NAVAL WAR COLLEGE REVIEW

Winter 2005
Volume 58, Number 1

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Cover

General Order 325 of 6 October 1884, drafted by Stephen B. Luce and signed by the Secretary of the Navy, William E. Chandler, establishing the Naval War College and making Commodore Luce its first president.

GENERAL ORDER, NO. 325.

October 6, 1884.

A college is hereby established for an advanced course of professional study for naval officers, to be known as the Naval War College. It will be under the general supervision of the Bureau of Navigation. The principal building on Coasters' Harbor Island, Newport, R.I., will be assigned to its use, and is hereby transferred, with the surrounding structures and the grounds immediately adjacent, to the custody and control of the Bureau of Navigation for that purpose.

The college will be under the immediate charge of an officer of the Navy, not below the grade of commander, to be known as the President of the Naval War College. He will be assisted in the performance of his duties by a faculty.

A course of instruction, embracing the higher branches of professional study, will be arranged by a board, consisting of all the members of the faculty and including the president, who will be the presiding officer of the board. The board will have regular meetings at least once a month, and at such other times as the president may direct, for the transaction of business. The proceedings of the board will be recorded in a journal.

The course of instruction will be open to all officers above the grade of naval cadet.

Commodore S. B. Luce has been assigned to duty as the president of the college.

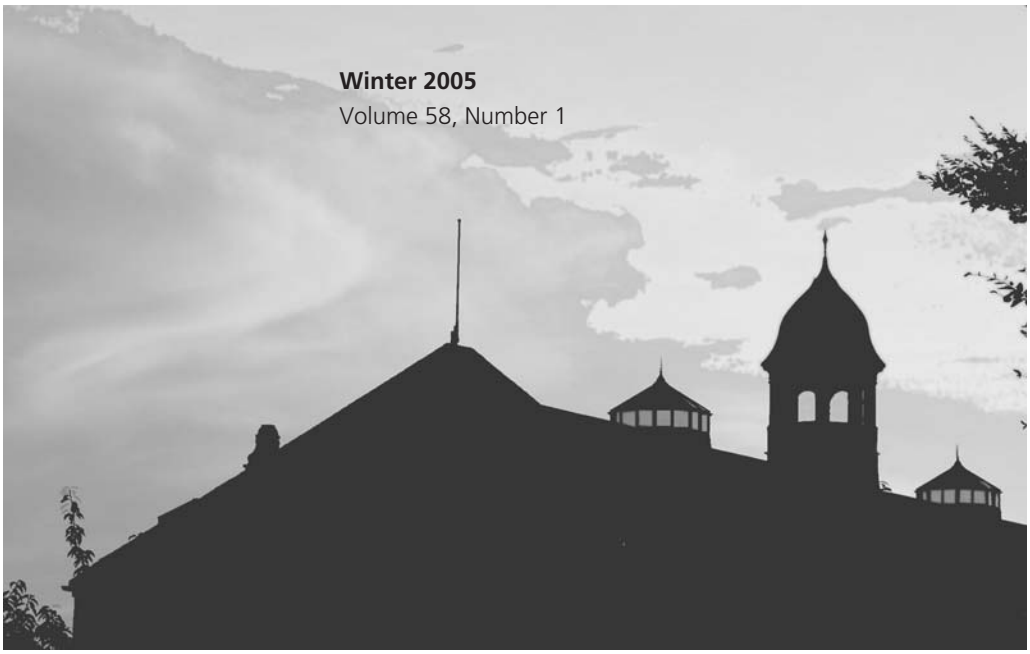
WM. E. CHANDLER,
Secretary of the Navy.

This year the institution marked its 120th anniversary with ceremonies on 6 October (including an "appearance" by the Commodore) and a commemorative coin—as well as with a highly successful visit in September by the Commission on Institutions of Higher Education of the New England Association of Schools and Colleges. That visit completed the on-site evaluation phase of a process (the ten-year comprehensive evaluation required for all NEASC-accredited colleges) that, we are confident, will ultimately continue the College's accreditation, originally granted in 1994, to confer the master of arts degree in national security and strategic studies.

"The principal building on Coasters' [sic] *Harbor Island" was the poorhouse and asylum for the deaf and dumb of Newport, Rhode Island. Built in 1819 and renamed Founders Hall in 1976, it now houses the Naval War College Museum, the Maritime History Department, and the Naval War College Press.*

For background and further information, see Sailors and Scholars: The Centennial History of the Naval War College *(1984), by John B. Hattendorf, B. Mitchell Simpson III, and John R. Wadleigh, sold at the Naval War College Foundation Museum Store.*

NAVAL WAR COLLEGE REVIEW



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CONTENTS

President's Forum 5

Terrorism and the New Security Dilemma 11
Philip G. Cerny

The reliability of interstate balances of power is declining; the capacity of the "states system" to provide security is deteriorating; the state itself is coming under increasing centrifugal pressure from both outside and inside, from above and from below; and the reshaping of the wider political environment in reaction to complex globalization remains rudimentary and uneven. We can expect substate and cross-border destabilization and violence, including but certainly not confined to terrorism, to become increasingly endemic.

From Conscripts to Volunteers
NATO's Transitions to All-Volunteer Forces 35
Cindy Williams

Like the United States after the Vietnam War, European militaries are seeking creative solutions to recruit, retain, and motivate the high-quality volunteers they need. But the demographic, economic, social, and labor environments within which the militaries compete for employees are different, and Europe is likely to find the task more difficult, costly, and lengthy than did the United States.

Grand Strategies for Dealing with Other States in the *New*, New World Order 63
James F. Miskel

Three broad strategies for maximizing the benefits the United States receives from state-to-state assistance programs are current today—the pivotal, buffer (or "seam"), and failed-state strategies. Examination of the assumptions and conceptual approaches imbedded in them shows that none represents an adequate strategy for dealing with the security threats of the present day and age.

Medical Support of Twenty-first-Century Warfare

The Mosquito Can Be More Dangerous than the Mortar Round
The Obligations of Command 77
Arthur M. Smith and Craig Hooper

Flesh and blood are critical elements of all weapon systems. Absent the will and physical capability to fight due to uncontrolled disease, any equation for victory is doomed. As the painfully high rate of malaria infection among unprotected Marines in Liberia recently demonstrated, the global war on terrorism, and especially expeditionary warfare in the underdeveloped world, may be completely paralyzed without a wholesale commitment of leadership "from the top" to environmental protection of troops under their command.

Hospital Ships in the War on Terror
Sanctuaries or Targets? 89
Richard J. Grunawalt

The immunity of hospital ships from attack is firmly established in international law; they have long enjoyed a "safety in vulnerability" rooted in their humanitarian purposes, universally respected by principled belligerents. But to a terrorist their white paint, red crosses or crescents, and special signals simply make them conspicuous and attractive "soft" targets. It is time to consider effective defensive armament for them—or failing that, abandoning their protected status.

World War II Carrier Warfare

Midway
Sheer Luck or Better Doctrine? 121
Thomas Wildenberg

The American and Japanese navies in the interwar years both acknowledged the transformative nature of the aircraft carrier, but they made strikingly different choices in implementing that naval revolution. The contrasting carrier doctrines and force structures these choices produced were tested decisively at Midway, in ways that speak to the nature of military technological innovation.

Race for the Decisive Weapon
British, American, and Japanese Carrier Fleets, 1942–1943 137
James P. Levy

It is popularly understood that after the spectacular American victory at the battle of Midway the aircraft carrier reigned supreme. However, it was not until 1944 that in fact carriers ruled the waves. Why the delay?

Review Essay
A New Standard for the Use of Force? 151
The Pentagon's New Map: War and Peace in the Twenty-first Century, by Thomas P. M. Barnett
reviewed by Lawrence J. Korb

Book Reviews
Hungary and NATO: Problems in Civil-Military Relations, Poland and NATO: A Study in Civil-Military Relations, and NATO and the Czech and Slovak Republics: A Comparative Study in Civil-Military Relations, by Jeffrey Simon
reviewed by Rachel Epstein 155

NATO and the Former Yugoslavia: Crisis, Conflict and the Atlantic Alliance, by Joyce P. Kaufman
reviewed by Tom Fedyszyn 158

A Time of Our Choosing: America's War in Iraq, by Todd S. Purdum
reviewed by D. L. Teska 160

At Cross Purposes: U.S.-Taiwan Relations since 1942, by Richard C. Bush
reviewed by Bruce Elleman 161

The Diffusion of Military Technology and Ideas, edited by Emily O. Goldman and Leslie C. Eliason
reviewed by George H. Quester. 163

Making War, Thinking History, by Jeffrey Record
reviewed by Jan van Tol 164

Generation Kill: Devil Dogs, Iceman, Captain America, and the New Face of American War, *by Evan Wright*
reviewed by Reed Bonadonna 166

Negotiating with North Korea, *by Richard Saccone*
reviewed by Xavier K. Maruyama 168

Paradoxes of Strategic Intelligence: Essays in Honor of Michael J. Handel, *edited by Richard K. Betts and Thomas G. Mahnken*
reviewed by Efraim Inbar 170

Battle Ready, *by Tom Clancy, with General Tony Zinni (Ret.) and Tony Koltz*
reviewed by Henry Bartlett 172

All the Factors of Victory: Admiral Joseph Mason Reeves and the Origins of Carrier Airpower, *by Thomas Wildenberg*
reviewed by Chris Madsen 174

A Rage for Glory: The Life and Times of Commodore Stephen Decatur, USN, *by James Tertius de Kay*
reviewed by Wade G. Dudley 175

John Paul Jones: Sailor, Hero, Father of the American Navy, *by Evan Thomas*
reviewed by Alan Cate 177

Of Special Interest 178

From the Editors 179

Index of Volume 57
Articles and Essays 181

Rear Admiral Jacob L. Shuford was commissioned in 1974 from the Naval Reserve Officer Training Corps program at the University of South Carolina. His initial assignment was to USS Blakely *(FF 1072). In 1979, following a tour as Operations and Plans Officer for Commander, Naval Forces Korea, he was selected as an Olmsted Scholar and studied two years in France at the Paris Institute of Political Science. He also holds master's degrees in public administration (finance) from Harvard and in national security studies and strategy from the Naval War College, where he graduated with highest distinction.*

After completing department head tours in USS Deyo *(DD 989) and in USS* Mahan *(DDG 42), he commanded USS* Aries *(PHM 5). His first tour in Washington included assignments to the staff of the Chief of Naval Operations and to the Office of the Secretary of the Navy, as speechwriter, special assistant, and personal aide to the Secretary.*

Rear Admiral Shuford returned to sea in 1992 to command USS Rodney M. Davis *(FFG 60). He assumed command of USS* Gettysburg *(CG 64) in January 1998, deploying ten months later to Fifth and Sixth Fleet operating areas as Air Warfare Commander (AWC) for the USS* Enterprise *Strike Group. The ship was awarded the Battle Efficiency "E" for Cruiser Destroyer Group 12.*

Returning to the Pentagon and the Navy Staff, he directed the Surface Combatant Force Level Study. Following this task, he was assigned to the Plans and Policy Division as chief of staff of the Navy's Roles and Missions Organization. He finished his most recent Pentagon tour as a division chief in J8—the Force Structure, Resources and Assessments Directorate of the Joint Staff—primarily in the theater air and missile defense mission areas. His most recent Washington assignment was to the Office of Legislative Affairs as Director of Senate Liaison.

In October 2001 he assumed duties as Assistant Commander, Navy Personnel Command for Distribution. Rear Admiral Shuford assumed command of Cruiser Destroyer Group 3 in August 2003. He became the fifty-first President of the Naval War College on 12 August 2004.

PRESIDENT'S FORUM

THESE HAVE BEEN SEVERAL VERY BUSY MONTHS since I was installed as the President of the Naval War College. To be serving in a position once held by Admirals Alfred Thayer Mahan, Raymond Spruance, and Stansfield Turner (among others) is very humbling but also exciting. I return to the College at a time when the need for military leaders able to think critically and shape the future has never been greater. Because the Naval War College is perhaps the finest professional military education institution in the world, I see the College playing an increasingly important role in preparing our students to assume leadership roles in the uniformed services, in government agencies in the national security arena, and in friendly and allied nations around the world.

There have been a number of changes here since I was a student over a decade ago, but the essence and the thrust of the College's education are the same. The demanding program still consists of four core elements: Strategy and Policy, National Security Decision Making, Joint Military Operations, and a robust and varied electives program. Likewise, our research, analysis, and gaming efforts remain focused on helping the Chief of Naval Operations to define the future Navy. We seek and receive a great deal of feedback about our programs and efforts from our accrediting bodies, our Board of Advisors, uniformed and civilian leaders within the Department of Defense, and our growing population of alumni. All indications are that we have the basics about right! But while the fundamental elements of our mission as the Navy's intermediate and senior-level professional military education institution are in place, the context within which we must accomplish our work continues to evolve rapidly.

Taken together, the political, economic, and technological developments in the international security environment represent a genuine sea change in the way we think about, shape, plan, and employ our naval forces. Over the College's long history, I suspect, every president, faculty, and student body has sought to grasp the significance of the changes around them. I am convinced, however, that the *scope* and *pace* of change today are extraordinary. Thus, the challenges to our College community—faculty, staff, students, and alumni—are as great as

they have ever been over the 120 years of the institution's existence. New strategic and operational challenges to our nation's security have emerged that demand bold, innovative approaches. The security threats confronting the United States and its allies are unconventional, created by an array of wily foes empowered by advanced technology. Many of the time-honored rules for dealing with other nations do not apply when dealing with nonstate actors such as international terrorist groups, pirates, and organized-crime syndicates.

Along with these asymmetric threats come the political perils of being the world's lone superpower and a demand to nurture better our relationship with friends and allies as we also compete for hearts and minds throughout the world. We must find ways to apply the nation's seapower and military might in greater concert with our diplomatic and informational instruments of power. As Walter Russell Mead said in *Power, Terror, Peace and War*, "We are going to have to reinvent some of the ways we think about power and influence."

In the months and years ahead, the College must act as a prudent mariner, reacting appropriately and decisively to changes in the international security environment. We will play a pivotal role in dealing with the emerging challenges of this new century. As a first step, we have begun a far-reaching internal analysis of all of our resident and nonresident professional military education programs and a thorough review of all our research, analysis, and gaming initiatives. We cannot yet know what these reviews will yield, but the fundamental measures of effectiveness for our efforts are clear: our academic programs and research products must remain relevant and focused on key issues of the day; and our case studies, war games, and exercises must address the issues of transformation, change management, risk analysis, the evolving international security environment, and the defeat of terrorism. Finally, our students must leave here prepared to play immediately key roles in the joint command and control architecture.

The continued interest of our Congress and recent policies established by the Chairman of the Joint Chiefs and by our CNO are unmistakable votes of trust and confidence in what we are doing at the Naval War College. Together, they underscore as well the *expectation* that the College will be a source of thoughtful answers in a world of tough questions. Many of the issues under debate relate to the increasing recognition of the unique value and capabilities of naval forces in a world of decreasing overseas bases and less-assured access. Naval forces have emerged as a key element of the joint future in the form of the *joint sea base* and other evolving concepts. With the objective of ensuring a range of flexible responses to the president and commander in chief, we must apply the College's considerable intellectual capital and operational expertise to exploiting capabilities unique and inherent in naval modes of operation.

