox, "The Rôle of Doctrine in Naval Warfare," U.S. Naval Institute Proceedings 41 (March–April 1915), pp. 31–75.
- 14. See Jon Tetsuro Sumida, Inventing Grand Strategy and Teaching Command: The Classic Works of Alfred Thayer Mahan Reconsidered (Baltimore: Johns Hopkins Univ. Press; and Washington, D.C.: Woodrow Wilson Center Press, 1997), and his "New Insights from Old Books: The Case of Alfred Thayer Mahan," Naval War College Review 54, no. 3 (Summer 2001), pp. 100–11.
- 15. See David A. Rosenberg, "Process the Realities of Formulating Modern Naval Strategy," in Mahan Is Not Enough: The Proceedings of a Conference on the Works of Sir Julian Corbett and Admiral Sir Herbert Richmond, ed. James Goldrick and John B. Hattendorf (Newport, R.I.: Naval War College Press, 1993), pp. 141–75.
- 16. Naval Historical Center, www.history.navy.mil.
- 17. Jay Thomas, Navy Cultural Resources Officer, Naval Facilities Command, e-mail to

Naval Historical Center Stakeholder Working Group, 7 October 2002.

- 18. On making available official documents, see "Purpose and Contribution in Editing Naval Documents," in *Naval History and Maritime Strategy: Collected Essays*, ed. John B. Hattendorf (Malabar, Fla.: Krieger, 2000), pp. 91–108; and Christine Hughes in a yetto-be-published paper "Franklin D. Roosevelt, Dudley W. Knox, and Naval Documents."
- 19. See Benjamin W. Labaree, "The State of American Maritime History in the 1990s"; Kenneth J. Hagan and Mark R. Shulman, "Mahan Plus One Hundred: The Current State of American Naval History"; and David Alan Rosenberg, "Beyond Toddlerhood: Thoughts on the Future of Naval History"; all in Ubi Sumus? The State of Maritime and Naval History, ed. John B. Hattendorf (Newport, R.I.: Naval War College Press, 1994), pp. 363-419. See also, Frank Broeze, ed., Maritime History at the Crossroads: A Critical Review of Recent Historiography, Research in Maritime History 9 (St. John's, Nfld.: International Maritime Economic History Association, 1995). For reflections on more recent developments, see Jaap R. Bruijn, "Reflections on the Recent Past of Maritime History in the Netherlands and Abroad," and Frank J. A. Broeze, "Riding the Wave: The State of Maritime History, Opportunities and Challenges," in Frutta di Mare: Evolution and Revolution in the Maritime World in the 19th and 20th Centuries, ed. Paul C. van Royen et al. (Amsterdam: Batavian Lion International, 1998), pp. 9–18, 195–207, and Sarah Palmer, Seeing the Sea: The Maritime Dimension in History. An Inaugural Lecture Delivered at the University of Greenwich 11th May 2000 (Greenwich, U.K.: University of Greenwich, 2000).
- Benjamin W. Labaree et al., America and the Sea: A Maritime History (Mystic, Conn.: Mystic Seaport, 1998).
- 21. *Mystic Seaport: The Museum of America and the Sea*, www.mysticseaport.org/.
- 22. Over the years, the conference proceedings have appeared under slightly different titles and from different publishers. The first published volume was Robert Love, ed., *Changing Interpretations and New Sources in Naval*

History (New York: Garland, 1980). The fourth and fifth symposia papers appeared under the title New Aspects of Naval History, by two different publishers (Annapolis, Md.: Naval Institute Press, 1981; and Baltimore: Nautical and Aviation, 1985); the sixth and seventh appeared under the title Naval History (Wilmington, Del.: Scholarly Resources, 1987, 1988). From the eighth symposium (1987) to the fourteenth symposium (1999), the Naval Institute Press published the proceedings under the title New Interpretations in Naval History. The fifteenth symposium was planned to begin on 12 September 2001 but was canceled due to the terrorist attacks on the previous day in New York and Washington. However, many of the papers that were to have been presented there were published as the first issue of the e-journal International Journal of Naval History 1, no. 1 (April 2002), www.ijnhonline.org/index_apr_02.html.

- "Sources on U.S. Naval History in the United States," *Naval Historical Center*, www.history .navy.mil/sources/index.htm.
- 24. "Naval War College Library: Naval Historical Collection," *Naval War College*, nwcinet/

library/2general%20information/libarch.htm. The library site is www.nwc.navy.mil/library.

- 25. This quotation and the information in this paragraph is based on Dr. David A. Rosenberg, chairman, "The Report of the Secretary of the Navy's Advisory Subcommittee on Naval History for 1998," to Secretary of the Navy Richard Danzig, 27 June 1999, quotation from p. 1.
- 26. Dr. David A. Rosenberg, chairman, "The Report of the Secretary of the Navy's Advisory Subcommittee on Naval History for 2001," to Secretary of the Navy Gordon R. England, 7 December 2001, p. 6.
- 27. Ibid., p. 1.
- 28. OPNAV [Navy Staff] Instruction 5750.4D of 23 August 2002.
- 29. "Transforming Graduate and Professional Military Education," Graduate Education Review Board briefing, 2002, p. 14 (using 1998 data).
- 30. Richard Suttie [Capt., USN], "The Value of Graduate Education for Corporate America," white paper for the Graduate Education Review Board, 2002, p. 4.



FIGHTING AT AND FROM THE SEA A Second Opinion

Frank Uhlig, Jr.

n our concentration on the excellent sensors, weapons, computers, and communications systems now or soon to be in our hands, strategic and operational naval theory has faded from our minds—in some cases, it may never even have entered. Hence, the great effects imposed on the Navy and, indeed, on the world at large by Captain Alfred Thayer Mahan seemingly have passed forever. Since Mahan, who died nearly ninety years ago, few have ventured into this still illexplored field of endeavor, and the names of those who have done so do not easily come to the minds of others.

However, naval theory beyond the management of arms, sensors, and communications is alive, if not perfectly well.¹ Those writing today in this field invite thought on several matters, but here I will comment on only one—the methods for the use

of naval forces in war.

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© 2002 by Frank Uhlig, Jr. Naval War College Review, Spring 2003, Vol. LVI, No. 2 One well informed and thoughtful scholar lists six such methods.² These, in the order discussed below, are coastal defense, maritime power projection, commerce raiding, the fleet-in-being, fleet battle, and blockade. Over the centuries navies have used, or tried, all of them, and others, too. In the last half-century they have added two new methods. Perhaps a third is in the offing.

The defense of coasts, and especially of harbors, against superior forces coming from the sea has most often and most powerfully been undertaken from ashore by armies and air forces. The usual result of a strong harbor defense is that the potential invader either chooses a less desirable place through which to begin his campaign ashore, or he does not try at all. Cases in point are Manila in World War II and, also in World War II, some of the French Atlantic ports, all of them well defended. The Japanese, impressed by the harbor defenses at Manila, began their drive upon that city in December 1941 at Lingayen Gulf, 120 miles to the north. At the time of the Allied amphibious attack at Normandy in 1944, British and American respect for the German defenses of the French Atlantic ports led them to land near none of them. Through the use of small craft, including submarines, and minefields, local naval forces can contribute, in an adjunctive manner, to the defense of a coast or port, but they have seldom had the principal role and seem unlikely to do so often in the foreseeable future.

Maritime power projection consists of bombardments by aircraft, missiles, and guns, small-unit raids ashore, and invasions, all coming from across the sea. Whatever the form, this is what coastal defenses are supposed to thwart. These offensive actions from the sea are an option for strong navies when the enemy's navy is weak and even more so when his coastal defenses, too, are thin. When the defending enemy is strong the attacking fleet, and the landing force as well, must be very strong.

Nowadays, it might be argued, a large amphibious force would surely be detected well ahead of time, the defenders alerted, and the amphibious assault crushed. Still, in most such assaults of the last century, even though the defender usually did not know exactly when the attack was coming, he hardly ever was unprepared to oppose it vigorously. Yet, almost without exception, the amphibious assault carried the day. Thus, one should not refrain from using the amphibious weapon simply because it may no longer be hidden. In effect, it seldom ever was.

In 2001–2002, Osama bin Laden and his Taliban hosts probably imagined that in the absence of an Afghan coastline to be assaulted, they were safe from American reprisals mounted from the sea for bin Laden's murderous attacks on the United States of 11 September. No doubt to the consternation of bin Laden and the others, American diplomacy opened the Pakistani gates between Afghanistan and the Indian Ocean, as well as other gates well inland, and the American reprisals on the Taliban and their admiring guest came anyway. First the reprisals came from aircraft flying off carriers in the Arabian Sea and, not long after, from Air Force aircraft too. Some of the latter flew from Diego Garcia in the Indian Ocean, others from countries bordering on Afghanistan, and some directly from the United States. All American aircraft en route to Afghanistan needed the help of not only diplomacy but also, because of the long distances they had to fly in order to reach their objectives, that of tanker aircraft. The carrier planes were, for instance, "heavily dependent on shore-based tanking, much of which was provided by the RAF."³ Altogether the aircraft, assisted by several dozen Tomahawk land-attack cruise missiles fired from ships at sea, achieved a great deal. In cooperation with a few hundred Special Forces troops and a number of Afghan tribal armies, within a short time they chased the Taliban and its guests out of the lowlands and the cities into the mountains, where the survivors still lurk. The outcome of the struggle in Afghanistan is unclear and may remain so for some time. But the aviators flying from afloat and ashore were essential to the improvements so far achieved.

In whatever form it comes, maritime power projection works best when at least the immediate objectives are at, or near, the coast, or at most within the normal combat radius of the fleet's aircraft, including those of the landing force. It need not involve any combat afloat, though if such combat is among the possibilities, a navy had best be prepared to engage in it successfully. In 1917–18 this country advanced an army of two million soldiers across three thousand miles

It will not be enough for navies just to be able to board, examine, and perhaps seize merchant ships of interest. They must retain the ability to sink them. of the contested Atlantic to friendly French ports. To protect the forward-moving battalions, regiments, brigades, and divisions in their transports from German U-boats, the Navy provided each

convoy with a substantial escort of destroyers. Once the troops were disembarked, authorities ashore took over and moved them to where they would be needed, eventually to the fighting front three or four hundred miles inland. Though not an invasion, that enormous achievement, right up to disembarkation, certainly was "maritime power projection."

On a much smaller scale but mounted much more swiftly and over a much greater distance—eight thousand miles—the Royal Navy also projected power ashore in 1982, in response to the Argentine invasion of the Falkland Islands. The British navy landed the rescuing troops not in a friendly port but across a hostile, though undefended, beach fifty miles from the objective, which was the garrisoned village of Port Stanley. The Argentines chose to oppose the British amphibious assault—that is, they engaged in coastal defense—not with the troops they had on the islands, nor with missile-armed surface combatants, but with naval and air force aircraft flying from bases four hundred miles distant. It was only by a slight margin that the Argentine aviators failed. But they did, and in a few days the British landing force had recaptured the archipelago.

Whether the objective is near to, or far from, the beach, maritime power projection has so far had the most influence when the power projected from the ships consisted chiefly of troops in sufficient numbers to meet the need, and when the fleet supported them, during the landing and thereafter, with fire and logistics. A new form of fire support for forces ashore or about to go ashore is that of defending them, and the ships in which they are embarked, against attack by ballistic missiles. This may prove to be a heavy burden, to be borne by only a small number of ships. In our recent small wars, the primary forces projected, whether from ashore or afloat, have consisted of bomber and attack aircraft, with troops and surface-to-surface missiles in a supporting role.⁴ Be that as it may, a successfully landed army soon enough will provide its own fire, including that against ballistic missiles, but while the fighting lasts, its need for logistical support will be unending.

A few small, short-distance airborne assaults were carried out during World War II, notably by the Germans at Crete in 1941. But as a rule, the projection of an army across the water has been successful only when either there was little danger to shipping at sea or the side that wished to project force ashore had gained at least momentary command of those parts of the sea that were of interest to it. It had to continue to maintain such command for as long as it wished to sustain its forces on the other shore. After their air-landed assault forces had defeated the British defenders on Crete, the Germans achieved adequate local sea command, chiefly through the use of shore-based aviation.

Sometimes the weaker side at sea will engage in *commerce raiding*—that is, attacks on enemy shipping where no core issues are at stake, where distances are great, and where, while enemy merchant ships may be scarce, enemy warships are scarcer yet. The objective is, as inexpensively as possible, to annoy and inconvenience the enemy as much as possible without attracting too much of the enemy's strength to the defense of its distant merchantmen. This mode is exemplified by the nineteenth-century Confederate raider *Alabama* and by Germany's newly armed former merchant ships roaming the lonely southern ocean in the last century's world wars. This might still work, but probably not for long.

It was the weaker side too, and it alone, that would engage in the practice of a *fleet-in-being*. This required little more than a substantial naval presence with which to inhibit useful activities on the part of the more powerful opponent. The mere presence of the large German High Seas Fleet in the southeastern corner of the North Sea through the entire First World War is an example. It prevented the British from shifting important elements of the more powerful Grand Fleet (based at Scapa Flow, in that sea's northwestern corner) to other waters where they would have been most welcome. As the example suggests, the effect of a fleet-in-being was likely to be marginal. After 1918 this passive and largely ineffective form of warfare had just about died. Current means of intelligence and communications have buried the corpse.⁵

Fleet battle is aimed, through the defeat and even destruction of the enemy's main force at sea, at gaining command of that sea. Why does one seek such

command? What can one do with it? One seeks such command so that friendly shipping, filled with cargoes or people necessary for the survival of a nation and the success of its forces in battle, can sail to where it is needed when it is needed, and so that hostile shipping cannot do those things.

Once the enemy's main force at sea is defeated or destroyed, one's own combatant ships can then be dispersed in ways that will help ensure the destruction of the enemy's weaker warships and the capture, blockade, or destruction of his military and commercial shipping. Moreover, concentrated anew, they can protect and support forces engaged in the projection of power ashore.

What do we mean by "shipping"? Commercial shipping, normally privately owned but in wartime usually under government control, consists of ships carrying fuel (gas, coal, oil, refined products), dry bulk cargoes (grains and ores), food and manufactured goods (now almost always in containers), autos and trucks, and heavy and bulky structures (sometimes including damaged ships). Commercial shipping also includes ships and boats engaged in fishing, in support of those extracting oil and gas from the sea, and in the swift or clandestine transport of such illegal cargoes as drugs and unsought immigrants. Though they are not ships, oil and gas rigs in the ocean, and transoceanic cables too, are as worthy of naval attack and defense as any ship might be.

Military shipping, often commissioned naval vessels, includes all those ships that do not take part in the struggle for command of the sea—such as those intended for amphibious warfare and for the logistical support of forces engaged in combat afloat, aloft, or ashore. Ballistic missile submarines come under this heading too.

Though there have been many actions between small and medium-sized naval forces—such as at Manila Bay (1898), Dogger Bank (1915), and the bloody night actions in Ironbottom Sound (1942)—there have never been many fleet battles. In the First World War there was only Jutland (1916). On that occasion the German admirals had neither sought nor expected their encounter with the

Few people today know that oceangoing merchant ships are not only much larger than their predecessors but also more numerous than they have been for a long time. Grand Fleet; thereafter they made sure it would not be repeated. The battle's most important effect was that the German navy shifted the bulk of its effort to direct attack on hostile shipping by means of

submarines. In the Second World War there were no fleet battles at all in either the Atlantic or the Mediterranean, and very few in the Pacific. It seems likely that no one now, or soon to be, in any navy will ever experience such an action.

Blockades attempt in another way to achieve what successful fleet battles theoretically do. The military blockade is an attempt by the stronger fleet to keep the weaker fleet locked in port where it can do its own side no good, its enemy no harm. Even in the old days blockades were more common than big battles, because while the stronger fleet longed for a fleet action, the weaker one dreaded such a thing. Since the coming of the aircraft and now of the long-range missile as well, ships in port are not likely to be any safer than those at sea. The difference is that ships at sea can do things, and they often are hard for an enemy to find, while those in port can do nothing and are easy for an enemy to find.

Just before the First World War, with the submarine an established part of every fleet, the aircraft not far behind, and the effectiveness of minefields upon incautious ships beyond doubt, the British decided that next time they would establish a "distant" blockade (hundreds of miles from the ports of interest) rather than a "close" one.

When war broke out in 1914, traffic across the once commercially lively North Sea ended, as a result of the British blockade; that sea became, in the words of a German admiral, Edward Wegener, a "dead sea."⁶ So it remained as long as the war lasted. Mainly in its commercial form, the distant blockade was a great success. Almost no ships, civil or naval, tried to sail from outside into German ports or from German ports to destinations outside. Only U-boats tried that. They made such voyages routinely, but they alone.

In the role of counterblockaders the U-boats proved highly successful. In the English Channel, the Western Approaches to Britain, and the Mediterranean too, they could not capture British and other Allied shipping, but they could sink it. Soon an old truth reasserted itself—that Britain and its allies, much more than a wholly continental alliance, were dependent for their very lives on the flow of merchant shipping in and out. The defeat of Allied shipping by the U-boats would have meant the defeat of the entire Allied war effort. In the nick of time, the British, both naval officers and merchant mariners, reluctantly recognized that the way to overcome the deadly threat was to form merchantmen into convoys guarded by small warships suitable to the task. This they did; as a result, the threat to shipping was cut to a bearable size. The Allies recovered their strength, and before the end of 1918 they had defeated Germany on the western front.

In the second war, that of 1939–45, as soon as possible the struggle at sea between submarines and convoys took the form of submarine "wolf packs" deployed operationally against convoys by headquarters ashore on the strength of communications intelligence. The convoys, this time protected not only by small warships but also by large, land-based aircraft, came to depend as well on advice, commands, and communications intelligence from their own headquarters ashore. In keeping with the Allied objective at sea—the safe and timely arrival of the convoys—the most important use of such intelligence was to route the convoys away from where it was expected that U-boats would be. The next most important use of it was to direct Allied aircraft and warships not needed for escort of convoys to where U-boats would most likely be found. It took the Allies three and a half years to win this struggle. Once they had the upper hand they never loosened their grip, for victory in the Atlantic was the prerequisite for victory on and over the continent of Europe.

What we have seen here—sustained heavy assault on, and defense of, shipping far at sea—is something not often found in lists of naval functions. However, since the world wars we have not seen, nor are we likely soon to see again, anything like it. Rather, the assault on, and defense of, shipping has abandoned the open oceans and moved into coastal waters and the narrow seas. Aircraft and surface combatants large and small have engaged in such warfare during the last half-century in the Sea of Japan, Yellow Sea, Taiwan Strait, South China Sea, Persian Gulf, Red Sea, eastern Mediterranean, and Falkland Sound. Some of their actions have had much greater influence, or impact, on the course of the war than the small size of the craft often engaged would lead one to expect.

By the middle of the twentieth century we had seen the end, so it appears, of commerce raiding, the fleet battle, and the fleet-in-being. What remained for navies was, by whatever means were both possible technically and acceptable politically, to ensure that friendly shipping could reach its destination in a safe and timely fashion and that hostile shipping could not. Should friendly shipping be able to do as desired, then and only then would it also be possible, if necessary, to engage in maritime projection of power—that is, to assault the enemy ashore, in whatever ways seemed most suitable.

Since then, two methods of using naval forces have been added and two strategic conditions have changed. The first new method to be added was the deterrence of nuclear attack-the forestalling of any such attack upon one country by means of the threat of an equal or greater nuclear blow upon the country that had launched the attack. The necessity for this arose shortly after the Soviet Union demonstrated its ability to manufacture and use nuclear weapons. In the United States, at first nuclear deterrence was entirely the responsibility of the Air Force, but over time it shifted toward the sea, and now, through its ballistic-missile submarines, the Navy has a large, perhaps the largest, part to play. For the same reason as the United States, the Soviets, British, and French also supplied themselves with such submarines. With Russia having reasserted its own existence in place of the sinister Soviet Union and the good relations now enjoyed among all four powers possessing such submarines, the deterrence task has lost the salience it once had. Moreover, it has no part in our current struggle against a stateless enemy, Osama bin Laden and his criminal gang of religious zealots. But against a small power potentially possessing some "weapons of mass destruction," the deterrent effect of our ready nuclear forces should be as dependable at least as it was in the days of an

immensely powerful, aggressive, and overtly hostile Soviet Union. As the years go by it will be important to replace old ships, weapons, and all else necessary to the success of the force dedicated to the role of nuclear deterrence.

The other new method of employing naval forces is that of making sure friendly air traffic can pass over the sea and hostile military air traffic cannot. Let us quickly review an example. In the fall of 1973 the United States responded to an Israeli demand for help during the war that had broken out between that country and Egypt (to the southwest) and Syria (to the northeast). U.S. combat aircraft were flown from this country to Israel; to ensure their safe and timely arrival, the Sixth Fleet strung itself out almost from one end of the Mediterranean to the other. Its immediate tasks were navigational assistance to transiting aircraft, protection against air interdiction originating in North Africa, and help in the event of a mishap. Two carriers of the three available in that theater provided tanker support to aircraft that needed it, while the third made room for some of those same aircraft on its flight deck. Shortly, it appeared that the other great power actively engaged in the area, the Soviet Union, might be preparing to airlift some of its own troops to Egypt. In response, the Sixth Fleet concentrated south of Crete, where, should the situation arise, it could both protect Israelibound shipping and aircraft, and destroy Soviet shipping and aircraft bound for Egypt. Meanwhile Soviet warships, which had been stationed where they could protect supply ships and air transports bound for Syria, moved south so they could provide similar protection to air transports bound for Egypt. They might have performed that task either by means of surface-to-air missiles with which to engage U.S. fighter planes headed toward the transport aircraft, or by means of surface-to-surface missiles with which to engage the carriers from which the aircraft would fly. By that time, however, a truce respected by both sides had taken hold ashore. The Soviets did not try to fly their troops to Egypt. Slowly the ships dispersed, and the crisis wound down.⁷

At the top of the preceding paragraph is an inequality: a fleet must ensure the passage of "friendly *air traffic*" and prevent the passage of "hostile *military air traffic*." The reason for protecting all friendly air traffic is plain. But attack on hostile civil aircraft, at least at the beginning of a war, could result in the destruction of an airplane filled with hundreds of civilian passengers trying merely to go about their private lives. In 1988 a U.S. warship did shoot down an Iranian civil airliner (having mistaken it for an attacking combat plane), and nearly three hundred people perished unnecessarily. Nothing much came of this, for the United States expressed its regrets immediately and did what little it could to make amends. A more ominous analog was the sinking by a U-boat in 1915 of the British passenger liner *Lusitania*, an attack that cost over a thousand lives, including those of many Americans. Most people in this country had been indifferent to the outcome of

the European war, but the sinking turned many of them into opponents of Germany and helped bring about the American decision two years later to enter the war against that country. So, although passage of hostile military aircraft over the sea, or even inland within reach of the fleet's weapons, should be prevented, passage of an enemy's civil aircraft is a different matter.

The potential third new method of employing naval forces in war or near-war is that of forward defense of countries friendly to us from attack by ballistic missiles. If this task, which is likely to be separate from that of defending our own forces, were undertaken by the U.S. Navy, it would require the services of perhaps a large portion of the nation's not very numerous modern surface combatants, at some measurable cost to the accomplishment of other assigned, or assumed, missions.

In order to destroy a hostile ballistic missile before it has gained too much speed or advanced too far into space for a forward-deployed ship to counter, our ship might have to be very close to the launching site. However, its being there would mark it as a clear and present danger to one of the potential enemy's most highly prized possessions. Thus, before launching a missile (not necessarily only one missile), the enemy might reasonably seek to disable, sink, or capture our forward-located ballistic missile–defense ship. Because the hair-trigger nature of

While passage of hostile military aircraft over the sea, or even inland, should be prevented, passage of an enemy's civil aircraft is a different matter. our ship's duty will demand the full attention of all on board, to assure that it can carry out its assigned task, we might find it advisable to deploy additional forces for its protection. This is

one of those old naval issues that, when ignored, bring great difficulty. Consider the catastrophes that enveloped those lonely far-forward ships, the USS *Liberty* in 1967 and the USS *Pueblo* in 1968.⁸

Perhaps the threat to a hostile ruler of being annihilated himself, along with all he values, posed by our, and other countries' nuclear deterrent forces, so successful for so long, will still prove to be the least provocative, most effective defense we will have against hostile missiles.⁹

The ability and willingness to counter-attack is inherent in deterrence. So it will be necessary for the government to make clear to everyone that no matter what its nature or means of delivery, any "weapon of mass destruction" fired at this country, at our forces, or at one of our allies who does not itself possess nuclear deterrent forces, will yield in return more than one nuclear explosion in the land of the perpetrator.

The first of the two strategic conditions that changed in the second half of the last century is that most of the countries that had maintained large navies and

used them vigorously in the wars of the first half of that century have lost interest in engaging in wars against their neighbors and thus also lost the resources needed to do so, let alone to engage in warfare against countries at a significant distance. Thus, except for the United States, they now see no further need to have large navies. Moreover, though powerful militarily ashore, neither China nor India seems ready to match its strength there with similar strength afloat. For its part, with 337 ships in commission at the end of 2001, the U.S. Navy, currently the biggest in the world by far, has about the same number of ships in commission as it did during the years of pacifism and economic depression between the two world wars. This number is far smaller than at any time since those days.¹⁰ It is a number not soon likely to grow.

The second changed strategic condition is that few major countries-China is the great exception-nowadays man or maintain substantial merchant fleets under their own flags. Indeed, in Europe and North America, once the world's main sources and users of seagoing ships of all kinds, not many people even know how to build a merchant ship. What has not changed is that almost all those countries are as dependent as ever on the safe and timely flow of merchant ships into their ports, each ship filled with necessary or at least desirable imports. In general, they are equally dependent on the safe and timely flow of such ships out of their ports, many of them filled with important exports. Few people today know that oceangoing merchant ships are not only much larger than their predecessors but also more numerous than they have been for a long time.¹¹ The coming into common use of the highly efficient cargo container, which can swiftly be moved from ship to truck or train, has led to the economical commercial practice of "just in time" resupply of goods or products from source to store. No one wishes disruption of this efficient flow-that is, no one except those at war with important exporters or importers.

During their long war of 1980–88, Iran and Iraq came to attack each other's oil exports. Iraq did so by means of missiles launched from aircraft at what mainly were neutral tankers attempting to fill themselves at Iranian terminals. Iran did so primarily by laying mines in the channel between Kuwait (which was Iraq's seaport proxy) and the exit from the Persian Gulf.

The Iraqi pilots hit many ships with their missiles. But despite the almost complete absence of naval or air protection, the flow of neutral tankers willing to risk attack never ended—the Iraqi attack on shipping failed. In contrast, the United States, which favored Iraq as the lesser of evils and feared what the Iranian mines and other naval instruments might do to Iraq's ability to continue the war, arranged to have a number of foreign-flag tankers placed under American colors. This justified the employment of U.S. warships to protect the tankers from any form of Iranian attack. A series of skirmishes followed that led, among other results, to the destruction of several Iranian warships and oil drilling platforms at sea, as well as serious mine damage to an American frigate. The most important effect of these activities, albeit one little noticed, was that all merchant ships under the protection of the U.S. fleet arrived where they were needed when they were needed. After a year Iran called a halt to the war, not only that against the United States but also that against Iraq.¹²

It is to the advantage of most countries that neither tankers nor container ships be sunk at sea and that tankers, at least, not be sunk in port either. If a tanker were to be sunk at sea, someone's fishing grounds could be ruined, or a coast fouled, for years—if in port, the result would be even worse. Should a container ship be fatally damaged at sea, not only would the ship's entire cargo be lost but hundreds, or even

The assault on, and defense of, shipping has abandoned the open oceans and moved into coastal waters and the narrow seas. thousands, of buoyant or semibuoyant containers could break loose from the sinking ship and form a giant floating minefield, albeit a nonexplosive one, endan-

gering all ships and craft nearby, perhaps for months. A new task for navies, or for the U.S. Coast Guard if the problem is in American waters, will be to round up all those floating containers in such a contingency, either placing them aboard some self-submerging ship—such as a dock landing ship (LSD) or a heavy-lift ship—or sinking them so they will be no more a source of danger to others. This task will be tedious, dangerous, and important. Hence, it is a good thing that the U.S. and other navies have revived the old practice from sailing ship days of organizing boarding parties in order to examine, and perhaps seize, merchant ships of interest—as well as, for intelligence purposes, the people on board. Thus, in this old way twenty-first-century navies can conduct blockades (or embargoes, quarantines, or other terms suitable to non-war confrontations) in a highly effective fashion.¹³

However, that does not mean belligerents opposed to the safe passage of the enemy's ships, or enemy-supporting neutral ships, across the seas and oceans will not resort to whatever means they have to sink them. If the ships in question are ours or supporting us, the U.S. fleet must protect them. If they are the enemy's or supporting the enemy, that same fleet must blockade, capture, or sink them.

For an important reason, it will not be enough for navies just to be able to board, examine, and perhaps seize merchant ships of interest. They must retain the ability to sink them, for without that, the people in those ships might choose to brush off the attentions of would-be boarding parties. When one considers in particular the current need to keep dangerous ships out of our ports and those of our neighbors, the importance of retaining the capability to sink them looms large.

For that reason the U.S. fleets should consider establishing on each coast, or other areas of concern, "flying squadrons" of suitable forces able to concentrate

on ships of interest as far at sea as intelligence will permit. If such a ship resists seizure, it should be sunk, and sunk as quickly as possible. No resource of ours is better suited to that task than a submarine, for no other ships, and few aircraft, have weapons so effective for that purpose as a submarine's full-sized torpedo—or two, or three, as needed. Other resources will be needed to rescue survivors from the sea and, should any such survivors still be filled with murder-ous hate, to control them until they are delivered to the authorities ashore.

How does this play out in a world dominated by information?

Commanders in the time of George Washington and Horatio Nelson had to fight their battles, campaigns, and wars in an era of information poverty. Commanders now must fight in an era of information wealth, or even of information excess.

We celebrate today the enormous volume, variety, and accuracy of information we gather and the speed with which we move it over great distances. We seek, send, receive, store, and delete information. Sometimes between receiving information and deleting it we examine and act upon it well. Information now not only comes from, but also goes to, great numbers of devices that we have conceived, created, and deployed. One example is the direct coupling of sensors and navigators to weapons.¹⁴ Hitherto, forces were accustomed to firing, launching, or dropping many weapons in the hope of gaining at most a few hits. With the current coupling, the likelihood of a hit is so high that only one weapon, or a few, need be directed at any target. The influence of this change on the requirements for ships, aircraft, launchers, weapons, fuel, parts, and crews has been enormous. Now only a few (or a little) of each of these can achieve as much as once required many (and much). This both eases a navy's problem of protecting logistical ships and aircraft and magnifies the effect of the loss of even one. In time the enemy, whoever it may be, will be operating under the same influences.

All the foregoing—people, ships, weapons, and the rest—must be harnessed by the commander in order to carry out his (or her, not yet its) intent. Nowadays that commander is more likely than ever before to be at a great distance from the scene of action; yet he possesses the ability to make tactical decisions in a timely fashion. This ability is something far beyond the reach of Admiral Chester Nimitz in Hawaii during World War II, or even in the thick of battle, as Vice Admiral Nelson was at Trafalgar in 1805. Current and future very senior officers and civilian officials having such power likely will see it as a good thing. Among the others, at least some will see it otherwise.

Whether information comes from near or far, or reaches the recipient through his eyes or ears, the great efforts we make now (and made in the past, too) to gain and transmit it are all intended to influence, affect, and direct in a timely way their recipients' thoughts and actions. The same purposes lie behind efforts to deny the enemy timely access to accurate information and, in the same fashion, to provide him instead with believable misinformation.¹⁵

Hence, both sender and receiver must be able to trust that the signal received is identical to the signal sent. They must also be able to understand accurately what has come in and, if a message is just wrong, or fraudulent, to sense that. (Recent experiences in Eastern Europe and Central Asia suggest we have room for improvement here.) Finally, those to whom information is sent must be able to decide swiftly what to do about it—sometimes to do nothing is best—and send out to their subordinates orders that are coherent, practical, and suitable to the occasion.

It is in this context that naval forces now and in the foreseeable future must carry out their missions. How will they do that?

Mainly, it appears, they will make sure that friendly ships, and aircraft flying over the sea, can go where they are needed when they are needed, and that enemy ships and military aircraft flying over the sea cannot do those things. Furthermore, if necessary or desirable, they will land forces ashore, supporting them then, and thereafter, with fire and logistics. (If sufficient ground forces are already in place, the provision by the fleet of fire and logistics will be enough.) For those who like labels, this can be called "objective-centered warfare."

Little of the foregoing is new. Less is dramatic. Often those engaged in a navy's work must demonstrate high skill and courage. As they do so, they must understand that the world will most likely have focused its attention elsewhere and will never notice how well they perform. But those are everlasting characteristics of war at sea, and from the sea.

NOTES

- The point is made with particular clarity by Roger Barnett—Captain, U.S. Navy (Ret.), and professor emeritus of the Naval War College—in his "Naval Power for a New American Century," *Naval War College Review* 55, no. 1 (Winter 2002), pp. 43–62. Because it invites new thought from others, its publication was particularly welcome.
- 2. Ibid., p. 46.
- 3. David C. Isby, "Carrier Battle Group and Its Alternatives," *Air Forces Monthly*, September 2002.
- David R. Mets, The Long Search for a Surgical Strike: Precision Munitions and the Revolution in Military Affairs (Maxwell Air Force Base,

Ala.: Air University Press, 2001), pp. 34–50. In the preface to his small book Dr. Mets says (p. xii) that even if airpower "cannot carry the day alone, we would be derelict to our duty as citizens not to consider the possibility of increasing use of airpower as the supported force and ground and sea power as the supporting forces."

- Wayne P. Hughes [Capt., USN, Ret.], of the Naval Postgraduate School, Monterey, California, conversation and notes in Newport, Rhode Island, 3 October 2002.
- Edward Wegener [Rear Adm., Federal German Navy, Ret.], "Theory of Naval Strategy in the Nuclear Age," in *Naval Review 1972*, ed. Frank Uhlig, Jr. (Annapolis, Md.: Naval

Institute Press, 1972), p. 195. (This annual also served as the May 1972 issue of the Naval Institute *Proceedings*.) On the same page Admiral Wegener states that "sea traffic is the object of naval war."

- 7. This is a shortened version of my account of those events on pages 360–61 and 362 of *How Navies Fight* (Naval Institute Press, 1994). Sources for that account are Robert G. Weinland, *Superpower Naval Diplomacy in the October 1973 Arab-Israeli War* (Arlington, Va.: Center for Naval Analyses, 1978); and Stephen S. Roberts, "The October 1973 Arab-Israeli War," in *Soviet Naval Diplomacy*, ed. Bradford Dismukes and James M. McConnell (New York: Pergamon, 1979).
- 8. On the swiftly emerging issue of the defense of both our forces and nearby allies from theater-range and area-range ballistic missiles see Charles C. Swicker [Cdr., USN], *Theater Ballistic Missile Defense from the Sea: Issues for the Maritime Component Commander* (Newport, R.I., Naval War College Press, 1998). Commander Swicker's is a remarkably clear and concise discussion of a subject that lends itself to long-winded murkiness.
- 9. For an interesting account of an earlier naval effort to help defend the nation against a land-to-land attack from over the ocean, see Joseph F. Bouchard [Capt., USN], "Guarding the Cold War Ramparts: The U.S. Navy's Role in Continental Air Defense," *Naval War College Review* 52, no. 3 (Summer 1999), pp. 111–31.
- Naval Historical Center, U.S. Navy Active Ship Force Levels, 1917– (Washington, D.C.: Ships Histories Branch, 23 January 2002).
- 11. According to a table of shipping statistics compiled by the Maritime Administration in 1992 and sent me two years later by Mike Blouin, then of that organization, in 1940 (before the sinkings and building programs of war had had much time in which to distort peacetime figures) there were in the world 12,798 seagoing merchant ships of 80,600,000 deadweight tons. Half a century later, in 1990, the number of ships had nearly doubled, to 22,983, and their deadweight tonnage, or carrying capacity, had multiplied

more than seven times, to 609,479,000. Since 1990 these numbers have risen.