We have a truly extraordinary advantage here in Newport to meet our nation's and our Navy's expectations.

- A highly capable and motivated faculty and student body.
- A commitment to research and analysis absent parochial interests.
- Complete naval "ownership"—we are "inside the lifelines."
- A close and complementary relationship with the Navy Warfare Development Command and the CNO's Strategic Studies Group here in Newport and the Naval Postgraduate School in Monterey, California.

In light of the factors outlined in the previous paragraphs, we have identified our three top goals for this flagship institution:

The first is to ensure that all our professional military education programs remain current, rigorous, relevant, and accessible to the maximum number of students. This requires full-time resident programs that are skillfully crafted to focus on the issues most critical to future leaders, and nonresident programs tailored to the needs of this very diverse student body. We need to educate our officers so they are competent for the age, relevant to the times, and prepared to help shape the future.

The second is to ensure that our research, analysis, and gaming efforts support the needs of the fleet, the combatant commanders, and the Chief of Naval Operations. The Naval War College is a unique asset that "lives outside the beltway" and "thinks outside the box." We need to focus on delivering analytical products that matter to our service and impact key decisions.

The third is to develop and provide the education necessary for officers to operate and lead effectively and efficiently in joint maritime command and staff positions, on combatant commander staffs, and in joint task forces. There is no question that virtually all military operations in the future will be accomplished with joint and multinational forces, led by officers from all services who are first and foremost experts in their own warfare community. But these officers must also be educated and acculturated to work in a joint, interagency, and multinational environment, where the pace and complexities of modern combat operations do not permit the luxury of on-the-job-training—naval officers must arrive *ready to fight.* The Naval War College must become the educational center of excellence for joint command and control in the maritime domain.

In the final analysis, with regard to our educational responsibility, I want to assure you that the College continues to educate our students effectively in joint warfare from a *maritime perspective.* We have a long and proud heritage as the intellectual center of the Navy, and we want to ensure that we focus on the strategic and operational challenges in the maritime domain while being actively

involved in developing naval strategy for the future. With regard to our research, analysis, and gaming function, we must continue to bring our unique advantages to bear on projects of significant importance to our regional commanders, our fleet and numbered fleet commanders, the Navy Staff, and the CNO. Our criterion for success is insight into military conflict of such accuracy and penetration that current and future leaders can say of their own circumstances, as did Fleet Admiral Chester Nimitz at the end of World War II, "The war with Japan had been re-enacted in the game rooms at the War College by so many people, and in so many different ways, [with the exception of kamikaze tactics] nothing that happened during the war was a surprise."

I will keep you informed as we conduct our internal reviews and as we sharpen the focus of our activity and accelerate our advantages. I am thrilled to be aboard, to be associated with this nation's preeminent national security faculty, and to be on the bridge at such a vital moment for our College and the Navy. I am certain we are up to the task.

J. L. SHUFORD
Rear Admiral, U.S. Navy
President, Naval War College

Philip G. Cerny is professor of global political economy at Rutgers University in Newark, New Jersey. He previously taught at the Universities of York, Leeds, and Manchester in the United Kingdom and has been a visiting professor or visiting scholar at Harvard University, Dartmouth College, the Fondation Nationale des Science Politiques (Paris), and New York University. In addition to numerous articles in academic journals, he is the author, editor, or coeditor of several books, including recently Internalizing Globalization: The Rise of Neoliberalism and the Erosion of National Models of Capitalism *(London and New York: Palgrave, 2005).*

An earlier version of this paper appeared as "Neomedievalism, Civil War and the New Security Dilemma: Globalisation as Durable Disorder," Civil Wars *(Spring 1998).*

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TERRORISM AND THE NEW SECURITY DILEMMA

Philip G. Cerny

Since 11 September 2001, the primary focus of American foreign policy has ostensibly been the "war on terror," although the George W. Bush administration has also given priority to other objectives, such as Iraq and national missile defense. This emphasis on the threat of terrorism is extremely valuable for analytical purposes, because it draws attention to key aspects of security today—in particular the central paradox of how to deal with the increasingly diffuse character of threats with the means available to state actors, in what is still to a large extent an interstate system. There are at least two aspects to this problematic. The first is assessing the appropriate or most effective role of states and great powers in reacting to and dealing with terrorism and other direct forms of violence. The second is the relationship of contemporary forms of violence to wider social, economic, and political issues characteristic of the twenty-first century—issues that themselves are becoming increasingly transnationalized and globalized.

GLOBALIZATION AND INSECURITY IN THE TWENTY-FIRST CENTURY

With regard to responding to threats of terrorist violence, on the one hand, terrorism is portrayed as a phenomenon unlike previous generalized threats. Although specific instances of terrorism in history are legion, they have been sporadic and geographically circumscribed. However, terrorism, like other security issues, has in the twenty-first century become a more and more *transnational* form of violence or warfare. Today it involves networks and patterns of violence that do not resemble the kind of "international" warfare among states that has dominated the international system since the seventeenth century. In

particular, the quasi-random targeting of civilians rather than military forces is widely seen as a fundamental, bottom-line element of the very definition of terrorism.[1] The development of terrorism as a cross-border, nonstate, network-based phenomenon goes contrary to the general perception in "realist" international relations analysis that the most significant threats to international security come from states rather than from nonstate actors. On the other hand, American policy makers today still see terrorism as depending crucially on states for its spread and impact—a perspective that fits with realist preconceptions and is seen to call for traditional national, great power–based military responses. As a recent authoritative analysis of contemporary American foreign policy has argued, the "link between terrorist organizations and state sponsors became the 'principal strategic thought underlying our strategy in the war on terrorism,' according to Douglas Feith, the third-ranking official in the Pentagon." Thus "while terrorists might be described as 'stateless,' they ultimately depended on regimes like the Taliban [in Afghanistan] to operate."[2]

At the same time, the underlying causes and principal motives of terrorist violence are framed by the identification by American policy makers of terrorists themselves as "evil," motivated only or primarily by a hatred of freedom and of America's role in spreading freedom.[3] Its state sponsors are seen to form an "axis of evil" and to have become the chief threats to world order. Therefore the underlying structure of the threat that terrorism embodies for international security is believed by key policy makers in the Bush administration to be fundamentally mediated through and determined by the structure and dynamics of the states system. Indeed, the "hegemonists" (as they have been called) in the Bush administration have integrated terrorism into a state-centric view of international relations and have prescribed unilateral, state-based American leadership as the appropriate response.[4]

In contrast, this article argues that terrorism is merely one dimension of a wider phenomenon that is transforming the international system and domestic politics too around the world—*neomedievalism,* a phenomenon that is leading to the emergence of a new security dilemma in world politics. Both of these concepts will be specified in more detail later in this article. However, broadly speaking, neomedievalism means that we are increasingly in the presence of a plurality of overlapping, competing, and intersecting power structures—institutions, political processes, economic developments, and social transformations—above, below, and cutting across states and the states system. States today represent only one level of this power structure, becoming more diffuse, internally split, and enmeshed in wider complex webs of power. This structure is fluid and fungible, feeding back and undergoing continual adjustments and ad hoc responses to a rapidly changing environment. In this context, the definition of

what is a "security" issue is also becoming more and more fluid and fungible—including the dislocations caused by economic development; the destabilizing effect of transitions to democracy; the undermining of traditional cultures, beliefs, and loyalties; threats to the environmental and public health; and the like.[5] The nineteenth and twentieth centuries experienced similar challenges, and these led to two world wars and the Cold War; however, the economic and political environment of that time actually strengthened the central role of nation-states and of the states system as the main providers of security. Today, they are making this role more and more problematic.

This transformation in turn gives rise to what I have called the "New Security Dilemma."[6] The idea behind the New Security Dilemma is that states are increasingly cut across and hedged around by a range of complex new structural developments and sociopolitical forces that, taken together, are leading to the crystallization of a globalizing world order—more correctly, a "durable disorder"—that in crucial ways looks more like the order of late medieval society than like the world of "modern" nation-states.[7] As analysts have pointed out, many recent international relations theorists have argued that globalization, "the growing economic, political, and social interconnectedness of nations that had resulted from increased trade and financial ties and the rapid advance in communications technology . . . was undercutting the authority of individual states, with power flowing to nonstate actors such as private corporations and transnational activist groups." However, "Bush and his advisors would have none of it."[8]

A new sense of generalized insecurity has emerged, reflecting the fact that the provision of security itself as a public good can no longer be guaranteed by the states system.

This article argues the converse, that the core problems of security in the twenty-first-century world profoundly reflect these globalizing and transnationalizing trends—and their underlying social, political, and economic causes—and that they can be addressed only by reassessing fundamental notions of security. In particular, there has been a clear shift in the dominant form of violence and conflict from one characterized by interstate wars to one in which civil wars, cross-border wars, and "low intensity" or guerrilla-type wars—including terrorism—increasingly predominate and proliferate.[9] Of course, civil and cross-border wars are nothing new, and terrorism has been with us throughout human history.[10] However, their interconnectedness and the way they are inextricably intertwined with other aspects of globalization—linkages that cut across states and crystallize below the level of states—is the key to understanding the nature of contemporary security and insecurity.[11] Terrorism reflects deeper and wider structural changes. In this sense, a war on terror

cannot be a simple war of armed forces but must be a sociopolitical process. Rather than a "war on terror," what is needed is to transform security itself, to make it less like war and more like what the social theorist Michel Foucault, writing in the tradition of eighteenth- and nineteenth-century social philosophy, called "police"—not merely policing in the sense of countering violence and imposing order but pursuing a civilianization of politics and society, stressing social development, welfare, and good governance.[12]

This interconnectedness, of course, reflects not only transnational economic interdependence, usually seen to be the root of globalization, but also a wide range of other related social and political developments. New information and communication technologies have intensified pressures resulting from the interaction of previously nationally compartmentalized social and cultural categories, with an emphasis on the sheer speed of that interaction.[13] The development of Marshall McLuhan's "global village" has been paralleled—or, for some, superseded—by a postmodernist fragmentation of cultures and societies.[14] In political terms, the reidentification of societies as "multicultural," emphasizing shifting identities and loyalties, is unraveling the consolidation of national culture societies that was at the heart of the modern nation-state project from Bismarck's *Kulturkampf* to postcolonial "nation-building."[15] Many major social causes and "cause" pressure groups, such as nongovernmental organizations, as well as sectoral interest groups, are becoming less concerned with negotiating direct benefits from the state and more focused on such crosscutting transnational issues as the environment, women's issues, land mines, political prisoners, sustainable development, and the like.[16] Furthermore, the end of the Cold War unleashed a huge number of social and political grievances that had previously been kept in ideological and political check through direct or indirect superpower control.

National-territorial institutions—states—are thus being overlaid, crosscut, and challenged by a range of less institutionally bound issues, demands, and groups, bridging the micro level, the meso (intermediate) level, and the transnational in ways the state cannot. In this context, those who believe that any one nation-state—even one like the United States that possesses several times the military capabilities of other major powers, let alone minor ones—is in a position unilaterally to provide security as a public good to the global system as a whole are living in cloud-cuckoo-land. Hegemony is not a feasible goal reflecting the realities of the twenty-first century but an attempt to reconstruct the history of the 1950s without the Soviet Union. In a neomedieval world, more complex political, economic, and social approaches are required to fill the basic security gap that results from the multilayered, crosscutting, and asymmetric global and transnational structures of the third millennium.

THE NEW SECURITY DILEMMA

The central dynamic mechanism of stabilization and ordering in the traditional realist states system has been called the "security dilemma."[17] This was the notion that perceived external threats generate feelings of insecurity in states that believe themselves to be the targets of such threats, and that these states take measures to counteract those threats (alliances, arms buildups, etc.). These countermeasures are in turn perceived as threatening by other states, leading to feedback in the form of counter-countermeasures, eventually undermining existing balances of power and creating a vicious circle of ever-increasing insecurity among states. The notion of the "arms race" is the best-known paradigm case of how the traditional security dilemma works. As occurred at the outbreak of World War I, this process can get out of hand.

But the traditional security dilemma is also what links order and change in the realist approach. Only by creating and recreating balances of power—whether through war, development and manipulation of power resources, or politically effective (strong-willed) foreign policy—can this tendency to system breakdown be counteracted and stabilized, at least for long periods, periods usually punctuated by system-rebalancing wars. The breakdown of one balance of power must be replaced by another if conflict is to be minimized. Such an analysis has been at the heart of both classical realism and neorealism.[18] But that dynamic does not work in the same way, if at all, in a more transnationally interconnected world. Changes in the character of the security dilemma since the end of the Cold War have not resulted simply from the breakdown of one particular balance of power—that is, of the bipolar balance between United States and the Soviet Union. Rather, recent changes profoundly reflect the increasing ineffectiveness of interstate balances of power as such to regulate the international system.

The failure of large powers in the 1970s and 1980s to determine outcomes in the Third World through traditional security means—the most salient examples being Vietnam for the United States and the Sino-Soviet split (and later Angola and Afghanistan) for the Soviet Union—was the first major shock to the balance-of-power system itself. The later demise of the Soviet Union did not result just from change in its relative overall power position vis-à-vis the United States. More accurately, the USSR collapsed because of the evolving configuration and interaction of both domestic and transnational pressures stemming from its technological backwardness, international economic interdependence, awareness of social and cultural alternatives by individuals and groups made possible by international contacts and communications, the growth of consumerism and other pressures for "modernization," etc.—with all of which the Soviet Union was less and less able to cope in a more interconnected world. Likewise, growing

complex interdependence in the West undermined the hierarchical alliance structures set up in the postwar period by the United States—for example, with the development of Gaullism in France.[19] Paradoxically, both superpowers became weaker in systemic terms, because traditional forms of power could not cope with the globalizing challenges of the late-twentieth-century international order.

Those challenges were and are particularly stark in the security arena. The lack of utility not only of nuclear weapons, increasingly seen as unthinkable and unusable, but also of limited, low-intensity (guerrilla) warfare—more and more costly and counterproductive for the big powers, as demonstrated in Vietnam and Afghanistan—means now that neither national nor collective security can any longer be reliably based on balances of power among nation-states, and great powers in particular, per se. A new sense of generalized insecurity has emerged, represented not only "from above," by the threat of proliferation of weapons of mass destruction but also "from below," by the rise of civil wars, tribal and religious conflicts, terrorism, civil violence in developed countries, the international drugs trade, etc. This sense of insecurity reflects the fact that the provision of security itself as a public good—the very raison d'être of the states system—can no longer be guaranteed by that system.

In the New Security Dilemma, a new range of incentives is emerging for players—especially nonstate actors but some state actors too—to opt out of the states system itself, unless restrained from doing so by the as yet embryonic constraints of complex, especially economic, interdependence. The costs to remaining states are rising dramatically, as globalization increasingly enmeshes actors—and states—in complex, crosscutting webs of wealth, power, and social relationships. Indeed, to hijack the language of neorealist international relations theory, states are not concerned primarily with "relative gains," their place as states in the international pecking order vis-à-vis other states, but increasingly (thanks to the revolution of rising expectations linked with globalization) with "absolute gains"—better standards of living, individual security, human dignity, and the ability to participate freely in social life. These expectations are undermined by war and by the imperatives of national military organization.

International relations are therefore no longer dominated by holistic, indivisible national interests and collective fears for national survival but rather by divisible benefits pursued by pluralistic, often cross-national networks of individuals and groups, whether peaceful, as in the context of "global civil society," or violent, as in the case of terrorism. In an inversion of the famous quotation from President John F. Kennedy's 1961 inaugural address—"And so, my fellow Americans: ask not what your country can do for you; ask what you can do for your country"—people are less and less satisfied with what their

countries can do for them. They are finding more and more alternative forms of identity and action—from the Internet to links with diasporas and "global tribes," from anti-globalization protests to religious fundamentalism, and from "epistemic communities" to terrorist networks.[20]

This situation has led not only to the rise of new actors and forces below and cutting across the level of the state but also to attempts to reinforce and rebuild state power and the interstate system, in futile attempts to turn back the clock. One manifestation of the latter is the U.S. attempt to counteract terrorism through a more focused and vigorous application of military force, as exemplified by the Bush administration and the long-contemplated war in Iraq.[21] A contrasting manifestation, however, is the attempt by some European states, especially France and Germany, to emphasize multilateral rather than unilateral power balancing, especially through the United Nations. Both of these responses essentially involve a process of "catch-up," lagging the development of micro- and meso-level processes and therefore highly vulnerable to "defection," as the game theorists say—to players quitting the game and heading off on their own. The postwar situation in Iraq abounds with examples of these processes in action, as fragmented groups with contradictory aims create insecurity for both the occupying powers and ordinary Iraqis, and as international alliances shift around reconstruction contracts, potential peacekeeping participation, the role of the American-supported interim government, etc. Cases in point include the 2004 elections in Spain and the emergence of the war in Iraq as the most contentious issue in the 2004 American presidential election campaign.

Rather than a "war on terror," what is needed is to transform security itself—pursuing a civilianization of politics and society, stressing social development, welfare, and good governance.

Perhaps most importantly, attempts to provide international and domestic security through the state and the states system—especially the U.S. attempt to use its power to regulate and control that system unilaterally—are becoming increasingly dysfunctional. They create severe and diverse backlashes at local, transnational, and hegemonic levels, backlashes that further weaken states and undermine wider security. Terrorism, the most extreme example of such a backlash, often actually gains sympathy, adherents, and momentum from the attempts of states to repress it.

Furthermore, these backlashes do not develop in a vacuum. They interact with economic and social processes of complex globalization to create overlapping and competing cross-border networks of power, shifting loyalties and identities, and new sources of endemic low-level conflict—the "durable disorder"

mentioned earlier. Indeed, the notion of a vicious circle inherent in the traditional security dilemma is transposed into the New Security Dilemma, but at an entirely different level. To begin with, attempts to address insecurities through traditional forms of state power, especially hegemony, create further insecurities that provoke backlashes. These backlashes in turn draw both states and nonstate actors farther into the quagmires of ethnic and religious conflict, warlordism, and tribalism, ineffective or collapsed states, and ever-increasing calls on military, political, and economic resources. Such responses simply provoke further resentment, frustration, and hopelessness, and breed endemic low-level conflict. Supposedly hegemonic powers are thus sucked into a widening security gap of their own making.

THE NEOMEDIEVAL SCENARIO

In order to understand the overall pattern and direction of these changes, it can be heuristically useful to reframe the problem through an unusual but suggestive historical analogy, an analogy that paints a wider picture. In this case, we start from the assertion that nation-states are simply not what they used to be. Rather than being able to make certain kinds of domestic public policy in ways that are insulated from "external" constraints and to support commonly held social values through centralized institutions—what neorealist theorists think of as the essential "hierarchical" character of the state—nation-state-based institutions and processes are increasingly being transformed into transmission belts and enforcement mechanisms for outcomes arrived at on myriad diverse levels across the wider global system. The line between the "inside" and the "outside" is increasingly blurred structurally and transgressed by all sorts of actors. At the same time, however, this global system is itself becoming more and more institutionally diverse and complex, characterized by attributes that echo features of a world apparently lost since the decay of feudalism and the early rise of the nation-state in the fourteenth through seventeenth centuries.

Today we live in an era of increasing speed, global scale, and the extremely rapid diffusion of information and technological innovation—characteristics that seem to be outgrowing the political capacities of the existing institutional order, just as analogous long-term trends outgrew the old order of the Middle Ages.[22] In an exercise of what is generally called "neomedievalism," we will be looking here at various widely noted features of the medieval world, especially the late medieval world, in order to draw lessons for the present. These features include:

- Competing institutions with overlapping jurisdictions (states, regimes, transgovernmental networks, private interest governments, etc.)

- More fluid territorial boundaries (both within and across states) and a lack of exogenous territorializing pressures
- The uneven consolidation of spaces, cleavages, conflicts, and inequalities, including both unevenly developing new spaces and the fragmentation of old spaces
- Multiple or fragmented loyalties and identities
- The spread of what have been called "*zones grises,*" gray zones, geographical areas and social contexts where the rule of law does not run.[23]

Neomedievalism as a concept is notable primarily for its metaphorical value. In contrast to "modern" notions of statehood or sovereignty, medieval societies were characterized by multiple, overlapping hierarchies and institutions; their structures were multilayered and asymmetric, involving diverse types of authority and social bonds, competing with each other within the same broad and generally ill-defined territorial expanse. As such societies expanded, they increasingly interacted, intersected, and overlapped. In many ways they were victims of their own success, as feudalism led over time to tremendous economic growth and social development. Smaller units like village and tribal/clan societies, unless highly isolated, were drawn into wider systems of competing landlord/warlord relationships, in which layers of hierarchy were permeable and territorial frontiers fluid; these were in turn pulled into wider monarchical and imperial systems, ranging from coherent, quasi-confederal empires to tributary and suzerain systems with little social unity from below. Religious hierarchies frequently crosscut such systems in complex ways; trade routes and fairs sustained a limited market economy, usually on the margins but with growing structural impact; and cities increasingly provided havens for groups that found themselves either on the periphery of, or able relatively easily to navigate across, the complex inner boundaries (and often external frontiers too) of the premodern world. Communications and transport systems obviously constituted a key set of technological constraints and opportunities within which such societies could evolve.[24]

Although the emergence of modern nation-states—and the states system—from this milieu was a complex (and today controversial) matter, that process was always far more than a mere shift from fluid, overlapping structures to rigid hierarchies inside and anarchy outside, as neorealist theory would have it. In contrast, national economies themselves evolved in the context of growing trade, an increasing global division of labor, and the spread of international markets for commodities and finance;[25] national societies provided the breeding ground for both the secular Enlightenment and the spread of modern

universalistic religions; and the emergence of the modern state gave rise to different yet analogous political systems based on bureaucratic rationality, economic modernization, and indeed, competition among themselves, both economic and military.[26] The states system is by no means therefore the antithesis of globalization but its precursor and progenitor. States—and the interstate system—have created the very conditions for their obsolescence or transcendence in an interdependent, crosscutting international and transnational system. The main problem is, of course, that the very success of the state as an embedded institutional structure is also its prison. The nation-state both creates and underpins globalization processes, on the one hand, and prevents those processes from effectively rearticulating governance at a "higher" level, on the other.[27]

In this context, states are losing their capacity to provide the public good of security, while collective governance institutions have a long way to go before they can develop that capacity. Several features of today's neomedieval world feed into this basic security deficit.

Multiple Competing Institutions

The first—and most important—characteristic of the medieval system, already mentioned, was that of competing institutions with overlapping jurisdictions. The early (or pre-) medieval order in Europe, often called the Dark Ages, was a period of extreme localism. Roman-era trade routes were abandoned, imperial legal norms forgotten, and political power fragmented and diffused. Village and local societies exchanged obeisance and sharecropping in return for military protection from relatively localized predators, giving rise to overlapping claims to power and territorial lordship. These arrangements nevertheless laid the groundwork for a basic social stability that enabled economic production to expand, trade routes and cities to grow, and political and legal institutions to develop at different levels.

The Roman Catholic Church developed an extensive, complex hierarchy to monitor and control its vast lands and activities, giving it a certain overarching authority that often conflicted with regional and local power centers. As more surplus goods came to be produced, expropriated, and exchanged, merchants, financiers, artisans, and laborers created guilds and urban corporations, which interacted with preexisting hierarchies. Territorial frontiers were overlapping and ill defined, giving rise to endemic low-level warfare over land and other resources, although the outcomes of such warfare increasingly created precedents of control that crystallized into more formal boundaries over time. The pyramid of wealth and control steepened, and the competing dynastic monarchies claiming to inhabit the apex consolidated; significant sectors of the feudal economy (urban production, moneylending and finance, long-distance trade, etc.) grew

in autonomy and interdependence; and military and taxation bureaucracies became institutionalized. In these ways the stage was set for the nation-state to emerge from the creative destruction of the warfare of the fifteenth through seventeenth centuries.[28] The feudal nobility did not lose its power and wealth; rather, it was absorbed into the system.[29] These changes enabled more militarily, bureaucratically, socially, and economically organized nation-states to develop.

Today, this process of state consolidation is being, if not actually reversed, at least significantly modified and reshaped. Overlapping and competing jurisdictions and socioeconomic arrangements are creating a world that looks more and more like a medieval one. In the first place, states themselves are being transformed into structures that will be better able to survive in a multilayered/multitiered global context, that of the "competition state."[30] Monitoring and regulating economic activities are likely to differ from sector to sector, depending upon the scope and scale of the microeconomic and mesoeconomic characteristics of each sector—especially its degree of transnationalization—with the effective purview of states limited to those sectors the organization of which structurally corresponds to the requirements of effective promotion, monitoring, and control at a national/territorial level.[31] Nation-states will probably look more like American states within the U.S. federal system—with circumscribed remits but important residual policy instruments and the ability to exploit niches in the wider system through limited taxation and regulation. They will be analogous to what have been called "postfeudal residual aristocracies" in a more and more globally integrated capitalist environment, focusing on what is good for their own domestic estates—the benefits of globalization—while seeking not to lose too much power and prestige to the nouveaux riches or transnational elites and new transgovernmental bureaucracies of the global economy.[32]

Further, in the international political economy, transnational regimes, new forms of private economic organization, transnational strategic alliances, and the globalization of financial markets are forcing a convergence and homogenization of the rules, procedures, and outcomes of public policy formulation and of implementation across borders.[33] In addition to transnational interest group formation and the development of transgovernmental coalitions bringing regulators and policy makers in overlapping spheres into regular networks that cut across "splintered states," this rapid but asymmetric multilayering of political and economic institutions is leading to the emergence of quasi-public, quasi-private dispute-settlement regimes seeking to arbitrate competing claims for rights and privileges—the core of what has been called the "privatization of governance."[34]

Probably the most consensual and homogenizing dimension of globalization is the spread of Western, capitalist conceptions of property rights at both national and international levels. However, as has been argued, the lack of effective private-property-rights regimes in developing countries not only undermines their endogenous development but condemns those countries to continued predatory impositions by transnational economic actors, especially where the latter are allied to local and state elites.[35] In addition, it could be said that with regard to intellectual property rights in particular, capitalist society developed despite rather than because of the existence of an intellectual-property-rights regime, as the result of diffusion of ideas treated as public goods. If a strict intellectual-property-rights regime were to be constructed, it might actually prevent such diffusion in the future, leading to a new form of "enclosure" that would reinforce other social, economic, and political asymmetries in a neomedieval world.[36]

Therefore, the fact that the state is increasingly enmeshed in crosscutting economic, social, political, and indeed "transgovernmental" webs (where state actors are exposed to transnational pressures and linked into transnational networks) and that a range of complex, asymmetric, crosscutting authoritative institutions are being created or adapted to operate in a globalizing world are, in combination, leading to the crystallization of a global quasi-order that looks more like the medieval world than the "modern" nation-state system of the late nineteenth and early twentieth centuries. Even in the security area—the "bottom line" of the modern nation-state—the intersection of economic globalization, multiculturalism, proliferation of multilevel institutions, and the like, on the one hand, and the fragmentation of techniques, tactics, and strategies of warfare along the lines of low-intensity wars, civil wars, terrorism, and the "revolution in military affairs," on the other, looks more like the fragmented, multilevel warfare of the Middle Ages than like the "total wars" of the first half of the twentieth century. Clausewitz's dictum that "war is the continuation of politics by other means" refers today less to the clashes of nation-states than to the clashes of so many different social, economic, and political forces under, over, and cutting across the nation-state level and increasingly defecting from the states system itself.[37]

Fluid Boundaries and the Lack of Exogenous Territorializing Pressures

The main causal factor missing from this process today, one that was nevertheless crucial for the transition from feudalism to the nation-state, is that of exogenous systemic competition. Embryonic nation-states in the late and post-feudal periods consolidated domestically to a large extent because they continually clashed with other—comparable—pretenders to stateness, national wealth, and

autonomy. The institutionalization of competition and conflict between and among increasingly powerful European dynastic families in the late medieval period led to the expansion of state bureaucracies and their growing penetration into more and more exclusively territorialized—national—social and economic bases. However, just as the Chinese Empire, in Paul Kennedy's analysis, stagnated because it experienced no fundamental external threat for many centuries, so today's neomedieval international order faces no direct exogenous political or military pressures for institutional consolidation at a global or transnational level—unless something like a Martian invasion occurs, of course.[38] The United Nations, for example, has no external enemy to fight and therefore no way of turning a potential outside threat into a question of survival—a situation that constrains its capacity to institutionalize "collective security." Thus an increasingly dense, multilayered, and asymmetric set of competing institutions with overlapping jurisdictions—including and enmeshing, not breaking up, the residual nation-state—will stumble on, untroubled by exogenous pressures to consolidate.