- 12. For an excellent contemporary account of how this task is handled in one area, the upper reaches of the Persian Gulf, see James Goldrick [Commodore, Royal Australian Navy], "In Command in the Gulf," U.S. Naval Institute *Proceedings*, December 2002, pp. 38–41.
- 13. In Tanker Wars: The Assault on Merchant Shipping during the Iran-Iraq Crisis, 1980– 1988 (London: I. B. Taurus, 1996), Martin S. Navias and E. R. Hooton provide a thorough account of that subject. Other sources are: Anthony S. Cordesman and Abraham R. Wagner, The Lessons of Modern War, vol. 2, The Iran-Iraq War (Boulder, Colo.: Westview, 1990), pp. 135, 271–73, 338; Michael A. Palmer, Guardians of the Gulf: A History of America's Expanding Role in the Persian Gulf, 1833–1992 (New York: Free Press, 1992), pp. 119–49; and Uhlig, How Navies Fight, pp. 378–83.
- 14. This combination of sensors, navigating devices, and weapons has taken unto itself much of the work formerly carried out by the tactician, who usually has concerned himself, at least up to now, first with finding the enemy and then with placing his own command where it can deliver its fire upon that enemy with greatest effect, keeping in mind the desirability of minimizing the enemy's ability to return fire effectively.
- 15. Commander G. Guy Thomas, U.S. Navy (Ret.), pointed out recently that "one seeks command of the electro-magnetic spectrum for reasons analogous to the reasons a navy seeks command of the sea: so that friendly information necessary for the survival of a nation and the success of its forces in battle can get where it is needed when it is needed, and that hostile information cannot do these things" (conversation, 3 September 2002). Commander Thomas is the liaison officer between the Johns Hopkins University Applied Physics Laboratory in Baltimore and the Navy Warfare Development Command in Newport, R.I.

THE CHALLENGES OF AMERICAN IMPERIAL POWER

Michael Ignatieff

e live in a world that has no precedents since the age of the later Roman emperors. What is so remarkable is not simply the military domination of the world by a single power. In Alfred Thayer Mahan's time, Britain dominated the seas (but had to share its domination with a number of other navies). It is not just the fact that this single power, the United States, has achieved its dominance at incredibly low cost to its economy—some 3.5 percent of gross domestic product. It is not simply the awesome reach of its military capability the ability of an air command center in Saudi Arabia to deliver B-52 strikes on a mountaintop in Afghanistan within seventeen minutes of receiving target

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coordinates from special forces on the ground. Nor is it resolve; terrorists everywhere have been cured of the illusion created by the American debacle in Somalia in 1993 that America lacks the stomach for a fight. What is remarkable is the combination of all these: technological dominance at a lower cost proportional to wealth than at any other time in history, absense of peer competitors, and inflexible resolve to defend its way of life—and those of other nations as well, who, like Canada (I happen to be a Canadian citizen), are happy to shelter under American imperial protection.

Parallels to the Roman Empire become evident. The difference, however, is that the Romans were untroubled by having an empire or by the idea of an imperial destiny, while the Americans, who have had an empire, it could be argued, since Theodore Roosevelt, persist in believing that they do not. The United States, then, is a unique empire—an imperial power without consciousness of itself as such. On 11 November 2002, President George W. Bush, remembering Americans in uniform who had laid down their lives, remarked in passing that America is not an empire—it has no imperial designs, no intention of conquest.* There is no reason not to take the president at his word; I am speaking of empire in a different way. Empires need not have colonies, need not be established by conquest and aggression; the United States is an empire in the sense that it structures the global order. It does so primarily with American military power, diplomatic resources, and economic assets, and it does so primarily in the service of its own national interests. If its interests can serve those of allies as well, so be it, but the United States acts on that basis even if they do not. It is impossible to understand the global order, or the sense in which it is an order at all, without understanding the permanently structuring role of American global power projection.

The well-known maps indicating the division of the globe into the "areas of responsibility" of CentCom, NorthCom, and all the other "Coms"[†] convey an idea of the architecture underlying the entire global order. This is a different vision of global order than Europe's-that of a multilateral world ordered by international law. There is a great deal about international law that can be admired, but it seems to miss the fundamental point-the extent to which global order is sustained by American power. In November 2002, for instance, the United Nations Security Council passed, fifteen votes to none, a resolution on Iraq. We can be perfectly sure, however, that without the inflexible, unrelenting American pursuit, through those multilateral institutions, of the U.S. national interest, nothing would have happened in respect to Saddam Hussein's weapons of mass destruction. Multilateral institutions like the United Nations are important, but their entire momentum, force, and direction are driven by American power; literally nothing happens in these institutions unless the Americans put their shoulders to the wheel. It is in that sense that I refer to America's exercise of an imperial structuring and ordering role in the world, and in that sense that there is an analogy to Rome.

But there is a more troubling parallel—troubling for those who use military power for a living—with the Roman Empire in its later centuries. It is that

^{* &}quot;Over the generations, Americans have defended this nation without seeking to dominate any nation. American troops do not come as conquerors, but as liberators." "President Commemorates Veterans Day at Arlington Nat[iona]l Cemetery," *The White House*, www.whitehouse.gov/news/ releases/2002/11/20021111-3.htm [22 November 2002].

[†] The nine unified combatant commands—including U.S. Central Command and U.S. Northern Command. See "Unified Combatant Commands," *Defense Almanac*, www.defenselink.mil/pubs/ almanac/almanac/organization/Combatant_Commands.

overwhelming military superiority does not translate into security. Mastery of the known world does not confer peace of mind. America has now felt the dread that the ancient world must have known when Rome itself was first threatened by the Goths. In the fifth century, an imperial people awakened fully to the menace of the barbarians on the frontier when they poured over the marches and sacked the city; today the menace lies just beyond the zone of stable democratic states that see the Pentagon, and until 2001 the World Trade Center, as headquarters. In those border zones, modern-day barbarians can use technology to collapse distance, to inflict devastating damage on centers of power far away. In March 2001, I asked an audience of U.S. Naval Academy midshipmen from which country the next threat to their ships would come; they could not answer the question. I suggested Afghanistan, to stunned silence. Even to these educated young men and women, only five months after the attack on the USS *Cole*, the strategic challenge that a tiny country on India's northwest frontier could pose to the United States was not evident.

We have now awakened to the barbarians. We have awakened to the radical collapse and distance that they have wrought. Retribution has been visited on the barbarians, and more will follow, but the U.S. military knows that it has begun a campaign without an obvious end, and that knowledge has already affected the American way of life and the way Americans think about it. The most carefree empire in history now confronts the question of whether it can escape Rome's ultimate fate. The challenge can be localized, for a moment in Afghanistan, then in Iraq, but it is global in character, and that is unsettling. There are pacification operations, overt or covert, already under way in Yemen, in Somalia, in the Sudan. According to the Washington Post, al-Qa'ida attempts to launder financial assets have been traced to Lebanese business circles that control the export of diamonds from Sierra Leone, Liberia, Angola, and the Congo. There are cells to be rooted out in the Philippines and in Indonesia. Now, at this writing, there is the prospect of an operation against Iraq, of which the primary purpose, self-evidently, is the elimination not only of weapons of mass destruction but of the core of Arab rejectionism. Its aim is to break the logjam that has frustrated Middle East peace for fifty-odd years and then to reorder the map of an entire area to serve the strategic interests of the United States. If that is not an imperial project, what is?

An American empire that had since the defeat in Vietnam been cautious in its designs has been roused to go on the offensive. The awakening was brutal, but there might be reason, in an ironic way, to be thankful—as a great poet once said, barbarians are a "kind of solution."* Barbarism is not new; fanaticism is not

^{*} Constantine Cavafy (Konstantinos Kavafis, 1863–1933), in Awaiting the Barbarians: "Now what's going to happen to us without barbarians? / Those people were a kind of solution."

new. What is new is the connection between barbarian asymmetric methods and a global ideology, Islam, that provides a bottomless supply of recruits and allies for a global war. Also new is the way in which fanatics have exploited the values of our society—our openness and freedom, as well as our technology—to take war to the heart of the empire.

The single most dangerous thing about terrorism is the claim that terrorists are responding to grievances about which, in fact, they do not care. The 11 September attackers made no demands at all, declared no explicit political agenda. They went to their deaths in complete silence. Nonetheless, hundreds of millions of people accepted them as representatives of their own long-frustrated political desires—to drive Israel into the sea, to expel America from the holy places, and so on. The hijackers themselves were more interested in the spectacle of destruction, in violence for its own sake, than in the redemption of the downtrodden, but they have been taken as martyrs for political ends.

Unless some of those political ends can be addressed, it is not clear that there can be an appropriate solution to the problem of terrorism; the U.S. armed forces are being asked to solve militarily a problem that probably, in the end, has only political solutions. Robust military responses are needed, but they must be

But the case to rebuild Iraq is fundamentally not ethical but prudential—it is a smart thing to do. part of a political strategy—in fact, a geopolitical strategy, one that recognizes that the American homeland has found itself caught in the crossfire of a civil war. The terrorists are not attacking only

the United States, or even the West; they are also coming after its Arab allies. They want nothing more than to return the Arab world to A.D. 640, to the time of the Prophet. The civil war is a desperate struggle between the politics of pure reaction, represented by client Arab regimes, and the politics of the impossible the desire to take these societies out of modernity altogether. That viewpoint brings home how exposed politically the United States is. One aspect of that vulnerability that the attacks of 11 September 2001 laid bare is the extent to which the West has treated its Arab allies as mere gas stations. These Arab states have become decayed and incompetent betrayers of their own people, and betraying and incompetent defenders of U.S. interests. The American empire is in the process of discovering that in the Middle East the pillars upon which it depends for support are built of sand; that is one element of the political challenge it faces.

Another element, and one of the unacknowledged causes of "9/11," is the juxtaposition of globalized prosperity in the "American world" with the disintegration of states and state order in places that achieved independence from the colonial empires after the Second World War. American hegemony in the post– Cold War world has coincided with a process of state disintegration. The United States has achieved global hegemony just as the global order is beginning to come apart at the seams. Not only are the colonial states that arose between 1947 and 1960 in Africa and Asia starting to unravel (Exhibit A being Pakistan), but the states, like Georgia, that achieved independence with the end of the Soviet empire are also beginning to fragment. American hegemony, then, is a position of special fragility.

America as the remaining empire has been left with the problems that the older empires could not solve—creating nation-state stability in the critical postcolonial zones. In places like Pakistan, the collapse of state institutions has been exacerbated by urbanization, by the relentless growth of shantytowns that collect unemployed or underemployed males who see the promise of globalized prosperity on television in every cafe but cannot enjoy it themselves. In such places the collapsing state fabric creates a vacuum. Who fills the vacuum? The mullahs. They fill the vacuum not simply with indoctrination and cheap hatred but by provision of real services. A poor parent in rural Pakistan near the northwest frontier who wants a child to get an education sends him to a *madraseh*. Parents with children they cannot look after send them to the mullah. However uncomfortable it is to accept, terrorist movements are creating legitimacy in this way, by providing services to fill the gap left by the absence of credible and competent states.

The political Left uses "empire" as an epithet—imperial America, it declares, can do anything, can shape the world chessboard any way it wants. The implication of the foregoing, however, is that America is not in a position to create stability on whatever terms it likes. The United States is the sole guarantor of order, yet its capacity to control and determine outcomes is often quite limited, and nowhere are the limitations of American power more evident than in the Middle East. Since Franklin D. Roosevelt embraced the Saudis and Harry Truman recognized Israel, American leadership has driven out the other potential arbiters, the Russians and Europeans, without being able to impose its own terms for permanent peace. Presidents have come and gone, but they have not been able to resolve this enduring hemorrhage of American national prestige.

For fifty years, the United States paid almost nothing for its support for Israel. This was a debt of honor, a linkage between two democratic peoples. But three or four years ago, it began to pay an ever higher strategic price for the continued Israeli occupation of the Palestinian lands—an inability to broker a settlement that would guarantee security for the Palestinian and Israeli peoples on the basis, essentially, of partition. American failure to impose such a settlement has now brought national security costs; the events of 11 September 2001 cannot be understood apart from that fatal dynamic. But it is a dynamic that indicates the limitations of U.S. power, even with close and devoted allies. American presidents may well hesitate to put even more prestige on the line in this issue; if they overreach in the Middle East, they may lose everything, while if they do not invest enough, they may lose anyway. They are always managing the chief problem of empire—balancing hubris and prudence. Today, in the face of a global challenge and the collapsing of distance, the decision "triage"—making the distinction between hubristic overreach and prudential caution—is much more complicated. It is much more difficult to dismiss any nation—say, Afghanistan—as marginal, of no importance; any such nation is likely suddenly to become a national security threat.

It is not just the Middle East that highlights simultaneously America's awesome power and vulnerability. When American naval planners look south from the Suez Canal, for instance, they see nothing good. Sudan, Somalia, Djibouti, Eritrea, Yemen—all are dangerous places, and some of them have been fatal to American service men and women. One of the traditional diplomatic and political functions of the U.S. Navy is to represent and promote American imperial power by showing presence, going ashore, showing the flag. But as the United

The world order arranged by Churchill and Roosevelt is being replaced by American military power—and that is asking of it more than it can do. States has realized that forward land bases for its other kinds of combat power are more and more vulnerable, the Navy's role has begun to shift to that of an offshore weapons platform. Cutting back military presence in places that

are too vulnerable to terrorist attack seems to be good news—after the USS *Cole* attack, certainly. The cost, however, is that reducing base presence in these places also reduces influence and potentially increases alienation. This is the well-known downside to reducing exposure to terrorist attack. Americans come to be regarded as a mysterious offshore presence, focused on weapons and discipline, not on making friends, not on making alliances, not on making local contact.

All this makes it apparent that the United States emerged from the Cold War with very little idea of the strategic challenges that would face it afterward. It won the Cold War by virtue of a strategic act of political-military discipline carried out by administration after administration from 1947 to 1989. It was one of the most sustained displays of political and military resolution in the history of republics, and it brought triumphant success. But the nation's post-1991 performance looks much more like what used to be said of the British—the consolidation of empire in a fit of absence of mind. Successive administrations—this is not a political point—thought they could have imperial dominion on the cheap. They thought that they could rule a postcolonial, post-Soviet world with the imperial architecture, military alliances, legal institutions, and internationaldevelopment organizations that Franklin Roosevelt and Winston Churchill had created to defeat Hitler. As the world order arranged by Churchill and Roosevelt comes apart, no new architectures, alliances, institutions, or organizations have been established to replace the old. What has actually been put in their place is American military power—and that is asking of it more than it can do. The Greeks taught the Romans to call this failure *hubris*. But it is also a failure of historical imagination—making the American military the preferred solution for disorder that is replicating itself around the globe in overlapping zones and posing a security threat at home. It is an imperial problem that seems to be heading for disaster.

A second fundamental imperial problem for the United States, on a par with its structural vulnerability, is the fact that it is alone. Its neighbor Canada spends 1.1 percent of its gross domestic policy on national defense, and its armed forces are incapable even of defending the Canadian homeland. In Europe, large countries with long military traditions are investing in national defense at levels of 2 percent, 2.2 percent, 2.3 percent of GDP; they are no longer credible military allies. The military consequence is obvious in combined operations, but there is also a political aspect, an irony that has received too little attention—that for Europe, spending so little on weapons is an enormous, historic achievement. The Europeans spent so much on arms for 250 years that they nearly destroyed their continent in two world wars. Today, they are trading down military strength so sharply as to affect their very national identities; the European states have become postmilitary cultures. In a sense, as Europe integrates into the European Union, these states are even becoming "postnational" cultures.

This trend is producing a widening gap with the United States, not simply in defense expenditure and military capability but in mentality. Europeans—whose ancestors invented the very idea of martial patriotism, national conscription, and national anthem—now look at American patriotism and think it an utterly alien phenomenon. The United States, then, is the West's last military nation-state. It can no longer call on allies who fully understand the centrality of military power and sacrifice in national identity. This isolation will be a long-term imperial challenge, because the decline of European defense budgets seems to be irreversible, and a particularly difficult one, because America cannot do without Europe in civilian terms. However contemptible its military capabilities become, Europe's social and economic reconstruction capacity is simply essential. The United States must cooperate with these postnational, postmartial nation-states; without them the American taxpayer will have to foot the entire bill for not only their own defense but the maintenance of global order.

Thus, on a specific issue of moment, it is possible that the most efficient solution to a postinvasion occupation of Iraq would be a U.S. military government—a Douglas McArthur in Baghdad. Putting a qualified, tough American general in charge of a military chain of command would be the most efficient, and might be the cheapest, way to coordinate effort and resources. But the Europeans would not have it. No Middle Eastern state would have it. The idea is simply not acceptable internationally; if it were pushed, no one would support the reconstruction effort; the United States would bear the entire cost.

This instance points to a very different picture of the world than that entertained by liberal international lawyers and human rights activists who hope to see American power integrated into a transnational legal and economic order organized around the United Nations, the International Criminal Court, the World Trade Organization, and human rights treaties. Theirs is a feeble vision, as we have seen; without American power, the multilateral international order is a train without an engine.

There is a third imperial problem, or at least an inevitable part of a global war on terror—nation building. Afghanistan has brought the point home. However extraterritorial, nonterritorial, or nonnational a terrorist organization may be, it needs facilities, especially to train its "foot soldiers." Terrorists cannot sustain themselves without compliant states who allow them to operate secretly or even, as in this case, actually to run their foreign and domestic policies and fence off large pieces of real estate. The United States sat and watched that happen in Afghanistan for four years; that must never, ever, happen again. The United States has learned that failed states can become direct national security risks and that accordingly, like the idea or not, it is in the nation-building, or state-reconstruction, business.

The exercise of nation building, however, raises a number of ethical difficulties. In fact, there lies at the very heart of the matter a fundamental contradiction of principle and policy. The concept of human rights, which is the semiofficial ideology of the Western world, sustains the principle of selfdetermination—the right of each people to rule itself, free of outside interference. It is a proposition dear to Americans, who fought a revolution to secure the right to self-determination; it is the core of their democratic culture. How can the imperial act of nation building be reconciled with it? The old imperial solution is collapsing; the problem falls ineluctably to the United States; nation building is unavoidable. But how is it to be done? Bringing order is the paradigmatic imperial task, but it is essential for reasons both of economy and principle that it be done without denying local people their right to some degree of selfdetermination. The old imperialism, the nineteenth-century kind, justified itself as a mission to civilize, to inculcate in tribes and "lesser breeds" the habits of self-discipline necessary for the exercise of self-rule. This is not a minor point. We often think that imperialism and self-determination are completely contradictory self-rule by strangers. Interestingly, however, all the nineteenth-century empires

The most carefree empire in history now confronts the question of whether it can escape Rome's ultimate fate. used self-determination to maintain themselves. How? By making a promise: "If you submit to us now, we will train you to be free tomorrow." Self-determination and imperialism, then, are not the polar

opposites they seem to be; as paradoxical as it may sound, self-determination is a means by which to perpetuate imperial rule. Canada, for instance, was for a hundred years a self-governing dominion within the British Empire. In the old imperialism, self-rule did not have to happen any time soon. The British kept their hold on India for most of the twentieth century with assurances: "You are not quite ready yet. Just be patient, and we will hand over to you." The British mandate in Palestine took the same tack.

The new imperialism works on a much shorter time span. The contradiction between imperialism and democracy is much sharper in places like Afghanistan, Kosovo, and Bosnia. The prospect of self-rule cannot be distant, because the local elites are creations of modern nationalism, of which the primary ethical content is self-determination. In Kosovo, Bosnia, and Afghanistan, and quite probably in Iraq, the mantra is that local elites must be empowered to take over as soon as imperial forces create conditions of stability and security. Nation building thus seeks to reconcile imperial power and local self-determination through the vehicle of an "exit strategy." This is imperialism in a hurry to spend money, get results, to turn over to the locals, and get out. But it is similar to the old imperialism in the sense that the real power remains in imperial capitals. Local leaders, even if elected by their own peoples, exercise limited power and must always look over their shoulders to Washington. This new imperialism, then, is humanitarian in theory but imperial in practice; it creates "subsovereignty," in which states possess independence in name but not in fact. The reason the Americans are in Afghanistan, or the Balkans, after all, is to maintain imperial order in zones essential to the interest of the United States. They are there to maintain order against a barbarian threat.

Many people, particularly in the United States, feel that this is a terrible misuse of American combat power and resources. They consider it hubris that will suck the nation into open-ended and unmanageable commitments. But are there alternatives? There seems to be no other way in which to make the world safe for the United States. Exercises of imperial power are in themselves neither illegitimate or immoral. For U.S. forces and resources to create (in Iraq, say) stable democratic institutions, establish the rule of law, and then leave would be creditable—provided, of course, that the new democratic elite is not simply an American puppet. The caveat would be especially critical in Iraq, and reconciling imperial power and democracy would become particularly delicate there. We would have to create, or help to create, or help to repatriate a genuinely credible national leadership. The Iraqi National Congress, the Iraqi exiles in general, are "not ready for prime time," and there is no credible counter-elite in the country itself. The biggest challenge the United States would have in making Iraq work is to find that elite and sustain it—and yet allow it the independence it would need to achieve acceptance within the nation. It is not at all clear how that can be done, but if the United States expels the Saddam Hussein regime, it will have to be.

Does the United States have the right, in international law, to impose regime change? I was a member of an international commission on intervention and state sovereignty funded by the Canadian government and charged to report to the UN Secretary General in September 2001. Our report set the ethical bar very high. The commission argued that the only grounds for full-scale military intervention in a state were human rights violations on the order of genocidal massacre or massive ethnic cleansing. We believed that it is not a good idea for America or any other country to knock over more or less at will sovereign regimes, even odious ones. The United States would be, or feel, called upon to intervene everywhere, and whatever remains of the UN Charter system governing the use of force in the postwar world would be destroyed. In that view-embarrassing as it is for a human rights activist to say-intervention in Iraq is not justifiable on strict human rights grounds. However, the combination of the regime's human rights behavior and its possession (actual or imminent) of weapons of mass destruction constitutes that ethical justification-provided that, as required by just-war theory, the military instrument is the last resort. The exercise of securing Security Council legitimacy was a matter not of obtaining permission but of establishing good faith, to document the crucial fact that the use of American power was being contemplated only after a decade of attempts to disarm Saddam Hussein by other means.

There is another ethical issue as well—under what obligation is the United States to build a new Iraqi nation once it has knocked the door down? It is not obvious in classical just-war theory that commencing hostilities obliges a nation to clean up afterward. Whether such an obligation exists is a lacuna of just-war theory. International law lists the things that legitimize the use of military force: a nation is entitled to meet force with force; when a nation is attacked, it is entitled to reply. But must it also rebuild, rehabilitate, reconstruct? What is the ethical claim here? When the Allies had pulverized the regimes of Adolf Hitler and the Japanese—as it was entirely right and proper for them to do, with the totality of their military force—were they then under an obligation to rebuild Germany and Japan? Many people, like Secretary of the Treasury Henry Morgenthau, Jr., wanted them turned into pastureland, returned to abject agricultural feudalism forever. The decision to reconstruct the two nations did not emerge from the just-war tradition; it was made on prudential, political grounds. Today, as in 1945, there is no strict, ethical obligation, but there is a prudential, political one, if the United States wants to build stability, in its own image. The intervention and state sovereignty commission tried to develop an ethical system that made the right to intervene correlative with an obligation to rebuild; that, we believed, is the way that the emerging, customary law of nations should go. But the case to rebuild Iraq is fundamentally not ethical but prudential—it is a smart thing to do, a smart investment of American power.

Democracy is always thought of as the antithesis of empire, but one of the dramas of American power in the twenty-first century is that empire has become a precondition for democracy. Neither democracy nor anything like the rule of law can be established in Afghanistan without a sustained, determined exercise of American imperial power. There is no chance at all that Iraq will emerge from forty years of authoritarianism to democracy and the rule of law without American imperial power. The United States was a democracy before it was an empire; now, suddenly, it is involved in places where the historical relationship is reversed. The nation faces a challenge that will test its own legitimacy as a democratic society—not simply to create stability, to order matters to suit its national interest, but to create institutions that represent the desire of local populations to rule themselves. Can it use imperial power to strengthen respect for selfdetermination, to give states back to the abused, oppressed people who deserve to rule them for themselves?

TARGETING AFTER KOSOVO

Has the Law Changed for Strike Planners?

Colonel Frederic L. Borch, U.S. Army

Recent reports published by Amnesty International¹ and Human Rights Watch² charge that the North Atlantic Treaty Organization 1999 air operations against Serbia—Operation ALLIED FORCE³—selected and attacked targets in violation of the law of armed conflict.⁴ While the two high-profile organizations clearly supported NATO's goal of stopping the bloodshed in Kosovo, both reports were sharply critical of some NATO combat operations.

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Both claimed, for example, that an air strike on a Serbian radio and television station during the campaign was illegal because it was "a direct attack on a civilian object." Amnesty International and Human Rights Watch further charge that the bombing of two bridges was unlawful because too many civilians were on or near the structures during the attack. Finally, both groups contend that the deaths of civilians during NATO attacks on military targets necessarily meant that NATO had failed to obey the law's mandate to minimize harm to noncombatants. According to Amnesty International, "NATO forces did commit serious violations of the laws of war leading in a number of cases to the unlawful killings of civilians."5 Similarly, Human Rights Watch declared that NATO "illegitimate" attacks on nonmilitary targets resulted in excessive civilian casualties.⁶ If these and other allegations are true, General Wesley K. Clark, the regional commander

responsible for the conduct of ALLIED FORCE, as well as the NATO planners who sequenced and synchronized the operation, violated the law—and incurred both personal liability and state responsibility for NATO members and the United States. Additionally, if the charges are true, commanders and their planners cannot look to ALLIED FORCE as a model for targeting in future military operations.⁷

So, what is the truth? Is it illegal to attack a government-owned television station? Must a commander instruct a pilot to refrain from attacking a bridge if civilians can be seen on it? Are commanders and their planners responsible if a large number of civilians are killed during an attack? This article concludes, after examining the law relating to targeting and analyzing the facts and circumstances surrounding targets that, allegedly, were illegally attacked, that Amnesty International and Human Rights Watch are wrong, on two grounds. In some instances the facts do not support their claims; where the facts are not in dispute, the two groups have drawn conclusions based on faulty interpretations of existing international law.

NATO selected and attacked legitimate military objectives in the Kosovo campaign. The methods and weapons it used to destroy or neutralize these targets were lawful and proportional to the military advantage expected. Finally, NATO distinguished between combatants and noncombatants and took proper precautions to avoid injuring or killing noncombatants.

OPERATION ALLIED FORCE

In 1998, Serbian military and police forces flooded into Kosovo and began systematically driving ethnic Albanians from their homes. Roughly 250,000 Kosovars were forced to flee; most of these refugees escaped to neighboring Albania and Macedonia, but the Serbs killed hundreds of men, women, and children in this act of "ethnic cleansing."⁸ When diplomatic efforts advanced by Germany, France, and Italy did not lead to a negotiated settlement with the president of the Federal Republic of Yugoslavia (FRY),⁹ Slobodan Milosevic,¹⁰ the United States and its NATO allies decided that only military action would stop the aggression. On 24 March 1999, after talks at Rambouillet, in France, failed to stop Serbian violence against ethnic Albanians in Kosovo, NATO launched Operation ALLIED FORCE. In a seventy-eight-day "phased" air operation, aircraft from thirteen (out of nineteen) NATO member states flew combat sorties against targets in the provinces of Kosovo and Vojvodina, Serbia proper, and Montenegro.

Ninety of every hundred bombs used in NATO's attacks on airfields; air defense emplacements; bridges; command, control, and communication sites; and police and troop barracks were precision-guided munitions (PGMs)—a significant fact when one considers that PGMs constituted only 9 percent of bombs dropped in DESERT STORM.¹¹ In addition to these aircraft-delivered PGMs,

long-range cruise missiles fired by the United States and the United Kingdom were used to hit similar targets. The goal of ALLIED FORCE was "to halt or disrupt a systematic campaign of ethnic cleansing."¹² The means of reaching this end state were chosen on the basis of the belief that a gradual increase in force and intensity would cause Milosevic to halt the aggression in Kosovo.¹³ By the time ALLIED FORCE ended, NATO had flown more than 38,400 sorties and released 23,600 air munitions against over nine hundred targets.



Commentators disagree "about exactly what caused Milosevic to accept NATO's conditions."14 He may have capitulated because he was politically isolated and realized that he could not undermine the alliance's unity and sense of purpose. On the other hand, since Serbian army and police forces had killed or expelled most Muslim Kosovars by early June 1999, he might have acquiesced because he had achieved his objectives. Whatever Milosevic's reasons, the fact remains that at the end of NATO's air operation, Serbian forces had ceased their ethnic cleansing operations in Kosovo.15

THE LAW OF ARMED CONFLICT AND TARGET SELECTION

Under the law of armed conflict, all persons, places, and things may be targeted if they are military objectives. As Article 52(2) of the 1977 Protocol I to the 1949 Geneva Conventions explains, military objectives are "objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage."¹⁶ Even if a person, place, or thing qualifies as a military objective, however, that does not mean that it may be attacked using any imaginable method. Rather, only *lawful* weapons may be employed.¹⁷ Additionally, any attack on a military objective must be *necessary* to accomplish a military purpose. By way of example, an enemy fighter jet is a military objective, but if it cannot be flown because it is parked in the middle of a city neighborhood miles away from a runway, bombing it is arguably unlawful, because it would not accomplish a military purpose.

While noncombatants and civilian property may never be directly targeted, the law recognizes that an attack on an otherwise lawful military objective may cause *incidental* injury and damage to civilians and their property. There are, however, limits on such incidental or collateral damage. In the words of Article 57(2) of Protocol I, it must not "be *excessive* in relation to the concrete and direct military advantage anticipated" (emphasis supplied) from targeting the military objective. That is, collateral damage not only must be minimized but may not be disproportionate to any military gain. The law of armed conflict requires attackers to respect this principle of proportionality by demanding that they "at all times *distinguish* between the civilian population and combatants and between civilian objects and military objectives."¹⁸

Since the adoption of Protocol I in 1977, the principles of distinction and proportionality have become increasingly important in the selection and attack of targets. For example, it is now generally accepted that "even a legitimate target may not be attacked if the collateral civilian casualties would be disproportionate to the specific military gain from the attack."¹⁹ Thus, for example, massive bombing of the type used by the World War II Allies against Dresden is no longer lawful-principally because the tens of thousands of German civilians killed was excessive when balanced against the military need to destroy the German railway network in that city. Additionally, the bombing accuracy resulting from the development of PGMs has brought with it a significant reduction in collateral damage. As a result, while the law of armed conflict has not changed-there is no legal requirement to use PGMs, and injuring civilians and their property is lawful if incidental to an otherwise legal attack on a military objective-planners and operators choosing between laser-guided ordnance or "dumb" bombs now more than ever must consider collateral damage. What constitutes "excessive" collateral damage ultimately is very much affected by the subjective mind-set of the commander in charge of an operation or campaign.²⁰

Lawful military objectives that almost always satisfy the "military necessity" test include enemy aircraft, vehicles, and warships; naval and military bases; warship construction and repair facilities; military storage depots; airfields, ports, and harbors; troop concentrations and embarkation points; and lines of communication. Lawful targets also include dual-use objects like bridges, railheads, road networks, and similar transportation infrastructure used both by civilians and by enemy armed forces. For example, a power-generating station that supplies electricity both to military structures (e.g., command and control node or air defense site) and public facilities (such as a civilian hospital or school) may be attacked if military necessity requires it.²¹ Again, however, regardless of the legitimacy of selecting and attacking a target, collateral damage to

noncombatants and their property must not be disproportionate to the military advantage achieved in destroying or neutralizing the target. An electrical power grid may be targeted if the effect that the loss of power will have on nonmilitary facilities is not excessive when balanced against the advantage gained by removing that energy source from the enemy's military forces.

Finally, because the law of armed conflict requires that "constant care shall be taken to spare the civilian population" from the effects of military operations, noncombatants near a legitimate military target must be warned of an impending bombardment. In the language of Article 57(2)(c) of Protocol I, "effective warning shall be given of attacks which may affect the civilian population, unless circumstances do not permit." This provision is understood to mean that a warning may be general in nature; it need not be specific if this would jeopardize the success of the mission. Even then, only "reasonable efforts" to warn are required by law.²²

Finally, in targeting a legitimate military objective, attackers may use methods that safeguard their own forces, provided they otherwise comply with the law of armed conflict. In ALLIED FORCE, for example, NATO pilots avoiding Yugoslav air defenses dropped ordnance from a "safe" altitude of fifteen thousand feet. This was entirely lawful. First, at least in regard to attacks on fixed targets, delivering precision-guided munitions from this height actually furthered the principle of distinction, because it gave an aircraft more time—undisturbed by flak or surface-to-air missiles—to acquire the object being attacked and guide the weapon to it. On the other hand, the fifteen-thousand-foot altitude did make it arguably harder to minimize collateral damage when attacking moving or nonfixed targets. On balance, however, NATO's decision to protect the force was lawful; it did not violate the principle of distinction.²³

In sum, the law of armed conflict requires that each target satisfy the definition of military objective; that the means selected in attacking the target be proportional to the military advantage gained; and that incidental damage to civilians and their property be minimized.²⁴ To ensure that every U.S. military operation follows these legal requirements,²⁵ judge advocates are integrated into military planning and operations at all levels and a military lawyer reviews every target for "legal sufficiency" prior to any attack.²⁶

SPECIFIC TARGETS ATTACKED IN ALLIED FORCE

Amnesty International and Human Rights Watch claim that NATO's attacks on at least five targets were unlawful because either the targets were not lawful military objectives; or the attack accomplished no "definite military advantage"; or the bombardment resulted in excessive and disproportionate collateral damage.²⁷

Laser-Guided Bomb Attack on the Grdelica Railway Bridge

On 12 April 1999, an American F-15E Strike Eagle launched a laser-guided bomb to destroy a railway bridge in Grdelica, Serbia. While the bomb was on its way to the target, a passenger train came onto the bridge; the bomb hit the train rather than the bridge. As General Clark explained at a press conference on 13 April, the pilot realized that he had missed his target. Consequently, he "came back around to try to strike a different point on the bridge because he was trying to do [his] job, to take the bridge down."²⁸ Taking aim "at the opposite end [of the bridge] from where the train had come," the pilot launched a second PGM. By this time, however, the train had moved—and it was hit again. Some ten civilians in the train were killed and "at least" fifteen injured.²⁹

NATO planners had selected the Grdelica bridge for attack because it was part of a resupply route for Serb forces in Kosovo; Amnesty International and Human Rights Watch acknowledge that this military use made it a legitimate target. Nonetheless, these organizations claimed in their reports that the attack was illegal for two reasons. First, NATO had violated the principle of distinction when the F-15E pilot did not delay his attack while there was "civilian traffic" on the bridge."³⁰ Second, NATO had violated the principle of proportionality because the

NATO, wanting to avoid collateral damage to civilians, suspended the attack. It was too late.

civilian deaths were "excessive in relation to the concrete and direct military advantage anticipated."³¹ In essence, Amnesty International and Human Rights Watch charge that as there was no need to attack

the bridge at that particular moment—the structure could have been destroyed ten minutes later, when the passenger train was safely across—the bombardment violated the principle of proportionality.

Under the law of armed conflict, Amnesty International and Human Rights Watch are correct that it was unlawful to attack the Grdelica bridge while a passenger train was on it. While the bridge was a legitimate target, it could have been attacked when free of civilian train traffic; there is no evidence that the mission's success would have been jeopardized if the aircraft had returned later. That said, the groups' legal conclusions are irrelevant, as the facts show that the F-15E pilot and weapons systems officer did not know that the train was on the bridge until it was too late to prevent collateral damage from the first bomb. As General Clark explained, the pilot launched his first laser-guided bomb while still "many miles" from the target, from where he "was not able to put his eyes on the bridge." Over the next few minutes, as their aircraft closed on the Grdelica bridge at very high speed, the pilot and weapons systems officer tracked the bomb's trajectory on a five-inch video screen; all seemed in order. Then, "at the very last instant with less than a second to go," the train came upon the bridge and was struck.³² It is apparent that there was no intent to harm civilians with the first electro-optical guided bomb. Moreover, the crew intended its second bomb to hit a point on the bridge some distance away from the train; that it in fact struck the train was likewise an accident.

An independent investigation conducted by the International Criminal Tribunal for the Former Yugoslavia (ICTY) confirmed NATO's claims that the civilian deaths and injuries at Grdelica had been unintended.³³ The lesson to be learned is that while military operations must be conducted in accordance with the law of armed conflict, criminal responsibility requires either an *intent* to violate the law or a *reckless disregard* of it. Consequently, an attacker who acts reasonably in bombing an otherwise legitimate target has a defense against the charge that excessive collateral damage occurred. What happened at Grdelica was a tragic accident, not the result of intentional or reckless conduct; the regional commander and his planners bore no command or individual responsibility for it.³⁴

Bombing of the Refugees on the Djakovica Road

On 14 April 1999, for about two hours in the afternoon, NATO F-16 and Jaguar aircraft attacked two vehicle convoys traveling on the Djakovica Road in Kosovo. The convoys had been targeted because NATO believed they carried Serb special police forces that had been setting fire to houses in order to drive Albanian Kosovars from their homes. The targets were identified and ordnance released from an altitude of fifteen thousand feet, for reasons explained above. The attack was successful, in that many vehicles in the convoys were destroyed or badly damaged. At some point during the bombing, however, NATO learned that the convoy might comprise "a mix of military and civilian vehicles"; wanting to avoid collateral damage to civilians, it suspended the attack until more was known. It was too late—some seventy civilian men, women, and children had been killed and about a hundred injured. Most of the vehicles in the convoy turned out to have been farm tractors.

Amnesty International and Human Rights Watch reports charged that the attack was unlawful on the ground that NATO's concerns with protecting its own pilots had caused it to ignore the principle of distinction.³⁵ That is, by flying at fifteen thousand feet to avoid surface-to-air missiles, NATO attackers had been unable to distinguish between military objectives and noncombatants and their property. NATO countered that as the pilots had believed they were seeing and attacking military vehicles, the civilian deaths and injuries were accidental.

Was the bombing of the Djakovica road refugees a war crime? No. The F-16 and Jaguar pilots thought they were attacking military vehicles belonging to FRY

special police units conducting ethnic cleansing. The danger to them from enemy air defenses made it reasonable to attack from fifteen thousand feet. Finally, while civilians were killed, their deaths were not the result of an intentional or reckless failure to honor the principle of distinction. Just as it had after the Grdelica incident, the ICTY concluded that NATO had not acted improperly at Djakovica: "While this incident is one where it appears the aircrews could have benefited from lower altitude scrutiny of the target at an early stage, the committee is of the opinion that neither the aircrew nor their commanders displayed the degree of recklessness in failing to take precautionary measures which would sustain criminal charges."³⁶

While NATO was cleared of wrongdoing at Djakovica, the committee's language suggested that there was a bombing altitude—somewhere above fifteen thousand feet—at which ALLIED FORCE aircraft would have been acting with criminal recklessness. Attackers may not adopt self-protection measures that so reduce their ability to honor the principle of distinction that a reasonable person would view them as reckless. At what "line" the reasonable becomes reckless, however, is most difficult to determine. But if NATO's self-protection measures had made its pilots unable to distinguish between combatants and noncombatants, these measures would have made it difficult—if not impossible—to carry out any lawful attacks.

Attack on the Lunane Bridge

On 1 May 1999, in the middle of the day, NATO warplanes bombed the Lunane Bridge in Kosovo. Apparently the bridge itself suffered only minimal damage, but a civilian bus on the bridge during the attack was blown in half. An unknown number of civilians were killed.³⁷

No one—not even Amnesty International and Human Rights Watch—disputes that the bridge was a legitimate military objective; it was on the main resupply road between Nis, Serbia's second-largest city, and Pristina, the capital of Kosovo. Rather, Amnesty International and Human Rights Watch charged that NATO had violated the law of armed conflict in that the alliance "did not take the precautionary steps necessary to avoid civilian casualties." The two organizations insist that NATO could have attacked the bridge at night, when civilian traffic across it was reduced. Alternatively, the two groups argue, by attacking the bridge when a civilian bus was crossing it, the NATO pilots ignored the presence of noncombatants and disregarded the principles of distinction and proportionality. Amnesty International and Human Rights Watch reasoned that if NATO had been conducting aerial operations in accordance with the law of armed conflict, its pilots would necessarily have seen the bus; realizing that attacking the bridge at that moment likely would result in excessive collateral damage, they would have halted the attack and resumed it only after the bus had crossed the bridge to safety.

Did NATO violate the law because its attack on a legitimate military objective also resulted in civilian casualties? It did not. At a 2 May 1999 press conference, a NATO spokesman explained that the bus had crossed the bridge "after weapons release" and that there had been no intent to target it. Interestingly, when asked if NATO could conduct its attacks on bridges at night—so as to minimize the danger to civilian buses and trains—the spokesman said, "We did not target the bus as we have not targeted earlier the train. We target bridges, and I am sure that the Serb authorities know that these bridges are of extreme value to their lines of communications and [that] when they allow public traffic over these bridges, then they risk a lot of lives of their own citizens."³⁸

The reference to the Grdelica train indicates that NATO viewed the Lunane Bridge as a similar situation—the attacking pilots had intended to destroy a legitimate military objective. That their ordnance struck a bus was an accident. NATO further maintained that if the damage to the bus and injury to its passengers was in fact accidental, as explained, it had not violated the law of armed conflict; on the contrary, it was, arguably, the Yugoslav government that had done so, as it had no doubt understood that the bridge was a lawful military objective. Article 58(c) of Protocol I requires government officials to take "necessary precautions to protect the civilian population, individual civilians and civilian objects under their control against the dangers resulting from military operations."³⁹ By allowing its citizens to use transportation facilities that were almost certain to be attacked, the Federal Republic of Yugoslavia had put their lives at risk. At Lunane the consequences were tragic.

Missile Attack on Serbian Radio and Television Station

On 23 April 1999, U.S. missiles⁴⁰ struck the downtown Belgrade studios of a Serbianowned radio and television station.⁴¹ The facility housed commercial telephone, fiber-optic cable, high-frequency radio, and microwave communication equipment. It was connected with more than a hundred radio relay sites in Yugoslavia—forming a network that was principally civilian but that NATO intelligence had determined was integrated with the government's strategic and operational command and control structure. As NATO officials were to explain at a press conference after the attack, "military traffic [had been] routed through the civilian system," and the station's equipment had been used "to support the activities of FRY military and special police forces."⁴²

On about 12 April, NATO issued a general warning⁴³ to Western media outlets that the radio and television station might be attacked, and in turn the Belgrade government learned of the fact from media reports. When the facility was not

immediately bombed, however, Belgrade apparently discounted the warning and failed to inform the station's staff.⁴⁴ Consequently, when NATO ordnance hit the facility, between ten and seventeen civilians—technicians, security workers, and makeup artists—were killed, and about the same number wounded.⁴⁵

According to Amnesty International and Human Rights Watch, the attack "was a deliberate attack on a civilian object and as such constitutes a war crime."⁴⁶ They argued in their reports that as the station transmitted civilian programming only, it had not made "an effective contribution to military action" and so could not have been a proper military objective. Additionally, the groups charged that bombing the facility had been illegal because, even if it satisfied the military objective test, its destruction would not give NATO the "definite military advantage" required by Article 52(2) of Protocol I. The fact the station had been back in operation within hours and had not been reattacked, they argued, necessarily meant that it had little military utility. Amnesty International and Human Rights Watch further maintain that the attack was illegal because the number of civilians killed in the attack had been excessive in relation to any military advantage gained.⁴⁷

Was it lawful to target the Serbian radio and television station? Yes. It had a dual use; it broadcast civilian programming but also was an integral part of the Yugoslav/Serbian military command and control network. This fact made it a lawful military objective. The purpose in targeting it was to degrade the enemy's strategic and operational capabilities—the "definite military advantage" required by Protocol I. That the attack did not permanently neutralize enemy

So, must a commander instruct a pilot to refrain from attacking a bridge if civilians can be seen on it? command and control did not make it any less legal. Finally, even if one assumes for the sake of argument that the civilian casualties were excessive, the true cause of this collateral damage was not

NATO's bombardment. On the contrary, the deaths and injuries resulted from Belgrade's failure to protect its own citizens in light of the warning received some ten days earlier. If the Milosevic government had informed the station's employees that their workplace was a possible target, at least some of these civilians would not have been in the building when it was hit;⁴⁸ the missiles most likely would have harmed no one.

One more issue deserves comment. Prime Minister Tony Blair of Britain and NATO officials suggested that propaganda broadcasts made by the radio and television station had also justified its attack. Not surprisingly, Amnesty International and Human Rights Watch harshly criticized this view, claiming that there is no legal basis for it. The committee of the International Criminal Tribunal for the Former Yugoslavia examining the matter agreed that this rationale probably could not be the sole basis for an attack. The committee, however, determined that NATO's attack had nonetheless been lawful; its propaganda justification had been "an incidental (albeit complementary) aim of its primary goal of disabling the Serbian military command and control system." However, the committee cautioned that had the station gone beyond broadcasting propaganda and actually urged its listeners to kill Albanian Kosovars or engage in other crimes against humanity, it would have become a lawful military objective.⁴⁹

Bombardment of Korisa Village

During the night of 13–14 May 1999, three NATO aircraft dropped ten laserguided and gravity bombs on Korisa, a village on the highway between Prize and Pristina. The primary target was a Serbian military camp and command post a short distance from Korisa. NATO intelligence believed that there were no civilians in the immediate area. In any event, the NATO pilots "visually identified" an armored personnel carrier, ten artillery pieces, and "dug-in military revetted positions" prior to dropping their bombs.⁵⁰ The attack on the military objective was a success; however, the bombs also struck ethnic Albanian refugees living nearby. A "relatively large number of civilians"—as many as fifty—were killed and a roughly equal number injured.⁵¹ Subsequent investigations have not disclosed why these men, women, and children were present in the area. It may have been simply fortuitous that they had encamped near the Korisa military camp. There is, however, evidence that Serbian forces had forced refugees to remain near their positions as "human shields."⁵²

While acknowledging that the military command post was a legitimate military target and agreeing that it was a serious violation of the law to use the refugees as human shields,⁵³ Amnesty International and Human Rights Watch nonetheless charged that NATO's attack was unlawful. NATO's pilots, they held, had "failed to take sufficient precautionary measures to ascertain that there were no civilians present" before they dropped their bombs. The high number of civilian casualties, the organizations maintained, had been excessive in relation to the military gain—a violation of the principle of proportionality.⁵⁴

The basic problem with the stance taken by Amnesty International and Human Rights Watch is that it does not comport with existing law. NATO forces attacked a legitimate military objective. The facts that NATO intelligence officers believed that no civilians were in the area and that the pilots saw none undercut any conclusion that the civilian deaths resulted from any NATO failure. If the commander authorizing the aerial attack and the officers planning it did not know that there were civilians present—as they might well not know, in wartime conditions—the law offers a "mistake of fact" defense. The history of warfare is replete with examples of "fog of war" producing unintended consequences especially harm to innocent civilian men, women, and children. While such episodes are always regrettable, it does not necessarily follow that some person or state is responsible for them. Not surprisingly, the ICTY committee investigating the Korisa attack concluded that "credible information available is not sufficient to tend to show that a crime . . . has been committed by the aircrew or by superiors in the NATO chain of command."⁵⁵

HARD AND FAST RULES?

Roughly five hundred civilians were killed by the NATO air campaign in Kosovo.⁵⁶ While this loss of life is both sad and lamentable, the ratio of sorties to civilian deaths in that campaign was more than seventy-five to one. This ratio certainly supports the conclusion that NATO tried to minimize casualties and conducted ALLIED FORCE in accordance with the law of armed conflict.

For high-profile groups like Amnesty International and Human Rights Watch, however, civilian casualties or other collateral damage will never be acceptable. Such organizations have the not-so-hidden agenda of promoting rules that would make the legal conduct of war impossible, in order to end warfare itself—at least by law-abiding states. Amnesty International, for example, insists that an attacker has a "responsibility under international humanitarian law to take *all possible precautions* to avoid harming civilians."⁵⁷ The law of armed conflict, however, places no such requirement on combatants. Protocol I states clearly that "civilians enjoy *general* protection against dangers arising from military operations";⁵⁸ this means that no crime has been committed if civilians are harmed in a military attack if such injury is collateral and not disproportionate to the definite military advantage gained.

Recognizing that "hard and fast rules" would advance their long-term goal, Amnesty International, Human Rights Watch, and others steadfastly insist that the law of armed conflict is a collection of clear and unambiguous strictures. But any rule is subject to subjective judgment, in terms of how it is applied to a particular set of circumstances. Thus, for example, there is no requirement for an attacker to warn civilians near a target of the specific time and place of a future attack. On the contrary, because it seeks to *regulate* rather than *outlaw* military operations, the law of armed conflict requires only that "reasonable efforts" be made to warn, and then only when the military situation permits. It is in the face of this clear legal standard that Human Rights Watch insists that NATO "did not take adequate precautions in warning civilians" prior to its attack on the Belgrade radio and television station.⁵⁹

Applying the law of armed conflict is not like using a calculator to solve a mathematical equation. On the contrary, because of the many subjective variables involved in military operations, the law necessarily requires that those responsible apply and balance many factors both tangible and intangible. It follows that the claim that the law of armed conflict can be applied with precision is dangerous, for two reasons. First, when groups like Amnesty International and Human Rights Watch claim that NATO committed war crimes, some individuals and governments inevitably believe that it is true. This threatens to deprive the United States and NATO of the moral high ground-an important component of success. Further, if America's friends believe that it selects and attacks targets in violation of the law, they will stand aloof from future coalition operations in which the United States participates-a direct threat to its national security strategy of engagement. Second, such false claims could restrict the flexibility of regional commanders in carrying out warfighting missions. If Amnesty International and Human Rights Watch repeat their allegations often enough, Congress, the White House, and the Pentagon may ultimately accept them and thereafter make target-related decisions on the basis of misinformation about the law. It is critical that leaders at the strategic and operational levels of war understand that NATO's attacks on targets in ALLIED FORCE were entirely lawful. The law of armed conflict did not change before, during, or after the operation. Only legitimate military objectives were targeted and attacked, and no collateral damage occurred as a result of violations of the law.

Regional commanders and their planners can properly look to ALLIED FORCE as a model for targeting in such campaigns in the future. They must choose lawful military objectives and plan legal attacks on those targets. But these commanders and operational planners—and the judge advocates serving them must be just as vigilant in countering those who would improperly restrict the lawful waging of war.⁶⁰

NOTES

Amnesty International, founded in 1961, describes itself as "a Nobel Prize–winning grassroots activist organization with over one million members world wide." Amnesty International works to "free all prisoners of conscience . . . ensure fair and prompt trials for political prisoners . . . abolish the death penalty . . . [and] end extrajudicial executions and 'disappearances'"; for more information, see www.aiusa.org. U.S. joint doctrine categorizes Amnesty International as a nongovernmental organization. *Interagency Coordination During Joint Operations*, Joint Publication 3-08,

vol. 1 (Washington, D.C.: U.S. Government Printing Office [hereafter GPO], 1996), p. GL-10.

2. Human Rights Watch, a nongovernmental organization like Amnesty International, was founded in 1978 as "Helsinki Watch." It describes itself as "the largest U.S.-based human rights organization." Human Rights Watch initially monitored compliance with the human rights provisions of the Cold War–era Helsinki accords, but "when the Reagan administration argued that human rights abuses by right-wing 'authoritarian' governments were more tolerable than those of left-wing 'totalitarian' governments," Human Rights Watch changed its focus "to counter this double standard." Human Rights Watch now investigates and works against human rights abuses worldwide. For more information on Human Rights Watch, see www.hrw.org.

- 3. For more on ALLIED FORCE, see Wesley K. Clark, Waging Modern War: Bosnia, Kosovo, and the Future of Combat (New York: PublicAffairs, 2001); Andrew J. Bacevich and Eliot A. Cohen, eds., War over Kosovo (New York: Columbia Univ. Press, 2001); Barry R. Posen, "The War for Kosovo: Serbia's Political-Military Strategy," International Security (Spring 2002), p. 75; Miron Rezun, Europe's Nightmare: The Struggle for Kosovo (Westport, Conn.: Praeger, 2001); Albrecht Schnabel and Ramesh Thakur, eds., Kosovo and the Challenge of Humanitarian Intervention: Selective Indignation, Collective Action, and International Citizenship (New York: United Nations Univ. Press, 2000); Ivo H. Daalder and Michael E. O'Hanlon, Winning Ugly: NATO's War to Save Kosovo (Washington, D.C.: Brookings Institution, 2000); Michael Ignatieff, "The Virtual Commander: How NATO Invented a New Kind of War," The New Yorker, 2 August 1999, p. 31; Stephen Biddle, "The New Way of War? Debating the Kosovo Model," Foreign Affairs (May-June 2002).
- 4. The "law of armed conflict" is a general term that includes the more restrictive categories of "law of war" (customs and laws regulating war) and "international humanitarian law" (customs and laws regulating the treatment of noncombatants, like civilians and prisoners of war). For the purposes of this article, the law of armed conflict includes the principles enunciated in the Hague Conventions of 1907, the Geneva Conventions of 1949, and the 1977 Protocol I to the Geneva Conventions. The United States has never ratified Protocol I; however, it views some provisions as either legally binding as customary international law or acceptable practice though not legally binding. For example, the United States accepts the legality of Article 51 (protection of the civilian population), Article 52 (general protection of civilian objects), and Article 57 (precautions in attack)-all of which govern the selection and attack of targets. For more on the U.S. view of Protocol I, see "Remarks of Michael J. Matheson, Session One: The United States Position on the Relation of Customary International Law to the 1977 Protocols

Additional to the 1949 Geneva Conventions," *American University Journal of International Law* & *Policy* 2, no. 419 (1987). Additionally, regardless of the legal status of Protocol I vis-à-vis the United States, all NATO members other than Turkey have ratified it. Accordingly, as ALLIED FORCE was conducted by a coalition almost all thirteen members of which had ratified Protocol I, as a practical matter its provisions applied to all military operations in that campaign.

- Amnesty International, Report: NATO/Federal Republic of Yugoslavia: Collateral Damage or Unlawful Killings? [hereafter Amnesty International Report], web.amnesty.org/ai.nsf/Index/ EUR700182000?OpenDocument&of= COUNTRIES\YUGOSLAVI [11 March 2000], p. 1.
- Human Rights Watch, Report: The Crisis in Kosovo: Civilian Deaths in the NATO Air Campaign [sic] [hereafter Human Rights Watch Report], www.hrw.org/reports/2000/nato/ Natbm200-01.htm [10 February 2000], p. 1.
- 7. Others claiming that NATO committed "war crimes" during ALLIED FORCE agreed with Amnesty International and Human Rights Watch. For example, Canadian law professor Michael Mandel described the bombing campaign "as a coward's war... not even partially legitimized by the Security Council of the United Nations"; Charles Trueheart, "Taking NATO to Court," *Washington Post*, 20 January 2000, p. A15. This article, however, addresses only the Amnesty International and Human Rights Watch allegations.
- 8. The expression "ethnic cleansing" is relatively new. In the context of the conflict in Kosovo, the phrase means "rendering an area ethnically homogenous by using force or intimidation to remove persons of given groups from the area." Ethnic cleansing, which has included murder, torture, arbitrary arrest and detention, rape and sexual assault, deportation, and the like, constitutes "crimes against humanity" and is a violation of international law. W. Michael Reisman and Chris T. Antonio, *The Laws of War* (New York: Vintage Books, 1994), p. 389.
- 9. The Federal Republic of Yugoslavia (FRY) consists of Serbia and Montenegro; both are sometimes called "Former Yugoslav Republics"—a reference to the Yugoslav federation that existed during the Cold War. Serbia, as the largest and most populous republic, dominates the FRY. Kosovo is the southernmost province of Serbia.

- 10. For a recent and thorough examination of Milosevic's conduct during ALLIED FORCE, see Joseph Lelyveld, "The Defendant," *The New Yorker*, 27 May 2002, pp. 82–95. Milosevic is now on trial for war crimes at the ICTY in the Hague, Netherlands. A guilty verdict is both likely and expected. For more on the ICTY, see note 29.
- Eric Schmitt, "It Costs a Lot More to Kill Fewer People," *New York Times*, 2 May 1999, p. WK5.
- 12. General Wesley K. Clark, Remarks to the American Enterprise Institute, 31 August 1999, quoted in Human Rights Watch Report, p. 2.
- 13. But there was sharp disagreement among both the NATO members and the military about how to apply pressure on Milosevic. For a thorough discussion of differing views in the alliance, see U.S. General Accounting Office, Kosovo Air Operations: Need to Maintain Alliance Cohesion Resulted in Doctrinal Departures (Washington, D.C.: 2001). In the military, the disagreement was equally pronounced. General Clark, for example, believed that Serbian army and police units in Kosovo should be the focus of the bombing. Lieutenant General Michael Short, on the other hand, "believed this to be a waste of valuable munitions and sorties." Consequently, Short advocated bombing strategic targets that would destroy Milosevic and his leadership structure. Scott A. Cooper, "The Politics of Airstrikes," Policy Review (June and July 2001), www.policyreview.org/jun01/cooper.html. See also "Operation ALLIED FORCE from the Perspective of the NATO Air Commander," keynote address, Legal and Ethical Lessons in NATO's Campaign in Kosovo conference, Naval War College, Newport, R.I., reprinted in Legal and Ethical Lessons in NATO's Campaign in Kosovo, ed. Andru E. Wall, International Law Studies, vol. 78 (Newport, R.I.: Naval War College, forthcoming 2003), pp. 23-26; David A. Deptula, "Firing for Effects," Air Force Magazine, April 2001, pp. 46-53.
- 14. U.S. Department of Defense, *Report to Congress: Kosovo/Operation ALLIED FORCE After Action Report*, 31 January 2000, reprinted as JMO NWC 2102 (Newport, R.I.: Naval War College), p. 10. See also Stephen T. Hosmer, "The Conflict over Kosovo: Why Milosevic Decided to Settle When He Did," Report MR-1351-AF (Santa Monica: Calif.: RAND, 2001), www.rand.org/publications/MR/MR1351.

- 15. For less laudatory perspectives on NATO operations in ALLIED FORCE, see Tariq Ali, "After the War," in *Masters of the Universe: NATO's Balkan Crusade* (New York: Verso, 2000), p. ix.
- 16. Additional Protocol I (1977) to the Geneva Conventions of 1949, 1125 UNTS 3 [hereafter Protocol I].
- 17. Weapons may be illegal per se or illegal by an improper use. Biological and chemical weapons are per se illegal. Certain projectiles (i.e., "dumdum" bullets) also are outlawed. An otherwise legal weapon chosen with an *intent* to cause unnecessary suffering would be an example of improper, and therefore illegal, use. In any event, every weapon in the U.S. inventory must be reviewed for legality under the law of war. For more on this requirement, see U.S. Army Judge Advocate General's School, *Operational Law Handbook* (Charlottesville, Va.: Judge Advocate General's School, 2000), pp. 5–11.
- 18. Protocol I, art. 48 [emphasis supplied].
- International Court of Justice, "Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons," *International Legal Materials* 35 (1996), p. 936.
- 20. For a good discussion of the PGMs/collateral damage issue, see Stuart W. Belt, "Missiles over Kosovo: Emergence, *Lex Lata*, of a Customary Norm Requiring the Use of Precision Munitions in Urban Areas," *Naval Law Review* 47 (2000), pp. 115–75; C. B. Shotwell, "Economy and Humanity in the Use of Force: A Look at the Aerial Rules of Engagement in the 1991 Gulf War," *Journal of Legal Studies* (1993), pp. 27–29.
- 21. For an exhaustive list of proper targets, see U.S. Navy Dept., *The Commander's Handbook on the Law of Naval Operations*, Naval Warfare Publication 1-14M/U.S. Marine Corps MCPW 5-2.1 (Washington, D.C.: Department of the Navy, October 1995), para. 8.1.1.
- 22. Ibid., para. 8.5.2; Reisman and Antonio, pp. 92-93.
- For more on NATO's force protection decision, see note 35.
- 24. Despite the clear and unequivocal requirements of the law, a recent article by two Air Force officers claims that a target should only be attacked if "moral" and "consistent with our cultural norms." Jeffrey L. Gingras and Tomislav Z. Ruby, "Morality and Modern Air War," *Joint Forces Quarterly* (Summer 2000), p. 109. Fortunately, as will be argued, there is no legal basis for this idea.

- 25. Defense Dept. Directive 5100.77 requires the U.S. armed forces "to comply with the law of war in the conduct of military operations and related activities." Joint doctrine echoes this requirement in stating that "the Armed Forces of the United States must *account for our actions*" in conducting military operations [emphasis in original]. U.S. Joint Chiefs of Staff, *Joint Warfare of the Armed Forces of the United States*, Joint Publication 1 (Washington, D.C.: GPO, 10 January 1995), p. ix.
- 26. Judge advocates at the U.S. European Command (EUCOM) carefully evaluated ALLIED FORCE targets and advised General Clark and his planners and operators on the legality of selecting and attacking each and every one. Col. Warren D. Hall III, Staff Judge Advocate, U.S. European Command (EUCOM), Stuttgart, Germany, telephone interview by author, 20 April 2001; Lt. Col. Tony E. Montgomery, deputy staff judge advocate and chief, Operational Law Division, EUCOM, Stuttgart, Germany, e-mail interview by author, 27 April 2001. See also Michael Ignatieff, Virtual War (New York: Metropolitan Books, 2000), pp. 197–98.
- 27. Amnesty International Report, pp. 2-4.
- 28. Ibid., p. 23.
- 29. International Criminal Tribunal for the Former Yugoslavia (ICTY), "Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign against the Federal Republic of Yugoslavia" [hereafter ICTY Report], International Legal Materials 39, p. 1257. The ICTY was established on 25 May 1993 by UN Security Council Resolution 827. The tribunal's mission is to prosecute persons responsible for serious violations of humanitarian law committed in the territory of the former Yugoslavia between 1 January 1991 and a date to be determined. Since its creation, the ICTY has heard criminal cases involving mass killings, the organized detention and rape of women, and the practice of "ethnic cleansing." After Amnesty International and Human Rights Watch charged NATO with violating the law of armed conflict during ALLIED FORCE, a committee appointed by the ICTY prosecutor conducted an independent investigation of the allegations. While this article contends that the ICTY Report is legally sound, not all agree. For less favorable views, see Michael Bothe, "The Protection of the Civilian Population and NATO Bombing on Yugoslavia: Comments on a Report to the Prosecutor of the

ICTY," European Journal of International Law 12 (2001), pp. 531–35; and Natalino Ronzitti, "Is the Non Liquet of the Final Report by the Committee Established to Review the NATO Bombing Campaign against the Federal Republic of Yugoslavia Acceptable?" International Review of the Red Cross 82 (2000), pp. 1017–28.

- 30. Amnesty International Report, p. 23.
- 31. Ibid.
- General Wesley K. Clark, press conference, NATO Headquarters, Brussels, 13 April 2001, quoted in ICTY Report, p. 1273.
- 33. Ibid., p. 1275.
- 34. Even where a regional commander intends a specific act, if the intent is based on an honest (however mistaken) belief that the act is legitimate, that commander has a defense. For example, after World War II, Generaloberst (Colonel General) Lothar was acquitted at Nuremberg of charges that he had unlawfully destroyed civilian property and driven forty-three thousand Norwegians from their homes in a "scorched earth" policy taken to stop the advancing Red Army. In fact, the Soviets were not near Rendulic's forces, but he did not know this. The tribunal concluded that "the conditions, as they appeared to the defendant [Rendulic] at the time were sufficient upon which he could honestly conclude that urgent military necessity warranted the decision made." See Shotwell, n. 144.
- 35. Both the Amnesty International and Human Rights Watch reports suggest that NATO aircraft in ALLIED FORCE placed too great a premium on their own safety-and that flying at high altitudes was generally unnecessary. This view, however, is erroneous. The threat to allied aircraft was very real; the Serbs, dispersing their anti-air assets and selectively emitting their radars, "forced NATO aircrews to remain wary and denied them the freedom to operate at will in hostile airspace." NATO was unable to suppress anti-air assets completely, and its pilots were obliged to take "aggressive and hair-raising countertactics" to avoid being shot down. Benjamin S. Lambeth, "NATO's Air War for Kosovo: A Strategic and Operational Assessment," Report MR-1365-AF (Santa Monica, Calif.: RAND, 2001), p. 76 n. 22.
- 36. ICTY Report, p. 1277.
- 37. FRY officials claimed that forty civilians riding on the bus had been killed; NATO conceded that

there had been casualties but did not agree to a specific number.

- 38. Amnesty International Report, p. 35.
- 39. Protocol I, art. 48.
- 40. Eight Tomahawk missiles were used to hit the state-run radio and television station in Belgrade. In all, the United States and United Kingdom launched a total of 238 Block III Tomahawk missiles during Operation ALLIED FORCE. The 198 that hit their targets accounted for nearly half of all government, military, and police headquarters, integrated air defense systems, and electric power grids in the country. Bryan Bender, "Tomahawk Achieves New Effects in Kosovo," *Jane's Defence Weekly*, www.janes.com/defence/naval_forces/news/jdw/ jdw000718_1_n.shtml [18 July 2000].
- 41. This was part of a coordinated attack; on the same night, radio-relay towers and power stations supplying electricity to these facilities were also hit. ICTY Report, p. 1277.
- Amnesty International Report, p. 42; ICTY Report, p. 1277.
- 43. Amnesty International Report, p. 33.
- 44. Human Rights Watch provides this explanation as to why the warning was disregarded. Human Rights Watch Report, p. 12.
- 45. Human Rights Watch claims that sixteen civilians were killed and sixteen wounded; Human Rights Watch Report, p. 12. The ICTY prosecutor's report, however, argues that "there is some doubt over exact casualty figures"; ICTY Report, p. 1277.
- Steven Erlanger, "Rights Group Says NATO Bombing in Yugoslavia Violated Law," New York Times, 8 June 2000, p. A8.
- 47. Amnesty International Report, p. 31.
- 48. Any civilian employee who chose to continue working in the facility would have knowingly accepted the risk. Interestingly, the *Daily Telegraph* (London) recently reported that the head of the station at the time was later arrested for failing to warn his employees that a NATO attack was likely. Alex Todorovic, "Serb TV Chief Accused over Air Raid," *Daily Telegraph* (London), 14 February 2001, p. 19.
- ICTY Report, pp. 1278–79. After the ICTY Report was published, the European Court of Human Rights decided *Bankovic v. Belgium and*

Others. In that case, six Yugoslav nationals (five acting on behalf of deceased radio station employees and the sixth acting on his own behalf for personal injuries suffered in the attack) sought compensation from the seventeen European members of NATO; the United States and Canada were not named in the suit, since they are not members of the Council of Europe or signatories to the Convention on Human Rights. The plaintiffs argued that NATO had violated the European Charter on Human Rights guarantee of a right to life in bombing the Belgrade station, in that the attack had killed innocent civilians. On 19 December 2001, a unanimous European Court refused to hear the case, holding that it had no jurisdiction over an event occurring in Yugoslavia, as Yugoslavia was not part of the forty-three-member Council of Europe. In any case, said the Court, the European Convention on Human Rights "was not designed to be applied throughout the world." The jurisdictional basis of the Court's decision meant that there had been no examination oflet alone decision on-the merits of the case. Bankovic et al. v. Belgium et al., 11 Butterworths Human Rights Cases 435 (2002), www.echr.coe.int. See also "Serbian TV Bombing Case Thrown Out," CNN.com/World, 20 December 2001, http://www.cnn.com/2001/WORLD/Europe/12/ 19/Brussels.yugo/?related.

- Amnesty International Report, p. 39; ICTY Report, p. 1282.
- 51. ICTY Report, p. 1282.
- 52. Ibid., p. 40.
- 53. Using civilians (or other protected persons) as human shields violates customary international law and Article 51(7) of Protocol I.
- 54. Amnesty International Report, p. 41.
- 55. ICTY Report, p. 1282.
- 56. Human Rights Watch concludes that "as few as 489 and as many as 528 Yugoslav civilians were killed by NATO bombardments during ALLIED FORCE." Human Rights Watch Report, p. 4.
- Emphasis supplied. Amnesty International News Release, "Kosovo: Amnesty International Concerns Relating to NATO Bombings," www .amnesty.org/news/1999/47006999.htm [18 May 1999].
- 58. Protocol I, art. 51.1 [emphasis supplied].
- 59. Human Rights Watch Report, p. 9.

60. For more on the legality of NATO's operations in Kosovo, see Catherine Guicherd, "International Law and the War in Kosovo," *International Institute for Strategic Studies* 41 (1999), p. 20; Heike Krieger, ed., *The Kosovo Conflict and International Law*, Cambridge [Univ.] International Documentation Series (Cambridge, U.K.: Cambridge Univ. Press, 2001); Michael E. Smith, "NATO, the Kosovo Liberation Army, and the War for an Independent Kosovo: Unlawful Aggression or Legitimate Exercise of Self-Determination?" *Army Lawyer* (February 2001), pp. 1–22; Christopher Greenwood, "The Applicability of International Humanitarian Law and the Law of Neutrality to the Kosovo Campaign," in *Legal and Ethical Lessons in NATO's Campaign in Kosovo*, ed. Wall, pp. 39–74; Adam Roberts, "The Laws of War after Kosovo," in ibid., pp. 405–36. Naval War College Review, Vol. 56 [2003], No. 2, Art. 1

The Naval War College in the late 1960s

SMALL NAVIES AND NETWORK-CENTRIC WARFARE Is There a Role?