In this context, nation-states will find—weaker states first, stronger states later on—that their territorial and authoritative boundaries will effectively become more fluid. Of course, legal sovereignty is not formally threatened, state borders still appear as real lines on the map, and guarantees of diplomatic recognition and of membership in certain international institutions remain. Substate ethnic and separatist movements, however, increasingly threaten the cohesion of collapsing states (like Lebanon and Somalia), "transnational territories" (such as those unevenly controlled until recently by the National Patriotic Front of Liberia), and so-called archipelago states like the former Zaire (now the Democratic Republic of Congo), at the same time that such states cling to existing borders for dear life, in the name of elite legitimacy and continued control.[39] Iraq in mid-2004 is an excellent example, where ethnic rivalries have led some actors—and even Western analysts—to call for the breakup of the country into Sunni, Shia, and Kurdish states, yet all three groups are aware that such a development would reduce their overall power both internally and externally. Therefore it is unlikely that the actual breakup of nation-states per se will be as significant a development as the exogenous and endogenous differentiation of their authority, as discussed above—especially for the older and wealthier nation-states of the North. Nevertheless, centrifugal pressures on "empire-states" like Russia and China are likely to grow in importance as the penetration of crosscutting sectoral and market pressures expands within those

States today represent only one level of this power structure, becoming more diffuse, internally split, and enmeshed in wider complex webs of power.

territories and as groups like Chechens and Uighurs develop a sense of being collective players in the wider game.[40]

At another level, the emergence of international or transnational regions is playing an increasing role in territorial organization. However, what is most interesting about these regions is not their institutional coherence or supra-statelike structural form; indeed, the European Union is the only region with that sort of quasi-state coherence (although even that is in doubt, with the recent travails of the proposed European Constitution). What is most interesting is that regions are themselves multilevel, asymmetric entities, with crisscrossing internal fault lines—subregions, cross-border regions, local regions, not merely "nested" but often conflicting, with national, transnational, and subnational rivalries poorly integrated—based mainly on the density of transactions that in turn reflect the complexity and circularity of wider globalization processes.[41] It is the diversity of their internal structures and external linkages that is most striking, not their similarity. The recent trend toward developing the concept of "multilevel governance" simply reveals the complexity and variance inherent in regional projects.

Finally, the main significance of the recent war in Iraq in this context is the fact that it long formed a crucial part of a project to counteract the kind of fissiparousness associated with globalization by militarily ratcheting up the United States into a hegemonic empire. On the one hand, despite overwhelming U.S. military spending and force levels—including the various technological developments usually brought together under the rubric of the "revolution in military affairs"—a number of problems stemming from the attempt to build new domestic structures in collapsed or defeated states, such as Somalia in 1992–93 and contemporary Afghanistan, imply the need for a strategy of reconstruction that can only be ongoing, interventionist, and well organized.[42] Other nation-states, although increasingly enmeshed in various global and transnational economic and social webs, are unlikely simply to cede the hegemonic ground to the United States and will increasingly seek to counterbalance American power, especially by other means.

Probably the most interesting potential aspect of such behavior is that it will not necessarily take the form of specifically military balancing, although there will be a certain new willingness to reverse the decline of military establishments in Europe, Russia, etc. Rather, we are witnessing the revival of an old idea from the 1960s, that of the emergence of a whole new category, the "civilian superpower," the strength of which comes from its economy and from the political clout that its economy brings.[43] The European Union has never aspired to be a military superpower, although military cooperation is increasing. American hegemonic pretensions are likely not so much to provoke further European

military consolidation as to accelerate attempts to develop and expand Europe's "civilian" influence on world affairs—an influence that is likely to be far more attractive in other parts of the world, too, when it comes to creating alliances and below-the-state networks of influence. Finally, international institutions such as the United Nations, the various international economic institutions like the International Monetary Fund and the World Bank, and political processes such as G-8 meetings and trade negotiations—often lumped together under the rubric of "global governance"—are likely to have been sidelined only temporarily by the war in Iraq.[44]

The Uneven Consolidation of New Spaces, Borders, Cleavages, Conflicts, and Inequalities

The main structural fault lines—political, social, and economic—in this complex world reflect not clear territorial boundaries enclosing hierarchical authority structures but rather new distinctions between different levels of economic cleavage and urban/rural splits. The academic literature on global cities, for example, reflects the concept that a range of "virtual spaces" in the global political economy will increasingly overlap with, and possibly even replace, the "real" space of traditional geographical/topological territories, in a process that has been called "denationalization."[45] These new spaces are embodied—and increasingly embedded—in transaction flows, infrastructural nodes of communications and information technology, corporate headquarters, "edge city" living complexes for "symbolic analysts," increasingly "dematerialized" financial markets, and cultural and media centers of activity (and identity).[46] According to Christopher May, control of new ideas and innovations will come to be increasingly concentrated in such areas, protected and secured by a growing panoply of international and transnational intellectual property rights.[47]

The specific spaces that people perceive and identify with are likely to become increasingly localized or micro-level in structure—in the Middle Ages, space was highly localized, of course. People may even lose their very perception of space as partitioned vertically and learn over time to "navigate" between different overlapping, asymmetric layers of spatial perception and organization, in a process of "fragmegration"—a dialectic of fragmentation and integration.[48]

On the one hand, there will be continual fragmentation of old spaces, in a process that will be both asymmetrical and episodic, giving rise to newly entrenched spatial inequalities. The poorer residents of such areas will find themselves increasingly excluded from decision-making processes. In areas where navigation among complex structural layers is more difficult—for example, where such nodes, infrastructure, activities, etc., do not exist within easy reach or perception, such as across large geographical spaces—many people will

simply be "out of the loop," country bumpkins or even roaming, deprived bands, "primitive rebels."[49] Consider contemporary Albania or, more starkly, Somalia and the Democratic Republic of Congo, where those people mobile enough to escape the hinterland are forced once again to become predators or supplicants, this time in the cities, as in the Middle Ages.

On the other hand, there may emerge new levels of social organization that combine social identity and solidarity, common economic interests, and embryonic political organization—what have been called "spheres of authority."[50] However, it is unclear whether these spheres will be relatively consistent and uniform entities, on the one hand, or highly irregular, uneven, ad hoc political spaces, on the other. It is unclear even if they will be large and well enough organized to be effective—that is, whether they will enjoy sufficient economies of scale to pursue effectively common interests or provide public goods. Evidence seems to point to the increasing *in*effectiveness of such entities in the face of global and transnational pressures and structural trends, although the interaction of such new spaces with each other and with older structures of governance may serve to regularize them somewhat.

Both of these trends are likely to alter the way economic interests are articulated and aggregated. Changes in institutions, the fluidity of territorial boundaries, and the increasing hegemony of global cities will interact with new forms of "flexible" labor processes and economic organization to increase inequalities and turn downwardly mobile workers (especially the less skilled, the ghetto dwellers, etc.) into a new *Lumpenproletariat,* underclass, or subcaste—a process well under way in the First World and already dominant today in large parts of the Third World. In this context, it will not be primarily ethnic loyalties and tribal enmities that will undermine the community represented by the nation-state, although they have so far been the leading edge of cultural fragmentation. It will be the development of complex new inequalities of both real class and virtual geography. Such inequalities will be far more difficult to counterbalance and neutralize without effective or legitimate state institutions, and, especially when they are allied to other cleavages, they are likely to constitute an increasing source of civil and cross-border violence.

Fragmented Identities

Such a situation will not merely be one of fragmentation but one of *multiple loyalties and identities*.[51] As in the Middle Ages, occupational solidarity, economic class, religious or ethnic group, ideological preference, national or cosmopolitan values, loyalty to or identity with family, local area, region, etc., will no longer be so easily subsumed in holistic images or collective identities. Indeed, a neomedieval world will be one of social and political schizophrenia, with

shifting patchwork boundaries and postmodern cultural images. National identities are likely to become increasingly empty rituals, divorced from real legitimacy, "system affect," or even instrumental loyalty.[52]

On the other hand, the question of how such multiple identities can coexist in a stable fashion has led some observers to attempt to develop analogies for the unifying ideological and cultural role of the Roman Catholic Church in the Middle Ages. These writers have attempted to identify possible successors to this role in a neomedieval world—perhaps New Age philosophy or the environmental movement. However, any truly global cultural identity structure will have to be not homogeneous or unifying but intrinsically multilayered and amorphous.

Paradoxically, however, this shapeless postmodernity gives identity increased flexibility and resilience in a globalizing world, a chameleon-like adaptability to a wide range of differentiated contexts. Identities are not overarching and global—in the way, for example, that ecologists refer to "the planet," or *gaia*—but, like the institutions and spaces discussed earlier, seem increasingly to take a variety of different, often conflicting, forms. Identity and a sense of belonging have been identified throughout human history as crucial to coherent social bonds and therefore to political stability and effectiveness. As General Charles de Gaulle wrote in 1934, "Human passions, insofar as they remain diffused, realize nothing ordered, nor in consequence effective. It is necessary that they be crystallized in well-defined circumscriptions."[53] This implies a continual search for identity, not a mere postmodernist fragmentation but concrete attempts to restore old identities and to construct new ones. At one extreme, small-scale territorially based communities seek to break away from superimposed nation-state identities to insulate themselves and their ways of life from global trends; the peasants of Chiapas in southern Mexico, for all their use of international revolutionary slogans and images, correspond to this category (about which more below).

At another level, non–territorially based groups, especially widespread ethnic and religious groups, may organize in order to control territories of their own; these irredentist elements range from national liberation movements to those who claim the same historic territory, such as Palestinians and Israelis, or Bosnians of different ethnic persuasions. They may also expand to form a transnational movement intended to *extraterritorialize* their very identities. Terrorist groups usually involve some admixture of both of these characteristics, with both a territorial base (e.g., Afghanistan under the Taliban) and an extraterritorial database with extensive network connections (the original meaning of "al-Qa'ida"). However, there is also an increasing rediscovery of extensive cosmopolitan connections. One scholar perceives a historical spread around the world of "global tribes"—the Jewish diaspora, the British Empire and the

Anglo-Saxon legacy, the overseas Chinese, the Japanese, today's Indian diaspora, Latinos, and many others—all on the "road to Cosmopolis."[54] Others write in neo-Marxist terms of "transnational classes" and a newly embedded transnational hegemony of capital.[55] In this process of identity "fragmegration," the sociocultural face of a globalizing world looks very different from that of increasingly crystallized "national culture societies" of the nation-state era and more like a neomedieval one.[56]

The Spread of "Zones Grises"

Finally, in a neomedieval world, there will not only be "niches" for the maintenance of pluralist autonomy for individuals and groups to organize into Rosenau's spheres of authority or to pursue policy goals at multiple levels of governance, but there will also be increased escape routes—and organizational opportunities—for those operating more or less "outside the law." Exit from political society is likely to become a more viable option for a wider range of actors and activities. At one level, such phenomena involve more than just international (and domestic) criminal activities like the drug trade or the (semi-transnational) Russian mafia; they also involve the areas where excluded people live—especially urban ghettoes, at one geographical extreme, and enclaves in inaccessible areas (jungle, mountains, etc.), as noted earlier. Indeed, the toughest problem in this area is the intersection of different dimensions of extralegal activities with legal or quasi-legal ones. For example, the resources and networks of the drug trade not only create alternative power structures and social identities for members of the underclass physically located in ghettoes but extend into state bureaucracies and "legitimate" private firms, as mafias have always done. Another such gray zone arises from the inevitable constitutional conflicts created by the assertion of indigenous rights over what is legitimately local and what legitimately supralocal (provincial, national, regional, etc.), as in Chiapas.[57]

At another level, however, it is likely that many traditionally mainstream social and economic activities will expand as much through gray zones as through legitimate means, much as the so-called black economy has done in many parts of the world during the modern era. A transnationalized "black" economy constitutes a major challenge to the enforcement function of the competition state, and the inclusion or integration of such areas and activities into the complex governance structures of a globalizing world is likely to be extremely uneven. At a third level is a specifically security-based dimension of this phenomenon that cuts across borders and regions too—shifting the focus and locus of conflict and violence even farther away from the interstate pattern and toward the intractable complexities of the micro and meso levels.[58] The New Security Dilemma

means that as the reliability of interstate balances of power declines and as alternative possibilities for global and transnational security are found wanting—that is, as the security deficit grows—the growth of "insecurity from below" creates conditions in which increasingly intractable and complex civil and cross-border wars will become the norm. Backlashes in turn create new insecurities that states are ill suited to counter. Indeed, projects for a new American hegemony are likely merely to accelerate that spiral in the longer term.

DURABLE DISORDER AND THE SECURITY DEFICIT

As noted earlier, the medieval world was not a world of chaos and breakdown but one of relatively "durable disorder." This is also true of today's world. In this context, the development of some sort of coherent global security system is unlikely to come from nation-states or the states system as such. Nation-states are, first, too limited in the scope and scale of what they can do (especially in a post-hegemonic world), and second, too beholden to narrow domestic interests to be able to lead such a transformation process, despite the widespread belief in the United States in the universality of the American ideological message. States can, of course, play a facilitating role, especially as domestic enforcers of global norms and practices, and—paradoxically—in pushing forward a process of economic globalization in order to maximize domestic returns, a kind of barrier-lowering tit-for-tat. However, such developments will merely widen the security deficit, not fill it. The New Security Dilemma means that as the reliability of interstate balances of power declines, as alternative possibilities for global and transnational security are found wanting, and as the process of reshaping the political environment in reaction to complex globalization remains uneven and multidimensional in time as well as space, we can expect substate and cross-border destabilization and violence, including but certainly not confined to terrorism, to become increasingly endemic.

Nevertheless, such turbulence does not necessarily mean chaos. Indeed, the medieval order was a highly flexible one that created a wide range of spaces that could accommodate quite extensive social, economic, and political innovations—eventually laying the groundwork for the emergence of the postfeudal, nation-state-based international order. The twenty-first-century globalizing world order similarly provides manifold opportunities as well as constraints. In the world of global finance, multinational firms, multilateral regimes, and private authority, therefore, the emerging neomedieval world order is most likely, reflecting its medieval predecessor, to be a kind of durable yet fertile disorder—what organization theorists today would call a "heterarchical" order.[59] Nation-states will never regain their unitary, sovereign, hierarchical, multifunctional character, but neither will they be able to appeal to an authoritative world

government. In this sort of neomedieval world, therefore, the fundamental question is not whether American hegemony—or that of any other state or grouping of states—is inherently good or, indeed, bad. There is much to debate on that question. But no state or group of states *as such* are likely to meet effectively the challenges thrown up by the New Security Dilemma and so fill the global security deficit. In this environment, civil wars, ethnic wars, cross-border wars, warlordism, terrorism, and the like must be addressed not as military questions but rather as social, economic, and political ones. What is needed is not so much a war on terror as a political, economic, and social war on the causes of terror—uneven development, inequality, injustice, and, perhaps most importantly, the incredible frustrations engendered by the revolution of rising expectations in a globalizing world—if the vicious circle of the New Security Dilemma is to be broken.

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FROM CONSCRIPTS TO VOLUNTEERS

NATO's Transitions to All-Volunteer Forces

Cindy Williams

Since the Cold War ended, twelve of NATO's twenty-six member states have suspended compulsory military service or announced plans to phase it out, thus joining the United States, Canada, the United Kingdom, and Luxembourg in the family of nations with all-volunteer armed forces (AVFs). Most of NATO's other members are deeply reducing the number of conscripts they call up each year, relying increasingly on volunteers to fill their military ranks.[1]

The national decisions to halt conscription were motivated by a variety of factors. Whatever the paths to those decisions, however, advocates of military reform—including senior leaders in NATO—hold that the volunteer militaries will be better suited to NATO's post–Cold War missions and can deliver modern, high-technology, expeditionary capabilities more cost-effectively than can their conscript counterparts.[2] Some hope that switching to the "small but solid" volunteer model will free up money in payroll and infrastructure accounts that can be reinvested in new military equipment, thus narrowing the capabilities gap that has grown up between the United States and its NATO allies.[3] Unfortunately, as the United States discovered when it ended conscription in 1973, the benefits of shifting to an AVF do not materialize immediately, and the period of transition can be more costly and difficult than anticipated.