Paul T. Mitchell

s there a place for small navies in network-centric warfare? Will they be able to make any sort of contribution in multinational naval operations of the future? Or will they be relegated to the sidelines, undertaking the most menial of tasks, encouraged to stay out of the way—or stay at home? If the recent experience of the Canadian navy is any guide, small navies have every right to be concerned about their future in network-centric operations. For while the Canadian navy has achieved a high degree of success within U.S. naval formations, it has done so only by virtue of highly privileged access. To date, the challenges posed by the revolution in military affairs in general and network-centric warfare (NCW) in specific have been framed in terms of technology and investment.¹ The allies and partners

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investment therein, and they need to make significant capital investments in order to catch up. Worse, "dynamic coalitions," developed rapidly to deal with crisis situations, may become the most common form of military cooperation. In such coalitions, detailed, prearranged plans and doctrine are likely to be entirely absent. Partners will have had little in-depth operational experience or knowledge of their own capabilities. Technical standardization will be low; national logistical support may be limited or entirely absent. Significantly, there may be serious questions regarding the professionalism of personnel participating in these coalitions.²

of the United States are lagging in technology and

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How dynamic coalitions will function in network-centric warfare is undoubtedly problematic. One commentator has recently suggested that the nature of NCW may ultimately result in more unilateral (or virtually unilateral) U.S. operations, such as that recently conducted in Afghanistan. In effect, the risk of "clueless coalitions" may drive the United States, however unwillingly, toward a more unilateralist military policy, irrespective of that enunciated in its national security strategy.³ The Joint Chiefs of Staff have called for a more "tailored approach to interoperability that accommodates a wide range of needs and capabilities" without implying "access without restraint."⁴ In the unstructured environment implied by the concept of dynamic coalitions, however, the policy restraints upon information sharing, surely the heart of network-centric warfare, may be considerable. As Thomas Barnett has pointed out, "Not only will our allies have little to contribute to the come-as-you-are party, they won't be able to track the course of the conversation."⁵

This article examines the nature of NCW, the challenges it presents to coalition operations, and some recent developments that seek to overcome these challenges. It uses the Canadian navy's recent and ongoing experience of directly integrating into U.S. carrier battle group operations as a test case. The article finds that the principal challenges that will be raised by NCW are not likely to be technical ones, although undoubtedly these will be formidable. Rather, the most challenging issues for all navies, and small ones in particular, stem from policy. If Canada's example is typical, navies that have less well developed relationships with the U.S. Navy are likely to confront such crippling difficulties in integrating into NCW-dominated operations as to be excluded from them.

THE NATURE OF NCW

Much of what has been revolutionary in the revolution in military affairs is not so revolutionary from a naval perspective.⁶ Navies have been working with information technology since 1957, when the CANUKUS Naval Data Transmission Working Group, after three years of deliberations, ratified the technical standard for data exchange.⁷

Link 11 is more or less standard among Western navies. Primarily used to share tactical information so as to develop what is now known as a "common operational picture" within a task group, Link 11 data is also used by the U.S. Navy to transmit certain engagement orders. However, for many reasons, Link 11 is relatively slow. Because of significant lag times between target detection and the posting of data onto the Link network, its information is not of fire-control quality. Further, it passes to linked ships only the data that has already been processed on board the contributing ship. This occasionally leads to duplicate tracks or conflicting information about the same target. Link 11 demands a high degree of professional competence on the part of track coordinators in order to keep the operating picture "clean."⁸

Network-centric warfare aims at increasing the efficiency of the transfer of maritime information among participating units (or nodes). By optimizing the efficiency of operations through information exchange, even small naval formations can generate additional combat power.⁹ Data is manipulated by a series of dynamic and interlinked "grids": sensor grids gather the data, information grids fuse and process it, and engagement grids manage the operations generated.¹⁰ Improved operational efficiency results not only from the increased speed at which operations can proceed but also from the "self-synchronization" that is generated between units.¹¹ This speed and synchronization ultimately merge the strategic "recognized maritime picture" with common operational and tactical pictures.¹² For example, in Canadian ships, the recognized maritime picture is provided to ships by shore-based facilities, whereas ship-based sensors and tactical data links generate local information. At the moment, neither informs the other, which can often lead to discrepancies. With the merging of information into a common pool distributed by linked systems, plans and operations will become much more dynamic. They will be able to react instantly to changes in the battle space, by virtue of their enhanced awareness of them. For navies having this capability, the result is a competitive advantage, an ability to "lock in success" while locking out enemy initiative.¹³

The original requirement to increase reaction speeds arose in the Cold War in order to deal with hypothesized regiment-sized air attacks on surface ships; the present impetus for speed and synchronization is the return of fleet operations to their traditional setting, in and around the littorals. The sheer density of maritime and air traffic, the presence of naval, commercial, and recreational maritime vehicles, results in a level of complexity that blue-water operations rarely encounter. This web of activity is made all the worse by the influence of microclimates, complex oceanography, and unique geographical features. Finally, in the littoral, there are few places where a warship does not stand out, whereas defenders are afforded a multitude of opportunities to hide their forces, whether geographically or through deception, basing them on nonnaval platforms.¹⁴ In effect, naval forces are forced onto an "asymmetrical" battlefield in the littorals.¹⁵

In response, networked operations permit enhanced speed and synchronization, which generate predictive planning and preemption, resulting in proactive, "maneuverist," effects-based operations; integrated force management, allowing synchronization of missions and resources; and execution of time-critical missions, employing "near optimal weapons pairings."¹⁶ The most explicit technological development stemming from these conceptual underpinnings has been "cooperative engagement," which passed its operational evaluation trials in September 2001.¹⁷ Cooperative engagement, like Link 11, seeks to develop the common operational picture; unlike Link 11, however, it also aims to coordinate threat decisions in real time. Further, it also attempts to distribute fire-control-quality information to participating network nodes.¹⁸ Cooperative engagement improves a force's ability to share data, even that of a fragmentary nature. For example, because of stealth technology or terrainmasking effects, a ship's sensors may be unable to collect precise and complete information on a particular target. In a formation equipped with cooperative

The underlying trouble is that the guiding principle of NCW is to increase speed and efficiency, whereas coalitions are always about scarcity. engagement, ships would automatically cue other sensors within the formation, producing a more detailed picture. All this information could then be pooled with the data collected by other more

distant ships to assemble a "composite picture" of the target that no single ship would have been able to generate. Units might thereby receive fire-control-quality information on targets outside their sensor horizons; they could fire weapons before threats appeared to them, allowing engagements to take place at maximum distance from the targets.¹⁹ The end result of all this would be a considerable increase in the time available to make decisions-more time to assess threats and respond—and operations faster than the opponent can sense and respond to himself. Cooperative engagement is not the only technical development speeding up the pace and efficiency of naval operations within the U.S. Navy. Much like the private business world in the last five years, the U.S. military has taken advantage of the Internet to improve the flow of information. The Defense Message System, backed up by the Secret Internet Protocol Routing Network (SIPRNET), has introduced a series of World Wide Web-based applications such as e-mail with attachments, "chat rooms," and web pages.²⁰ SIPRNET in particular seems to have had a revolutionary impact on the planning and conduct of operations within the U.S. military. It has transformed laborious manual procedures into rapid electronic ones. This became most evident during Operation ALLIED FORCE, when the sheer amount of paperwork forced planners to use electronic formats, "which were substantially easier to create, pass via e-mail, and maintain visibility on." As superiors appended their comments on forwarded messages, it became simpler to track the evolution of commanders' intentions as well.²¹ Even "chat rooms," so ubiquitous among idle teenagers, have a distinctly revolutionary aspect in that they permit the transmission of information (along with attachments of imagery and

other intelligence) without radio communication, thus preserving communications security within a theater.²²

Video teleconferencing (VTC) has also led to "compressed command and control processes" through its ability to span the strategic, operational, and tactical levels. It is particularly useful for staffs that are widely dispersed geographically.²³ A previous Sixth Fleet commander, Vice Admiral Dan Murphy, called VTC "the wave of the future." Video teleconferencing obviates the need to collocate staffs and reduces ambiguity in commanders' intentions.²⁴ VTC and chat functions collectively permit "distributed collaborative planning," which seeks to assemble problem solvers for rapid and effective response to time-critical situations, while providing access to and ensuring the availability of information resources.²⁵ Aircraft carrier battle groups are inherently dynamic

FIGURE 1

| Time | Event |
|-------|--|
| 05:00 | Receive unit operational reports |
| 08:00 | Brief battle group commander |
| 09:00 | Brief JTF commander |
| 10:00 | Warfare commanders' coordination board |
| 13:00 | Planning cell meetings |
| 18:00 | Release commander's intentions and situation report messages |
| 20:00 | Units receive commander's intentions |
| 00:00 | Units release operational reports |

given the constant flow through them of ships, personnel, and new technology. It is necessary to control this dynamism rather than be overwhelmed by it; accordingly, a battlegroup deployment involves a meticulous process of training and planning through which all participating units and individuals become familiar with the synergies between processes, procedures, and systems. The product is a specified "battle rhythm" (see figure 1). This battle rhythm requires that everything within the group, system, individual, or ship, "not have an adverse effect on communications or information flow." To this end, the battle group proceeds through a series of subunit and unit training exercises. These culminate in the "comprehensive task unit exercise" that certifies the battle group for basic functions and a final "joint task force exercise" that combines the CVBG with other formations, such as amphibious groups and allied formations.²⁶

ALLIED FORCE and subsequent operations in Kosovo are widely hailed as beginning the introduction of network-centric operations, and ENDURING FREE-DOM in Afghanistan has laid to rest many of the criticisms. This is especially so since that operation saw the confrontation of a high-tech military against a ragtag, guerrilla-type army: The Afghanistan operation may ultimately prove to be a boon to the Department of Defense's revolution in military affairs, in which the prize is not territory but information. Only after a clear picture of the battlefield is assured—and that shared with as many weapons platforms as possible—can the maximum potential of PGMs and other high tech weaponry be unleashed both militarily and politically.

Particularly impressive has been the manner in which information from a wide variety of sources has been processed and fused for both air and ground forces, thus permitting midcourse updates, engagement zones, "moving target options," and cockpit target imagery.²⁷

Equally evident, however, was the initial lack of allied participation in the most secret and demanding operations. While this might have stemmed from a general lack of allied logistical lift, other possibilities must also be considered. As Vice Admiral Arthur K. Cebrowski, the "godfather" of network-centric warfare, has noted, while the United States wants its partners to be as interoperable as possible, "not being interoperable means that you are not on the net; so you are not in a position to derive power from the information age."²⁸

NCW AND INFORMATION BARRIERS

Getting on the net may not be a simple process at all for allies and coalition partners. Essentially, these nations face two distinct challenges: network access may be hampered by technical incompatibilities inherent in their force structures, but it may be obstructed also by design.²⁹

Recent operations in the Balkans have underscored the difficulties of meeting American expectations for rapid, information-dense operations. During operation SHARP GUARD, conducted by NATO and the Western European Union in the mid-1990s, the ability of a ship to compile an operational picture was limited at times to its own horizon. Further, the commander of NATO Naval Forces South, in Naples, initially had no timely access to information being collected by units under his command.³⁰ During ALLIED FORCE, "existing data networks were not adequate to support the flow of information of . . . data among key nodes of the NATO information grid." Further, the United States was unable to pass along "high-fidelity data"; the alliance experienced accordingly difficulties attacking time-sensitive targets, "because of the need for rapid exchange of precision targeting data and continuous precision updates from sensor to shooter until the target is destroyed."³¹

Although some of these issues later found technical solutions (SHARP GUARD units and command centers eventually received old U.S. Navy Joint Operational Tactical System terminals, for example), the "need for speed" in network-centric operations places the whole notion of multinational operations at risk. Interoperability barriers may exclude even close allies. Connectivity problems are the "equivalent of changing to a different railway gauge at each national border";³² high-tempo operations therefore ultimately become hostages to the units with the slowest information and decision cycles.³³ Just as pressing and in the long term even more damaging than technology differentials may be lack of physical access. Liaison officers have traditionally been exchanged by militaries to ensure the transmission of information among partners, particularly when there are interoperability problems.³⁴ Today, liaison officers are often unable to enter U.S. command centers because of security restrictions.³⁵ Technology itself may ultimately lead to the electronic equivalents of these physical barriers.

The growing use of video teleconferencing directly raises this issue, because of the classified information frequently involved. In order to access a VTC link, "all users must be on the same level of classification of network and have access to the information on the network."³⁶ The lack of timely written documentation

Much of what has been revolutionary in the revolution in military affairs is not so revolutionary from a naval perspective. and the instantaneous, experiential nature of VTC hinder any participation by those not on the network.³⁷ As Major General John Kiszely of the British army has

pointed out more broadly, "Full interoperability between forces would depend upon integrated collaborative planning based on the maintenance of a common operating picture and common intelligence inputs. Without appropriate digital communications, this would not be practical, and made all the more unlikely because the U.S. SIPRNET is NOFORN [not releasable to foreign nationals]."³⁸ Thus, network-centric operations in a coalition or alliance environment may ultimately hinge on information releasability rules and the ability to exchange information between networks of different security classifications.

The underlying trouble is that the guiding principle of NCW is to increase the speed and efficiency of operations, whereas coalitions are rarely concerned about combat efficiency. Coalitions are always about *scarcity*—in terms of operational resources, political legitimacy, or both. The trade-off is always in terms of political influence over operational considerations; in coalitions, politics frequently trump efficiency. Neither is information releasability policy oriented around efficiency, but rather security. "Information release and control must be conducted in a manner that prevents damaging foreign disclosure[;] this capability must be demonstrated to information owners" before any transfer can be effected.³⁹ Information, and what it may imply about the systems that collected it, may be too sensitive to be entrusted to others.

In the absence of clearinghouses for information, information disclosure between nations is typically a tedious and cumbersome procedure.⁴⁰ Further, because the long-term effect of individual disclosures can be difficult to ascertain and because the career impact of improper disclosure is so serious, "commanders often choose stringent release rules to avoid problems."⁴¹ In this way, releasability concerns have dictated separated networks operating at different tempos. As Brigadier General Gary Salisbury, director of command, control, and communications systems for U.S. European Command, characterized the situation in September 2001,

How do [combined planners] get these national communication and information needs and fit these into a coalition environment? The bottom line is we are generally operating two different networks at two different security levels. We run our networks at a coalition releaseability level that's basically unclassified.⁴²

It is ultimately these information security policies that prevent allies and partners from operating at the same speed as the American military. Many of the problems of interoperability between allies and coalition partners are the same as those encountered in joint interoperability. Some have suggested that lessons learned from the latter can be applied to coalitions.⁴³ Nevertheless, the intervening variable, not present in joint situations, is that of international politics. The transnational element—particularly as it affects information security—makes coalition and alliance interoperability an order more difficult than joint interoperability.

It would be a gross overstatement to claim that the United States is unconcerned by the issue of information releasability. Throughout the 1990s and still today, the United States has sponsored Joint Warrior Interoperability Demonstrations (JWIDs), intended to seek technical solutions to common and pressing interoperability problems. These demonstrations have identified several technical solutions; for instance, "Radiant Mercury" and "SIREN" (Secure Information Release Environment) decision-support software, which speed up the sanitization and declassification of secret documents.⁴⁴ The 1996 JWID identified the "Coalition Wide Area Network" (CWAN) as a "golden nugget." CWAN permits establishment of a common operational picture at a "coalition secret" level. Separated (though not entirely) from the SIPRNET by software firewalls and gateways, CWAN was initially introduced in the multinational RIMPAC ("rim of the Pacific") exercise series and is currently being widely used elsewhere as well.⁴⁵ Finally, the U.S. assistant secretary of defense for command and control has sponsored a series of workshops and seminars among a working group composed of Australia, Canada, Germany, Britain, and the United States, with France as an observer. The working group seeks to identify the core needs of information exchange and to establish common doctrine and procedures prior to any operation.46

Dwight D. Eisenhower famously remarked, "Allied Commands depend on mutual confidence."⁴⁷ Like relinquishing command and control, releasing sensitive information is an act of trust between states surpassed only, perhaps, by placing troops under even the limited control of an ally; releasing closely held knowledge places technology, operations, and even personnel at risk.⁴⁸ "Trust involves a willingness to be vulnerable and to assume risk. Trust involves some form of dependency."⁴⁹

Thus, we can expect that just as nations have always been unwilling to place complete control of their troops under the control of foreign nations, they will be unwilling to share completely all information they have: "As close as . . . Canadian and British allies are in common interests and objectives, there will always be limits to sharing the most highly classified information with these nations."⁵⁰ In the past, this reluctance did not typically jeopardize operations. However, in network-centric warfare information is the cornerstone of all action; the existence of separate networks operating at different speeds will have an undeniable impact on battle rhythms.

The United States is certainly willing to share most of its information with certain partners. For forces of nations not in this privileged club, integration into American networks will be increasingly difficult, depending on how often they operate with the U.S. forces and the degree of trust extended to them. Forces not permitted to take part in planning will ultimately be restricted simply to taking orders—possibly to assume high-casualty or politically distasteful roles.⁵¹ The added risk is that multinational operations will become more and more circumscribed, that allied participation will be accepted only under the most restrictive circumstances. The United States is unlikely to hamstring its own military forces or to slow its implementation of network-centric warfare given its obvious benefits. It may decide simply to "pass" entirely on alliance participation.⁵² Information releasability policy would ultimately decide, then, not only the shape and nature of naval coalitions but possibly even their very existence.

CANADIAN SHIPS IN AMERICAN CVBGS

One can get a sense of the challenges facing coalition naval network-centric warfare by examining the integration of Canadian warships into U.S. aircraft carrier battle groups. In some respects, this case represents the crucible, for any difficulties faced by Canadians are likely to be considerably more intense for navies outside the bonds of trust that have traditionally connected the Canadian and American navies.

The Canadian navy began arranging to insert its ships into carrier battle groups in the late 1990s in an effort to improve interoperability with the U.S. Navy (see figure 2). Initially, only West Coast ships, operating out of Canadian Forces Base Esquimalt, in British Columbia, were involved. The West Coast fleet

FIGURE 2

MIF

| MARPAC Ships | | | |
|--------------------------|--|--|--|
| 1995, HMCS Calgary | 50 days as independent ship in MIF | | |
| 1997, HMCS Regina | Surface action group | | |
| 1998, HMCS Ottawa | Abraham Lincoln BG, fully integrated | | |
| 1999, HMCS Regina | Constellation BG, replaced U.S. ship | | |
| 2000, HMCS Calgary | Surface action group, PacMEF | | |
| 2001, HMCS Winnipeg | <i>Constellation</i> BG, on-scene commander 17–24 July 02, TACON of all BG units | | |
| 2001, HMCS Vancouver | John C. Stennis BG | | |
| MARLANT Ships | | | |
| 2001, HMCS Charlottetown | LANTMEF, joined Harry S. Truman BG in Med. | | |

Maritime Interdiction Force battle group Pacific Marine Expeditionary Force BG PacMEF TACON tactical control

Atlantic Marine Expeditionary Force I ANTMFF

> had fewer recurring operational commitments (such as the NATO Standing Naval Force Atlantic) than the East Coast command in Halifax, Nova Scotia. Further, the West Coast fleet had a long tradition of operating with the U.S. Navy and were therefore more doctrinally compatible with it than the Halifax squadrons, which had been primarily influenced by their long history of NATO operations.

> Since their introduction, the integration of Canadian ships into CVBGs has been an evolutionary process. Canadian ships began as members of the Maritime Interdiction Force in the Persian Gulf, later gradually moving into actual battle groups as mutual familiarity improved. What started first as an operational initiative eventually gained an explicit strategic stature (in the Canadian context), when it became Department of National Defence policy to improve interoperability with its allies, particularly the United States. The department now seeks to develop and maintain "tactically self-sufficient units," capable of substantial military contributions while asserting their Canadian identity. (A ground-forces equivalent would be the role Canadian Coyote LAV IIIs, armored reconnaissance vehicles, played in Bosnia, Kosovo, and now Afghanistan.) Commodore Dan McNeil, Director for Force Planning and Programme Co-ordination, has recently remarked, "We will never be able to field strategic level forces. . . . We're not ever going to be in that game. We're going to be fielding tactical units. [However,] if you properly use tactical units, you can achieve strategic effect. That is what we are trying to do."53

> A revolutionary aspect of these carrier battlegroup operations has been the fact that individual Canadian ships have often replaced American ones. This

arrangement has been of mutual benefit; the United States has been able to address its shortages of frigates and destroyers, and Canada has been afforded professional opportunities that it could not hope to obtain on its own. These opportunities include not only extended operations in groups larger than those the Canadian navy typically sends to sea but also exposure to assets not in the Canadian order of battle—carriers, cruisers, and nuclear submarines.

Canada has thus become a member of a select club, enjoying special access to the command and control concepts developed by the U.S. Navy as it travels down the road of network-centric warfare, as well as to military support not normally offered to allies. Finally, CVBG operations enable the Canadian navy to develop professional skills in the areas of littoral and interdiction operations, for which there is no opportunity in North American waters.

At the same time, such deployments stress the mutual dependencies and vulnerabilities that are central to every good coalition operation. For the Canadian navy, given the relative scarcity of Canadian ships (Canada has only twelve *Halifax*class frigates), each unit deployed has value out of proportion to its ultimate contribution to a carrier battle group. Obviously, sending such ships into the Persian and Arabian Gulfs, as is typical, is far more dangerous than assigning them to the standard fisheries patrols in Canadian waters they would most likely be conducting otherwise. Similarly, by replacing an American ship with a Canadian one, rather than simply augmenting the group, the U.S. Navy is placing considerable trust in the professionalism and competence of Canadian crews; as one battle group commander has declared, "We need to be ready to go on game day—and when we play, every game is game day."⁵⁴ Accepting a Canadian ship into a battle group also constitutes a commitment to look after that ship.

To ensure that they are not liabilities for their new battle groups, Canadian ships participate in the same exercises and workups that all American ships do. Similarly, they carry the latest revisions of the Global Command and Control System–Maritime (GCCS-M) and conduct training to ensure that they can share and use the information and imagery distributed on that system. The Canadian navy has been increasingly challenged by such upgrades, however, due to the legacy systems on board its ships. The CCS330 system that controls the ship displays in the operations rooms of the *Halifax* frigates and *Iroquois*-class destroyers is a closed-architecture system based on a unique operating system and military-specific software and hardware. State of the art ten years ago, it is becoming increasingly a maintenance problem and, even more seriously, has a very limited capacity for integration with new systems. New capabilities, like GCCS-M, must be added to Canadian ships on a stand-alone basis. Canadian display terminals, as a result, cannot send or receive operational messages; tactical networking requires separate consoles; and the information provided by

systems like GCCS-M and the Canadian equivalent of the SIPRNET, known as MCOIN III, become effectively "stovepiped." The result is a cluttered operations room where decision makers must consult a number of systems in order to gather all the information necessary to perform their jobs—obviously not the most efficient arrangement in the heat of battle.⁵⁵

Interestingly, the Canadian navy's effort to remain abreast of the fast-moving electronics revolution in command and control technologies is not being driven by American requirements. The United States is pleased that Canada strives to prevent gaps in capabilities. However, Canadian naval officers stress, it is the

"Not being interoperable means that you . . . are not in a position to derive power from the information age."

long history of naval cooperation and overall familiarity between the navies that has facilitated these exchanges, not the technical "kit" installed aboard Canadian

ships.⁵⁶ The difficulties Canadian ships typically encounter in integrating themselves into American battle groups largely arise from the issue of accessibility.

In battlegroup operations, as noted, the Coalition Wide Area Network is the principal means for coordinating action between Canadian and American ships; the U.S. Navy is gradually migrating its command, control, communications, planning, and execution functions to web and other digitally based delivery methods, notably the SIPRNET. However, CWAN and SIPRNET have mutual interface limitations. E-mail can pass between the two systems as long as the U.S. user has a CWAN account. Nevertheless, a security "firewall" strips off attachments before admitting messages into the CWAN. Thus a Canadian recipient may receive a commander's directive but not the supporting and amplifying information that originally accompanied it. Furthermore, messages from SIPRNET users without registered CWAN accounts will not reach Canadian ships, which may thereby miss important items.

The growing use of "chat" features to plan and coordinate has also been noted, and CWAN has such features. However, there is no interconnection between SIPRNET chat and CWAN chat. In order for a Canadian ship to participate in a session with American counterparts, a CWAN liaison officer must type into CWAN what was entered onto the SIPRNET system. Any attachment must be "air-gapped" onto CWAN, which can be quite a complicated procedure, involving multiple transfers between networks (SIPRNET to NATO Information Tactical Display System to MCOIN III).⁵⁷ As there is frequently only a single Canadian liaison officer on the carrier, accordingly, transfers between the two systems are likely to be delayed when that officer is not on watch.⁵⁸ Canada urges the U.S. flagships to man the CWAN terminal during these times, but it is likely to be overlooked in periods of high operational tempo—just when the Canadian ships most need the information.

Finally, the web features of SIPRNET are limited on the CWAN side. CWAN supports web pages, but they contain only information placed there by coalition partners. In a U.S.-run operation, the majority of the information needed will be originating from the United States. There is no direct connection between SIPRNET web pages and CWAN web pages; web files must be "air-gapped." As a result, CWAN and MCOIN III are often out of date, sometimes by days. Furthermore, CWAN information is likely to be only a "snapshot" of that available to SIPRNET, without the functional links that it has on the U.S. side, limiting the ability of coalition officers to "surf" for more information. Finally, the carrier is usually the only U.S. ship in a battle group with a CWAN terminal, in which case it is the sole unit capable of posting information there—making it all the more possible that important information will not be posted at all.

TRUST AND UNILATERALISM

There may be nothing available but inefficient, work-around solutions to these problems. The real difficulty is not so much technical as policy oriented. The natural desire to protect sensitive information is at the root of all these issues, and it is not unique to the United States-MCOIN III is a Canada-only system, just as SIPRNET is U.S.-only. We should not expect this sensitivity to disappear any time soon; in fact, 11 September 2001 doubtless heightened it. Releasability software helps to move information onto coalition networks in a timely fashion, but they are not gateways to the information that American officers use on a day-to-day basis. This results in two quandaries for Canadian ships. First, they often operate without even basic operational-procedure manuals; some publications have not been classified as releasable to Canada or to the Coalition Wide Area Network. Without such formal guidance, U.S. officers are generally reluctant to release even what is seemingly innocuous data for fear of making mistakes that could have repercussions for their careers.⁵⁹ Second, since the makeup of a carrier battle group is not permanent, information-sharing protocols must be rebrokered for each deployment. Sometimes gaining access is a question of proving one's bona fides to the battle group; sometimes the battlegroup staff is simply unaware what information has been passed, or is otherwise available, to the Canadian ship. Often such problems are resolved when the battlegroup commander becomes aware of them, but the necessity to approach "the flag" for such matters highlights the impediments to network operations in a coalition environment.

The Canadian experience with U.S. carrier battle groups is instructive in both positive and negative senses for the overall question of network-centric

operations in a coalition environment. It is positive in demonstrating that despite technical limitations and differences between two navies, effective cooperation can be achieved in the modern naval environment. Once willingness to cooperate and a basis of trust between two forces has been established, technology is not an impassable barrier. Canada's close experience with the United States may be helpful to other navies. In its vision document Leadmark, the Canadian navy has proposed to develop a "Gateway C4ISR"* function that would allow less capable navies to integrate themselves into network-centric operations.⁶⁰ The Canadian navy has performed such a function in the past. During the Gulf War, among the deciding factors in the selection of Canada to lead the Combat Logistics Force were its excellent interoperability with the United States (a proposed French ship, Doudart de Lagrée, "lacked good communications interoperability"), its multinational crews, and its remaining legacy communications systems (with which Canadian ships could talk with more or less all warships present).⁶¹ At present, Canadian ships play an important intermediary role in passing on information to other coalition partners in the Arabian Gulf.

However, there is a very large caveat-the relationship between the Canadian navy and the U.S. Navy took decades to evolve, and even so significant impediments remain to the seamless integration of forces that network-centric warfare demands. Further, while CVBGs must be prepared for all warfare eventualities, Canadian ships have participated predominantly in maritime interdiction. One wonders how welcome even Canadian ships might be in an operation dominated by strike warfare, against an asymmetric surface threat, in the littoral. Finally, the security demands of U.S. military networks are likely to be troublesome indeed for navies without the privileged access afforded to Canadian ships and crews on the basis of long-shared operational experience and a wealth of trust. Indeed, if the Canadian experience indicates that coalition networkcentric operations are possible, it also indicates that the price of admission will remain very high. In a dynamic coalition environment, professional trust will be critical, and the height of the bar will be set by both technology and policy. Because of the crippling effect of slower networks or nonnetworked ships in such a setting, information releasability issues may be a stimulus to American unilateralism.

^{*} C4ISR: command, control, communications, computers, intelligence, surveillance, and reconnaissance.

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given the distances involved. For Canada the matter is simpler, given the proximity of Halifax and Esquimalt to American naval bases.

- 57. The process can become complicated, depending on the nationality and access of the liaison officer. Canadian officers would have access to the Combat Information Center and, though without access to SIPRNET, could at least retype into CWAN simultaneously, as liaison officers without access to CIC could not. However, American officers, who would have SIPRNET access, can man the CWAN station. "Air-gapping"—downloading data to a floppy disk for reentry into the other network.
- 58. In the present operations in the Arabian Gulf, there are frequently more Canadian officers aboard the U.S. carrier. This is because of the presence of a Canadian task group engaged in maritime interdiction and littoral

interdiction operations. Similarly, given the coalition nature of the operations in South Asia, more liaison officers from other navies would be present to man the CWAN terminals. However, for a typical Canada/U.S. CVBG deployment, only a single officer would be present aboard the carrier.

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TRANSFORMING HOW WE FIGHT A Conceptual Approach

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ransformation has been defined correctly as a process rather than an end state. Still, nagging questions linger. What is the purpose of transformation? Toward what goal is military transforming headed? What do we want the future military to do? What should it look like? How should it fight? The transformation, to be meaningful, must lead coherently from a present state toward an envisioned future condition. Transformation, therefore, is most precisely a strategy designed purposefully to achieve a cogent vision of the future. Absent this articulation of purpose, transformation risks moving in the wrong direction—or in no direction at all. The key, to paraphrase Secretary of Defense Donald R. Rumsfeld, is to have the right ladder standing against the right wall.

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The struggle from which such a purpose may be derived has been a powerful subtext of the transformation debate and has indeed informed arguments over war planning against Iraq. In the meantime, the services have pursued a disaggregated transformation each trying to improve what it does best. Problems naturally arise with this approach, particularly in areas such as joint interoperability and lift, by air and sea—areas that are crucial for effectiveness at the joint level but that might get low priority from an individual service perspective. Still, it is important not to rush; making the intellectual effort to get the vision right is crucial. Heading, however purposefully, in a self-defeating direction would be disastrous. Up to this point, unfortunately, the debate about transformation and the future of the military has remained largely rooted in technology. We need to update our understanding of the nature of war and use it as a touchstone. The future will belong not necessarily to the most technologically advanced combatant but the one that understands the nature of war and can most effectively cope with and exploit it. Such understanding is a necessary backdrop for the development of vision and thereafter the intellectual, cultural, organizational, and technological components of transformation.

This article seeks to expand the debate to the necessary scope by proposing a set of ideas to synthesize the enduring nature of war with contemporary technological realities, to bridge the gap between new technology and broad transformation. These ideas emerge from five critical postulates about the enduring nature of war:

- 1. Information in war is "essentially dispersed."
- 2. War is Chaotic.
- 3. Combatants in war are complex adaptive systems.
- 4. War is a nonlinear phenomenon.
- 5. War is the realm of uncertainty.

The insights from those postulates suggest that our armed forces will be most effective if we master the following concepts:

- 1. *Decentralization:* create and exploit a knowledge advantage by empowerment at the appropriate levels.
- 2. *Complexity:* gain a complexity advantage by maximizing the number of meaningful interactions with which the enemy must cope simultaneously or nearly so.
- 3. *Resilience:* sustain balance and equilibrium in our own force while creating and exploiting instability and disorder in the enemy.
- 4. Tempo: sustain an intensity of operations over time with which the enemy cannot cope.

The apparent lessons from conflicts over the past ten years point to an emerging paradigm about transformation, known as the "information technology revolution in military affairs" (IT-RMA). Simply put, this increasingly popular thesis suggests that information superiority plus precision munitions equals victory.¹ Decision makers will have a "near-omniscient view of the battlefield" that will enable them to direct precision munitions onto targets with such rapid and lethal effect that enemies will be reduced to "awe," "shock," or "paralysis," and in any case be "locked out" of the objectives they wish to pursue. Either way, in this view, the enemy will have no choice but to give up. Embedded in the paradigm is the assumption that standoff precision munitions delivered primarily from air or sea forces will have maximum effect on the enemy with minimal risk to American lives and of collateral damage. A related assumption is that an omniscient view of the battlefield will make centralization of authority possible, indeed inevitable.² Recent events in Kosovo and Afghanistan illustrate the new reality.³ Indeed the commander in chief of U.S. Central Command was reportedly admonished for a DESERT STORM–like plan for invading Iraq and was told to make it "look more like Afghanistan."⁴

By continuing to focus almost exclusively on technology, the U.S. armed forces risk developing strategies, force structures, and warfighting concepts that are at odds with the nature of war.⁵ As Secretary Rumsfeld has argued, transforming America's military means changing "how we think about war," encouraging a culture of creativity and risk taking.⁶ Transformation, therefore, has important intellectual and cultural components, which must turn technological advances into a more effective military.⁷ Consideration of these other components of transformation, however, has too often devolved into little more than a glib hype of exhausted adjectives. Failure to come to grips with cultural and intellectual elements of transformation risks dooming the U.S. armed forces to "expensive irrelevance" and inconsequential lethality.⁸

THE NATURE OF WAR

It is time to challenge the validity of the prevailing IT-RMA thesis by examining some key aspects of the nature of war and offering alternative concepts that, if pursued, would move the U.S. armed forces along the path of true, rather than merely technological, transformation.

Information in War Is Essentially Dispersed

The Nobel Prize–winning economist Friedrich von Hayek (1900–92) argued that information is "essentially dispersed" in the "extended market order." Although economic theory often translates uneasily from a business to a military context, Hayek's concept is useful for analyzing individual and collective human behavior. The idea provides a conceptual foundation that can enable leaders to liberate and direct the creative genius of their people and organizations.

Hayek viewed the market as an evolutionary process of discovery and adaptation in which individuals gather, process, and interpret information and make choices to maximize their interests. What appears to be a chaotic market reflects in fact a "spontaneous order" that is beyond any central designing intelligence.⁹ "Modern economics explains how such an extended order can come into being," suggests Hayek, "and how it constitutes an informationgathering process, able to call up, and put to use, widely dispersed information that no central planning agency, let alone any individual, could know as a whole, possess, or control."¹⁰

Hayek argues that information, knowledge, and understanding are dispersed in space and time. Human beings perceive, interpret, and understand information and make decisions that reflect the lenses through which they view the world. In the terms of modern psychology, the rationality of individuals is bounded by such factors as experience, bias, education, and emotion.¹¹ As a result, two people can look at the same picture and derive completely opposite conclusions and accordingly take radically different courses of action to pursue their interests.

The apparent dissonance can be explained, in part, by the difference between "explicit" and "tacit" knowledge. Explicit knowledge is concrete information of the sort that can be entered into databases and information systems; tacit knowledge comprises the implicit information and processing capabilities that individuals possess as a result of their cognitive maps and perceptual lenses.¹² Tacit knowledge comes into existence and manifests itself in ways peculiar and specific to context. It is drawn upon only in particular circumstances. It shapes the way we behold information, how we create knowledge and understanding, and the degree to which we consider each item relevant and appropriate to a situation.

The essentially dispersed nature of information suggests that the fusion of explicit knowledge onto a situational-awareness screen does not result automatically in homogeneity of interpretation and decision. Different people, looking at the same situation, perceive different crises and opportunities; they make different assessments of risk; and they ultimately make different decisions about how to maximize the effectiveness of themselves and their organizations. Shared situational awareness of physical relationships on the battlefield, therefore, does not mean shared appreciation of how to act upon the information. The essentially dispersed nature of information will remain salient in warfare. Our challenge is to "leverage" it.

War Is Chaotic

Chaos theory is a relatively new and complex branch of science and mathematics, the implications of which for human systems have only begun to be explored.¹³ Chaos contends that a system contains a certain complex order that is determined by the nature and interrelationships of each element within it and by each force that acts upon it. Elements within the system interact with one another and with external inputs. The system also interacts with the "feedback" from the first interactions, creating "system perturbations" (subsequent orders of effects) that shape the system and ultimately make it unpredictable. The result is a peculiar order.

Chaos need not imply disorder. A Chaotic system can be stable or unstable. It is stable if "its particular brand of irregularity" persists in the face of disturbances (inputs), or if it returns eventually to its particular brand of irregularity. The inputs generate certain responses from the system that may be immediately unpredictable but stable over time.¹⁴ A Chaotic system is *unstable* if inputs result in a permanent change in the system's regime of behavior or nature.¹⁵ Chaotic systems are thus complex and deterministic.¹⁶ Because of the system's complexity, it is impossible to predict with absolute fidelity the impact of specific inputs or interactions.

War is Chaotic.¹⁷ Clausewitz argued that "war is more a true chameleon that slightly adapts its characteristics to the given case." The dominant tendencies in war—the famous "trinity" (passion, probability and chance, and reason) and "triangle" (people, military, and government)—give each war in general, and its combatants in particular, unique characteristics. Depending on context, these tendencies, singly or in combination, can be resilient or fragile with respect to particular inputs and interactions. "Our task therefore is to develop a theory that maintains a balance between these three tendencies [of the trinity], like an object suspended between three magnets."¹⁸ Such insight is an implicit recognition of the Chaotic nature of war and of the combatants that participate in it.¹⁹

In a similar vein, Clausewitz described the criticality of "moral factors" as the true measurement of an organization's combat capability. He eschewed the attempt to reduce war to fixed formulas, equations, and calculations of raw numbers.²⁰ The continuing interaction of opposites with deterministic systems makes war uncertain and unpredictable. Strength in moral factors gives resilience to the organization, but such resilience is not itself a fixed quantity—moral factors can grow or recede over time. A strong and confident army can become demoralized; an unconfident and untested force can develop high morale. The Chaotic nature of war endures. The challenge is to turn the fact to advantage.

Combatants Are "Complex Adaptive Systems"

Human organizations are complex and adaptive.²¹ The individuals and teams within the system react to inputs and adapt to changes. Sometimes those adaptations are consciously designed to maintain effectiveness in the face of a threatening input or to capitalize upon an opportunity for growth or value maximization. Others are subconscious or unconscious adaptations. Morale and confidence, for instance, might decrease as efforts to cope with interactions prove futile or, conversely, might increase as those efforts succeed.

A way to appreciate complexity, and its potential in war, is by contrasting it with simple and compound systems. A simple system is linear: the force of a single input will generate a proportional and predictable output. Decision making in simplicity is fairly easy. The combatant must respond to only a single threat. For instance, the presence of a bomber overhead will elicit a predictable "scatter" response from a ground unit: to escape the effects of the bomber, the ground unit disperses.

A compound system, on the other hand, is one in which two or more inputs are present that force a combatant to make choices. Often the choice taken to avoid one threat increases a combatant's vulnerability to another. This time, the ground unit is facing both a bomber and an opposing ground force. The best reaction to the bomber is dispersion, but that choice will make the unit more vulnerable to the opposing ground force. Conversely, the best choice to oppose the ground force is to concentrate the friendly ground forces; doing so, however, makes it more vulnerable to the bomber. The commander is on the horns of a dilemma. The combination of threats in a specific battle or context increases the challenge for the enemy. Compound systems account for interaction at the friendly-versus-enemy level.

A complex system is one in which interactions take place on multiple levels. Combatants interact with more than just the enemy. In war, commanders interact within themselves—their own emotions, goals, biases, and experiences—and with their staffs as they attempt to cope with war's complexity while simultaneously trying to accomplish the war's purpose. Commanders and organizations also interact with friendly forces. At the strategic level, this can be interaction with the people and the government. At the operational and tactical levels, this can mean interaction with adjacent forces or other instruments of national power. The activities of friendly forces shape the context in which our own operations take place. In a similar vein, there is interaction with the external environment. Examples of external forces are, among others, political directives, coalitions, the physical environment, and third-party inputs to the system. The complexity of war, therefore, increases with the number of critical interactions and adaptations affecting the components of the Clausewitzian trinity and triangle.

Warfare is not a single, isolated act. Interactions take place simultaneously on various levels. As long as the system—the individual, the organization, the country—remains resilient, it will attempt to adapt effectively to crises and opportunities. As the system becomes more fragile, its ability to sustain effectiveness erodes. Adaptations aimed at other purposes (such as individual survival) can rise to the fore, atomizing and unraveling the fabric of the combatant.

Evolutionary biology theory lends insight into the unpredictability of complex interaction within Chaotic systems. Although it is possible in hindsight to trace backward the development of a species, predicting its evolution in advance is not possible.²² Too many singular factors intervene to determine the outcome ahead of time—that is, as in Chaotic systems, the result is deterministic but not predictable.²³ The outcomes of individual interactions, therefore, alter the general situation and affect the choices of others. They shape the nature of future interactions and thus exert successive effects.²⁴

When applied to war, the concept of adaptive complexity suggests that the number of possible outcomes increases unpredictably with the number of meaningful inputs.²⁵ As each side adapts to those inputs, interactions can generate effects and responses that defy prediction and expectation.²⁶ Looking backward from the outcome, one can readily perceive a logical, understandable unfolding of interactions.²⁷ From the perspective of the observer in the midst of the process in time and space, however, the result was only one of myriad possibilities.

War Is a "Nonlinear Phenomenon"

The Chaotic nature and adaptive complexity of war render it a nonlinear phenomenon.²⁸ A linear outcome is one in which the strength of the input yields an output of proportional strength; a nonlinear outcome is one that is not directly proportional to the input.²⁹ Nonlinear systems, as historian Alan Beyerchen explains, "are those that disobey proportionality or additivity. They may exhibit erratic behavior through disproportionately large or disproportionately small outputs, or they may involve 'synergistic' interactions in which the whole is not equal to the sum of its parts."³⁰ In a nutshell, a nonlinear outcome is one that defies the logic and science of linearity.

Nonlinear systems are living, animate, and adaptive. They can change over time and by interaction with their contexts.³¹ As Chaos and complexity theories suggest, the alterations that result can move the system into a qualitatively different nature or regime of behavior. Nonlinearity helps to explain why even subtle inputs to the system sometimes yield inordinately large outputs and, conversely, why large inputs may have only minor effects. Small changes to initial conditions in a fragile system can lead to outcomes that defy proportionality, while large inputs to a resilient system might simply be absorbed. A given input can yield different outcomes at different times, because the nature of the system at any moment is dependent upon context.³² As Beyerchen summarizes, "The heart of the matter is that the system's variables cannot be effectively isolated from each other or from their context; linearization is not possible, because dynamic interaction is one of the system's defining characteristics."³³

To recognize war as a nonlinear phenomenon is to acknowledge that no single formula, equation, methodology, or capability can predict outcomes or guarantee victory. Inputs can cause effects that are disproportionately large or small; they can cause "system perturbations" and unintended consequences, responses to which can lead in turn to successive effects that change the situation fundamentally but could scarcely have been anticipated.³⁴ Effective adaptation to the unpredictability of warfare remains a fundamental challenge.

War Is the "Realm of Uncertainty"

Warfare, then, is by nature uncertain.³⁵ Prevailing concepts of uncertainty, however, are inadequate. Uncertainty is commonly understood as a matter of information.³⁶ If that is the case, the argument that information superiority, or "dominant battlespace knowledge," can "lift the fog of war" is plausible.³⁷ Uncertainty, however, is not reducible to information. To be sure, simple uncertainties, unknown but attainable pieces of information, can be reduced radically by technology. But simple uncertainties merely scratch the surface of the issue.

An uncertainty not necessarily reducible to existing information concerns the future. According to one influential study, such situations of *future uncer-tainty* can be grouped into four categories. In the first, a "clear enough future," forecast precisely enough for strategic development, is apparent—though absolute certainty is impossible, the future seems to point inexorably in a single strategic direction. In other cases, "alternate futures," a few discrete outcomes are plausible. In a third category the actual outcome can lie anywhere along a broad (but bounded) continuum: a "range of futures" in which no discrete outcomes are obvious. True "ambiguity" is the last category. In this case there is no basis upon which to forecast the future.³⁸

Aside from those that result from gaps in information and those relating to the future, there are several other types of uncertainty that are crucial to an understanding of war.³⁹ *Intrinsic uncertainty* results from "bounded rationality"— the existence of a gulf between perception and reality. Cognitive biases, emotions, assumptions, experiences, education, and heuristics all shape the meaning people elicit from information. This type of uncertainty accounts for the phenomenon of two people seeing the same things and deriving different conclusions. Particularly in complex, unique, and ambiguous environments, the decisions and actions arising from bounded rationality can be highly unpredictable. *Frictional uncertainty* deals with the inability to predict precisely how the "friction of war" will manifest itself. Equipment failures and performance anomalies form a part, but more importantly, so do poor communication, fear, danger, exhaustion, disobedience, initiative, will, inertia, and other human

factors. These frictions can affect individuals and organizations in ways that defy prediction and expectation.

Dynamic uncertainty is the most problematic, because it results from interaction. The concepts of Chaos, adaptive complexity, and nonlinearity underscore the inherent unpredictability in war that results when forces interact. An input that generates a certain response from one system will likely elicit a much different one from another. Destroying a communications network, for instance, might make one combatant unwilling to continue the war; it might merely stimulate another combatant to increase the intensity of resistance. Such outcomes result from complex interactions that defy precise modeling and forecasting.⁴⁰ Intrinsic, frictional, and future uncertainties exacerbate the problem.

Coping with uncertainty has traditionally meant collecting more information. In this approach, the decision maker must have a sense of what is knowable and accessible and what is not. He or she must also understand the cost of additional information and determine whether the effort is worthwhile. The decision maker uses analyses refined on the basis of the new information to develop strategies to shape or adapt to developments and to determine the right "portfolio of actions" in response to them.⁴¹ Uncertainty has been something to be overcome (by information) or something to "bind" (by anticipating the future).

The existence of frictional, intrinsic, and dynamic uncertainties suggests that the old paradigm is incomplete. Chaos, adaptive complexity, and nonlinearity suggest that instability and fragility in the system can lead to highly contingent, disproportionate, and dysfunctional outcomes. Coping in advance with uncertainty requires creating the conditions necessary for resilience. Second, uncertainty demands versatility and flexibility if crises and opportunities are to be responded to in a manner that derives maximum advantage. Last, this broader concept demands an approach to war that focuses on the creation and exploitation of uncertainty in the enemy.

TRANSFORMING HOW WE FIGHT

A combatant who understands the nature of war and can not only cope with but exploit it will have a decided advantage. This perspective can open new and more appropriate pathways toward real transformation. It also can serve as a reference point from which to evaluate the IT-RMA thesis and to suggest alternatives to a myopic focus on technology. Our ability to do so will in many ways determine the effectiveness of our armed forces in both the present and the future; it depends, in turn, on our ability to master four basic conceptual approaches.

Decentralization

A knowledge advantage can be exploited by empowering people at the lowest possible level. The notion that information is essentially dispersed in the extended order of the battlefield, coupled with the fact that shared information does not necessarily imply a shared appreciation as to how to respond to it, leads to fundamental questions regarding how organizations should be commanded and controlled. One part of the issue concerns whether a centralized or decentralized approach is more effective.⁴²

The increasing transparency of the battlefield makes the impulse for centralization more difficult to control. The argument is that very senior commanders now have "dominant battlespace knowledge"; that they know everything necessary to make rapid and sound decisions. The interconnectedness of the organization, in this view, enables the commander to transmit those decisions instantaneously to subordinates and monitor precisely how those orders are implemented. The core assumptions of this argument are that shared information leads to shared understanding, that decisions are made most effectively at higher echelons of organization, that organizations consist of "decision entities" controlling "actor entities"—and that networks permit fewer of the former to control more of the latter.

Such centralization of authority, however, would suboptimize the performance of the military and the people who constitute it, because, as studies in the behavioral sciences have shown, bounded rationality is intrinsic to human nature. In a crisis, as we have seen, one person might respond conservatively while another person recognizes a fleeting opportunity worth significant risk.⁴³ Centralizing authority has the unfortunate consequence of limiting battlefield understanding to a single "decision entity." That might seem safe, in that a senior commander is presumably less likely, by virtue of experience and education, to make a poor decision than a more junior commander. However, the creative tension that results from competing perspectives is lost.⁴⁴ Moreover, removing from junior leaders the sense of responsibility, "ownership," and empowerment decreases motivation, retards creative thinking and problem solving, and results generally in less effective execution. The likelihood that decisions will not be executed in the manner intended increases with psychological distance between decision maker and actor.⁴⁵

Empowerment of professionals at the lowest possible levels is the most effective guarantor of excellence. Technology should unleash the power of people rather than handcuff it. Liberating the creative genius of people can create a certain complex order in an operation that no central authority could conceive or direct and that no enemy could fully comprehend or counter. In any case, the idea that information is essentially dispersed argues for a similar decentralization of authority.⁴⁶

Decentralization, it is important to note, has its limits. Empowering untrained subordinates merely leads to poor decisions made more quickly; dissemination of authority in the absence of direction or guidance can produce disjointed activity that fails to accomplish the purpose of the operation, even impedes it. Leaders must define the creative space in which their subordinates are free to act. Statements of commander's intent, mission, boundaries, rules of engagement, and main effort are traditional methods of bounding that space and providing reference points. A new approach to the same problem is "effects basing"—explaining the effects a commander wants to achieve and how ground, sea, and space forces and other elements of national power interrelate, while allowing subordinate commanders to determine precisely how to achieve those effects. Leaders can also utilize "permissive" rules of engagement, instructions, and control measures designed to accelerate the decision-action cycle.⁴⁷

To be sure, the senior leader must have confidence that a subordinate will make sound decisions. Training, education, and mutual understanding gained through acquaintanceships are natural foundations of mutual trust. Ad hoc organizations, accordingly, have difficulty with decentralization. We need to develop understanding and trust in the necessary depth at the operational level in peacetime so that it can be drawn upon in war. Standing joint task force staffs that train and communicate routinely with the tactical commanders and organizations they are likely to employ in action might prove important. We should also examine institutional impediments that create impulses toward micromanagement: how long officers remain in command positions, the education and training they receive, and how often command teams and staff teams operate together.

Information in the hands of people who cannot act on it is worth little; in the hands of those who can, it creates complex synergies of unimaginable power. We can guarantee suboptimal performance by centralizing authority while placing relatively powerless people in harm's way, or we can create a culture that truly transforms how we operate. Technology is neutral in this regard. A "culture of confidence" requires self-discipline and a relentless passion for excellence. Such a culture likewise relies upon junior professionals to be worthy of trust—an issue, to be sure, that deserves more attention.⁴⁸ The ability of commanders to educate and train professional subordinates, give them the authority they need, promote innovative thinking and responsible risk taking, and resist the urge to micromanage is crucial to warfighting effectiveness. Finally, creating the right culture requires institutions and systems that enhance rather than impede decentralization. Technology gives us tools to fight with. The degree to which we

can liberate and focus the creative genius of educated and trained professionals will determine how *well* we fight.

Complexity

A complexity advantage can be achieved by maximizing the number of meaningful interactions with which the enemy must cope simultaneously or nearly so. Complexity increases further if interactions occur at multiple levels. It also rises when response to one interaction creates "system perturbations" to which a combatant must respond as well. The most effective way to gain the complexity advantage is by combining the concept of "effects-based operations" with joint capabilities.⁴⁹

The notion that standoff precision munitions alone can generate the right effects and produce the psychological collapse of the enemy is at odds with the idea of adaptive complexity. A thinking enemy who is determined to win will find ways to mitigate the effects of standoff precision munitions.⁵⁰ Despite their destructive power, such weapons, employed in isolation, have limited psychological impact. Their shock value erodes rapidly, and their effects can be countered with relatively few adverse consequences.⁵¹

"Complex" should not be confused with "complicated"; neither should "simple" be conflated with "simplistic." Simple actions that pose diverse threats, when integrated properly, produce complexity for the enemy. At the tactical level, tasks relatively simple to understand and implement—defend from a battle position; emplace obstacles; employ indirect fires, close air support, and rotarywing aviation; and counterattack by fire—can create, when integrated into a defensive operation, a very complex challenge for the enemy. Each threat by itself may be easy to deal with; when they are integrated, attempts to evade or defeat one will result in increased vulnerability to others. Threats from multiple directions and in multiple dimensions—sea, air, ground, and space—exacerbate the complexity.

The principle applies similarly at the operational and strategic levels. Balanced, synergistic employment of complementary capabilities to achieve effects along "multiple lines of operation" integrates simple individual tasks into complexity for the enemy.⁵² The simultaneous, integrated employment of precision-strike and ground maneuver forces on enemy formations and critical vulnerabilities, coupled with operational fires on second-echelon or reserve forces; special operations forces operations on strategic targets; strikes against the enemy's communications, economy, and infrastructure; public and private diplomacy aimed at coalition partners and third parties; and the use of economic instruments of power are ways to generate complexity at the operational and strategic levels of war. The increased number of options available to a balanced force to employ all

of its elements of power in an integrated manner will complicate further the range of problems with which the enemy must cope.⁵³

In addition, bringing to bear a whole array of capabilities can cause "virtual attrition"—the diversion of assets to deal with anticipated threats—which can make our operations even more effective at the points of focus. Faced with such complexity, the enemy becomes more likely to make critical, even self-defeating errors. By making our actions unpredictable enough, we may create such uncertainty for the enemy as to induce cognitive or psychological collapse. A complex operation is far more likely to do so than a simplistic assault by a single capability.

Resilience

Related to complexity is the concept of resilience, by which balance and equilibrium can be sustained in our own force while instability and disorder are created and exploited in the enemy. Chaotic, complex adaptive systems such as combatants at war range in robustness from resilient to fragile. Resilient systems can absorb inputs and yet sustain, or quickly return to, their "normal" regimes of behavior, while fragile systems become disordered and incoherent.⁵⁴ Both are inherently nonlinear. We see unpredictable outcomes in war routinely—the small resilient unit withstands and rebuffs an attack despite being vastly outnumbered; another defending unit collapses entirely in the face of an attack by a numerically weaker foe.⁵⁵ We cannot predict with certainty such disproportionate outcomes, but we can approach the Chaotic, complex, and nonlinear natures of war from the perspectives of resilience and fragility in order to tilt the outcomes of interaction in our favor.

Clausewitz described the nature of combatant states in terms of the "trinity" and "triangle," and of the strength of armed forces with respect to physical size, moral factors, and the relative genius of their commanders. Although such a framework is not perfect, it does capture significant "points of attraction" that together influence the degree of resilience in the system.⁵⁶ Combatants must cultivate and sustain resilience by attending to these points of attraction at the strategic, operational, and tactical levels. It will be critically important to the process of military transformation to develop the factors that influence morale, cohesion, and leadership with the same amount of energy and enthusiasm now devoted to technology.

The opposite side of the coin naturally concerns the enemy's degree of resilience; operations should create and exploit fragility in the enemy in order to induce nonlinear outcomes in our favor. As we have seen, however, a note of caution is in order—we must not assume that any single weapon can bring about the inevitable collapse of the enemy. Some enemies are indeed fragile enough to be defeated by standoff precision munitions alone, as believed by some theorists. A more resilient enemy, however, will sustain the will to fight. Rather than relying on problematic assumptions of inevitable collapse after precision-guided missile (PGM) attacks, the U.S. military needs to focus instead on creating the conditions in which the will to fight becomes increasingly difficult to sustain. By maximizing the level of complexity and exploiting fragility we inflict the greatest possible pressure on the enemy's will. The complexity generated by a properly employed, balanced, joint force will create the conditions necessary for successful military operations whether the enemy's will is strong or weak. Understanding the nature of combatants and the relationships between complexity and resilience is the basis of a sounder approach to warfighting.

Тетро

The concept of tempo—sustaining an intensity of operations with which the enemy cannot cope—integrates decentralization, complexity, and resilience. A combatant's will to resist is rarely broken by single spikes in the intensity of operations; in the respites that follow during periods of transition, the enemy recovers, adapts, and resumes the fight.⁵⁷ Instead, intense, complex interactions need to be created and maintained over an extended period of time. Operations that integrate effects, generating the most possible at each level of war, and do so unrelentingly have the most potential to break the enemy's will.

Organizations require considerable structural resilience and balance to mount such operations at high sustained tempo without exceeding the limits of their own capability or endurance.⁵⁸ To dominate transitions we need to eliminate the operational pauses that result from too little numerical strength to sustain tempo or from improperly assembled forces that cannot overcome the effects of terrain and weather.

Studies of combat psychiatry and nonlinear dynamics indicate that disproportionate negative outcomes—cognitive or psychological collapse—occur when systems, whether organizations or individual humans, do not have time to recover their equilibrium.⁵⁹ The ability, then, to sustain constant pressure against the enemy's points of leverage becomes crucial—to deny the enemy periods of rest in our transitions between offense and defense or between our successive offensive or defensive operations. Constant pressure requires not only a balanced force but one able to win the initial fight and then to commit fresh units to maintain pressure while the previously engaged units recover.⁶⁰ The nature of the enemy determines whether and when cognitive or psychological collapse will be achieved, but we can stretch his moral factors to the limit by "nesting" significant effects at the tactical, operational, and strategic levels and

by dominating transitions so as to deny the enemy any chance to recover equilibrium.

RELEASING CREATIVE GENIUS

Technological improvement is important but, pursued in isolation, will lead us only so far.⁶¹ We must simultaneously examine desired operational capabilities and cultural and intellectual concepts that express how we want to fight. The synergistic interaction of analysis and synthesis among broad categories leads to innovation that is greater than any single approach can contribute on its own. We will fail if we focus exclusively on technology.

One of the problems with technological evolution and revolutions in military affairs is that the first organizations to experience such changes do not necessarily come to grips with them most effectively.⁶² Technological and conceptual change must be integrated in a manner consistent with the enduring nature of war.

Information technology, of course, can radically improve the speed at which orders are transmitted; create forums for dialogue between commanders struggling to interpret reality on the basis of what they see on the ground and on their computer screens; enable commanders to apply combat power quickly to exploit fleeting opportunities; and permit an order-of-magnitude increase in the tempo of operations. A technology-based common operating picture can help commanders unleash the creative energies of their subordinates while ensuring that their actions and decisions remain within the framework of their own intent.⁶³ However, the true magic of high-performing organizations is that professionals, given the authority and autonomy they need within the parameters of their seniors' vision, creatively employ their interdependent efforts in a manner that leads to the success of the whole organization. Information technology should, in the hands of mature and thoughtful leaders, result in empowerment and ini-tiative rather than rigidity and overmanagement.⁶⁴

True transformation will be measured not by the speed of microchips but by the effectiveness of soldiers, leaders, and organizations in the next war. We need to stimulate and release the creative genius of our people. We must develop leaders who possess intellectual courage, who understand the theory and history the art and science—of their profession, who can combine education and experience into wisdom, and who can cope with the enduring nature of war and turn it to their advantage. We need to develop resilient organizations that are cohesive, trained, confident, and ready to fight and win. Implementing warfighting concepts and doctrines that promote resilience and agility while generating higher complexity and operational tempo than the enemy can handle will ensure dominance even if an enemy can match or mitigate our technological advantages. A balanced, truly joint force armed with effective leaders, versatile commands, and sound warfighting concepts and doctrines will be the foundation of a truly dominant military in the twenty-first century.

NOTES

- 1. In more sophisticated terms: information superiority leads to "dominant battlespace knowledge" that will "lift the fog of war" and assure victory. For examples of the IT-RMA thesis see William A. Owens [Adm., USN, Ret.], Lifting the Fog of War (New York: Farrar, Straus and Giroux, 2000); David S. Alberts, John J. Garstka, and Frederick P. Stein, Network Centric Warfare (Washington, D.C.: Command and Control Research Program, Office of the Assistant Secretary of Defense [C3I] [hereafter CCRP], 1999); Stuart E. Johnson and Martin C. Libicki, Dominant Battlespace Knowledge (Washington, D.C.: National Defense Univ. Press, 1996); David A. Deptula, Firing for Effect: Change in the Nature of Warfare, Defense and Airpower Series (Arlington, Va.: Aerospace Education Foundation, 1995); Fareed Zakaria, "Face the Facts: Bombing Works," Newsweek (3 December 2001); John A. Warden [Col., USAF], "Employing Air Power in the Twenty-first Century," in The Future of Air Power in the Aftermath of the Gulf War, ed. Richard H. Shultz, Jr., and Robert L. Pfaltzgraff, Jr. (Montgomery, Ala.: Maxwell Air Force Base, Air Univ. Press, 1992); Thomas L. Mahnken, "War in the Information Age," Joint Force Quarterly, Winter 1995-96, pp. 39-43.
- Eliot Cohen, "A Revolution in Warfare," Foreign Affairs, Spring 1996, pp. 48–50.
- 3. See the very interesting article on the effects of live video feeds to higher headquarters on tactical decision makers engaged on the ground, by Thomas E. Ricks, "Beaming the Battlefield Home: Live Video of Afghan Fighting Had Questionable Effect," *Washington Post*, 26 March 2002.
- 4. Rowan Scarborough, "Size of Force on Ground Key in Plan for Iraq War," Washington Times, 26 April 2002. The specific claim, whether accurate or not, does reveal an ongoing debate over the best way to take

advantage of the American military's technological superiority.

- See, for instance, Paul Van Riper and Robert H. Scales, "Preparing for War in the 21st Century," *Parameters*, Autumn 1997, pp. 5, 14. The article, however, is more of a critique of the IT-RMA thesis than a discussion of how to apply new technologies to enhance warfighting effectiveness.
- Donald H. Rumsfeld, "Transforming the Military," *Foreign Affairs*, May–June 2002, p. 29.
- See the U.S. Defense Dept., *Quadrennial Defense Review Report* (Washington, D.C.: U.S. Government Printing Office, 30 September 2001), pp. iv–v.
- 8. The term "expensive irrelevance" comes from Riper and Scales, p. 14.
- See "In Praise of Hayek," *The Economist*, 28 March 1992, p. 75. Quoted in Barry D. Watts, "Clausewitzian Friction and Future War," McNair Paper 52 (Washington, D.C.: Institute for National Strategic Studies, National Defense University, 1996), p. 70.
- F. A. Hayek, *The Collected Works of F. A. Hayek*, ed W. W. Bartley III, vol. 1, *The Fatal Conceit: The Errors of Socialism* (Chicago: Univ. of Chicago Press, 1989), p. 14. Cited in Watts, p. 70.
- 11. For discussions of bounded rationality see Robert Axelrod, "Schema Theory: An Information Processing Model of Perception and Cognition," American Political Science Review, December 1973, pp. 1248–66, and Structure of Decision: The Cognitive Maps of Political Elites (Princeton, N.J.: Princeton Univ. Press, 1976); Richard Heuer, "Cognitive Factors in Deception and Counterdeception," in Strategic Military Deception, ed. Donald Daniel and Katherine Herbig (New York: Pergamon, 1982); Daniel Kahneman, Paul Slovic, and Amos Tversky, Judgment under Uncertainty: Heuristics and Biases

(Cambridge, U.K.: Cambridge Univ. Press, 1987). Discussions of bounded rationality emerge in ancient Greece. Plato's Myth of the Cave is an example of bounded rationality. According to Plato, we do not see things as they really are. As individuals bound by chains in a cave with our backs to the light, we see only images and shadows of things represented on the wall of the cave. Plato did suggest, however, that a philosopher could break the chains of perception and turn around, climb out of the cave, and reach the light. From there, he could see things as they really are. See Book VII in Allan Bloom, The Republic of Plato, 2d ed. (New York: Basic Books, 1991). See also Aeschylus, Prometheus Bound, trans. H. Weir Smith (Cambridge, Mass.: Harvard Univ. Press, Loeb Classical Library, 1988).

- 12. Watts, p. 76. John Boyd argued that the "orientation" process of the OODA loop is shaped by genetic heritage, cultural tradition, previous experiences, and unfolding circumstances. I have subsumed these issues and more under the rubrics of cognitive maps and perceptual lenses.
- 13. In this article a capital C is used when referring to Chaos as a science; the lower case is used when referring generically to disorder. For excellent introductions to Chaos theory see James Gleick, *Chaos: Making a New Science* (New York: Viking, 1988), and Glenn E. James, *Chaos Theory: The Essentials for Military Applications*, Newport Paper 10 (Newport, R.I.: Naval War College Press, 1996).
- 14. Weather patterns are examples. We know that temperatures are higher in the summer than in the winter, we know when hurricane and monsoon seasons begin and end, we know when snowfall is likely and when it is not. Within those large parameters, however, we cannot predict with certainty exactly when a hurricane will hit and where, the temperature on a specific day a month in advance, or how many inches of snow will fall on a given ski resort on a given day two weeks from now. See Gleick, p. 48.
- 15. A military organization with low morale and capability, for instance, can collapse completely when attacked by a more effective force. Likewise, a change in leadership can alter the morale of an organization radically.

- 16. Every input and interaction affects the system. Some are absorbed and the system returns to normal, some alter the system permanently. A robust, or resilient, system is stable; it retains its character in the face of input. A fragile system is unstable—it alters fundamentally due to input.
- 17. The Chaotic nature of human systems is due, in part, to the complexity of the individuals that constitute it, the complexity of interactions among individuals, the inputs external to the organization, and the responses and adaptations, individually and collectively, to those inputs and interactions.
- Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, N.J.: Princeton Univ. Press, 1984), p. 89.
- 19. As historian Alan Beyerchen observes, "But when a pendulum is released over three equidistant and equally powerful magnets, it moves irresolutely to and fro as it darts among the competing points of attraction, sometimes kicking out high to acquire added momentum that allows it to keep gyrating in a startlingly long and intricate pattern.... The probability is vanishingly small that an attempt to repeat the process would produce the exact same pattern." (Alan Beyerchen, "Clausewitz, Nonlinearity, and the Unpredictability of War," Parameters, Winter 1992, pp. 69-70). Clausewitz was an avid observer of science, and it is quite possible, according to biographer Peter Paret, that he witnessed such a demonstration and decided to include it as a metaphor in On War. See Peter Paret, Clausewitz and the State: The Man, His Theories and His Times (Princeton, N.J.: Princeton Univ. Press, 1983), p. 310.
- 20. According to Clausewitz, "An irreconcilable conflict exists between this type of theory and actual practice. . . . [Those theories] aim at fixed values; but in war everything is uncertain, and calculations have to be made with variable quantities. They direct the inquiry exclusively toward physical quantities, whereas all military action is entwined with psychological forces and effects. They consider only unilateral action, whereas war consists of continuous interaction of opposites" (Clausewitz, 134, 136).
- 21. The best discussions of complex, adaptive systems are Robert Jervis, *System Effects:*

Complexity in Political and Social Life (Princeton, N.J.: Princeton Univ. Press, 1999), and "From Complex Systems: The Role of Interactions," in *Coping with the Bounds: Speculations on Nonlinearity in Human Affairs*, ed. Tom Czerwinski (Washington, D.C.: CCRP, 1998).

- 22. Darwin's central thesis of evolution is that the rich diversity of species comes about "chiefly through the natural selection of numerous successive, slight, favorable variations; aided in an important manner by the inherited effects of the use and disuse of parts; and in an unimportant manner, that is in relation to adaptive structures, whether past or present, by the direct action of external conditions, and by variations which seem to us in our ignorance to arise spontaneously." Cited in Watts, p. 80. Charles Darwin, Origin of the Species by Means of Natural Selection, Great Books of the Western World, vol. 49, series ed. Robert Maynard Hutchins (Chicago: Encyclopaedia Britannica, 1952), p. 239; see also Ernst Mayr, The Growth of Biological Thought: Diversity, Evolution, and Inheritance (Cambridge, Mass.: Belknap Press, 1982), pp. 394-534.
- 23. Darwin's theory of natural selection is not without its flaws, but as one observer notes, the core thesis is the only empirical theory that is capable "of solving that most difficult of problems posed by life anywhere in the universe, namely, the problem of the existence of adaptive complexity." Cited in Watts, p. 81. Richard Dawkins, "Darwin Triumphant: Darwinism as a Universal Truth," in Man and Beast Revisited, ed. Michael H. Robinson and Lionel Tiger (Washington, D.C.: Smithsonian Institution Press, 1991), p. 38; Richard Dawkins, The Blind Watchmaker: Why the Evidence of Evolution Reveals a Universe without Design (New York: W. W. Norton, 1987), p. 317.
- 24. For a similar analysis of friction see Stephen J. Cimbala, *Clausewitz and Chaos: Friction in War and Military Policy* (Westport, Conn.: Praeger, 2000), pp. 200–201.
- 25. By "meaningful inputs" I mean inputs to the system that require decisions from leaders and actions from organizations. The level of importance of the inputs is determined by the degree to which they affect the combatants.

- 26. See Watts, p. 79.
- 27. See, for instance, Fred Charles Iklé, *Every War Must End* (New York: Columbia Univ. Press, 1971): "The final outcome of wars depends on a much wider range of factors, many of them highly elusive—such as the war's impact on domestic politics or the degree to which the outside powers will intervene" (pp. 1–2).
- 28. Nonlinear dynamics is a branch of science that seeks to explain why systems in the real world routinely do not respond as predicted by classical mathematics and Newtonian physics. For discussions of nonlinearity see Czerwinski.
- 29. Linda P. Beckerman, "The Non-Linear Dynamics of War," *Science Applications International Corporation*, 1999, www.belisarius.com/ modern_business_strategy/beckerman/ non_linear.htm, p. 2.
- 30. Beyerchen, p. 62.
- 31. Military organizations often exhibit nonlinearity. The quality of leadership, for instance, can have a significant impact on the combat effectiveness of an organization. As the quality of leadership changes over time, the organization's effectiveness can vary widely. Combat stress on a unit can also become transformational. What is a superb outfit after two weeks in combat can become a dysfunctional one after two months at the front.
- 32. See also James G. Roche and Barry D. Watts, "Choosing Analytic Measures," *Journal of Strategic Studies*, June 1991, pp. 165–209, and Watts, p. 194.
- 33. Beyerchen, p. 66.
- 34. One powerful example of nonlinear behavior comes from Samuel Huntington's *Clash of Civilizations*: "More generally, even small amounts of violence between people of different civilizations have ramifications and consequences which civilizational violence lacks. When Sunni gunmen killed eighteen Shi'ite worshippers in a mosque in Karachi in February 1995, they further disrupted the peace in the city and created a problem for Pakistan. When exactly a year earlier, a Jewish settler killed twenty-nine Muslims praying in the Cave of the Patriarchs in Hebron, he disrupted the Middle Eastern peace process and created a problem for the world." In this case,

context was absolutely crucial in generating nonlinear behavior that disrupted the already fragile peace process in the Middle East. Samuel P. Huntington, *Clash of Civilizations and the Remaking of World Order* (New York: Simon and Schuster, 1996), p. 254.