Ultimately, within a decade, the United States got through its transition with good pay and educational benefits, professional recruiting, improved conditions

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of military life, and other measures aimed at attracting and keeping high-quality people. Like the United States at that time, European countries are seeking creative solutions to recruit, retain, and motivate the high-quality uniformed volunteers they need and to encourage them to depart when their services are no longer required. The economic, demographic, labor, and social environments within which militaries compete as employers for qualified people differ from country to country, however. As a result, both the appropriate solutions and the difficulty of transition will vary, and the military benefits of AVFs may be more difficult, more costly, and longer in coming in European countries than they were in the United States.

This article looks at the transition to all-volunteer forces in the militaries of NATO. It begins with a brief overview of changing conscription policies and the factors that motivate the shift to an AVF. It then describes some of the problems the American all-volunteer force encountered during its first decade and the initiatives the United States embraced to solve them. It continues with a look at the problems encountered by Europe's militaries as they shift, followed by a discussion of key differences that may make U.S. solutions less effective in NATO Europe. It ends with an overview of initiatives in several European countries and a brief summary.

THE EMERGENCE OF ALL-VOLUNTEER FORCES IN EUROPE

The United States, Canada, the United Kingdom, and Luxembourg share a decades-long tradition of all-volunteer service. Since the end of the Cold War, six nations—Belgium, France, Hungary, the Netherlands, Portugal, and Spain—have ended conscription. The Czech Republic, Italy, Latvia, Romania, the Slovak Republic, and Slovenia plan to phase conscription out within the next several years (see table 1).

The decision to end compulsory service is a national one. A look at the factors motivating the decisions to end conscription reveals both similarities and differences among European countries and between Europe and the United States.

In the United States, the choice was rooted in domestic politics and concerns over social and racial inequities stemming from the draft system that prevailed during most of the Vietnam War. Nevertheless, the deliberations that preceded the decision were informed by studies of a far richer set of issues: social and demographic factors, military effectiveness, economic efficiency, the role of women in the military, the role of and prospects for reserve forces, and other related concerns.[4] The choice to end conscription was particularly favored by economists, who anticipated that a volunteer force would be less expensive in terms of the opportunity costs (foregone wages combined with any preference for civilian life) of individuals who would serve. Economists also predicted that

TABLE 1
CONSCRIPTION POLICIES IN NATO COUNTRIES

Country	Conscription	Number in Active Forces (Thousands)	Number in Reserves (Thousands)	Term of Conscription (Months)	Number of Conscripts (Thousands)	Share of Conscripts in Forces (%)
Belgium	Suspended in 1994	39	14	None	0	0
Bulgaria	Plans to keep	51	303	9	45	88
Canada	No peacetime conscription	60	23	None	0	0
Czech Republic	Phase out by 2006	40	N/A	12	19	48
Denmark	Plans to keep	23	65	4–12[a]	6	25
Estonia	Plans to keep; AVF under consideration	6	24	8[b]	1	24
France	Suspended in 2001	259	100	None	0	0
Germany	Plans to keep; increasing volunteers	283	359	9[c]	93[d]	33
Greece	Plans to keep	178	291	16–19	98	55
Hungary	Called last conscript in 2004	33	90	6	23	70
Italy	Suspend by 2007[e]	200[f]	63	10	40	20
Latvia	Phase out by 2008	5	13	12	2	33
Lithuania	Plans to keep	13	246	12	5	37
Netherlands	Ended in 1996	53	32	None	0	0
Norway	Plans to keep	27	219	12[g]	15	56
Poland	Plans to keep	163	234	12[h]	81	50
Portugal	End in 2003	45	211	4	9	20
Romania	Phase out by 2007	97	104	6–12	30	31
Slovak Republic	Suspend in 2006[i]	22	20	6[j]	8	34
Slovenia	Phase out in 2004	7	20	7	1	18
Spain	Ended in 2001	151	328	None	0	0
Turkey	Plans to keep	515	379	15	391	76
United Kingdom	Ended in 1962	213	273	None	0	0
United States	Ended in 1973	1,434	1,212	None	0	0

Except for dates of conscription, figures are as of 2003.

Sources: Transatlantic roundtable September 2003; IISS, *Military Balance 2003–2004*; U.S. Defense Dept., *Active Duty Military Personnel Strengths by Regional Area and by Country (309A)* (Washington, D.C.: 30 September 2003), available at web1.whs.osd.mil/mmid/M05/hst0309.pdf; NATO Parliamentary Assembly, *25–28 March 2003: Visit to Latvia and Estonia,* www.nato-pa.int; NATO Parliamentary Assembly, *16–19 June 2003: Visit to Poland and Lithuania by the Defence and Security Sub-Committee on Future Security and Defence Capabilities,* www.nato-pa.int; NATO Parliamentary Assembly, *Invited NATO Members' Progress on Military Reforms, 2003 Annual Session,* 146 DSCFC 03 E, www.nato-pa.int; and others.

a. Up to 24 months in certain ranks.
b. 11 months for sergeants and reserve officers; see NATO Parliamentary Assembly, "Invited NATO Members' Progress on Military Reforms, 2003 Annual Session," 146 DSCFC 03 E, www.nato-pa.int.
c. May volunteer to extend service to a total of 23 months.
d. Includes some 25,000 service members who voluntarily extended their periods of conscription to total up to 23 months.
e. A government bill was presented in 2003 to accelerate the suspension of conscription to 2005.
f. Under the Professional Law, will reduce to 190,000 troops.
g. Plus refresher periods; for some, possibility of 6 months with follow-on service in Home Guard.
h. Will drop to 9 months in 2004.
i. Retain authority for 3-month conscription to fill any gaps in military specialties.
j. Beginning January 1, 2004.

volunteers would be more cost-effective for the military, because of longer terms of service, lower personnel turnover, reduced training costs, and the substitution of capital for labor.[5]

Advocates of military transformation cite the switch to an all-volunteer force as a key enabler of the fundamental transformation in the U.S. military between the end of the Vietnam War and the Persian Gulf War of 1991. Today, Pentagon leaders seem united in their support for the volunteer model on military grounds, and economic studies continue to inform policies related to the AVF in the United States.[6] Nevertheless, questions about the sustainability of the military operations in Iraq and Afghanistan, together with concerns over the social composition of the armed forces, have sparked renewed debate.[7]

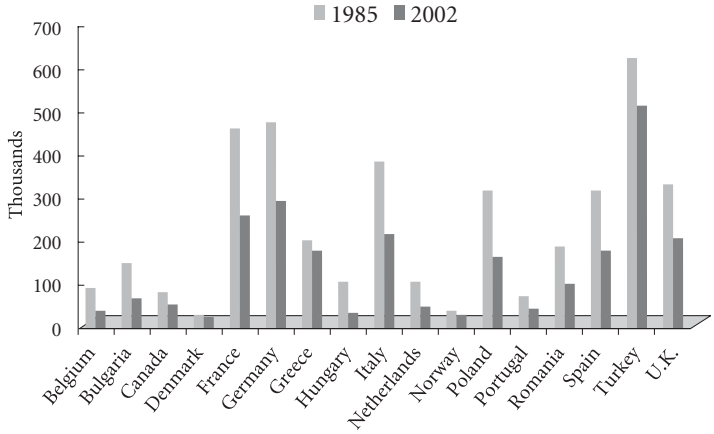
In Europe, economic arguments have been much less important to the national debates than they were in the United States, though budgetary considerations generally have been important drivers. Furthermore, the military reasons often have more to do with the availability of volunteers for foreign missions and less to do with their suitability for high-technology warfare—perhaps reflective of a European inclination toward the lower end of the military spectrum.

Every European country that decided to adopt an AVF after the Cold War ended did so in the context of its own political environment and for its own unique reasons. Nevertheless, it is possible to identify some common themes for each of four groups of countries: those in Western Europe that adopted AVFs shortly after the end of the Cold War; those in Western Europe that made the shift around the turn of the century; countries in Central and Eastern Europe; and the Baltic states.

Belgium and the Netherlands were the first to end conscription. For them, the choice was intertwined with the decision to downsize their militaries. The long-term prospect of peace in Europe undercut the Cold War motivation of a sizable conscript army as an element of national security, and ending compulsory service seemed part of the peace dividend. The Dutch decision was also informed by a Priorities Review in 1993 emphasizing the creation of forces that could be deployed quickly to respond to crises, which conscripts could not do.[8]

Christopher Jehn and Zachary Selden identify broad themes that motivated the next four Western European nations—Spain, France, Portugal, and Italy—to decide on the shift at about the turn of the century. The decision in those countries generally involved a variety of factors, including the changed geopolitical environment, economic pressures, changed military missions, and domestic politics.[9] The end of the Cold War meant an opportunity to reduce military budgets substantially and cut back sharply on the number of people serving in uniform (see figure 1). At the same time, conscripts—generally

FIGURE 1
ACTIVE-DUTY TROOPS OF SELECTED NATO COUNTRIES



Source: International Institute for Strategic Studies, *Military Balance 2003–2004* (Washington, D.C.: Oxford Univ. Press for the IISS).

precluded by law from deployment outside the country—were virtually useless for the out-of-area missions that NATO began to emphasize and that increasingly represented the main missions of Europe's militaries (see table 2).

In addition, the military drawdowns in those countries set off chain reactions that eroded popular support for conscription. For example, in post–Cold War Spain, as the military shrank, so did the proportion of eligible youth called to service each year. As fewer than half of the eligible young men were required to serve, conscription appeared increasingly unfair to those relatively few who did have to enter the armed forces. Both draft resistance and popular sentiment against conscription swelled. Politicians seized on the issue during an election campaign and halted conscription when they gained control of the legislature.[10]

For the Central and Eastern European members shifting to AVFs—the Czech Republic, Hungary, Romania, the Slovak Republic, and Slovenia—the considerations were somewhat different. For them, the new security environment and the prospect of collective defense in NATO made military downsizing possible; developing affordable militaries that would be compatible with NATO made downsizing and force restructuring necessary.[11] The view of alliance leaders and advisers that conscript forces were a vestige of the Cold War also played a role, as did public opinion and increasing levels of draft avoidance.[12]

Finally, of the three Baltic states, only Latvia plans to end conscription during this decade; in addition, Estonia is considering the shift to an AVF. Rather than downsizing, those countries are creating new militaries from whole cloth. Their decisions regarding compulsory service are still driven to some extent by concerns for self-defense. In preparing for membership in NATO, however, they have embraced the goal of integrating their forces into the alliance for missions in other parts of the world. The budgetary costs of new militaries and signals from NATO and the NATO Parliamentary Assembly about the military structures expected of new members have also been important factors in their decisions.[13]

TABLE 2
FORCES OF NATO COUNTRIES OPERATING ABROAD, 2003

Country	Personnel in Operations Outside Country (Thousands)	Personnel in Active Forces (Thousands)	Share of Active-Duty Personnel in Operations Outside Country (Percent)
Belgium	0.7	39	2
Bulgaria	0.5	51	1
Canada	2.6	60	4
Czech Republic	1.2	40	3
Denmark	1.6	23	7
Estonia	Fewer than 100	6	Less than 1%
France	34.7	259	13
Germany	7.3	283	3
Greece	3.2	178	2
Hungary	1.0	33	3
Italy	9.7	200	5
Latvia	0.2	5	3
Lithuania	0.2	13	1
Netherlands	5.5	53	10
Norway	1.3	27	5
Poland	3.9	163	2
Portugal	1.4	45	3
Romania	1.6	97	2
Slovak Republic	0.9	22	4
Slovenia	0.1	7	1
Spain	4.2	151	3
Turkey	39.5	515	8
United Kingdom	47.0	213	22
United States	436.0[a]	1,434	30

Sources: IISS, *Military Balance 2003–2004. Transatlantic roundtable September 2003; and others. Figures for personnel operating abroad include forces based permanently abroad as well as those deployed to military operations.*

a. Active duty only; substantial numbers of reservists are also serving abroad. Includes some 26,000 personnel afloat, 109,000 serving in other NATO countries, and 104,000 deployed to the Pacific theater.

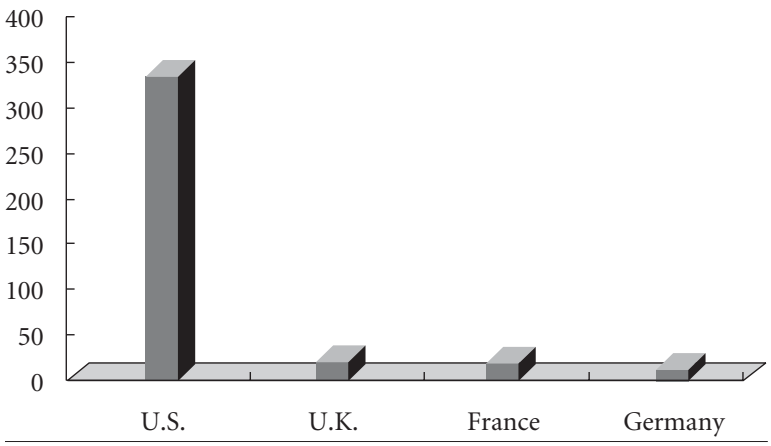
IMPROVING COST-EFFECTIVENESS

Whatever a nation's mix of reasons for suspending conscription, advocacy inside and outside NATO has raised expectations that AVFs will ultimately lead to improved military effectiveness and lowered personnel costs, thus narrowing the transatlantic capabilities gap. At first glance, the numbers seem compelling. In 2000, the United States spent just 27 percent of its military budget on personnel, compared with 34 percent in 1970, before the advent of the AVF.[14] Today, countries with AVFs generally devote smaller shares of their budgets to personnel expenditures and larger shares to developing and purchasing new equipment than do those that retain conscription. For example, taken together, the United States, Canada, and the United Kingdom—three NATO countries with long-standing AVFs—devote 28 percent of their total defense budgets to

modernization. In contrast, the combined share of defense budgets dedicated to modernization in all the other countries of NATO comes to just 16.6 percent.[15]

A somewhat more refined example compares NATO Europe's three biggest spenders: the United Kingdom, France, and Germany. While the three countries' total defense budgets are roughly similar, Germany keeps more people under arms than the other two countries (see figures 2 and 3). Of the three, only Germany still has conscripts; France ended conscription in 2001 and is still in the throes of transition. Germany's conscripts add to the size of the Bundeswehr and at the same time drain money that would otherwise be available for modernization, with the result that Germany spends only one-quarter as much money on equipment modernization per active duty service member as the United Kingdom (see figure 4).[16]

FIGURE 2
TOTAL DEFENSE SPENDING (U.S. $ BILLION, 2002)



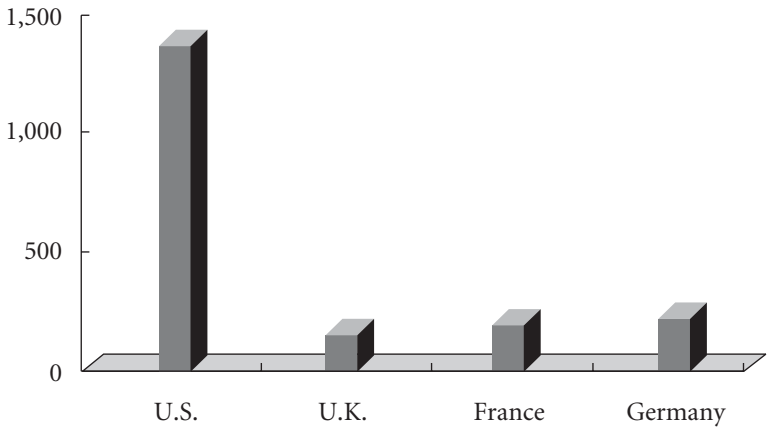
More generally, the U.S. experience appears to validate the arguments made in favor of all-volunteer forces on the basis of economic efficiency and cost-effectiveness.[17] Nevertheless, both the U.S. experience of the middle to late 1970s and the early indications from Europe suggest that the transitions in Europe will be more costly and difficult than many people foresee.