- 35. For an in-depth examination of uncertainty in war see Christopher D. Kolenda, Uncertainty in War: Exploring the Nature of Combat and Conflict (Advanced Research Project, Naval War College, Newport, R.I., 2002).
- 36. For instance, Frank M. Snyder, "Command and Control and Uncertainty," Naval War College Review, March–April 1979, Owens, pp. 14–15. Robert Leonhard seems to argue along similar lines in asserting an inverse proportionality between "knowledge" and "ignorance." See his Principles of War for the Information Age (Novato, Calif.: Presidio, 1998), p. 251.
- 37. For further discussion see Owens; Johnson and Libicki, eds.
- 38. Hugh Courtney, Jane Kirkland, and Patrick Viguerie, "Strategy under Uncertainty," Harvard Business Review, November-December 1997, repr. Strategy and Force Planning, 3d ed. (Newport, R.I.: Naval War College, 2000), pp. 37-41. Vision is another part of uncertainty about the future, not addressed in the above study, that must be added to the construct. Vision is an attempt to create an image of the future and then to develop plans, policies, and programs to achieve it. Imbedded is a degree of doubt, conscious or otherwise, over whether the vision is the correct or best one. The enemy attempts to achieve vision as well, and these competing visions and implementation schemes can undermine existing plans, create unforeseen opportunities and crises, and even make an existing vision absolutely untenable.
- 39. See Kolenda, Uncertainty in War, pp. 47-58.
- 40. The interactions and counteractions and the resulting changes and adaptations that take place create such complexity that the interacting systems defy modeling by anything less complex than themselves.
- 41. Courtney et al., pp. 43–51. The authors suggest three strategic postures (shape the future, adapt to the future, and reserve the right to play) and three payoff profiles in a

portfolio of action (no-regrets moves, options, and big bets).

- 42. For discussions of centralization versus decentralization see Christopher D. Kolenda, "Discipline: Creating the Foundation for an Initiative-Based Organization," in Leadership: The Warrior's Art (Carlisle, Penna.: Army War College Foundation Press, 2001), and Dandridge M. Malone, "The Integration of Internal Operating Systems: An Application of Systems Leadership," in Strategic Leadership: A Multi-Organizational Perspective, ed. Robert L. Philips and James G. Hunt (Westport, Conn.: Quorum Books, 1992). Another part deals with the question of organizational structure. Should we "flatten the hierarchy" and develop "networked" organizations, or is the current structure still useful? Due to the increased capacity for control afforded by network-centric organizations, the organizational structure can be flattened to remove unnecessary and redundant layers of commanders and staff. In light of the war on terror, as one argument posits, the only way to defeat a networked organization is with a networked organization. See John Arquilla, David F. Ronfeldt, and Michele Zanini, "Networks, Netwar, and Information-Age Terrorism," in Countering the New Terrorism, ed. Ian O. Lesser et al. (Santa Monica, Calif.: RAND, 1999). So-called networked organizations, however, seem to thrive when operating in a negative integration paradigm. They are good at nihilistic destruction but have difficulty building cohering platforms for action. Nationalist organizations, for instance, while effective in undermining existing governments or fighting foreign forces, have traditionally experienced severe difficulties in attempting to build for the future. Hence, we should exercise caution prior to assuming that a networked organization is intrinsically more effective than a well-functioning hierarchical system. For further study on nationalism and nationalist organizations, see John Hutchinson and Anthony D. Smith, eds., Nationalism (New York: Oxford Univ. Press, 1994).
- 43. One famous example is the dispute between General Heinz Guderian and his superiors about how best to exploit the Sedan breakthrough in May 1940. Guderian wanted to continue his attack to the west, while his superiors wanted to consolidate south of the

bridgehead, defeat an impending French counterattack, and only then resume the attack toward the Channel coast. Guderian eventually had his way through a combination of obfuscation and downright disobedience. Had the more "prudent" approach prevailed, the outcome of the campaign in France might have altered significantly. For more development see Robert Allan Doughty, *The Breaking Point: Sedan and the Fall of France, May 1940* (Hamden, Conn.: Archon Books, 1990), pp. 218–38, and Heinz Guderian, *Panzer Leader* (New York: Da Capo Press, 1996), pp. 97–106.

- 44. The fear of subordinate leaders making suboptimal decisions can be addressed through training and education; see Kolenda, "Discipline."
- 45. "Distance" in this case can be viewed as psychological distance between leader and subordinate. As the psychological distance grows, the subordinate might feel less responsible for successful implementation of a decision or plan. The stronger the identity of actors with decisions, the more likely they will have a sense of ownership and desire to see the decisions implemented properly.
- 46. Empowered professional individuals and leaders throughout an organization will make decisions and take actions designed to maximize the contributions of themselves and their organizations toward achieving the commander's intent. When coupled with the levels of excellence created by ownership and sense of responsibility, this complex order increases the effectiveness of operations by an order of magnitude.
- 47. A "free-fire area" is an example of a permissive control measure. Although restrictive in that it prevents friendly forces from entering, it is permissive in that enemy forces within the area can be struck immediately without cumbersome clearance-of-fire procedures.
- 48. Much ink and emotion have been spent recently about the increasing penchant for oversupervision. A dispassionate analysis would undoubtedly reveal that lack of confidence in the competence and judgment of subordinates, whether justified or not, is an important part of the cause. Recent conflicts may have left senior leaders with relatively little to do other than micromanage affairs, but

a conflict of greater complexity might come along that demands attention at senior levels and faith in junior leaders to perform without direct and overwhelming supervision. The direction taken during transformation with respect to centralization versus decentralization of authority might make the difference between winning and losing. The term "culture of confidence" is used effectively by Kevin Farrell in his discussion of the German army in the Second World War; see "Culture of Confidence: Tactical Excellence of the German Army in the Second World War," in *Leadership*, ed. Kolenda.

- 49. For discussions of effects-based operations see Arthur Cebrowski [Vice Adm., USN], "President's Forum" (pp. 5-14), and Edward A. Smith, Jr., "Network-centric Warfare: What's the Point?" (pp. 59-75), Naval War College Review 54, no. 1 (Winter 2001). Theorists of maneuver warfare and networkcentric warfare acknowledge the Chaotic nature of war. They call for operations aimed at generating effects upon the enemy's will to create paralysis, shock, and dislocation rather than merely focusing on the physical destruction of the enemy's forces. They recognize implicitly that interactions that create dysfunctional instability in the enemy's system can result in the loss of will to fight. Nesting effects on the enemy's command and control structures, on the morale of enemy armed forces, and on a combatant's economic infrastructure are examples of such methods. The degree to which such operations are successful, however, depends upon the ability to generate the destabilizing inputs and upon the resilience of the enemy. For articles on the necessity of balance in force structure see Robert Scales, Future Warfare Anthology (Carlisle, Penna.: Strategic Studies Institute, 1999).
- 50. Placing air defense sites, command and control facilities, and other critical assets next to hospitals, places of worship, and highly populated areas are adaptations designed to take advantage of American aversion to civilian casualties and collateral damage. Dispersing and hiding armored forces, using decoys, and relying more heavily on small-unit infantry operations are some ways to limit the effectiveness of precision munitions. Multirole chemical factories that can make

pharmaceuticals and baby formula as well as chemical and biological weapons are also adaptations.

- 51. The campaign in Kosovo, Operation ALLIED FORCE, is used by IT-RMA enthusiasts and strategic bombing advocates as an example, par excellence, of the notion that airpower alone can win war on the cheap and should usher in a new American way of war. The reality is a bit more complicated. Recent scholarship over the past year had added much needed substance to the debate on all sides. See Andrew J. Bacevich and Eliot A. Cohen, War over Kosovo (New York: Columbia Univ. Press, 2001); Benjamin S. Lambeth, NATO's Air War for Kosovo (Santa Monica, Calif.: RAND, 2001); and Stephen T. Hosmer, Why Milošević Decided to Settle When He Did (Santa Monica, Calif.: RAND, 2001). For an incisive analysis of the three books see Stephen Biddle, "The New Way of War? Debating the Kosovo Model," Foreign Affairs (May-June 2002), pp. 138-44.
- 52. "Lines of operation" is a term General Tommy R. Franks used in an address to the Naval War College in Newport, Rhode Island, on 23 May 2002 to describe the different avenues he was employing in Operation EN-DURING FREEDOM.
- 53. Employing ground forces does increase the potential for U.S. casualties, and therefore, critics argue, might undermine the war effort in a casualty-averse society. A number of problems exist with this argument. First, casualty aversion seems to have far more to do with the stakes of the war than a reflexive impulse to avoid putting Americans in harm's way. Second, as we learned in Kosovo, taking ground troops "off the table" simplified the conflict for the Serbians and led to a belief that they could endure the bombing while completing the ethnic cleansing of the province. Such myopic rationality on the part of NATO to avoid casualties by taking away the ground force option highlights a third problem: making adaptations easier by simplifying the war for the enemy can prolong the conflict, thereby actually increasing the total number of casualties and amount of destruction. For relevant polling data for the war on terrorism see CNN/USA Today/Gallup, ABC News/Washington Post, and CBS News, 12 September 2001; Washington Post/ABC

News, 8 November 2001, and contrast with polls concerning U.S. forces deploying to Bosnia in CNN/USA Today, 15–18 December 1995.

- 54. It is also possible for inputs to strengthen or weaken a system. For instance, a change to better leadership, a battlefield victory, and refitting can make an organization more resilient, whereas a change to poor leadership, a series of defeats, and lack of logistical support can erode resilience and make an organization more fragile.
- 55. For further discussion see Kolenda, *Uncertainty in War*.
- 56. While physical size is important, for instance, a large force with poor morale and incompetent leadership is far more fragile than a smaller force with high morale and superb leadership.
- 57. Transitions are characterized by pauses in war as each side prepares for a subsequent operation. The period between initial deployment and the conduct of offensive or defensive operations is a transition. The pause that results when an offensive operation culminates and the unit prepares to defend or resume the offensive is another type of transition. Likewise, the period between conducting a defensive operation and a subsequent offensive operation is a transition. These transition periods, and others like them, are typically times when an organization can recover and restore equilibrium.
- 58. See Watts, pp. 82-89.
- 59. See Czerwinski; Beyerchen; and Kolenda, *Uncertainty in War.*
- 60. There seems to exist, therefore, an organizational threshold for the management of transitions. Below a certain number of robust subordinate units, the organization cannot dominate both fights. The U.S. Army, for instance, can employ cavalry forces to dominate transitions in war. These forces are traditionally organized and equipped to operate autonomously in a geographically dispersed manner to cover the entire battlespace of their parent unit. Intelligently employed, cavalry organizations give army divisions and corps the capability to dominate transitions and thus set the conditions to induce adverse nonlinear effects on the enemy.

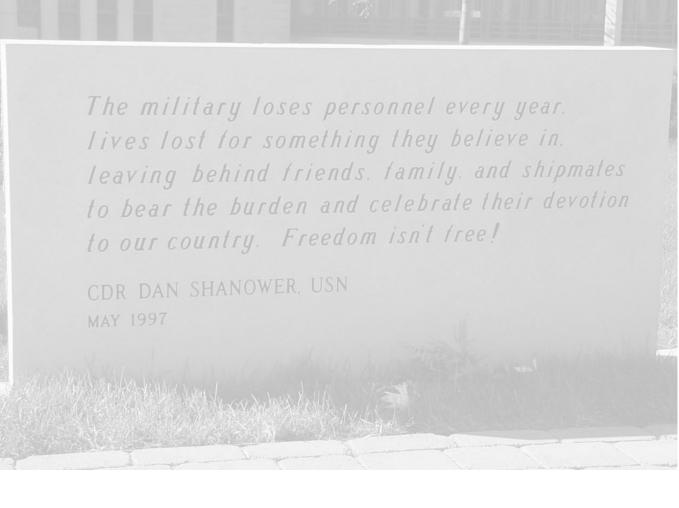
- 61. John Boyd's "conceptual spiral" provides important insight into the transformation and future of the military. See John Boyd, "Conceptual Spiral," lecture, Naval War College, Newport, Rhode Island, August 1990. For further discussion of Boyd see Grant Tedrick Hammond, *The Mind of War: John Boyd and American Security* (Washington, D.C.: Smithsonian Institute Press, 2001).
- 62. It was not the British and the French, the technological leaders in mechanized systems during the interwar period, who implemented the concepts of "blitzkrieg" or "Deep Battle." In May 1940 the side with the technologically superior tanks lost to the side that employed inferior and fewer machines more effectively. While the Germans and Soviets were conceptualizing the power of deep penetrations by mechanized formations supported by artillery and aviation, the British and French focused on using "penny packets" of tanks to plug holes in defensive positions. See

Robert Allan Doughty, *The Breaking Point*, *Sedan and the Fall of France*, *1940* (Hamden, Conn.: Archon Books, 1990), pp. 7–32, and *The Seeds of Disaster: The Development of French Army Doctrine*, *1919–1939* (Hamden, Conn.: Archon Books, 1985); and Frederick W. Kagan, "Soviet Operational Art: Theory and Practice of Initiative, 1917–1945," in *Leadership*, ed. Kolenda.

- 63. The Marine Corps has captured these ideas most effectively. See U.S. Navy Dept., *Warfighting*, Fleet Marine Field Manual 1 (Washington D.C.: U.S. Government Printing Office, 1997); U.S. House, Procurement Subcommittee and Research and Development Subcommittee of the House National Security Committee, testimony of Lt. Gen. Paul Van Riper, USMC, 20 March 2001; and H. T. Hayden ed., *Warfighting: Maneuver Warfare in the U.S. Marine Corps* (London: Greenhill Books, 1995).
- 64. See Kolenda, "Discipline."

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RESEARCH & DEBATE

STILL WORTH DYING FOR NATIONAL INTERESTS AND THE NATURE OF STRATEGY

P. H. Liotta

I am grateful for the opportunity to respond to James Miskel's well written if logically flawed essay mistitled "National Interests: Grand Purposes or Catchphrases?" (in the Autumn 2002 issue of this journal). The substance of his essay, after all, is not just about the evident "value" of national interests; Miskel, rather, questions why presidential administrations publish and revise national security strategies, per congressional mandate, over the course of their terms. In present-

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© 2003 by P. H. Liotta Naval War College Review, Spring 2003, Vol. LVI, No. 2 ing his case, he conflates the distinction between interests and objectives; consistently misses several truths that the Bush administration's *National Security Strategy* of 17 September 2002 recognizes as enduring; misstates the analytical perspectives of liberalism and realism; and offers an interpretation of national interests and the nature of strategy that is both narrow and deterministic.¹

Yet, before proceeding farther, I should admit an obvious bias in my response. Jim Miskel is a close personal friend and a colleague for whom I hold great respect. While we have certainly disagreed on fundamental strategic issues before, my concern for bias here is not that I will be harsh in my comments but that I will not be harsh enough.

My greatest contention with Miskel's argument lies in the beginning and the conclusion of his essay, where he opines, "The congressional requirement for unclassified national security reports has clearly proven to have little value in terms of furthering the debate. Congress would do well to consider whether the public interest would be better served if national security reports were required only once in a presidential term—on the assumption that interests and strategies do not, or at least should not, change annually.... Implicit in [this debate] ... are two assumptions. One is that national interests can be defined precisely.... The second assumption is that statesmen actually attempt to define national interests with precision."²

WHAT'S GOING ON? MISSING THE GRAND PURPOSE BY FOCUSING ON THE CATCHPHRASE

While there are some basic truths in Miskel's skillfully worded sentences namely, that national security strategies are marketing strategies of administration achievements as much as clear statements of strategic vision—the flaws in Miskel's argument seem apparent as well.

First, Miskel fails to recognize that U.S. national interests, far from what he terms "vague platitudes," are in fact long-term, enduring, abstract principles that are embedded in the U.S. Constitution.³ Secondly, Miskel's suggestion that national security strategies are simply expressions of national interests is just plain wrong. National security strategies are presidential declarations of strategic interests and policy objectives, as well as explanations of the means offered to achieve these ends. Objectives, therefore—which Miskel *never* recognizes in his essay as distinct from interests—are the goals of policy, meant to secure long-term, abstract strategic interests.

Miskel's failure to distinguish, or recognize a difference, between abstract interests and short-term objectives seriously weakens his argument. At the most fundamental level, basic national interests are enduring and unlikely to change over time: to guarantee the security and prosperity of the nation-state. It ought to be obvious to even the most casual observer of international affairs that the involvement of the United States in the global landscape is also a critical aspect of its national interests; rightly or wrongly, we cannot secure our interests without our involvement in the international arena. Thus, the fundamental "model for national success: freedom, democracy, and free enterprise," which forms the initial template for the Bush National Security Strategy (or NSS), differs little from the previous administration's emphasis on "engagement" in the globally interdependent environment and "enlargement" of democratic communities throughout the world.⁴ The three "strategic postures" of the previous NSS only emphasize this essential interest orientation: "Enhancing Security at Home and Abroad," "Promoting Prosperity," and "Promoting Democracy." (Despite Miskel's rejection of these postures as a "laundry list of bromides and unfulfilled

wishes," the previous administration deserves credit for its emphasis on homeland security—which has become the central focus of the latest national security, and which was largely ignored or given far less significant priority in previous national strategies.)

How one achieves that security and prosperity is not always obvious; one must rely on specific policy objectives meant to secure these interests. Therefore, while the *interests* of the Clinton administration and of the current administration, for example, are decidedly similar in their purposes, their *objectives* are decidedly at odds. Consider these key areas of policy objective differences—despite similar declarations of national interests—between the 1999 Clinton strategy and the 2002 Bush strategy, as given in figure 1.

FIGURE 1

| | Preemptive Action | International Treaties | U.S. Military | Global Economic Growth |
|---------------------|--|--|---|--|
| Clinton Strategy | No use of the word "preemption." U.S. prepared to "act alone"; notes that many security objec- tives can be achieved only by leveraging influence and capabil- ities through interna- tional organizations, alliances, and as leader of ad hoc coälitions. | Arms control and nonproliferation essential. The ABM Treaty remained cor- nerstone of strategic stability. U.S. commit- ted to Comprehensive Nuclear Test Ban Treaty. In principle, supported Kyoto Pro- tocol on Climate Change. | Fighting and winning major theater wars "ultimate test" for U.S. Armed Forces. In concert with allies, U.S. must have capa- bility to deter and defeat large-scale, cross-border aggres- sion in two distant theaters in overlap- ping time frames. | Focus on debt relief, building macro- economic "stable, re- silient global financial system" with more openness for Interna- tional Monetary Fund, focus on social and human labor, and environmental concerns. |
| Bush Strategy | While U.S. will enlist international commu- nity, will not hesitate to act alone to exer- cise right of self- defense by acting preemptively. Will deny terrorists sanc- tuary or support by "convincing or com- pelling states" to accept sovereign responsibilities. | Claims that non- proliferation efforts have failed, and that— despite agreements— Iran, Iraq, and North Korea (not mentioning India or Pakistan) have obtained weapons of mass destruction. Relies instead on "counter-proliferation," claiming right to deter and defend against threat before it is "unleashed." | The U.S. must main- tain capability to de- feat any enemy— whether state or nonstate actor—with forces strong enough to dissuade adversar- ies "from pursuing a military build-up in hopes of surpassing, or equaling, the power of the United States." | Calls for "pro- growth" regulatory policies that improve incentives for work, investment, and free trade. Includes the New Millennium Account—to reward states that show ac- ceptable reform. Urges IMF and World Bank to achieve sound policy, not reform. |

Source: Partially adapted from early Clinton national security strategies, the 17 September 2002 National Security Strategy of the United States, and a comparative analysis made for a front-page story for the New York Times, "Changes in Strategy for National Security," 20 September 2002.

Thirdly, Miskel actually seems serious in suggesting that such speeches as the 30 January 2002 address, to which he refers as the "axis of evil" speech, are more "useful" and "clarifying" than the publication of national security strategies he broadly dismisses as "collective arm [twisting]" and that are published "without enthusiasm." He further claims that the "axis of evil" speech—which he never

once refers to as the president's first State of the Union address, much else of which no one seems to remember, let alone quote—is "a positive step in terms of debating and defining more rigorously than usual [our] national interests."⁵

To be sure, the State of the Union address did indeed provoke a vigorous debate about terrorists, weapons, and tyrants. But Miskel performs some entertaining leaps of faith in suggesting that the "'axis of evil' epithet"—which is nothing more than a *specific* platitude—is "preferable to platitudes about the survival and vitality of the United States." Significantly, the Bush administration distanced itself in its 17 September national strategy from the claims made in the previous State of the Union address. Iran, for example—part of President Bush's "axis of evil"—is not even mentioned as a rogue state in the NSS. Iraq and North Korea, further, have historically shown that they understand deterrence; in October 2002, North Korea admitted to nuclear-weapons status and professed to seek a "diplomatic solution." President Bush has also publicly stated that neither North Korea nor Iran were candidate targets for U.S.-initiated use of force. So much for the value of speeches instead of strategies . . .

Miskel's argument again suffers when he fails to acknowledge that the Clinton and Bush administrations each published its various strategy revisions when it felt both compelled and ready to publish them, not on an annual basis. (The first Clinton national security strategy, for example, went through twenty-one drafts prior to its 1994 publication.)⁶ Further, Bush's national security adviser, Condoleezza Rice, has repeatedly emphasized the critical importance of the *National Security Strategy* and was quite emphatic in her enthusiasm for its publication.⁷ Further, Rice has publicly stated that—aside from the "axis of evil" designation of Iran, Iraq, and North Korea—there are certainly more than three "rogue states" in the world, though "it's probably best not to name them.... Countries can change their behavior, I suppose."⁸

Finally, the heated debate on the preeminence of U.S. armed forces, by which adversaries will be dissuaded from pursuing "military buildup[s] in hopes of surpassing, or equaling, the power of the United States," has put into print a conviction that has been present since early drafts of the 1992 *Defense Planning Guidance* (under the direction of then Secretary of Defense Dick Cheney). Stating such a position in a national strategy, which is a claim to primacy, makes clear an administration's position and relative emphasis on aspects of national interests in a way no other official document, or speech, could.

As further proof of why national strategies should be open to debate (and inevitably will undergo subsequent revisions), much attention has focused on the Bush strategy's emphasis on preemption. While the Bush *National Security Strategy* does not suggest preempting China, Russia, India, or other major powers, it argues for preemption against terrorists, in terms not radically different from the strategies employed by previous administrations. But the Bush strategy becomes more debatable regarding "rogue states," where it rests, according to a recent Brookings Institution policy brief, on a disputed conjecture that "deterrence based upon the threat of retaliation is less likely to work against the leaders of rogue states willing to take risks."⁹ Equally, the Bush national strategy provides no guidance on *when* to preempt, fails to acknowledge that a preemptive attack could *cause* the very attacks it seeks to prevent (in the Middle East or on the Korean Peninsula, for example), and may allow "partners" against terrorism merely to settle private national security differences—as Russia has already hinted it is ready to do in Georgia. Even Henry Kissinger argues that "it cannot be either the American national interest or the world's interest to develop principles that grant every nation an unfettered right of preemption against its own definition of threats to its security."¹⁰

Surely, then, there is a necessity, in declaring the significance of national interests to strategy, to pronounce why. Such declarations of interests are hardly bromides, wish lists, or platitudes. Such interests stem from the analytical perspective of the decision maker, yet Miskel may have simplified too cleanly in distinguishing these perspectives—as the next section briefly suggests.

CONFLICT OF INTERESTS?

CONFUSING PERSPECTIVES, CONFOUNDING ANALYSIS

Before presenting an argument on the necessity of national interests, I would like to question Miskel's broad description of "the two basic schools of thought about how national interests should be defined," which he offers as realism (whose "avatars" are von Bismarck and Nixon, and who would favor military force as the most tangible form of power for the state) and Kantian idealists or liberals (though he never actually gives a name to the latter but credits both Woodrow Wilson and Vladimir Lenin as being members of that "school"). Miskel's analysis is clear and readable, but it is also wrong. Numerous advocates of realism, particularly those of the strategic-primacy bent (such as Robert Kagan), would strongly support U.S. and NATO intervention in the Balkans, despite Miskel's argument to the contrary. Indeed, such realists would argue that U.S. intervention came too late, rather than that it should not have occurred at all.

Thus, to claim that only the Wilson "idealists" favored intervention in Rwanda or the Balkans is simply not correct. On the one hand, the Clinton administration, which Miskel implies was more infected by the idealist school than by realism, had clear intelligence and probable foreknowledge of genocide but chose not to act for any number of reasons—to include an assessment of Rwanda as not in the realm of defined, stated, vital, or important national security interests.¹¹ In the same vein, it is a clear truth that—unlike Somalia or Rwanda—vital national interests were at stake in Bosnia-Herzegovina and in Kosovo: the U.S. commitment to NATO (a permanent alliance) and the prevention of spillover of conflict into neighboring states, including NATO members Greece and Turkey. Humanitarianism, therefore, was not the only reason we intervened in the Balkans. Moreover, Miskel's analysis that U.S. interests were "uncertain" during the "air war on Serbia in 2000"—which was actually not a war, took place in 1999 against Yugoslavia (not just Serbia), and was set to become a ground intervention as well if airpower did not succeed—is flatly misdirected. Milošević knew exactly what would happen to him; he simply had no other choice left and had to hope for the best.

I acknowledge the merit in much of Miskel's subsequent focus in his essay, which centers on the Arab-Israeli conflict and draws upon the dynamics of the domestic political process and the "marketing of the American public and Congress." But his focus, like his analysis of the dynamics of the realist and liberal schools, is far too narrow.

By my last count, there are at least seventeen "schools" of analytical perspectives. All of them—and I can hear many of our colleagues, most not well grounded in international relations theory, already screaming their denials have some form of influence on national security decision making. After all, the most "Wilsonian" of presidents in the last half of the twentieth century, as scholars such as G. John Ikenberry have repeatedly argued, was Ronald Reagan.¹² Further, and to be blunt, the "realism" of Richard Nixon has almost no place in the administration of George Walker Bush. To the contrary, the current administration and the political debate that centers around its national strategy is primarily divided between three "schools": the realists, the liberals, and the moralists (or, more correctly, the idealists). The moralists are firm in their belief that spreading American "values" and American democracy will best achieve the ends of our national security, and thus far, both in the declaration of national interests and in the execution of national strategy to remake the world and to win the war on terror, they appear to be carrying the day.¹³

TO DIE FOR: NATIONAL INTERESTS AND THE NATURE OF STRATEGY

The national interest, admittedly, is a pretty slippery concept. Yet how one views, focuses on, and consistently acts upon such interest will prove the true test of larger "grand" strategic perspectives. The bottom line, after all, remains unchanged: what a nation wants and its citizens are willing to go to war over—and to die for—remains unchanged as a fundamental interest.

Miskel is not the first scholar to argue forcefully that there can be no agreement among Americans themselves about what constitutes the national interest. Peter Trubowitz, in a study meant to define the meaning of American national interests, came to the conclusion that those "who assume that America has a discernible national interest whose defense should determine its relations with other nations are unable to explain the persistent failure to achieve domestic consensus on international objectives."¹⁴ Others, such as historian Martin van Creveld, have become more cynical about the utility of interest:

To say that peoples go to war for their "interests," and that "interest" comprises whatever any society considers good and useful for itself, is as self-evident as it is trite. Saying so means that we regard our particular modern combination of might and right as eternally valid instead of taking it for what it really is, a historical phenomenon with a clear beginning and presumably an end. Even if we do assume that men are always motivated by their interests, there are no good grounds for assuming that the things that are bundled together under this rubric will necessarily be the same in the future as they are today.... The logic of strategy itself requires that the opponent's motives be understood, since on this rests any prospect of success in war. If, in the process, the notion of interest has to be thrown overboard, then so be it.¹⁵

Yet surely the purpose of any administration is to set the tone for leadership by declaring specific interests in writing, and by showing demonstrated commitment to those writings. The best possible way to do this is through the publication and revision of a national strategy. This is not to say that employment of the traditional military, economic, and political instruments of power ought to continue in the ad hoc manner in which they were applied during the 1990s. Regarding the military instrument in particular, Kissinger noted in late 1999, with particular reference to the Kosovo engagement, "I am uneasy with the readiness with which the military instrument is being used as the key solution for humanitarian crises."¹⁶ Yet this potential weakness also emphasizes the extraordinary magnitude of American strength at the beginning of the twenty-first century:

There are few countries or crises that can threaten American vital interests. Yet our "sole superpower" status means the U.S. will continue to use its influence, and perhaps its military forces, to save lives, right wrongs, and keep the peace. . . . We are in an era in which U.S. interventions may be seen as important but not vital. In such instances, U.S. leaders, supported by public opinion, may be willing to use military force for humanitarian reasons.¹⁷

Setting Power and Priorities: The Hierarchy of Interests

Interests are a starting point, not an end state. At its simplest understanding, the national interest demands that a state be willing to uphold its moral and national values with its treasure, blood, time, and energy, to achieve sometimes specific and sometimes unspecific ends. National interests reflect the identity of a people—geography, culture, political sympathies, and social consensus, as well

as economic prosperity and demographic makeup. Thus, national interests constitute little more than a broad set of often abstract guidelines that allow a nation to function the way it believes it should function. National interests also answer the fundamental but essential question, "What are we willing to *die* for?"

Hans J. Morgenthau, the classic realist thinker, saw two levels of national interest, the vital and the secondary.¹⁸ Vital interests assure a state of its security, the defense of its freedom and independence, protection of its institutions, and enshrinement of its values. Vital interests also negate compromise; they represent issues over which the state is willing to wage war. Secondary interests are more difficult to define, except that they involve compromise and negotiation.

How a nation identifies such vital and secondary interests has to do with the kind of national identity—or *polity*, as Aristotle termed it—its people want to assume for themselves. This identity can change over time. America, for example, has not been since the 1940s the isolationist nation it once prided itself on being. In 1941, Winston Churchill and Franklin Delano Roosevelt jointly proclaimed, in the Atlantic Charter, the liberal principles that would guide the post–World War II world. In 1944, representatives at the Bretton Woods conference established the core principles of economic order that are embodied today in the World Trade Organization; that same year, political leaders at Dumbarton Oaks presented aspects of a vision of future order in their proposals for a United Nations.

What America became committed to in the postwar order was a broader internationalist conception of vital interests that was in many ways antithetical to the isolationist leanings of the founders of the American republic. George Washington's farewell address revealed a preference for American national interests that seems oddly out of place in today's environment: "Europe has a set of primary interests which to us have none or a very remote relation. Hence she must be engaged in frequent controversies, the causes of which are essentially foreign to our concerns."¹⁹ If anything, Europe's interests—as a result of both common histories and struggles—are now at the core of American interests.

It seems significant, therefore, that the Bush NSS does not precisely define national interests in its introductory session, "Overview of America's National Strategy," and instead refers to "American internationalism that reflects the union of our values and our national interests"—"political and economic freedom, peaceful relations with other states" and "the non-negotiable demands of human dignity." (By contrast, the previous Clinton strategies prioritized interests in categories termed "vital," "important," and "humanitarian.") Indeed, not until much later in the Bush document is a distinction even made between values and interests: In Africa, promise and opportunity sit side by side with disease, war, and desperate poverty. This threatens both a core value of the United States—preserving human dignity—and our strategic priority—combating global terror. American interests and American principles, therefore, lead in the same direction: we will work with others for an African continent that lives in liberty, peace, and growing prosperity. Together with our European allies, we must help strengthen Africa's fragile states, help build indigenous capability to secure porous borders, and help build up the law enforcement and intelligence infrastructure to deny havens for terrorists.²⁰

Core Strategic Interests and Interests of Significant Value

At their most basic and abstract level, U.S. national interests in the contemporary world are simple to describe: to ensure the security and prosperity of the American people in the global environment. But distinguishing core strategic interests from significant interests that *might* require the United States to commit its treasure, blood, time, and energy is almost never easy. Indeed, the misrepresentation of what constitutes a national interest may well embody the central strategic dilemma the United States faces in this next century. It was no accident that political scientist Arnold Wolfers, five decades ago, referred to the concepts of "national security" and "national interest" as "ambiguous symbols."²¹

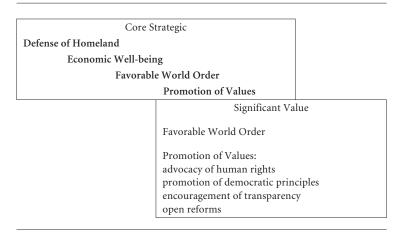
More frequently than often admitted, policy makers cannot know exactly how a potential crisis may impact the real national interest. Even seemingly objective and clear "threats" are difficult to sort through. The connection between Iraq's 1991 invasion of Kuwait and Serbia's refusal to sign the 1999 Rambouillet agreement may involve a difficult chain of causes and events that must be dealt with in relation to the idea of "interest":

Different people see different risks and dangers. And priorities vary: reasonable people can disagree, for example, about how much insurance to buy against remote threats and whether to do so before pursuing other values (such as human rights). In a democracy, such political struggles over the exact definition of national interests— and how to pursue them—are both inevitable and healthy. Foreign-policy experts can help clarify causation and tradeoffs in particular cases, but experts alone cannot decide. Nor should they. The national interest is too important to leave solely to the geopoliticians. Elected officials must play the key role.²²

The three-tiered approach to assessment of interests as basis for action for policy makers, strategists, and force planners is meant to illustrate this necessarily complex process. The first tier resembles Donald Neuchterlein's hierarchy of intensity and applicability.²³ This "sliding matrix of interests" (figure 2) suggests that nominal issues under the rubric of "favorable world order" (support for human rights, sovereignty versus individual liberties of the citizen, and control or prevention of intrastate conflict) can also have direct implications for core strategic interests.

Issues such as "favorable world" or "promotion of values" can enter the realm of vital, core strategic interests more often—and more quickly—than is commonly thought.²⁴ When a situation becomes so significant that policy makers are unwilling to compromise, the issue—no matter how seemingly peripheral or secondary—becomes a core strategic interest. Witness Kosovo in 1999, for example: NATO nations, by effectively declaring war against Yugoslavia on 24 March, were acting both in the "self-interest" of NATO and European security and, equally, in support of human rights and individual freedoms. Nonetheless, the world community's obligation and mandate to stop ethnic cleansing and genocide whenever able—and to ignore the sovereignty of individual states, if necessary—seem far from certain.

FIGURE 2 THE SLIDING INTERESTS MATRIX: INTENSITY AND LATITUDE OF COMMITMENT



Former secretary of state Madeleine Albright was far less confident when speaking about the potential for such "new" doctrine: "Some hope ... that Kosovo will be a precedent for similar interventions around the globe. I would caution against such sweeping conclusions. Every circumstance is unique. Decisions on the use of force will be made ... on a case-by-case basis."²⁵ Former national security advisor Sandy Berger, a month later, complicated the case for humanitarian intervention by suggesting (in the specific case of East Timor) that the United States should "weigh its national interests" in a country before deciding to use military power.

In practice, "case-by-caseism" and humanitarian intervention anytime/anywhere prove equally problematic. The above examples, far from implying vacillation by decision makers, only suggest how difficult it is *initially* to distinguish between core strategic and significant value interests (or what others have termed "vital" and "secondary" interests). Thus, aside from determining a first-tier order that provides the decision maker a useful, systematic means to think about interests, there should be a second tier for assessing how aspects of such interest will affect policy decision, implementation, and overall strategy. The table in figure 3 is meant to illustrate this difficulty.