THE U.S. TRANSITION TO AN AVF WAS NOT EASY

In 1973, in the United States, the idea of shifting to an all-volunteer force was opposed by most senior military leaders, by many in Congress, by influential academics, and even by the *New York Times*.[18] The first decade of the new force was rocky and marked by calls to revert to some form of national service.

During the first three years of the AVF, the services generally met their overall requirements for staffing and quality. During those early years, however, the number of first-term enlistees who left the service before completing their contracted terms of service rose from 26 percent to 37 percent, pushing turnover rates (the annual requirement for enlisted recruits divided by the total size of the enlisted force) to nearly 22 percent—far exceeding the 13 percent anticipated in studies commissioned before the change.[19] The high attrition rate meant that more recruits were needed every year than anticipated. The constant churning

FIGURE 3
TROOPS IN ACTIVE FORCES (THOUSANDS)



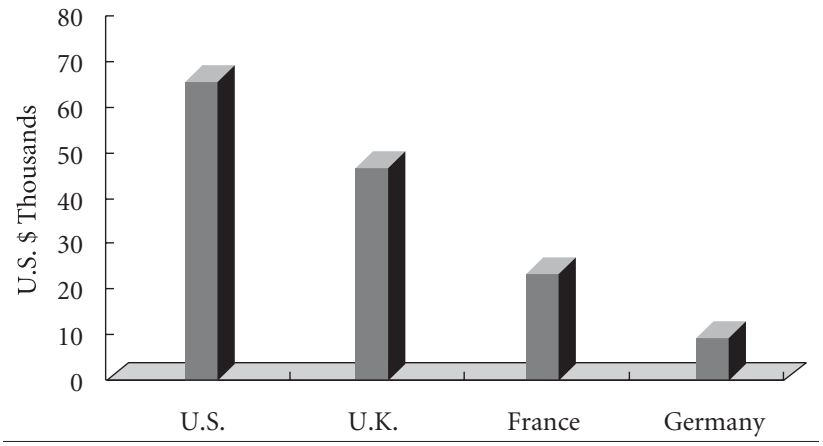
of the force translated into lower levels of experience and expertise in units as well as higher costs for recruiting and training. As a result, the share of the military budget devoted to personnel actually rose during the first few years of the AVF, despite a small reduction in the size of the force.[20]

The next few years brought the AVF close to crisis. During that period, the U.S. economy grew briskly and private-sector wages rose sharply. Military pay raises did not keep up, and budgets for recruiting and advertising were cut back. Congress suspended the GI Bill, which provided college money for military veterans and had served as an important enlistment incentive.

During that period, overall force levels were not a big problem. The services generally came close to meeting their targets for overall staffing; the largest proportional shortfall in total end strength was just 1.2 percent, in 1979.[21] Unfortunately, however, the quality of entering personnel plummeted. By 1980, nearly 50 percent of U.S. Army enlistees (compared with 28 percent in 1968) fell in the bottom 30 percent of American youth in terms of cognitive aptitude, while only 29 percent scored above the median on the military entrance test (compared with 49 percent at the end of the draft).[22] Across the four services, the proportion of low-scoring enlistees was worse than at any time since the Korean War.[23]

People with higher cognitive aptitudes do better at most military tasks; people whose aptitudes fall in the bottom 30 percent have difficulty acquiring the skills they need to be successful in the military. Thus, the high number of entrants who scored at the bottom of the test meant a lower-quality force, more work for trainers and leaders, and greater attrition for the entrants, too many of whom grew discouraged or were pressed to leave when they could not handle their assigned duties. In addition, that period coincided with a time of reduced investment in military equipment, resulting, some said, in a "hollow force." Some experts hold that problems stemming from reduced investment translated into morale problems that compounded the difficulties of getting the AVF started.[24]

FIGURE 4
MODERNIZATION SPENDING PER ACTIVE-DUTY SERVICE MEMBER (2002)



Fixing the problems cost money, but by the early 1980s a combination of efforts brought the U.S. military out of its transitional problems. Perhaps the most important was to raise military pay for recruits and, later, all ranks. Though pay raises lagged during the late 1970s, double-digit increases in 1981 and 1982 brought pay levels for most military people above the seventy-fifth percentile for people with similar levels of education and experience in private-sector firms. Despite the widely reported "pay gap" of the late 1980s and the 1990s, military pay continued to compare favorably with pay in the private sector throughout the second and third decades of the AVF.[25] Today, U.S. military pay raises are explicitly linked to average wage hikes in the private sector.

In addition, the United States expanded bonus programs to entice high-quality youth to join up and to induce people in critical occupations to reenlist. Following the mistaken decision to reduce educational benefits, the nation developed a new program that provides generous benefits for service members who wish to go to college or technical school after leaving the military. The services were also permitted to design educational bonuses of their own, an extra tool to attract people they most want to bring in. Money for post-service education proved to be particularly useful in attracting the high-aptitude people likely to be most successful in the military.[26]

The services also worked to identify and put a stop to military traditions that had little real value in a military sense but annoyed members greatly. Two emotionally charged issues were haircuts and "KP" (kitchen police) duty, which required soldiers to handle menial tasks on a routine basis. The issues pitted military commanders and veterans in Congress—who typically saw military "buzz cuts" and menial tasks as rites of passage supportive of good order and discipline—against the desires of recruits, who saw them as lifestyle detriments.[27] Ultimately, the desires of recruits won out. While the services still enforce haircut standards, they are more relaxed than during the draft era, and KP is largely a thing of the past.

Another initiative of the American transition was a focus on the quality of life for military families. Recruiters emphasized the benefits of family housing, health care, and cut-rate groceries, and money was added to budgets to improve the facilities, goods, and services that families appreciate. In the late 1980s, the Department of Defense opened its own child-development centers to provide subsidized, high-quality child-care services on military bases. The initiative probably paid off in improved recruiting and retention, but it also had a side effect that now raises costs for the military and complicates things both for commanders and for the people who serve—that is, the number of military people with young families grew.

In addition, the United States greatly expanded the pool from which talented recruits might be drawn by removing a 2 percent limit on the share of women in the forces, opening numerous jobs to women and transforming the conditions under which women serve. The proportion of women in the force rose from 1.9 percent in 1972 to 9.3 percent in 1983 and has since climbed to about 15 percent. The proportion of minorities who serve also increased, as individuals found better opportunities in the military than in the private sector.[28]

Finally, the military built a professional cadre of recruiters and invested heavily in marketing research and mass-media advertising. The general sales pitch emphasized the training and other opportunities the military can offer, a rich array of family benefits, good pay, a chance for an adventurous and yet more ordered life, as well as patriotism, a chance to be part of something important, and other intangibles. Increased advertising and recruiting can be the quickest and most cost-effective means to improve recruitment levels, which still typically lag when the economy heats up.

EUROPEAN MILITARIES ALSO FACE CHALLENGES IN TRANSITION

For European militaries that suspended the draft after the Cold War ended, the transition pains are real, and costs are higher than anticipated. The problems are compounded by the military drawdowns that preceded or accompanied the adoption of AVFs.

Downsizing Brought Its Own Problems

Across NATO, maintaining forces with an appropriate distribution of people in uniform with respect to rank, length of service, occupation, and ability level during the downsizing of the past decade and a half was a challenge. The United States managed its rank and experience profiles fairly carefully, through a system of attrition, lowered recruitment, and financial incentives to leave. Nevertheless, imbalances across occupations remain, with too few people in critical occupations and more than are needed in others. In some occupations, decisions made

during the drawdown had lasting effects. For example, the U.S. Air Force managed the drawdown by cutting back on the number of pilots it trained, and afterward found itself short of pilots.[29]

In Canada, much of the downsizing was accomplished through attrition and reduced recruiting. As a result, the Canadian Forces retained more older service members than are needed for current operations and has too few younger ones coming up the ranks. The older members, mostly married and settled in their lives, resist deployment. Yet shedding the older members at this point would leave too few experienced people to train incoming cohorts.[30]

Across Europe, strong programs of employee protection and generous retirement systems kept the armed forces from separating excess older members (see table 3). As a result, European militaries generally are left with too many older officers for their missions and a lack of experience in the lower officer ranks. In Belgium and the Netherlands, for example, most members of the professional military saw service as a lifetime career. After the downsizing, both countries were left with marked age and experience imbalances in their armed forces. Belgium has forty-seven-year-old corporals, and an average length of service of thirty-eight years. Leaders in both countries say that older members are not suited for current missions. In addition, Belgium faces an imbalance across occupational specialties, with too few people with the aptitudes, technical ability, and training needed. The Slovak Republic faces similar concerns.[31]

Romania found that its youngest and most capable members saw good opportunities on the outside and volunteered to depart as the military downsized, leaving the forces with too many high-ranking, older officers. After attempting to balance the pyramid based only upon rank and years of service, the Romanian armed forces are now working to improve the overall quality of the force as well.[32]

Shifting to AVFs Brought Unexpected Challenges

Across Europe, countries differ in their needs for military volunteers and the demographic, economic, labor, and social environments in which their militaries compete as employers. Thus, no two countries face precisely the same transition problems. Nevertheless, a look across NATO Europe reveals a number of shared challenges.[33]

- The level of military pay necessary to make the military competitive as an employer is typically higher than foreseen before the transition.
- Attracting high-quality recruits can be more difficult than anticipated; the private sector puts up particularly stiff competition for information specialists and other people with technical skills.

TABLE 3
CHARACTERISTICS OF MILITARY RETIREMENT SYSTEMS IN SELECTED NATO MILITARIES

Country	Type of Plan	Retirement Age or Years of Service (YOS)	Other
Belgium	Defined benefit: 75% of salary beginning at retirement age	45–61 for officers, depending on rank and whether "flying personnel"; 56 for soldiers and NCOs not flying personnel; 51 for NCO flying personnel	Reduced benefit for those who leave early; no pension for members in the new contract status
Canada	Individuals and government contribute into pension plan; defined benefit for service beyond 20 YOS; portable contributions for fewer than 20 YOS	Compulsory retirement recently raised to age 60 from 55. Pensions comparable to federal public service, indexed for cost of living. Full pension after 28 YOS for officers, 25 YOS for NCOs; members can retire after 20 YOS, with 5% penalty per year short of thresholds. Before 20 YOS, members can transfer a share of individual and government contributions into another pension plan	Option for paid, reduced annuity beginning at age 55–60 for those departing before 20 YOS
Czech Republic	Defined benefit and severance pay, with choice of lump-sum severance pay	Immediate annuity of 5% to 55% of average salary after 15–30 YOS; members revert to national pension system after 60 years of age, receiving the difference between service pension and other retirement pension if the service pension is higher	Members also receive severance pay equal to 4–6 months' salary for 15–20 YOS; "Smart Money" option equal to 2–18 months' salary for 2–26 YOS for members' who serve for fewer than 5 years or who opt out of the service pension and severance pay
France	Defined benefit	Career members: retirement age depends upon rank; deferred annuity option (at retirement age) after 15 YOS for NCOs, 25+ YOS for officers Contract members: immediate annuity after 20 YOS; deferred annuity option (at career retirement age) after 15 YOS	
Germany	Defined benefit	Contract soldiers: no retirement benefit Career personnel: lifetime annuity equal to about 70% of last pay, beginning at age 52–60 (depending on rank)	
Italy	Defined contribution (under public employee retirement system revised between 1992 and 1997)	Retirement eligibility based on age (usually 60 years) and YOS (currently in flux, consistent with reform of public sector retirement system), but military contributions of individuals who depart before then can be credited to pension accounts at the Italian Social Security Administration	Contributions are portable to Italian Social Security Administration for early retirees; defined benefit and mixed scheme retained for members already in service at the time of the reform; early retirement "seniority pensions" optional until 2008
Norway	Defined benefit	60	Option to retire at age 57 with 28 YOS

TABLE 3 CONTINUED
CHARACTERISTICS OF MILITARY RETIREMENT SYSTEMS IN SELECTED NATO MILITARIES

Country	Type of Plan	Retirement Age or Years of Service (YOS)	Other
Romania	Defined benefit	Men: Age 55 (somewhat later for flag officers) with 30+ years of work, including 20+ YOS in military Women: Age 55 with 20+ years of work, including 10+ YOS in military	Partial pension for younger retirees
Slovak Republic	Defined benefit and severance pay	Immediate pension equal to 30–60% (depending on YOS) of average pay of the best year from the final 10 years, after 15 or more YOS. In addition, retirement allowance equal to 2% of average pay of the best year from the last 10 years, paid monthly for a number of years depending on YOS, for members with 5+ YOS	In addition, members with 5 or more YOS receive severance pay equal to Gross Pay + .5 x GP x (YOS − 5)
Spain	Defined benefit	Permanent members may stay to age 58; pension possible after 8 years as temporary and 15 years as permanent member	No pension for temporary volunteers, who must leave after 12 years if they do not become permanent soldiers
United Kingdom	Defined benefit	Possibility of pension beginning at age 55 with 15–20 YOS; pension based on YOS and age at retirement, up to national retirement age	Some limited pensions before age 55
United States	Defined benefit	Immediate annuity for 20+ YOS; annuity indexed to cost of living, beginning at 50–75% of basic pay near end of military career	Some members may choose a lump-sum payment at 15 YOS, with a lower annuity. Severance pay for members separated involuntarily before 20 YOS

Source: Transatlantic roundtable September 2003.

- Poor working conditions and inadequate facilities can scare recruits away, but improving such conditions usually costs more money than has been set aside for the purpose.
- Anticipated savings may not materialize as soon as expected—because, for example, bases made redundant by the absence of conscripts cannot be closed, for political reasons.
- The costs to train longer-serving volunteers (thus capitalizing on a key advantage of volunteers) are usually higher than expected.
- Unanticipated costs, tight budgets, and budget cuts typically eat into resources needed to implement the reforms surrounding the transition.
- Initially, uniformed leaders may not be motivated to make the transition a success. The situation is exacerbated when tight budgets and unanticipated costs prevent the improvements in equipment, infrastructure, and training that were touted as benefits to be gained from the shift to all-volunteer forces.

The resulting lack of high-quality recruits, high turnover rates, and unanticipated costs are reminiscent of the difficulties the United States encountered during the first decade of its AVF.[34] It would be easy to jump to the conclusion that by adopting U.S. strategies, Europe's militaries could get through their own transition pains and bring about circumstances conducive to narrowing the military capabilities gap within a decade.

IMPORTANT DIFFERENCES LIMIT THE TRANSFERABILITY OF LESSONS

Unfortunately, the U.S. lessons may not apply to European militaries. Fundamental differences in demographics, social programs, educational systems, and labor models mean that initiatives that worked in the United States may be less effective in European countries.

For example, population growth in most of northern Europe is very low; in southern, Central, and Eastern Europe, populations are declining.[35] To maintain a force of its current size through 2020, Spain would need every year to recruit 2.5 percent of the cohort between the ages of eighteen and twenty-eight years, compared with just 1.6 percent in 2001 and 2002.[36] In contrast, the United States, where immigration makes up for relatively low birthrates, will need only about 1.5 percent of its annual cohort to keep a force of a similar size. High rates of conscientious objection may also dampen the success of recruitment efforts; by the time the draft ended in Spain, for example, 75 percent of draft-age men had identified themselves as conscientious objectors.[37] Europeans may also balk at joining the military with the prospect of being deployed in American coalitions that lack popular support.

While Europe's immigrant minorities are often disadvantaged, they may also come to their new homes with a negative image of the military.[38] Moreover, if immigrants perceive that they will not be welcomed by military leaders or that opportunities for advancement that are open to others will not be open to them, European militaries may find it more difficult to attract talented disadvantaged youth and minorities than do the U.S. armed forces. Concepts of pay equity across society, and between the military and other public employees, can also make it difficult to improve military pay without raising political charges that members of the armed forces have become mercenaries or are robbing other public servants of their due.

In the United States, recruiting and retention surge during economic downturns, when jobs on the outside are not as plentiful as they are during boom times. Because Western European nations typically offer more extensive public programs for the unemployed, including cash benefits, health care, and other social services, such economic cycles and high unemployment rates may not

advantage their militaries as much. In general, Western European social safety nets may catch people who in the United States would see military service as an alternative to unemployment or part-time employment. Strong social protections may also water down the appeal of family benefits offered by the military.

Models of youth training and education also differ sharply between the United States and most European countries. In the United States, vocational/technical education can seem like a last resort for high school students in trouble. In Western Europe, however, vocational schools and apprenticeships can be engines of the trades. As a result, learning a skill in the military may not provide the same opportunity to a European youth as to an American. Also, of course, in countries where college is virtually free, U.S.-style college bonus programs hold little attraction.

The immobility of European labor presents another striking difference. Strong employee protections typically apply to the military as well as the private sector, and many members of European militaries are represented by associations that amount to quasi–trade unions.[39] Members of the professional forces often expect to serve for a lifetime, whether or not the services need them that long. In addition, even young people resist the moves that a military career can entail. In the Bundeswehr, for example, it is not uncommon for service members to keep their families at home and commute several hours daily or on weekends because they prefer to live in the communities where they grew up. Such immobility can make it difficult for the military to attract qualified people. Lower employee turnover rates in private firms may also make it more difficult for service members to find new jobs when they leave the military.

For the countries new to NATO, the transformation from authoritarian rule and centralized, command economies to transitional democracy and market-based economies also makes for fundamental differences. The transformation is utterly altering relationships between political authorities and the military, as well as the role of the military in society. As recently as fifteen years ago, for example, political officers in most Central and Eastern European militaries still exercised substantial influence within military units. Promotions based upon Communist Party membership and ideology were not uncommon. Militaries consisted primarily of officers and conscripts, with very few longer-serving noncommissioned officers. The armed forces were called upon routinely as sources of free labor for the agricultural sector.

Reforms in the new and invited member states call for depoliticization of the armed forces, merit-based promotions, establishment of noncommissioned officer corps, and transformation of the roles and tasks of the armed forces. But the communist legacy may translate into political resistance to initiatives, such

as market-based pay and bonuses and merit-based promotions, that can appear inequitable to those raised in the former system.[40] On the other hand, the fact that the new member states are working from clean slates may make some changes easier and cheaper for them than for either the United States or Western Europe.

Finally, countries that are experiencing economic problems or working to meet the limits on national budget deficits imposed by the European Stability and Growth Pact may find it difficult to boost budgets for military pay and recruiting resources as the United States did during the late 1970s, when it faced mounting problems in transition to its AVF.[41]

EUROPEAN INITIATIVES TO SPEED THE TRANSITION

NATO nations seeking to expand the ranks of volunteers are undertaking initiatives to improve their capacity to recruit, retain, and motivate the high-quality members they need and to encourage them to depart when their services are no longer required. While the details are geared to the circumstances each country faces, in broad outline the initiatives are generally consistent with those the United States pursued during its transition period. But the measures differ in their details, and they may result in longer and more costly transitions than envisioned.

Improve Military Pay. Like the United States during its transition, European countries in transition hope to make military pay more competitive and to use bonuses or other supplements to basic pay to attract and keep people with key skills and offset the negative impact of frequent deployments. For example, France increased starting pay for privates. Belgium raised pay, introduced changes that would allow for overtime compensation, and expanded allowances for some occupational specialties. Spain added generous bonuses for volunteers who renew their contracts and hopes to fund a large basic pay raise this year, despite severe budgetary pressures. The Czech Republic instituted bonuses for serving in some operations.[42]

While they recognize the importance of boosting military pay, however, European countries generally have not moved to link military pay or pay growth explicitly to the private sector (see table 4). In contrast, the United Kingdom, with decades of AVF experience, benchmarks military pay directly against that of the private-sector professions; the United States links its military pay raises to average wage hikes in the private sector. Over time, the nations of continental Europe may find it necessary to develop such explicit links. Doing so may cost substantially more than their leaders currently anticipate.

TABLE 4
CHARACTERISTICS OF CASH PAY IN SELECTED NATO MILITARIES

Country	Link to Other Public Employees	Link to Private Sector	Variation by Occupation or Duty
Belgium	No automatic link, but General Staff works to keep pay comparable by education level to pay in public sector	Through public-sector link; public-sector pay is tied to average pay rates in private sector	Differential pay for pilots, medical, civil engineers, graduates of staff colleges; skills-based special pays for, e.g., pilots, divers, paratroopers; special pays for operations
Canada	Not officially tied, but tracks salaries in federal civil service	No systematic tie, but salaries and bonuses in some trades have been boosted to be competitive with private sector	Special pays for combat, deployment to theater, living abroad or in the Far North
Czech Republic	Yes	No	Bonuses for hazardous positions, missions abroad
France	Basic pay tied to public-sector pay	No	Special pays, bonuses for, e.g., pilots, submariners; living in Paris or abroad; deployed to interventions
Germany	Yes	No	Bonuses in specified occupations; daily bonus for service abroad, up to 92 euros per day
Italy	Pay is set separately for defense and security-sector employees	No	Operational allowance depending on grade and assignment: people in deployable units earn up to 50% more than in administrative units; elite units (e.g., airborne) up to 80% more
Norway	Pay is negotiated for public sector as a whole, military included	No	Special pay for pilots
Romania	Yes	No	Special pays for merit, based upon recommendation of supervisor
Slovak Republic	No	No	Bonuses for hazardous conditions from 1% to 6%
Spain	No explicit tie, but pay is comparable with that of other public-sector employees	No	Special pays for, e.g., parachute, marine, pilot, submarine, units with expeditionary capacity
United Kingdom	No	Independent military pay review body monitors pay in "equivalent" private-sector professions to benchmark its pay recommendations; adds an "X factor" to help offset the difficulties of military life	Extra pay for some skills, e.g., pilots, submariners
United States	Annual pay raise often linked to raise for federal civilian workers	Current law requires pay raise in excess of average wage rise in private sector; earlier law called for raise somewhat lower than in private sector; law can be rewritten through new defense legislation each year	Numerous special pays and bonuses for specific occupations and duties

Source: Transatlantic roundtable September 2003.

In some European countries, military pay is tied directly to the compensation of other public-sector workers, and public-sector/military-pay equity is deeply ingrained in national politics. In Germany, the linkage is so strong in the popular mind that people in uniform often call themselves "bureaucrats in uniform," which most American soldiers would find unflattering. The public-sector link can make it difficult to raise military pay without also raising pay for all civil servants, whose rights are often protected by powerful unions. As a result, some countries are seeking ways to boost military rewards through substantial noncash benefits, which they hope to justify based upon the military mission. In France, for example, where the government currently provides very little housing for service members, leaders are considering a sizable investment in housing, in the hope that the new benefit will satisfy military people without raising equity concerns for other public-sector workers.[43] New government-provided housing will greatly increase the cost of transition; unfortunately, providing it will almost surely cost the government substantially more than it is worth to the members.[44]

Provide Incentives for Redundant Senior People to Leave the Service. Like the United States in recent years, some European countries used financial incentives to encourage members to leave the armed forces during the post–Cold War downsizing. In France, for example, career officers were offered forty-five months of basic pay, tax free, to resign.[45] Romania provided a generous lump-sum payment and retraining for civilian employment, while the Czech Republic provided retirement allowances and retraining for civilian professions through the military education system.[46] While technically not a cost of transition to an all-volunteer force, the large costs of separating redundant people seriously complicate the budget picture for countries that adopted an AVF simultaneously with deep force reductions.

Improve Working Conditions. European militaries are also working to eliminate traditions that annoy service members but do not improve military outcomes, as well as to improve facilities and infrastructure. The Belgian military is reviewing staff regulations with an eye toward adopting more flexible procedures and improving morale.[47] Spain's Ministry of Defense has established a hotline for soldier complaints.[48] The Czech Republic is investing in infrastructure at its military garrisons.[49] For Germany, the modern equivalent of the U.S. "haircut war" of the 1970s is a body-piercing jewelry war; the Bundeswehr has undertaken a study to determine whether jewelry rules should be relaxed, as a symbol of a lifestyle more attractive to today's potential volunteers.[50] Improving working conditions by eliminating annoying traditions and regulations can be virtually cost free from a budgetary point of view and a net win for everyone. Improving

infrastructure is expensive, however, a fact that may seriously delay and undermine the benefits of AVFs in Europe.

Improve Career Paths. Especially in NATO's new member states, where a decade ago the armed forces were made up almost exclusively of officers and junior-ranking conscripts, militaries are working to create new corps of noncommissioned officers with good prospects for careers in the military. Romania, the Czech Republic, and the Slovak Republic are investing substantial sums in technical training and leadership development for these new senior enlisted personnel.[51] In addition, the new member states plan to develop merit-based, more transparent promotion systems.

In an attempt to make military careers more flexible, France has opened new positions for specialists, who will be allowed to rise in rank and pay without taking up the duties of command. Romania is working to attract more officers with civilian academic backgrounds.[52] All of these initiatives are important to the technologically capable militaries that NATO leaders hope will emerge with all-volunteer forces.

Improve Quality of Life for Service Members and Their Families. Like the United States during its transition, European countries are striving to provide family benefits and other quality-of-life features to make military life more attractive for volunteers. The U.S. slogan "recruit the soldier, retain the family" has become popular among military personnel managers across Europe (see table 5).[53]

For example, France has expanded such family assistance programs as aid in searching for schools, and it is considering new family housing. Romania also is building new housing. The Czech Republic is working to improve family support; in addition, Prague has established a housing allowance and now permits service members to rent on the open market. Germany and Belgium are opening child-care centers for military families, and the Netherlands is considering it. Several countries are working to reduce family separations.[54]

Family-friendly policies can provide important extra leverage in attracting and keeping volunteers, but they have their drawbacks. The incentives they provide to marry and have children at an early age may not operate in the best interest of the service member or the military. Because their costs do not appear in the pay accounts, they may not be visible to decision makers or the public. Moreover, when family benefits are delivered as subsidies or as goods and services provided directly by the government, as they often are, their value to recipients is typically less than their cost to the government.[55] To the extent that raising cash pay raises insurmountable equity concerns with respect to other public employees, however, expensive family benefits may provide needed tools for Europe's militaries seeking to attract qualified volunteers.

TABLE 5
FAMILY-FRIENDLY BENEFITS IN SELECTED NATO MILITARIES

Country	Military Housing	Child Care	Other Family-Friendly Benefits
Belgium	Housing generally not provided; a few government-owned houses available for rental; members abroad receive cash allowance	Limited services available in 7 locations until age 3	Subsidized hospitalization insurance for families
Canada	Government is getting out of the housing business; Canadian Forces Housing Authority maintains housing, disposes of it for government; members get location-dependent housing allowance and are charged prevailing local rents for CFHA housing	Family resource centers include subsidized child care	Counseling and other services at on-base family resource centers; the centers are new, and members complain they are underresourced and ignored
Czech Republic	New, generous, location-dependent housing allowance; housing no longer provided in-kind for career officers	Not available	Family support programs planned
France	Government provides shared rooms on base for privates; low-cost studios or apartments on base for NCOs; MOD estate agency owns some apartments for rent by officers at below-market rates.	Not provided	Higher pay for members with families; military holiday centers; family assistance centers; health care for family members; subsidized insurance; discounts on rail travel; special pays to offset strain of military duties on families
Germany	Some government housing available to members at below-market rates	Creating child-care centers	Government pays cost of relocation
Italy	Government housing available for officers, NCOs; may be provided to volunteer career soldiers	Reimbursement of crèche expenses	Government pays costs of relocation; tax reduction based upon family size
Norway	Government provides housing for up to four years (longer in rural areas) at new posting	Government assisted local communities in establishing child-care centers open to military and nonmilitary families	None described
Romania	Government provides housing in garrison for members and families; if unavailable, member receives housing allowance equal to 50% of monthly wage; recently launched program to build new houses for members and their families	Low-cost child-care centers in larger garrisons	Free medical care and medication provided through military medical facilities; free or discount access to military sports areas and recreational facilities; reimbursement of transportation during vacations

TABLE 5 CONTINUED
FAMILY-FRIENDLY BENEFITS IN SELECTED NATO MILITARIES

Country	Military Housing	Child Care	Other Family-Friendly Benefits
Slovak Republic	Government-provided accommodation for conscripts and students of military schools; apartments or military hostels for all members, or allowance to rent nearby; soldier pays for family members in hostels	Summer camps in military facilities for children of members	Recreation in military facilities; discounts for foreign travel
Spain	After 5 years of service, cash bonus to offset costs of housing transition at every change of post; some military housing	Child-care centers in some units	Some scholarships available for children; access to medical care for families
United Kingdom	Housing provided for all members, with type of housing based on rank	For officers, cash allowance toward private education for children	Allowances for relocation; child welfare assistance, family support services, and medical treatment for families posted overseas; confidential support telephone line for military members and families.
United States	Government provides housing for majority of single members and about 30 percent of members with families; others receive housing allowance based on rank, family status, and location	Government provides on-base child-care centers at subsidized cost that varies by family income (lower cost for lower income)	On-base family assistance centers; access to military recreation facilities; subsidized on-base grocery and department stores; health care for family members provided directly by government or through insurance at no cost to member; others

Source: Transatlantic roundtable September 2003.