FIGURE 3 NATIONAL INTEREST TAXONOMY

(requiring consideration of second and third-order consequences)

| ASPECTS OF | LEVEL OF | WEIGHT OF | EXAMPLES |
|---------------|----------------|----------------------|--|
| INTEREST | INTEREST | Impact | |
| Importance | Primary | Core Strategic | Long-term U.S. economic prosperity |
| | Secondary | Significant value | Open regional trading blocs |
| Duration | Primary | Permanent | Ensure the free flow of energy resources |
| | Secondary | Uncertain | Support opposition to oppressive regimes |
| Focus | Primary | Specific | Deny Serbian oppression of Kosovars |
| | Secondary | <i>General</i> | Universal respect for human rights |
| Compatibility | Primary | Complementary | Support for arms control/disarmament |
| | Secondary | <i>Conflicting</i> | U.S. rejects Comprehensive Test Ban Treaty |
| Influence | Primary | Enduring | American leadership |
| | Secondary | Temporary | Committing military forces overseas |

Source: With the exception of the "influence" interest proposed here, these interest types have been adapted from works of Hans J. Morgenthau, "Another Great Debate: The National Interest of the United States," *American Political Science Review* 46 (1952), p. 973; "Alliances in Theory and Practice," in *Alliance Policy in the Cold War*, ed. Arnold Wolfers (Chicago: Univ. of Chicago Press, 1964), p. 203; and *A New Foreign Policy for the United States* (New York: Praeger, 1969).

> Two pertinent examples of how focus, influence, importance, and attention to interests develop over time can be drawn from American involvement in the Balkans during the 1990s. In 1994, as Bosnia-Herzegovina descended into complete chaos and Great Britain and the United States came to loggerheads over whether or not NATO should intervene in the former Yugoslavia, President Clinton declared that "Europe must bear most of the responsibility for solving" problems in the Balkans.²⁶ By 1995, the president was declaring that the former Yugoslavia, being within Central Europe, was "a region of the world that is *vital* to our national interests."²⁷ During the intervening months, events themselves had not changed so much as the American perspective on the need for intervention in the former Yugoslavia. Put another way, not only had American interests moved from significant to core strategic (or from "secondary" to "vital") but the focus had shifted from general to specific.

> This second-tier "taxonomy of interest" can also point to some difficult recognitions (and seeming weaknesses) in strictly categorizing interests in all specific instances. The United States, for example, felt the sting of the "Kosovo effect" in late 1999 when Russian decision makers informed the Clinton administration that they were following in Chechnya the example of NATO intervention in the Balkans (by declaring both the interest-based need to protect sovereign

Russian territory and the "human rights" of Russian citizens) as Russian airpower systematically destroyed the capital, Grozny, and its vicinity, leaving tens of thousands of refugees and a ruined Chechnyan infrastructure. One Russian diplomat is said (the anecdote may be apocryphal) to have asked a U.S. State Department official what the difference between Kosovo and Chechnya was and to have received the reply: "You [Russians] had nuclear weapons."²⁸ Similarly, in the aftermath of the 1991 Gulf War, the Indian defense minister, when asked what single lesson he had learned from the "international community" intervention against Iraq, responded, "Don't fight the United States unless you have nuclear weapons."²⁹

Such contentious responses to the application of American power that supports U.S. interests prove useful for appreciating the complexity of national interests under strategic uncertainty. Distinguishing how such second-tier categories of interest conflict with initial first-tier interest-level assessments further sharpens the useful recognition that interests are not always in harmony, policy decisions are difficult and often nuanced, and strategy can at times seem hypocritical. While we do not hesitate to impose economic sanctions against Myanmar for its atrocious human rights record, we refrain from similar sanctions against the People's Republic of China. The reason is obvious: our economic prosperity interests (of core strategic importance, specific focus, and enduring influence) would almost always predominate over "lesser" interests (of significant value, general focus, and uncertain duration).

In an ideal world, support for human rights would not conflict with "absolute" interests for which Americans would be willing to die. In Iraq in 1991, rightly or wrongly, Americans were willing to accept up to ten thousand casualties, but in 1994 they would not have been willing to accept as many casualties to stem the genocide (over eight hundred thousand deaths) of the Tutsi population by Hutus. There was one specific reason for this: Americans are reluctant to accept casualties, or even to intervene, when their *only* foreign policy goals are "unreciprocated humanitarian interests."³⁰

Thus, a third-tier approach to addressing potential interests, strategic impact, and decision should include a methodology for assessing the relationship of factors that affect the relative position of first-tier interests. There exists a methodology (see figure 4) that is simple and logical and can reveal how seemingly "lesser" interests can quickly influence "core" interests. A North Korean invasion of South Korean territory, for instance, would be an event that self-evidently impacted core strategic interests. Yet Eritrea's continuing disputes with Ethiopia, Chechnya's perpetual struggles within the Russian Federation, Islamic revolutionary movements within Central Asia, the inability of the Colombian government to limit the growing power of the Fuerzas Armadas Revolucionarias de Colombia (FARC) and the Ejército de Liberacíon Nacional (ELN), or the systematic abuse of citizens (or a sector of a population) by a government—all these require a far more difficult logic chain to determine whether the United States should act or not.

Understanding levels of importance, the relationship between specific and general aspects of this perceived importance, and how a potential chain of linked events might lead to a "reaction" that will impact core strategic interests should improve determinations of whether an issue requires action for the sake of interest. The necessary choices a decision maker might face include the following: How plausible are postulated outcomes? How long is the chain of interrelated events? How far removed are these events from core strategic interests? How, specifically, will the issue affect obvious (and not so obvious) relationships to which the United States is committed? If the United States does not act on a specific issue, what are plausible second, third, fourth, and fifth-order consequences? Ultimately, it is essential to address these consequences with respect to potential interests. The three-tiered approach attempts a more balanced methodology for a complex process.

FIGURE 4 A METHODOLOGY FOR CHAIN REACTIONS: HOW DOES IT IMPACT "NATIONAL INTEREST"?

Immediacy of threat/challenge/opportunity

Geographic proximity that might affect identified interests

Magnitude of challenge to potential interests

Contagion effect and its ability to degrade interests

Connectivity between event and major detriment to interests (the domino effect)

Source: Partially adapted from Robert D. Blackwill, "A Taxonomy for Defining U.S. National Security Interests in the 1990s and Beyond," in *Europe in Global Change: Strategies and Options for Europe*, ed. Werner Weidenfeld and Josef Janning (Gütersloh, Germany: Bertelsmann Foundation, 1993), p. 105. Blackwill, however, focuses perhaps too narrowly on "threat" assessment.

Sorting through Interests

At best, the most general set of criteria for which the "traditional" instruments of power support national interests might be expressed as:³¹

• *Militarily*, to ensure American territorial integrity and support for alliances to which the nation is committed; to safeguard American citizens against intimidation or attack; to bolster American external interests in concert with political and economic interests, while fostering a nonbelligerent engagement with other states, regions, and alliances.

- *Politically*, to support and preserve American values of freedom, individual rights, the rule of law, democratic institutions, and the principles of constitutional liberalism.
- *Economically*, to sustain individual and societal prosperity through principles of economic reforms, macroeconomic coordination, and free market practice tempered by agreed rules, labor and environmental rules, and regional/international standardization.

As Robert Blackwill notes, the issue of human rights—as one example—connects "directly to U.S. vital and important national security interests/core national objectives."³² A national interest may therefore constitute much more than traditional, narrow realist understandings.

Consider, as an example, the declared interest of "defense of the homeland." Under a schema of liberal internationalism, military forces, both as instruments of national power and in support of other cooperative security endeavors, defend the homeland by supporting American interests *abroad*. American power, as part of a democratic security community, promotes "defense of the homeland" through force presence and involvement outside America's borders. Thus, in order to ensure the nation's territorial integrity, forces often will be deployed in instances that do not satisfy, at first glance, the narrow criteria of "survival" or protection of territorial interest. U.S. armed forces frequently support American interests by "playing away games."

Moreover, whether one agrees with the concept or not, there should be some recognition of how "human security" has entered the arena of state, non-governmental, and international organizational thinking. In an age when nontraditional threats like terrorism, organized crime, drug trafficking, and ethnic conflict are linked to such security challenges as population growth, environmental decline, denial of human rights, lack of development, and poverty rates that foster economic stagnation, social instability, and state collapse, it ought to be obvious that a new set of *traditional* problems has emerged. These problems require a fundamental rethinking of interests.

Ultimately, the requirement to *state, define,* and *defend* national interests in a public national strategy should remain. For the United States, stating, defining, and defending interests in the NSS both demonstrate a commitment to democratic process and explain how America sees its role in the world. While the American people by and large wish neither to be neo-isolationist nor to become, by virtue of the primacy of the United States, a global police force, principles as well as power constitute the idea of the national interest. It is as if the ghosts of Theodore Roosevelt and Woodrow Wilson were in constant tension, defining who we are as a people and for what achievable ends we are willing to commit our means—and what ends are worth dying for.

NOTES

- 1. While Miskel repeatedly draws on the metaphor of "Delphic ambiguity" and suggests that contemporary statesmen refuse to define national interests in anything but the broadest terms, there is a basic problem here as well. It is, bluntly, his references to the Delphic oracle are not well grounded in the cultural or historical truths of Hellenism. While oracles often produced (ambiguous) prophecies that had serious consequence for future events, the oracles themselves, over time, became corrupted by political manipulation. Eventually, Delphi was known as a "festival of madmen." Extending the analogy, Miskel's prescription here-to deemphasize the importance of declaring national interests and of periodically publishing and revising national security strategies-would amount to the same decline and would likely infect, rather than improve, the national security decision-making process.
- These statements are taken, in reverse order, from the opening and closing paragraphs of Miskel's essay, pp. 104 and 96, respectively.
- 3. Fortunately, Miskel does not directly state, but only implies, that U.S. constitutional principles are so obvious they are themselves "platitudes." Since many American lives were lost both to secure and to uphold these principles over our history as a republic, and since many nation-states around the globe have patterned themselves on the American constitutional example, Miskel's argument—had he stated this—would have self-destructed before it even began.
- 4. George W. Bush, "Preface," *National Security Strategy of the United States* [hereafter NSS] (Washington, D.C.: White House, 17 December 2002), p. iv. To secure national interests, the Clinton administration consistently emphasized three "strategic postures" in its later national security strategies: "Enhancing Security at Home and Abroad," "Promoting Prosperity," and "Promoting Democracy."
- 5. President Bush's first State of the Union address ought to be remembered for a number of reasons other than the "axis of evil" declaration, not the least of which is his opening statement: "Tonight, our nation is at war, our economy is in recession, and the civilized world faces unprecedented dangers. Yet the

state of our Union has never been stronger." For a complete text of the address see BBC News, on-line at news.bbc.co.uk/2/hi/americas/ 1790537.stm (17 November 2002).

- 6. John Lewis Gaddis, "A Grand Strategy," *Foreign Policy*, November/December 2002, p. 53, sidebar, "Power's Paper Trail."
- 7. Although Rice's support for the national strategy is a matter of public record, her specific enthusiasm can be found in Nicholas Lemann's "Without a Doubt: Has Condoleezza Rice Changed George Bush or Has He Changed Her?" *The New Yorker*, 14 and 21 October 2002, p. 175, on-line at www.newyorker.com/fact/content/ ?021014fa_fact3.
- 8. Ibid., p. 175.
- 9. The quote itself is from the Bush National Security Strategy. The notion that this might be a disputed "conjecture" is from Ivo H. Daalder, James M. Lindsay, and James B. Steinberg, The Bush National Security Strategy: An Evaluation (Washington, D.C.: Brookings Institution, 4 October 2002), p. 7, on the World Wide Web at www.brookings .edu (5 October 2002).
- 10. Ibid., p. 8.
- Admittedly, the Clinton administration subsequently publicly acknowledged and apologized for its failure to act in 1994 in Rwanda.
- 12. The sense in which President Reagan might consider himself as being, according to Miskel's assessment, of the same "school" as Vladimir Lenin might be a humorous, if fruitless, matter for discussion. Perhaps, for the sake of symmetry, Miskel could have compared the "realism" of Nixon and Stalin to the "idealism" of Wilson and Lenin.
- One of the most effective reviews of this trilateral analytical tension is Nicholas Lemann, "The War on What? The White House and Whom to Fight Next." *The New Yorker*, 16 September 2002, pp. 36–44.
- Joseph S. Nye, Jr., "Redefining the National Interest," *Foreign Affairs* 78, no. 4 (July– August 1999), p. 23.
- 15. Martin van Creveld, *The Transformation of War* (New York: Free Press, 1991), p. 217.

- 16. *The Economist*, "Where Do American Interests Lie?" 18 September 1999, p. 30.
- Phillip S. Meilinger, "Beware of the 'Ground Nuts," *Chicago Tribune*, 21 July 1999, on-line at ebird.dtic.mil/Jul1999/ s19990722beware.htm (22 July 1999).
- Hans J. Morgenthau, *The Impasse of Ameri*can Foreign Policy (Chicago: Univ. of Chicago Press, 1962), p. 191.
- Henry Steele Commager and Milton Cantor, eds., *Documents of American History*, 10th ed. (Englewood Cliffs, N.J.: Prentice Hall, 1988), vol. 1, p. 174.
- 20. Bush, NSS, pp. 10-11.
- Arnold Wolfers, "'National Security' as Ambiguous Symbol," *Political Science Quarterly* 67, no. 4 (December 1952), pp. 481–502.
- 22. Nye, p. 23.
- Donald E. Neuchterlein, America Overcommitted: United States National Interests in the 1980s (Lexington: Univ. of Kentucky, 1985), p. 15. Neuchterlein also presents this matrix in a subsequent book, America Recommitted: United States National Interests in a Restructured World (Lexington: Univ. of Kentucky, 1991).

- 24. Neuchterlein admits to the possibility of "promotion of values" as possibly becoming a vital stake or interest; he tends to focus on military security, realist-based conceptions of interest and level of commitment in the examples provided in his work.
- Ivo H. Daalder and Michael E. O'Hanlon, "Unlearning the Lessons of Kosovo," *Foreign Policy*, no. 116 (Fall 1999), p. 129.
- William Jefferson Clinton, A National Security Strategy of Engagement and Enlargement (Washington, D.C.: White House, 1994), p. 3.
- 27. William Jefferson Clinton, "Implementing the Bosnian Peace Agreement: Let Us Lead," *Vital Speeches of the Day* 62, no. 5 (15 December 1995), p. 130. The emphasis on *vital* is mine.
- 28. *The Economist*, "Where Do American Interests Lie?" 18 September 1999, p. 29.
- Samuel P. Huntington, "The Clash of Civilizations?" *Foreign Affairs* 72, no. 3 (Summer 1993), p. 46.
- 30. Nye, p. 32.
- 31. Ibid.
- 32. Ibid, p. 108.

IN MY VIEW

THE MILITARY'S PLACE IN MODERN AMERICAN SOCIETY

Madame:

In "The Erosion of Civilian Control of the Military in the United States Today" [*Naval War College Review*, Summer 2002, pp. 9–59], Richard Kohn presented an account of where the U.S. military has stood with regard to civilian authority within U.S. society. Professor Kohn comments several times that there was no immediate crisis resulting from an altered posture, but that as he saw it, the "power of the military within the policy process has been growing steadily."

I read Dr. Kohn's article several times and have great respect for the research and insights which it contains. I think he surveyed the landscape very well but drew all the wrong conclusions from it. The article came from a lecture by Dr. Kohn at the Air Force Academy in December 1999. That was near the end of the Clinton administration, and I think that is where at least part of the problem arises.

The first half of the article catalogues numerous instances of conflict between the military and the civilian authorities during the Clinton administration. Dr. Kohn makes note of the many reasons that the military leadership had for not considering William J. Clinton of a like mind with them. He then sets out a litany of incidents in the political-military sphere that occurred during the Clinton years, and which he attempts to lump into a pattern. In presenting this part of his argument, Dr. Kohn uses mild verbs or adjectives to describe the actions or history of President Clinton and his administration. Hence, Bill Clinton is not a draft dodger but rather "As a youth, . . . had avoided the draft." The chairmen of the Joint Chiefs of Staff (Generals Shalikashvili and Shelton) "appeared to have been liked and respected by civilians in the Clinton administration"—which could be rewritten as "they played well together." No such mildness appears when Dr. Kohn is describing actions that he attributes to the military, their supporters, or those who opposed the Clinton administration on a variety of matters. Now the words become sharper: "the newly elected president was *publicly* *insulted* by service people," or, "the *undermining and driving from office* of Secretary of Defense Les Aspin." This first part of the article is somewhat balanced in incident, time, and space, but the wording implies a bias toward the then administration and its leader, Mr. Clinton.

Dr. Kohn admits many faults of the Clinton administration and comments on a number of them. Where his argument misses the point is that he never totally measures the Clinton administration against others with regard to politicalmilitary unity. He says there is a greater gap between the military and its civilian superiors now but treats it as a continuance of one that existed earlier and may have widened as a result of recent events. In fact the Clinton administration was the most militarily inexperienced, ignorant, and unsympathetic of the last century, if not of the length of the Great Democracy's existence. The gap between the military and the Clinton administration was enormous, not merely a slight variation from previous administrations. Dr. Kohn sees the events of 1992–2000 as a slight aberration from the norm, whereas the reality is much greater. The gap between the military's outlook and that of its political leaders was at its peak during the Clinton administration. Dr. Kohn takes that peak as his starting point and from it draws conclusions that the gap is wide and growing. Instead, as soon as Clinton left, the gap returned to a more traditional narrowness.

Having misread the Clinton years, Dr. Kohn's article next reviews civil-military relations in a larger view and time span and again comes up with some interesting observations and insights—but alas, again the wrong conclusions. He cites the media as now being less capable and either missing, or unable to address, issues of civilian control of the military. I think this view is wrong. Agreed, the press is less capable today. Far more important, and completely missed by Dr. Kohn, is the fact that the media today are all but completely politically biased. This leaves the military always in a confrontation of sorts with one side of the media or the other. Dr. Kohn says that the military is "partisan in political affiliation, and overwhelmingly Republican." This is certainly not true. While the military may share more basic views with today's Republicans than it does the Democrats, there is in no sense a direct tie to the party, nor should there be. It remains an individual choice.

Dr. Kohn goes on to say that there is "in fact no tradition of resignation in the American military." There is a deep and continuous tradition of resignation throughout American political life. It includes Dean Acheson, William Rehnquist, and Cyrus Vance. It also includes the military. It is the very thought of the potential power that a military resignation might bring that has kept it from being used.

This brings us to the crux of Dr. Kohn's misreading of the present status of the politicians and the military. Dr. Kohn maintains that recent events, beyond the embarrassing Clinton years, have strengthened military opposition to the political leadership. I would argue the opposite. Relatively speaking, the military has

maintained its historical focus and obedient role; its power in the relationship has not grown, nor is the military anxious to see it do so. It is the political leadership that has grown in power; professionally and socially united with the media within a culture that is overwhelmingly media oriented, the politicians are stronger relative to a military which is still devoted to basic, sworn ideals.

The answer to Dr. Kohn's listing of troubles in U.S. civil-military relations would be a return to the draft; that would bring back "reliance on the citizen soldier," with all that that implies for shared national political/military values. That solution is not coming again soon, or maybe ever, short of a major national calamity.

The military, as correctly noted by Dr. Kohn, bases its strength in the oath of its officers to support and defend the Constitution of the United States and bear true faith and allegiance to the same. Increasingly the political leadership is pushing the highly competent and technically adept U.S. military to be a vanguard for a newfound "globalism." The real test of the existing U.S. political-military relationship is coming. It will arise when the believers in "duty, honor, country" are committed to major combat in the interests of someone else's country, or for the generation of wealth or protection of America's share of it. That time may not be far off.

BILL BARRY Huntsville, Alabama

Professor Kohn replies:

While Mr. Barry has done me the honor of several readings, he has missed one of my chief points and ignored the supporting evidence: that the diminution of civilian control long antedated the Clinton administration and has continued into the Bush administration. (My research included material to the spring of 2002.) Given my extensive criticism of Mr. Clinton and his administration in military affairs, the accusation of bias in favor of the Clintonites perplexes me. Nor do I understand Mr. Barry's point about the media, whose neglect of civilian control seems to me obvious by the almost total silence on the subject over the last generation.

On the subject of resignation, Mr. Barry is simply incorrect. Despite a few exceptions—Secretaries of State William Jennings Bryan and Cyrus Vance, and Attorney General Elliott Richardson and his deputy William Ruckelshaus (not Mr. Rehnquist), among others—only a very few senior political appointees, notable for their small numbers, have ever done so.

Mr. Barry may assert that the politicians have grown stronger in civil-military relations, but I believe both the scholarship and the evidence indicate otherwise.

Over time conscription would have a salutary effect on civil-military relations, but the likelihood is so small as to make any discussion irrelevant.

The figures on the political affiliation of officers cited in the article, and the changes of the last twenty-five years, confirm much anecdotal evidence about a change in officer attitudes, from a purposeful nonpartisanship bordering on nonparticipation to overwhelming identification with the Republican Party. Denying the facts will not make them go away. The degree to which this sours civil-military relations is unclear, but it does not take much imagination to conclude that it exacerbated civil-military relations during the Clinton years, deepened a dislike for Democrats that extends back a generation, and is likely to complicate relations in some future administration. Mr. Barry's closing warning about future conflict seems to me apocalyptic. I doubt that military professional-ism would ever grow so weak, or the political leadership so obtuse, as to provoke an open confrontation. But if Mr. Barry's views reflect a significant slice of officer attitudes, and my research indicates that it does, then the possibility exists.

Lieutenant Colonel Karen Kwiakowski, U.S. Air Force (writing in the Winter 2003 *Review*) also discounts the figures on party affiliation. My own suspicion is that the percentage of Republicans is actually higher than the research indicated. Some officers may have chosen not to return the survey, or to mark "independent" on the form, because they sensed that identifying with a political party runs counter to the American military ethos.

She may well be correct, however, that the rise of the neoconservative ideologues in the Republican party will increase friction with the military. The new *National Security Strategy of the United States*—the presence of some arrogant, belligerent, unilateralist rhetoric—does indeed suggest future adventurism. One can only hope that when the full implications of that document dawn on Congress and the public, cooler heads will prevail. Apparently that occurred in August and September 2002, when the Bush administration pulled back from attacking Iraq without consulting either Congress or the international community.

Clearly, in the future American military leaders will be obligated, as they have always been, to speak their minds clearly and forcefully to the civilian leadership, in private, with the same cold, hard analysis their predecessors have for the most part offered. Such courage and candor lie at the heart of the professional code, just as does the necessity to support, and accede to, civilian control.

RICHARD H. KOHN University of North Carolina at Chapel Hill

SEA BASING AND MEDICAL SUPPORT

Madame:

Rear Admiral Rempt suggests, in his "President's Forum" in the Autumn 2002 *Naval War College Review*, that the United States, in response to political and economic realities, is unlikely to utilize the extensive network of overseas bases that had previously been employable for sustaining our national military objectives. He likewise recalls the Navy's apparent historical ability to operate for extended periods at sea, no doubt referring to nuclear-powered aircraft carriers supported by a fossil-fueled mobile logistic chain. He subsequently discusses the concept of secure sea bases as a means for providing joint and combined force commanders with the ability to commence military operations, while serving the greater tactical advantages of reception, staging, onward movement, and integration of both Marine Corps and Army forces at sea.

While Admiral Rempt appropriately reminds us that the key to sustained combat operations has always been the logistical support of engaged forces, the concept of "stand-alone" sea basing provides little insight into the realities of supporting the physical integrity of the commander's greatest asset—the human flesh-and-blood elements of his operational forces (the most rational elements of his weapons systems). The constitution and utilization of services to support the combat injured and infirm may ultimately serve as pivotal factors in determining a commander's success or failure, and they can hardly be ignored in any operational concept, including that of sea basing.

What specifically are line-leadership expectations of fleet medical support? Are existing seagoing platforms with medical facilities indeed suitable for supporting the sea base medical requirements? The answers remain unclear, for while the fleet currently has a very robust operational medical system, including hospital ships and casualty receiving and treatment facilities aboard large-deck amphibious assault ships (these assets were originally designed for major Cold War conflicts), there is no assurance that the doctrinal mission of afloat medical resources has been altered toward specifically supporting littoral warfare. This is because both Navy line expectations of medical support services, as well as the specific capabilities that fleet medical assets must provide in order to meet Marine Corps requirements, have not yet been clearly defined, much less adequately validated.

T-AH hospital ships, for example, although possessing remarkable medical capabilities and capable of delivering large numbers of beds to a theater, are limited by their deep drafts to deep-water anchorages. Casualties can be brought to

them only via their single helicopter pad, or alternatively by surface craft, access by which is unsatisfactory even in the calmest sea state. Such ships also require enormous logistical support and may not be able to "man up" in a timely fashion, even for minor conflicts, without severely draining the manpower of facilities in the United States. Similarly, the usefulness of the casualty receiving and treatment facilities aboard the large-deck multipurpose, amphibious assault ships of the LHA/LHD types may be compromised, since these vessels will inevitably have operational missions conflicting with casualty retrieval. Furthermore, the large number of contained hospital beds on these platforms is misleading, for they are mostly suited for light casualties; these ships have significantly less capability for managing the severely traumatized.

Notwithstanding the stand-alone implication of Admiral Rempt's comments, afloat medical support services have historically not existed in a vacuum. From a logistical perspective, there has always been an inextricable relationship between events at sea and those on land. In the past, forward-based medical facilities on land, distant from the combat zone, have been critical to the support of naval warfare. The availability of land bases has frequently determined whether navies have had the overseas infrastructure to undergird their deployments. Several examples are enlightening:

- In the matured theater of operations that existed during the latter stages of World War II, large numbers of mobile, base, and fleet hospitals—creations of the Navy's Advanced Base Functional Component System (ABFC) were deployed overseas. Their value to the fleet was highlighted during the invasion of Okinawa, when kamikaze attacks upon the Fifth Fleet created high numbers of casualties among the forces afloat. For continuity of naval operations, six hospital ship transports were required for evacuating the mounting shipboard casualties to hospital facilities on Guam.
- Several decades later, during the Falklands conflict of 1983, British shipboard casualties at times exceeded combat casualties ashore and occasionally had to be evacuated to the combat zone hospital ashore for stabilization. For example, the Argentine bombing of the British auxiliary landing ship RFA *Sir Galahad* suddenly produced 179 casualties, including eighty-three burn victims, many with quite severe injuries requiring significant logistical support. Many were quickly transferred to medical facilities ashore for initial care, prior to transfer to the hospital ship *Uganda*. In addition, the Royal Navy was obliged to acquire a neutral land-based staging point in Montevideo, Uruguay, for transfer of 593 casualties from *Uganda*, in order to empty medical facilities afloat and prepare them for the arrival of new casualties.

• The amphibious insertion of forces of Task Force 58 into Afghanistan in late 2001 from the merged USS *Peleliu* (LHA 5) and *Bataan* (LHD 5) ready groups culminated in the creation of Forward Operating Base (FOB) RHINO, four hundred miles and approximately four hours' helicopter flying time (including in-flight refueling) from the sea base. Following a 5 December fratricide bombing, thirty-nine casualties were brought to FOB RHINO. Following triage, nineteen seriously wounded U.S. personnel were transported by a U.S. Air Force C-130 to a well-equipped Air Force surgical facility in Seeb, Oman, classified as possessing greater capability than those in the sea base. Twenty other Afghan injured were transported by CH-53 to the afloat task force. A subsequent land-mine injury of a Marine in Kandahar likewise resulted in medical evacuation to Seeb.

Another important unresolved issue will need to be addressed as well by those advocating sea basing: whether to apply for "protected" Geneva Convention status of casualty-reception vessels associated with the afloat sea bases, given the fact that use of "unprotected" casualty-evacuation vehicles or secure communications may violate their neutral status, notwithstanding the presumed perimeter protection of such formations by combatant vessels. Immediately prior to the British invasion of the Falklands, a civilian-operated passenger vessel, the luxury passenger liner SS Canberra, was rapidly converted to a troop carrier with a major surgical facility. Original plans called for Canberra to receive casualties, although it did not qualify for Geneva Convention neutrality by virtue of having transported troops and combat equipment to the theater via military convoy. This lack of protected neutrality was originally felt to be an advantage, since troops it received as casualties and successfully treated could be returned to the field directly, whereas the Geneva Convention prohibits return of such casualties from protected hospital ships. Unfortunately, as a result of fierce Argentine aerial attacks upon the fleet supporting the landing force, a command decision removed the unprotected Canberra from the San Carlos Water operational area, leaving the remaining hospital ship, Uganda, which conformed to the requirements of protected neutrality, as the only floating hospital. Elements of the Canberra medical organization were hurriedly put ashore at Ajax Bay, where they established in a deserted slaughterhouse and meat processing plant a casualty handling and treatment facility that effectively served the needs of both ground combatants and evacuees from the bombing of Sir Galahad.

The unique design and intensity of military munitions create large numbers of profoundly complex injuries simultaneously, many of them never seen in peacetime settings. The sheer volume of these often life-threatening injuries precludes standard logistical formulas. Competent personnel and capable facilities in the evacuation chain are needed, but the essential factor in their treatment is time. The commander of any over-the-water assault must therefore make certain choices. If he does not give appropriate priority to forward medical care, evacuation, and a sophisticated casualty-regulation network, he runs the risk of suffering a huge logistical burden and an adverse impact upon morale because the dead and injured will remain ashore. On the other hand, there will be an adverse impact upon the transport of assault echelons if medical evacuation back to casualty receiving ships is not planned, practiced, and controlled. Inattention to these issues by those remaining behind in their secure offshore sea bases will result in the loss of trained troops who could have been treated and returned to duty had enlightened and realistic medical planning and resources been appropriately integrated into overall operational plans.

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BOOK REVIEWS

A VERY OLD KIND OF WAR

Ledeen, Michael A. The War against the Terror Masters. New York: St. Martin's Press, 2002. 262pp. \$24.95

Some twenty years ago, en route to a Gulf deployment, this reviewer and other watchstanders received various briefings on how to defend against Harpoons and other U.S. weapons sold to the newly hostile Iranians. This occasioned more than a little angry puzzlement at how we found ourselves in such a situation, but we had no uncertainty about who the foe was.

Today, the United States once again faces conflict in the wider Mideast region, including the Gulf. Again we have foes that use our own tools against us (e.g., airliners as cruise missiles). However, unlike then, today we arguably face a fundamental confusion about who the enemy is and what this war is about. This makes it extraordinarily difficult to know what to plan and execute against or to know the overall campaign context for individual combat operations. Ultimately, such confusion is a formula for failure in this war.

In *The War against the Terror Masters*, Mike Ledeen, noted political analyst, Middle East scholar, and frequent contributor to the *Wall Street Journal* and other media outlets, presents a compelling picture of what the threat actually is, how it developed, and how the United States can and must defeat it. He avers that this war is not a "global war on terrorism" at all but is specifically about Islamic, not generic, terrorism—motivated and underwritten by militant Islamic fundamentalism and abetted by many regional regimes. However, many in the West are most reluctant to frame the conflict this way, for fear of being accused of "engaging in a war against Islam." Ledeen's account thus is quite "politically incorrect," but as one European leader recently (and encouragingly) noted, "to solve a problem, you must start by giving it a proper name."

President Bush, in his earliest "post–9/11" speeches to the nation, emphasized that the United States must wage war against the terrorists and *the countries that support or harbor them*, recognizing immediately that major terrorist organizations would be crippled absent state support. However, in the ensuing year this crucial distinction was largely honored in the breach. With the notable exception of Afghanistan, the emphasis has almost exclusively been on fighting terrorists, not their state facilitators. Much of the senior leadership of the Department of State, the CIA, and the U.S. military, as well as most European elites, consider terrorists primarily as criminals and therefore urge a legal paradigm, or crime-fighting approach, perhaps with selective military assistance, rather than actual warfighting. The consequence arguably has been a dangerously lethargic campaign of which the ultimate objectives remain vague and uncertain.

The conventional wisdom is that the United States is engaged in a totally new kind of war against clandestine organizations rather than nation-states. Ledeen argues compellingly that this is at best partially true. Rather, "our prime enemies are the terror mastersthe rulers of the countries that sponsor terrorism, and the leaders and soldiers of the terrorist organizations themselves." Moreover, "the main part of the war-the campaign against the terror masters who rule countries hostile to us-is a very old kind of war . . . a revolutionary war, right out of the eighteenth century, the very kind of war that gave us our national identity."

Ledeen starts by asking "why it happened," and recounts how the (Islamic) terror network developed, from the start of the Palestine Liberation Organization (PLO) to today's al-Qa'ida, including "an analysis of the importance of Islamic fundamentalism within the terror network, as well as the crucial roles of several Middle Eastern regimes." He argues that the al-Qa'ida and other Islamic terrorist groups have a fanatical desire to destroy the West, based on "a deep-seated Muslim rage and buttressed by a powerful Muslim doctrine. Without the rage and the doctrine-the ideology of the terror masters-there might be Islamic terrorists (there have been for centuries) but there would not be the global Islamic

terrorist network, resting on an Islamic fundamentalist mass movement."

Ledeen then poses the equally important question, "Why weren't we properly prepared?" He notes the woeful record of U.S. policy making and intelligence vis-à-vis terrorism and the Middle East since the late 1970s, when American policy makers failed to understand the epochal nature of Ayatollah Khomeini's triumph in Iran. The 1980s and 1990s saw a long, compounding litany of disasters and missed opportunities. Some were due to bureaucratic dysfunctionality and poor communications among various organizations, while others were results of deliberate, ideologically based castration of agencies like the FBI and CIA throughout much of the 1990s, when weltfremd policy decisions left the "CIA as a cross between the Post Office and the Department of Agriculture," in the words of one senior CIA official. However, many mistakes stemmed from a fundamental misunderstanding of "human nature and the true nature of human history"-in essence, for a variety of reasons, U.S. policy makers consistently fooled themselves about the reality of the threat. Progress is being made to correct some of the egregious flaws, but again, the pace is slow.

Lastly, Ledeen asks "How will we win?" He notes that if the key terror masters are in fact the rulers of their countries, the United States must defeat those regimes in some meaningful sense if it is to prevail. Noting these regimes' fragility, he suggests bringing them down will help the United States "show the Muslims that they have been led astray by the terror masters, that they should look within themselves for the source of their centuries-long failure, and that the best hope for them lies in cooperation with the civilized world and in greater freedom for all their people." This can be characterized as a "revolutionary war against the tyrants," one "entirely in keeping with our own national tradition of fighting tyranny."

The War against the Terror Masters is a book that U.S. military leaders should read as a matter of urgency in order to understand the deadly threat that confronts the United States and its armed forces. The confusion about whether the United States is fighting terrorists or a much more formidable phenomenon, militant Islamic fundamentalism, is exacting a heavy toll. Though the cost has been paid largely in terms of international political support through late 2002, arguably America has been very lucky that it has not been reckoned in lives and destruction from another large-scale atrocity. It is little wonder that Mike Ledeen for months has ended his newspaper columns with "Faster please," and more recently, "Faster please. What are you waiting for? Another September 11th?"

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Hoffman, Frank G. *Homeland Security: A Competitive Strategies Approach.* Washington, D.C.: Center for Defense Information, 2002. 67pp. (no price given)

O'Hanlon, Michael E., et al. *Protecting the American Homeland: A Preliminary Analysis.* Washington, D.C.: Brookings Institution Press, 2002. 188pp. \$17.95

Since the events of 11 September 2001, a multitude of homeland defensive plans have been discussed at every level of government and the military, centering on the restructuring of existing organizations or increased financing. Each plan focuses on a single phase or group believed to be essential to the safety of our nation. These two books for review take different approaches. Homeland Security: A Competitive Strategies Approach, by Frank G. Hoffman, stays out of the tactical and operational level of the "war" and focuses on the strategic level and the planning cycle. Protecting the American Homeland: A Preliminary Analysis, by Michael E. O'Hanlon, Peter R. Orszag, Ivo H. Daalder, I. M. Destler, David L. Gunter, Robert E. Litan, and James B. Steinberg, analyzes the problems of national security, determines the progress of current programs, and designs an agenda for future endeavors.

Homeland Security offers a process to enhance U.S. capabilities through a simple "course of action" analysis based on comparisons of known and perceived threats with strategies used by policy makers in recent history. The authors envision three possible categories of attacks against the United States. The first is a missile attack, from intercontinental ballistic missiles or cruise missiles; the second is covert attack or catastrophic terrorism, involving an array of weapons of mass destruction smuggled into the United States; finally, they consider a cyber attack designed to destroy the U.S. information infrastructure. Each method is considered in terms of known and projected capabilities of national and transnational players, and of the four classic strategies of nonproliferation, deterrence, counterproliferation, and preemption. Each "style" has been filtered through these four perspectives to discern strengths and weaknesses.

U.S. vulnerabilities are extensive. It will not be easy to protect the American people. The current approach of organizational restructuring to counter or prevent an attack, and the current assumption that the U.S. military can defend against an assault, may not meet the future need. Hoffman proposes a "serious policy debate" to consider the threat and risks and how to create an environment that will prevent an attack or at least make it very difficult for one to achieve the desired results. Hoffman provides valuable insights into the various strategies of homeland security that could be undertaken by the United States, making it clear that no single plan will suffice. Hoffman also discusses consequence management; if an attack is successful, a plan must be in place to mitigate its results.

Protecting the American Homeland argues that much could be achieved to improve homeland security at a cost that could be absorbed by both the federal government and the private sector. Working under the assumption that our large, open society provides little protection against terrorism, O'Hanlon's team presents a scheme to complicate terrorists' actions and therefore force them to engage less lucrative targets ("displacement") or to continue to plan for a difficult attack in ways that offer an opportunity for U.S. authorities to prevent the attack. The authors argue that first identifying U.S. weaknesses and vulnerabilities will make it possible to correct them or at least lessen the effects of attacks we cannot prevent.

O'Hanlon and his coauthors describe a four-tier approach. Securing U.S. borders is the initial step. They consider it possible only if air defense systems are expanded, a cruise missile defense system is created, and the Coast Guard and the U.S. Customs Service is extended, so as to improve security at sea, in ports, and over roads and rails. The second step entails preventive measures within U.S. borders to eliminate or reduce the possibility of an attack. This can be achieved by increasing FBI and state and local law-enforcement staffs; improving data collection, analysis, and dissemination; and providing incentives to the private sector by way of insurance and tax incentives to increase security and tracking of employees, production, and the storage and shipment of hazardous materials. The third measure would protect obvious targets. Once again, the concept of displacement is discussed-redirecting terrorist activities from a disastrous plan to one that is considerably less damaging. By concentrating on the protection of targets upon which attacks could be catastrophic-such as nuclear and chemical facilities, large buildings or arenas, national symbols, or critical parts of the national infrastructure-it may be possible to reduce the risk to essential interests. The fourth step deals with consequence management, or the mitigation of the effects of a terrorist act. Effective preparation of first responders is essential here. This preparation can be handled through training for the responders, added capacity to enable the health system to deal with the event, communications and information for the coordination of the relief efforts, and research and development in vaccines and detection equipment.

The remainder of the book deals with the principles for implementing and financing the organizational challenges of homeland security. The book proposes a balance between regulatory and insurance measures that would pass the cost to users and producers vice the population as a whole. Such measures would have to, as noted, provide incentives (reduced insurance rates) to improve security. Organizationally, the United States could either attempt the "lead agency" approach (a single entity with responsibility for security of the homeland) or the "interagency" approach, an entity that coordinates the many agencies responsible for various segments of the security problem. The authors believe that the Bush administration is on the right track with the interagency method.

Homeland Security is an excellent introduction to strategic approaches to the threats that face this nation. It provides a backdrop for further research into homeland defense. *Protecting the American Homeland* is a logical, flowing, step-by-step analysis to defining policy issues involving the development of a comprehensive protection plan. Both books are useful and thoughtful analyses of homeland security issues.

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Peters, Ralph. *Beyond Terror: Strategy in a Changing World.* Mechanicsburg, Penna.: Stackpole, 2002. 353pp. \$22.95

In *Beyond Terror*, author, historian, and pragmatist Ralph Peters has assembled a collection of his own essays that puts the "post–9/11" world in perspective in terms of the U.S. reaction to the attacks and the historical context in which those attacks occurred.

A retired Army lieutenant colonel and former intelligence officer, Peters has

been engaged in every major U.S. theater, focusing the better part of his professional life on assessing the threats to U.S. national security. Beyond Terror offers a clear, unfettered, down-toearth perspective of the world, as it is, not as the media "spinmeisters" or the "intellectual elite" would have one believe. His is a refreshing and invigorating view of what has made America the singular global force that it is today and what will allow it to maintain that stature in the long-term. He unabashedly believes that this country's effort to protect its borders and global interests is a righteous one, and he offers some insightful and common sense prescriptions for how the United States should proceed. Peters tempers the enthusiasm for quick fixes to terrorist threats and endeavors to steel the American public for a long, protracted effort that will require every facet of American power and will: "Like crime, terrorism will never be completely eliminated." What is needed, Peters argues, if the effect of terrorism on the American way of life is to be reduced, is not hand-wringing but an understanding of the terrorists' intentions and motives, and of their ever more complex tools and planning processes.

The collection of essays presented in this work is arranged in two "theme sets." In the first, Peters establishes the American reality in a hostile world from a historical perspective. In essence, the United States presently finds itself dealing with the colossal failures of the European colonial era, particularly with respect to the Islamic world, in which Western social, political, and economic ideals failed to take root and now take the terrorists' blame for the failure and decay of their societies at large. In the context of these failing cultures, Peters categorizes the emergence of two types of terrorists: the practical terrorist (or freedom fighter) whose actions reflect the yearning for social and political change, and the apocalyptic terrorist, who is "possessed and governed by a devilish vision . . . whose true goal is simply the punishment of others, in the largest possible numbers . . . as an offering to the bloodthirsty and vengeful God that they have created for themselves." Unlike for the practical terrorist, "No change in the world order will ever content the apocalyptic terrorist, since his actual discontents are internal to himself." Describing the latter as an unalterable menace to whom destruction and violence are not means to an end but ends in themselves, Peters suggests timely precepts (twenty-five to be exact) for the application of American power in the war on terror. The one that stands out as the key to long-term success is, "Do not be afraid to be powerful." The rest flow logically from it and provide a viable framework in which U.S. national security policy should be executed in the "new world paradigm." To strengthen the American sense of purpose, and more interestingly, provide an insight into the real character of American power, Peters describes the unique aspects of American social and cultural norms that will allow it to continue to be the preemptive global power: the ability of our society to break from "historical norms," to adapt and be responsive to changing dynamics, and the ability to compromise and yet assume a sense of responsibility for who and what we are.

The second series of essays deals primarily with recommendations for a "blueprint" for future warfare in the campaign against terror. It debunks social myths closely held by past U.S. presidential administrations. Peters attacks the present line of force planning by pointing out that the United States is well suited to fight the old Soviet threat, which never materialized: "We have the most powerful military in history, but its power is designed to defeat conventional threats. When the enemy does not 'fight fair' and deploy tanks, ships, and aircraft, we find ourselves punching thin air. We have prepared to fight machines. But the enemy is belief." He then exquisitely describes the warfare challenge of the future with respect to the "human terrain of urban operations" in the context of three city "types": hierarchical (synonymous to a typical U.S. city); multicultural (in contrast to "the fantasies of Liberal Arts Faculties," in these cities "contending systems of custom and belief [are] often aggravated by ethnic divisions struggling for dominance"these "cockpits of struggle" are representative of future combat challenges for U.S. ground forces); and tribal (the most "difficult urban environment for peacekeeping operations; ethnic conflicts in this environment can be the most intractable and merciless.")

Against this backdrop, Peters argues the shallowness in the use of U.S. military power in the past administration and then emphatically debunks the "casualty myth" that wove its way into the political thought and leadership of the last administration. He is outraged that an "elitist" administration could have so underestimated the will of the American people to commit blood and treasure in worthy causes that its attempts to steer into harm's way merely put the ship of state hopelessly "in irons." The subsequent "low risk" approaches (casualty avoidance via air "delivery" of military power) taken to "punish" violators of human rights and international law, Peters declares, merely emboldened lawless rogues to perpetrate more aggressive acts of human carnage and suffering.

Beyond Terror is a must-read for those who desire to get at the heart of the issues at hand without being hamstrung by political biases or organizational loyalties. The opinions of Peters will serve as a superb starting point for more detailed discussions on U.S. national security strategy and the direction that the war on terror should take in the future.

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Buckley, Roger. *The United States in the Asia-Pacific since 1945.* New York: Cambridge Univ. Press, 2002. 258pp. \$23

Even as the world remains focused on the war on terror, Roger Buckley's examination of U.S. policy in the Asia-Pacific since 1945 reminds us of the danger of ignoring Asia. Although this area has been crisscrossed in the post-Cold War period by such formal and informal regional organizations as the Association of Southeast Asian Nations (ASEAN) and the Asia-Pacific Economic Cooperation (APEC), Buckley cautions that "any future Asia without America is widely seen to be a recipe for possible chaos," since "Washington alone possesses the political and military strengths to deter aggression and thereby provide the essential foundations for nation-building, economic advancement and regional building."

This book recounts the wars and America's postwar difficulties after World War II, Korea, Vietnam, and the Cold War. Washington's challenges are far from over, and Buckley's list of contemporary difficulties includes "two Koreas, two Chinas, nuclear and conventional weaponry on a massive scale and the absence of a Russo-Japanese peace treaty." He argues the United States must prepare to resolve such problems through cooperative partnerships that will rely less on bilateral and vertical relations and more on a variety of Asian nations accepting a greater share of the responsibility; simultaneously, the United States must retain a combination of "regional muscle," the "political will to readily deploy" forces, and the "necessary weapon systems and Pacific Rim basing facilities" to act effectively as "insurance against aggression" and "reassurance to its allies."

According to Buckley, by far the most dangerous Asian problem is the potential threat posed by the People's Republic of China. Whether intentionally or not, this book's focus on wars and their aftermaths suggests that a conflict between China and America is in the offing. In particular, Beijing sees Washington as wielding arbitrary and excessive force in a way that undermines a more equitable distribution of power. Although some have predicted the evolution of a cooperative Sino-U.S.-Japanese triad, China's chagrin at the extent of U.S. power, and its antihegemonic stance, will make it even more likely that the region will see a "distancing of Beijing from an already long-established U.S.-Japan partnership." Assuming this happens, "the

entire region will be increasingly involved in dealing with a more ambitious and yet dissatisfied Communist state, since China still recalls the humiliations of the nineteenth century when it was 'sliced' like a melon among rival imperialists and still shares disputed land and sea borders with many countries." America's potential problems with China have been exacerbated in recent years by the disappearance of the European powers from Southeast Asia, Hong Kong, and Macao, and the precipitous decline of Russia in Northeast Asia, making China the only "possible contender for the American laurels."

Buckley, a Hong Kong-born, Britisheducated, and Japan-based scholar, is generally friendly to the United States and supportive of its East Asian policies. However, he has his fair share of criticism for U.S. policy makers, in particular Franklin Roosevelt's "casualness" in his dickering with Stalin at Yalta, Harry Truman's huge military reductions immediately prior to the Korean War, and Lyndon Johnson's and Richard Nixon's "humiliating" defeat in Vietnam. In the near term, Buckley warns, in addition to remaining the bulwark of Asia Washington must initiate wider regional interdependence among East Asian countries. Asian nations, instead of focusing on the United States as the Holy Grail for everything from democracy to human rights to capitalism, might do better to look at "British, European and Anglo-Pacific approaches to such issues" in order to spread their cultural horizons. To the extent that "globalization is frequently equated with Americanization," Buckley warns, the Asia-Pacific region may one day resent such influence as an unwelcome American intrusion.

This book went to press immediately before "9/11" and the war on terror. As a result, Buckley underestimates Japan's potential naval contribution to any multinational military effort, suggesting instead that "Japan appears most unlikely to deploy its so-called self-defense forces for anything much beyond the rescue of its own citizens in emergency situations abroad." Buckley's emphasis on the close interaction and interdependence of U.S. security and economic policies throughout the Asia-Pacific region are, however, as relevant now as ever. Buckley concludes by warning that Americans must energetically face up to the myriad of risks-chief among them the growing threat from Chinaassociated with being the dominant Asia-Pacific power.

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Knox, MacGregor and Williamson Murray, eds. *The Dynamics of Military Revolution, 1300–2050.* New York: Cambridge Univ. Press, 2001. 203pp. \$28

The editors of this slim volume of essays have wide ambitions. In 194 pages of text, they seek to define the nature of military revolutions; describe the tripartite sources of the concept in the still-controversial work of historian Michael Roberts on seventeenthcentury European land warfare, Soviet military theory, and studies by Andrew W. Marshall's Office of Net Assessment; and critique contemporary developments in American ground and air warfare. Furthermore, to support their arguments, Knox and Murray present case studies from seven centuries of armed conflict in the West. Between their introductory essay on the concept of a revolution in military affairs (RMA) and their concluding analysis of the shortcomings of the "American RMA," Knox and Murray place eight chapters on historical examples of military revolutions. There is one essay each by Knox and Murray (on the French Revolutionary army and the German blitzkrieg, respectively). The others are by equally prominent military historians: Clifford J. Rogers on fourteenthcentury military developments under England's Edward III; John A. Lynn on Louis XIV's army; Mark Grimsley on the U.S. Civil War; Dennis E. Showalter on the mid-nineteenth-century Prussian army; Holger H. Herwig on changes in naval warfare, 1885-1914, exemplified by the British and Germans; and Jonathan B. A. Bailey on the creation of modern warfare in World War I. The accuracy, comprehensiveness, and thoughtfulness of every essay are outstanding-a rare achievement in an anthology. The editors deserve commendation.

Each part of this volume is excellent, yet Knox and Murray have set themselves such a daunting goal-to integrate coherently arguments based on episodes of Western military history with contemporary defense policy analysis-that they fall somewhat short. While all the essays are fine offerings, Rogers's essay fits awkwardly alongside case studies of RMAs from the time of Louis XIV to the present, and Herwig's accentuates the absence of other essays on the transformations of naval warfare in the age of sail and after 1918. Historical examples drawn almost exclusively from British, French, German, and American military history suggest a

certain cultural bias; the selection neglects significant contributions over the past four and a half centuries to transforming western military theory and practice by the Dutch, Danes, Swedes, Spanish, Italians, Poles, and Russians. Since the editors stress the Soviet contribution to the RMA concept, their failure to include a Red Army case study seems egregious. The origins of the book in papers delivered at a small conference at Quantico in 1996 help explain its limitations. Nonetheless, a work of such ambitious intellectual scope would have benefited from double or even triple the number of chapters, with a greater geographical and topical inclusiveness.

Paradoxically, this reviewer's disappointment arises from the great contributions this book does make to understanding RMAs and redirecting present American efforts to achieve one. As all the authors emphasize, and as Knox and Murray reiterate in their conclusion, military revolutions are not actually based on technology. In fact, an RMA can occur without major technological innovation at all, as in lateeighteenth-century France. Instead, a military revolution is a reshaping of military institutions to solve strategic and political challenges. Adopting new weapons and equipment alone, without institutional reconfiguration, produces armies such as the British and French fielded against the Wehrmacht in May 1940. The editors present convincing arguments that the U.S. military has adopted new technologies without interservice integration or, far more important, without attempts to relate weapons systems, doctrine, force structure, and training to the strategic problems facing the nation. In mitigation,

Knox and Murray admit that achieving an RMA in the absence of an identifiable foe as the focus of strategy presents enormous difficulties. Be that as it may, they warn, the obstacle the United States presents to the ambitions of entities outside the Western alliance could make it the object of someone else's RMA. Perhaps that is the greatest warning to arise from the coincidental appearance of this book following 11 September 2001. The Dynamics of Military Revolution raises critical questions about how the United States might reshape its military to counter strategies based on asymmetrical warfare. Beyond the valuable contribution the book makes to military history, one hopes this volume will also help shape the national security debate currently in progress.

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Gilbert, Marc Jason, ed. *Why the North Won the Vietnam War*. New York: Palgrave Macmillan, 2002. 254pp. \$69.95

Since the fall of Saigon in the spring of 1975, Americans have sought to understand how their government could have lost the Vietnam War. Given the enormous gap in resources between the United States and the Vietnamese revolutionaries, it is difficult for even scholars of the war to explain why this nation's mighty military machine failed to defeat its enemy's forces. Many who have written about the war have focused on the alleged mistakes of American civilian and military leaders, arguing that more enlightened policies, such as fewer restrictions on military operations or more emphasis on pacification, would have turned the tide in South Vietnam. The purpose of the eight essays in this volume is to place American policies in a broader context or, as Gilbert writes, to recognize that "the outcome of that war was determined less at MACV [Military Assistance Command, Vietnam] and Washington than by the persistence of the enemy on the battlefield and in political cultures of the Saigon regime, the National Liberation Front, and its partners in Hanoi."

The most original essays in this volume, by William J. Duiker, George C. Herring, and Robert K. Brigham, pursue aspects of this theme. Duiker traces the efforts of the government in Hanoi "to manipulate the international and diplomatic environment to its own advantage" and its complicated relations with China and the Soviet Union, allies whose aid was vital to the North Vietnamese war effort. Herring emphasizes the international dimensions of America's defeat, noting how the inability of the Lyndon Johnson administration to gain support from European allies undermined the U.S. war effort. Brigham challenges the traditional distinction between northerners and southerners. arguing that it is misleading to divide "the struggle along geographical lines that have no cultural or historical precedent." Northerners, he argues, did not make all of the key decisions in the war; rather, southerners came to dominate party councils in Hanoi and were able to convince their northern comrades to pursue a more aggressive strategy in the South.

The other five essays focus, with varying degrees of success, more on the American side of the war. In a forcefully argued

essay, Jeffrey Record points out that those who emphasize the failures of civilian policy makers in Washington ignore both the achievements of Vietnamese revolutionaries and "the defective professional U.S. military performance in Vietnam within the political limitations imposed on the use of force." If politicians were stabbing the military in the back, "the military also was shooting itself in the foot." He concludes that it is unlikely that the United States could have done more than increase the price of an enemy victory. John Prados analyzes the uses of intelligence by both sides, emphasizing the difficulties of the Americans and South Vietnamese in collecting accurate information, and the extent of North Vietnamese and Vietcong penetration of the Saigon government and army. Gilbert challenges the views of Harry Summers, Jr., and William E. Colby, both of whom, he believes, fail to understand that America in Vietnam was betrayed "by its own collective limited vision of the nature of the war and the requirements of victory." Andrew Rotter examines the respective economic cultures of America and North Vietnam that shaped each side's response to the war, while Marilyn Young explores the impact of the American peace movement, suggesting that whatever its effect on the length of the conflict, widespread protests "increased the price to the government of continued prosecution of the war."

In a thoughtful reflection on these essays, Lloyd Gardner writes that "the reality of Vietnam was as elusive to American policymakers as the enemy forces were to the men they sent to this hall of mirrors. They saw only their own reflections, multiplied over and over." Like policy makers at the time, many historians have also been in a hall of mirrors, preoccupied with the American side of the struggle. It is the great strength of this volume that, at least in part, it suggests the insights that can be gained by moving beyond the American perspective.

CHARLES E. NEU Brown University



Peattie, Mark R. *Sunburst: The Rise of Japanese Naval Air Power, 1909–1941.* Annapolis, Md.: Naval Institute Press, 2002. 392pp. \$36.95

This work compellingly describes how Japanese naval aviation, both land and carrier based-like that of its principal adversary in the Pacific War, the United States-grew to maturity through trial and error. Its maturation period extended from the earliest days of powered flight through the bloody crucible of war with China. The story of U.S. naval aviation during this time is a familiar one, but that of the Japanese is less so, due to the formidable barrier posed by language. As more scholars equip themselves with the tools necessary to mine riches from the sources and publications of a former enemy, however, the other side of the story is becoming known. One such diligent student of Japanese naval history is Mark R. Peattie, familiar as the coauthor (with David C. Evans) of the highly praised Kaigun: Tactics and Technology in the Imperial Japanese Navy, 1887-1941 (Naval Institute Press, 1997). Holder of a doctorate in modern Japanese history from Princeton University and author, coauthor, or editor of seven other works, Peattie brings unique qualifications to the daunting task.

Sunburst's meat lies in seven chapters that discuss the early development of Japanese naval aviation (1909-21), Japanese naval aircraft and the tactics developed for their employment (1920-36), the design and construction of Japanese aircraft carriers and formulation of doctrine for their employment (1920-41), the Japanese aircraft industry and the design and construction of aircraft (1937-41), and Japanese naval aviation, both land and carrier based during the undeclared war with China (1937-41). Paralleling the wartime experience is a chapter on the development of Japanese naval air power in projecting the empire's power as it prepared for the Pacific conflict. The final chapter, "Descending the Flame," begins with the attack on Pearl Harbor and with the destruction, at sea and under way, of the British battleship HMS Prince of Wales and battle cruiser HMS Repulse. It ends with the battle of the Philippine Sea in June 1944, after which "the Japanese Navy never again launched a significant effort to contest the hegemony of the skies over the Pacific."

Augmenting the text are nine appendices: biographical sketches of those mentioned in the text; a glossary of naval aviation terms; the generic organization of Japanese naval aviation; naval aviation ships (carriers, seaplane carriers, and the like); naval air bases and air groups; principal naval aircraft; aircraft designation systems; principal engines; and a description of the "turning-in" maneuver. A common thread found in the graphics that appears throughout the text is the superb work of Jon Parschall, who renders tactical maneuvers, ordnance, aircraft, and ships with equal facility.

Sunburst, which Peattie affectionately dedicates to his former coauthor,

concludes that the "catastrophic collapse" of Japanese naval air power lay in the Imperial Navy's failure "to anticipate the kind of air combat it would be obliged to wage," its failure "to make the right kinds of decisions" to cope with the realities of a "new kind of air war," and, importantly, "the inability of Japanese industry and technology to support Japanese naval aviation against the emerging numerical and qualitative superiority of American air power." In that connection, this reviewer was particularly pleased with how Peattie disposes of the most common of persistent Midway myths, that the battle resulted in the catastrophic loss of aircrew. While heavy, the loss of pilots and observers by no means equaled the loss of the "trained maintenance personnel," invaluable to maintain modern naval aircraft, who went down with their ships. "Similarly," he contends, "the loss of skilled ground crews, often abandoned to their fates when the navy evacuated remaining aircrews from islands under siege, substantially weakened the land-based air groups."

"In the end," Peattie concludes, "the Japanese naval air service was outproduced, outorganized, outmanned, and outfought." Yet in the ashes of defeat, however, "the precision, skill, and . . . technical mastery" with which the Japanese crafted the Zero fighter "gave wings to the phoenix of postwar Japanese technology." Students of the Pacific War will find *Sunburst* (based on an impressive array of Japanese sources, including the official war history volumes and a variety of book or article-length studies) invaluable for its insights on an important subject.

ROBERT CRESSMAN Naval Historical Center



Dunmore, Spencer. Lost Subs: From the Hunley to the Kursk, the Greatest Submarines Ever Lost and Found. Cambridge, Mass.: Da Capo, 2002. 176pp. \$35

Service in the Confederate submarine CSS *Hunley* was not for the faint of heart—on its first two sea trials, it sank with a loss of nearly all hands. With a fresh and stalwart crew, *Hunley* crept from Charleston on the night of 17 February 1864 and sank the USS *Housatonic* with a contact torpedo. However, in the ensuing confusion and gunfire, *Hunley* was lost.

For over one hundred years *Hunley* lay undisturbed in the mud and silt of Charleston's harbor, until August 2000, when it was raised with an elaborate cat's cradle of slings, braces, and foam pads. CSS *Hunley* is now undergoing an archaeological examination that is yielding a treasure trove of artifacts as well as insights into the technology of its time.

Spencer Dunmore's work, a handsomely produced coffee-table book, has more substance than one might initially expect. Dunmore's accounts of the loss and recovery of the CSS *Hunley*, USS *Squalus*, HMS *Thetis*, and the Russian *Kursk*, and the losses of the USS *Thresher* and USS *Scorpion*, are interesting and contain notable new material.

Like aircraft, submarines are inherently safe but very unforgiving of human and mechanical failures. *Squalus* (1939), *Thetis* (1939), and *Thresher* (1963) each was lost when its hull was breached and seawater flooded in. The main air-induction valve stuck open when *Squalis* submerged, a torpedo-tube outer door was inadvertently opened on *Thetis*, and a seawater inlet pipe apparently failed catastrophically on *Thresher*.

Torpedoes can be as lethal to the submarine that carries them as to the enemy. In the years since the loss of *Scorpion* in 1968, its wreckage has been photographed several times by deep-sea reconnaissance vehicles. These photographs (many of which have been released and are in Dunmore's book), the troubled history of the batteries used by the submarine's Mark 37 torpedoes, and engineering analysis suggest that a spontaneous and violent initiation of a torpedo battery led to a warhead detonation and hull rupture.

The Russian submarine *Kursk* appears to have suffered a similar fate in the Barents Sea in 2000. Western acoustic detection systems picked up two massive explosions that correlated with *Kursk's* position. Naval engineers cited by Dunmore build a good case for the theory that the first of these explosions came from the hydrogen peroxide that was carried in *Kursk's* torpedoes and that the second resulted from the detonation of the torpedo's warhead.

The most fascinating and yet disappointing aspect of Dunmore's book is his descriptions of crew rescues and salvage—fascinating because these operations are high among underwater engineering feats, disappointing because Dunmore treats them shallowly.

When *Squalus* sank off Portsmouth, New Hampshire, the Navy had just placed into service a diving bell for submarine rescue. Winching itself down a half-inch wire fastened to the forward hatch of the *Squalus* 243 feet below, the bell ultimately rescued thirty-three of the fifty-five men aboard. The following summer, *Squalus* was raised with a complex system of cradles and supporting pontoons. With each lift, it was moved into shallower water, grounded, then lifted again. It reached Portsmouth Harbor in September 1939. The technical details of its salvage are one of the truly great stories of deep-sea salvage operations.

Kursk was raised in the fall of 2001 and carried back to Roslyakovo Shipyard. Raising the sub was no mean feat of underwater engineering-it weighed twenty-four thousand tons underwater and lay in 350 feet of water. Unfortunately, Dunmore gives but four pages to this accomplishment. Happily, two of them are devoted to excellent drawings of the techniques by which the damaged bow was removed, lift points attached to the hull, and the submarine drawn up into a specially prepared floating dry dock. One could well spend a serious amount of time studying these drawings alone.

As a comprehensive treatment of submarine loss and recovery, *Lost Subs* is uneven and technically superficial. However, its treatment of the *Scorpion* and *Kursk* disasters and the rich collection of underwater and salvage photographs will please the generalist and fill niches for the naval scholar.

FRANK C. MAHNCKE Joint Warfare Analysis Center



Stiehm, Judith Hicks. *The U.S. Army War College: Military Education in a Democracy.* Temple Univ. Press, 2002. 200pp. \$69.50

This is an in-depth and insightful examination of the U.S. Army War College, one of the nation's six senior service colleges. Stiehm offers a comprehensive book that reviews the history of the college, provides a typical class profile, offers a look at the faculty and the curriculum, and describes what a typical "Carlisle year" is like for the students. While analyzing the administration, Stiehm offers recommendations for improving the institution's ability to produce quality graduates. Stiehm believes that after following her prescription for improvements, the graduates would be better able to fight and win the nation's wars and would be better prepared to provide sound, thoughtful advice to senior decision makers on matters of national security and the application of military force in the pursuit of national objectives.

Stiehm is uniquely qualified to write this book. She attended the Army War College as a student-participant observer during the first semester of academic year 1996–97, with the class of 1997. Stiehm was fully integrated into the seminar experience of the war college and shared both the academic and social experiences of her classmates. She also served as a visiting professor at the U.S. Army Peacekeeping Institute and at the Army's Strategic Studies Institute, both located at Carlisle Barracks.

Stiehm's critical examination of the Army War College is valuable for the insightful information she shares, which is otherwise not available to the general reader, but more importantly should prove valuable to the Department of Defense policy makers and decision makers responsible for the establishment and maintenance of defense institutions. The complex and multidimensional nature of the global war on terrorism has caused the United States to think about warfare in a new way. Stiehm's work challenges those in power to review the administration, curricula, and faculty of the Army War College with an eye toward ensuring that the institution is able to address contemporary issues effectively and is positioned to adapt and change.

Stiehm organizes her conclusions and recommendations around the three thematic issues of "training and education," "civil-military relations," and "war and peace." The first deals with the basic function of the institution. Carlisle's mission statement is focused on the preparation and education of selected military, civilian, and international leaders. Is the mission of Carlisle to train or to educate? The differences are not subtle. Stiehm argues that the nature and composition of the faculty, design of the curriculum, and manner of course presentation all lead one to conclude that Carlisle is a training institution, not optimized for education, and that if the mission of Carlisle is in fact education, significant changes are required.

The second deals with the most basic constitutional issue of civilian control of the military. Stiehm concludes that the Army War College does not adequately prepare future senior leaders for the complications of realpolitik. She posits that there is an erosion of civilian control of the military and that this erosion is partially the result of the failure by the senior service colleges to ensure that graduates appreciate the unique position of the military, as it relates to government officials elected by the citizenry.

The third issue deals with the notion that we preserve the peace by preparing for war. Stiehm concludes that the Army War College may be spending too much time preparing for the wrong war and is unresponsive to today's security environment. She argues that the college could become a powerful change agent for military strategy, structure, and procurement, if certain of her recommendations were adopted. Among her recommendations are increased hiring of civilian Ph.D.s rather than retired military officers with doctorates, who, according to Stiehm, are of limited utility; increased independent research by the faculty; redesign of the curriculum to create "discomfort" (that is, to cause students to think outside of their comfort zones); and offer master's degrees to only a limited number of students.

Stiehm provides much grist for the intellectual mill and does the Army War College a service by creating a framework for professional dialogue and offering recommendations for future improvements.

BILL BROWN Colonel, U.S. Army



de Montbrial, Thierry and Jean Klein, eds. *Dictionnaire de Stratégie*. Paris: Presses universitaires de France, 2000. 604pp. \$130.92

At a moment when American and French perceptions of security threats and appropriate policy responses in the Middle East are in apparent collision, it is well to be reminded how little Americans in the defense intellectual community know of their French counterparts. Yet as this volume shows, strategic studies in France are not only alive and well but well informed, intellectually sophisticated, and surprisingly free of anti-American animus.

Thierry de Montbrial, director of the prestigious French Institute of

International Relations (IFRI), and Jean Klein, a professor at the Sorbonne, have assembled a wide-ranging collection of articles emphasizing the historical and theoretical dimensions of strategy, though without neglecting such current topics as terrorism, the Yugoslav crisis, NATO, or the revolution in military affairs. There are substantial pieces on various national schools of strategic theorizing, beginning with the ancient Greeks, Romans, and Chinese, and ending with the Soviets and the "Anglo-Saxons." Carl von Clausewitz is given due deference throughout, but the book also broadly acknowledges the reality of "culture" in shaping strategic rationality. There is a good general article on "strategic culture," as well as useful separate essays on Chinese and Asiatic strategic culture by Valérie Niquet, author of a treatise on Chinese strategy (Les fondements de la stratégie chinoise, Paris, 1997) that ought to be more widely known on this side of the Atlantic.

Great commanders (even Napoleon) are given short shrift by the editors except as contributors to the development of the art of war, but there are individual articles on strategic thinkers both minor and major. From the Anglo-Saxon world, Alfred Thayer Mahan, Julian Corbett, J. F. C. Fuller, T. E. Lawrence, Liddell Hart, Bernard Brodie, and Herbert Rosinski make up what is perhaps not an obvious selection. (Particularly interesting is the appreciation of Rosinski, a German refugee who, while on the faculty of the Naval War College, produced notable yet today almost completely neglected works on the historical development of strategy and on naval strategy.) From the French tradition, there are the standard figures-Antoine Henri Jomini, Ardant du Picq, Ferdinand Foch, Charles de Gaulle, Raymond Aron, Raoul Castex (the foremost French naval theorist), André Beaufre, Pierre Gallois, and others; there are also obscure yet interesting names, like Paul-Gédéon Joly de Maizeroy (1719-80), who apparently introduced the term "strategy" in reference to the higher component of the art of war, and the contemporary strategist Lucien Poirier.

Montbrial's own substantial essay on the theory of strategy deserves particular attention. Montbrial distinguishes his own view from that of certain of the other contributors, defining strategy in a broad sense to encompass aspects that transcend the art of war as such. He is well versed in game theory and the American business strategy literature, yet, unusually, reserves a place for "glory" in the strategic calculus. Of the other contributors, mention should also be made of Hervé Coutau-Bégarie, author of a Traité de stratégie (Paris, 1999) as well as a number of works on naval history and strategy, and François Géré, who has produced studies of American strategy and military policy and of psychological warfare. It is to be hoped that this material will not forever remain untranslated.

CARNES LORD Naval War College

OF SPECIAL INTEREST

SIENA COLLEGE MULTIDISCIPLINARY SYMPOSIA

Announcement

Siena College, in Loudonville, New York, announces the eighteenth in its multidisciplinary symposia, to be held 5–6 June 2003 on the theme "World War II: A Sixty-Year Perspective." The focuses will be fascism and Nazism; New Guinea and the Southwest Pacific theater, the Central Pacific campaigns, the air war, Sicily and Italy, and the North Atlantic; diplomatic, political, and military history; literature, art, film, and popular culture; and women's and Jewish studies. Asian, African, Latin American, and Middle Eastern topics of relevance are solicited, as well as collaboration and collaborationist themes, the home front, conscription, and dissent. Inquiries to Dr. Karl Barbir, Department of History, Siena College, 515 Loudon Road, Loudonville, NY 12211-1462, tel. (518) 783-2512, fax (518) 786-5052, e-mail barbir@siena.edu.

AECT "CRYSTAL AWARD"

The web-enhanced course offered by the Naval War College's National Security Decision Making Department has won the prestigious Association for Educational Communications and Technology 2002 "Crystal Award." Founded in 1923, the AECT is a professional association of thousands of educators and others devoted to improving instruction through technology. It interprets "technology" in terms not merely of hardware and software applications but also of how this technology enhances the learning process for students and their understanding of the people, events, places, and things through which they learn.

There are only two awards each year, one of them for distance education. Each award recognizes the most innovative and outstanding multimedia-based instructional and distance-learning projects for 2001–2002. The award committee selected the NSDM web-enhanced course on the basis of innovative and creative use of the medium, instructional value and relevance, instructional strategy, quality of production, evidence of successful utilization and implementation, and evidence of achievement of goals and objectives. The award is an important recognition of the entire NSDM faculty and their colleagues in the College of Distance Education of the Naval War College.

U.S. ARMY WAR COLLEGE STRATEGIC LANDPOWER ESSAY CONTEST 2003

The U.S. Army War College, in Carlisle, Pennsylvania, and the U.S. Army War College Foundation have announced the fifth annual Strategic Landpower Essay Contest. Topics must relate to the advancement of professional knowledge of the strategic role of landpower in joint and multinational operations. Eligibility to enter and win is open to all except those involved in the judging. The USAWC Foundation will award a prize of one thousand dollars to the author of the best essay and five hundred dollars to the runner-up. For information and a copy of the rules, contact Dr. Jerome J. Comello, U.S. Army War College, Department of Military Strategy, Planning and Operations, 122 Forbes Avenue, Carlisle, PA 17013-5242. Essays must be postmarked before 1 June 2003.