Seek Recruits from Nontraditional or Underrepresented Sources. Like the United States during the 1970s, Europe's militaries are seeking to expand the pool of prospective volunteers by opening more jobs to women. The German Bundeswehr, for example, which just a few years ago permitted women only in the music corps and the medical profession, now opens all jobs to women.[56] In addition, some of Europe's militaries are placing more emphasis on recruiting less-advantaged and minority citizens, immigrants, and even foreigners. Spain is actively recruiting service members from South America and Guinea; it currently limits to 2,400 the number of service members from those regions, but it is considering raising that figure.[57] The Bundeswehr is particularly attractive to volunteers from eastern Germany, even though military pay is lower for those born in the East than for West Germans.[58] The Royal Netherlands forces are looking to tap into the "unused potential" of the ethnic minority population.[59] Belgium's strategic plan recommends opening military recruitment to all European citizens, thus raising the specter of an east-west migration within Europe's

militaries.[60] Unfortunately, however, many of Europe's immigrants may find military service unattractive, and Europeans may find that their efforts in this aspect of the transition are not as fruitful as the successful U.S. model of attracting minorities and other youth who see the military as a good opportunity.

Improve the Post-service Employment Prospects of Service Members. Like the United States, European countries hope to attract a share of their recruits through the prospect of a good future "on the outside" after they serve for a few years in the military. However, differences in educational systems and labor mobility make for substantial differences in the mechanisms for improving post-service prospects. While initial training in a skill valued outside the military, combined with money for college, can be crucial in the U.S. case, the prevalence of high-quality trades training in the high schools in some European countries means that many European youth are more likely to be attracted by transition assistance and training as they depart service, and by the guarantee of public-sector jobs afterward.

Thus, for its twelve-year enlisted volunteers, Germany provides a full year of training at the end of service, followed by a full year of government pay in a transitional job in the private sector. Spain offers its volunteers two to ten months of training in an occupational specialty at the beginning of their careers and additional training for the return to the private sector. In addition, Spain's volunteers now have the opportunity to receive degrees as "military technicians," which the Ministry of Defense hopes will help soldiers and sailors as they return to civilian life. The Netherlands also plans to invest in training courses where needed to help service members transition to civilian employment. Romania is establishing a career-assistance program for veteran volunteers. The ministries of defense of Italy and the Netherlands have established new offices to tap into the private sector and help volunteers find jobs as they leave the military. In addition, the Italian Ministry of Defense will now pay for six months of training as volunteer members depart service. Belgium is considering new programs to provide retraining for volunteers at the end of their contracts and to award diplomas and other skills accreditation that will be recognized in the private sector.[61]

In some countries, perhaps the most important transition initiative is to reserve a substantial share of public-sector jobs for military volunteers. Italy guarantees a job at the end of military service for every volunteer. The Italian government reserves 60 percent of Carabinieri, 50 percent of national police force, and 45 percent of national forest police and firefighting jobs for short-term military volunteers; eventually all national police posts will be reserved for them. Spain reserves 60 percent of Guardia Civil posts for veterans; the Spanish Ministry of Defense is negotiating agreements with other ministries

to hold jobs for separating soldiers and sailors. In addition, the Spanish government is reaching out to private-sector employers' organizations in the hopes that they will set jobs aside for veteran volunteers. Belgium has opened its civilian jobs in ministries to former service members. In other European countries, ministries of defense are making arrangements with employer associations, labor associations, and other public agencies to assist former service members with placement.[62]

The European model of substantial end-of-service training, government-paid post-service jobs, and nearly guaranteed post-service employment may cost more than the American system of money for college and training necessary for duties in the military. The high costs of post-service training and placement will likely eat into national resources that might otherwise be available for military equipment.

Improve Recruitment Efforts. Finally, as in the United States during the 1970s, European militaries are working to boost recruiting through professional recruiting teams, mass-media advertising, and other measures.

In summary, the countries in transition are working to develop creative solutions to the specific challenges they face. Some of the steps they are taking resemble those the United States found beneficial during its transition phase. Nevertheless, profound differences in the demographic, social, economic, and labor settings of Europe and the United States may make the European transitions take longer and cost more than the American one, or than NATO's leaders currently hope.

MODERN, EXPEDITIONARY, HIGH-TECHNOLOGY

NATO's member states rely increasingly on volunteers to fill their military ranks. A growing number of European countries suspended compulsory service during the past decade or are now phasing it out. American and NATO leaders believe the all-volunteer model is more consistent with a modern, expeditionary, high-technology military.

Military personnel policies vary across NATO countries. Views of the appropriate balance between military capability and equity for individuals within a military also seem to vary. For example, what sounds to a Western European like reasonable equity and career stability can sound to an American like a jobs program. Conversely, suggestions by U.S. experts that European militaries should reduce the number of people in uniform and change their personnel policies to free up money for high-technology weapons can strike Europeans as self-serving attempts to develop partners for a style of war they would prefer not to fight, and

to drum up customers for weapons they would rather not buy. Similarly, to Americans, the quasi–trade union associations that represent many European service members can seem antithetical to a strong military, while to Europeans such organizations can seem central to protecting the rights of military members as "citizens in uniform."

Across the alliance, the military drawdowns of the past fifteen years created personnel management challenges. In some countries, they resulted in severe staffing imbalances that will take years or even decades to reverse. Moreover, the transition from conscription to an all-volunteer force creates its own challenges. Among other problems, nations that have undertaken it recently are finding the costs higher than they planned for.

The United States faced similar problems, but efforts along multiple fronts brought success within a decade. European militaries are undertaking similar efforts, tailored to their own national environments. But demographic, social, and other realities in most of Europe are different from those of the United States. Unfortunately, the differences are likely to make it more difficult and expensive, not less so, for Europe's militaries to attract, retain, and motivate high-quality volunteers and to induce them to leave when their services are no longer needed. As a result, AVF transitions in Europe may take longer and be more difficult and more costly than the American experience of the 1970s and early 1980s.

The implications of all this for narrowing the military capabilities gap are not good. Even a transition period as brief as that of the United States could mean that the expected improvements would not be evident for a decade after an armed service said good-bye to its last conscript. If the transitions take longer, the high cost of personnel will continue to drain resources from equipment accounts. More fundamentally, if the quality of recruits does not improve within a few years, troops will lack skills and cognitive aptitudes necessary to operate and maintain the high-technology equipment required to narrow the gap.

NOTES

1. Much of the information for this article is drawn from a transatlantic roundtable, "Filling NATO's Ranks: Military Personnel Policies in Transition," held at the Transatlantic Center of the German Marshall Fund of the United States in Brussels, Belgium, 8–9 September 2003. Participants at the roundtable included experts on military personnel policies from twelve NATO countries. In addition to providing presentations at the meeting, a participant from each country responded to a detailed questionnaire about current military personnel policies, challenges, and initiatives. The forum made it possible to collect substantial information, in English, from a consistent time period, from several countries at once. Information collected from the questionnaires or the roundtable discussion is cited as "transatlantic roundtable September 2003."
2. Lord Robertson of Port Ellen, former Secretary General of NATO, views conscript forces

as a vestige of the Cold War and volunteer militaries as more deployable and effective; see "No, We Ain't Dead: Interview with NATO Secretary General George Robertson," *Newsweek,* 20 May 2002, and "The Role of NATO in the 21st Century," speech by Lord Robertson as Secretary General at the "Welt am Sonntag Forum," Berlin, 3 November 2003, available at www.nato.int/docu/speech/2003/s031103a.htm. For the view that smaller volunteer militaries are better suited to modern equipment, see David R. Sands, "Even Military Experts Consider Draft Antiquated," *Insight on the News*, 12 February 2001; François Heisbourg, "Europe's Military Revolution," *Joint Force Quarterly,* no. 30 (Spring 2002), p. 29; Catherine Miller, "The Death of Conscription," *BBC News Online,* Friday, 29 June 2001.

3. For the view that conscripts "siphon off funds" that could otherwise be invested in equipment (thus narrowing the capabilities gap), see Richard L. Russell, "NATO's European Members: Partners or Dependents?" *Naval War College Review* 56, no. 1 (Winter 2003), pp. 30–40; David S. Yost, "The NATO Capabilities Gap and the European Union," *Survival* 42, no. 4 (Winter 2000–2001), pp. 100–101; Elinor Sloan, "Military Matters: Speeding Deployment," *NATO Review* 49, no. 1 (Spring 2001), pp. 30–33; and Philip Shishkin, "How Europe's Armies Let Their Guard Down," *Wall Street Journal,* 13 February 2003. Nicholas Burns, the U.S. ambassador to NATO, holds that "even without spending more money, many allies could use their existing defense euros more wisely by providing professional military units . . . rather than retain static conscript forces"; see "Launching NATO's Transformation at Prague," speech at Konrad-Adenauer-Stiftung, Berlin, 30 October 2002, available at nato.usmission.gov/ambassador/2002/s021030a.htm. The report of the German Weizsäcker Commission to the German federal government, *Common Security and the Future of the Bundeswehr* (23 May 2000), provides explicit estimates of personnel and infrastructure savings that would accrue from reducing the number of conscripts in the German forces.

4. Chief among them was the President's Commission on an All-Volunteer Armed Force (known as the "Gates Commission" for its chairman, Thomas S. Gates).

5. The economists' predictions have largely been borne out; see John T. Warner and Beth J. Asch, "The Record and Prospects of the All-Volunteer Military in the United States," *Journal of Economic Perspectives* 15, no. 2 (Spring 2001), pp. 169–92.

6. Guy Taylor, "Rumsfeld Rejects Idea of Returning to the Draft," *Washington Times,* 23 April 2004.

7. Senator Hillary Rodham Clinton, "Addressing the National Security Challenge of Our Time: Fighting Terror and the Spread of Weapons of Mass Destruction," speech at the Brookings Institution, Washington, D.C., 25 February 2004 (available from the Miller Reporting Co., Washington, D.C.); Helen Dewar, "Hagel Seeking Broad Debate on Draft Issue," *Washington Post,* 22 April 2004, p. A25.

8. "A Benchmark Study of the Armed Forces of Australia, Italy, the Netherlands, Sweden, the United Kingdom and Canada," Canadian Ministry of National Defence, 10 December 2002, available at www.dnd.ca/site/minister/eng/benchmark/bench_nether_e.htm.

9. Christopher Jehn and Zachary Selden, "The End of Conscription in Europe?" *Contemporary Economic Policy* 20, no. 2 (April 2002), pp. 93–100; "France Ends Military Draft, as External Threats Ebb," Associated Press, 27 June 2001, 9:49 AM ET.

10. Jehn and Selden, p. 95.

11. U.S. Congressional Budget Office, *Integrating New Allies into NATO* (Washington, D.C.: 2000).

12. David Price (Rapporteur), "Military Preparations of NATO Candidate Countries," Draft Report of the NATO Parliamentary Assembly Defence and Security Sub-committee on Future Security and Defence Capabilities, 2 April 2002, p. 9; Jeremy Bransten, "Czech Republic: Government Moves to Abolish Conscription, Joins European Trend," *Radio Free Europe/Radio Liberty,* Prague, 31 August 2001.

13. Vaidotas Urbelis, "Defence Policies of the Baltic States: From the Concept of Neutrality towards NATO Membership," NATO-EAPC Individual Fellowship Report 2001–2003

(Vilnius, Lith.: 2003), pp. 7, 11–12, 16; Price, p. 9; and Jehn and Selden, p. 98.

14. Warner and Asch, p. 179.

15. The figure excludes the seven members that joined NATO in April 2004. Author's estimate, based on U.S. Secretary of Defense Donald Rumsfeld, *Report on Allied Contributions to the Common Defense* (Washington, D.C.: July 2003), tables D-4 and D-8.

16. Author's calculations, based on U.S. Secretary of Defense Donald Rumsfeld, *Report on Allied Contributions to the Common Defense* (Washington, D.C., July 2003), tables D-4, D-8, and other sources. The comparisons are offered as illustrative of the arguments made by proponents of ending conscription for military reasons. The figures overstate the case, however. Although Germany's modernization spending is low compared with other countries in its military class, Germany still provides a greater share of NATO's ground combat capability than any other country in NATO besides the United States. Moreover, integrating the militaries of the East and West after the Cold War brought challenges for Germany that the other countries in the example did not face.

17. Warner and Asch, pp. 169–92.

18. Martin Anderson, "The AVF Decision, History, and Prospects," in William Bowman, Roger Little, and G. Thomas Sicilia, eds., *The All-Volunteer Force after a Decade* (Washington, D.C.: Pergamon-Brassey's, 1986), p. 11.

19. Gary R. Nelson, "The Supply and Quality of First-Term Enlistees under the All-Volunteer Force," in Bowman, Little, and Sicilia, eds., pp. 27–28.

20. Warner and Asch, pp. 178–79.

21. Nelson, p. 26.

22. The large number of entrants with poor cognitive aptitudes was initially masked by an error in norming the military entrance test, the Armed Services Vocational Aptitude Battery (ASVAB), which was introduced in 1976. Thus, from 1976 until 1980, many of the recruits who the services at first thought were in the middle band of aptitudes compared with other American youth actually turned out to fall within the bottom thirty percent. See Curtis L. Gilroy, Robert L. Phillips, and John D. Blair, "The All-Volunteer Force Fifteen Years Later," *Armed Forces and Society* 16, no. 3 (Spring 1990), pp. 329–50; and Nelson, pp. 31–32. The figures cited here reflect appropriate renorming of the initially misnormed tests.

23. Nelson, p. 32.

24. Maxwell R. Thurman [Gen., USA], "Sustaining the AVF," in Bowman, Little, and Sicilia, eds., p. 269.

25. Congressional Budget Office, *What Does the Military "Pay Gap" Mean?* (Washington, D.C.: June 1999). For comparison purposes, military pay is "regular military compensation," which includes military basic pay, allowances for food and housing (whether or not an individual lives in military housing), and the tax advantage associated with nontaxable allowances.

26. Thurman, p. 271.

27. Robert K. Griffith, Jr., *The U.S. Army's Transition to the All-Volunteer Force 1968–1974* (Washington, D.C.: U.S. Government Printing Office for the U.S. Army Center of Military History, 1996), pp. 167–69.

28. U.S. Defense Dept., *Population Representation in the Military Services, Fiscal Year 2001* (Washington, D.C.: Office of the Undersecretary of Defense, Personnel, and Readiness, March 2003).

29. Carl Conetta and Charles Knight, *The Readiness Crisis of the U.S. Air Force: A Review and Diagnosis,* Briefing Report 10 (Cambridge, Mass.: Project on Defense Alternatives, 22 April 1999), available at www.comw.org/pda/afreadtc.html.

30. Transatlantic roundtable September 2003.

31. Ministry of Defence of the Netherlands, *Summary of the Defence White Paper 2000* (The Hague: 17 July 2001), available at www.mindef.nl/nieuws/media/170701_whitepaper2000.html, p. 13; Shishkin; and transatlantic roundtable September 2003.

32. Transatlantic roundtable September 2003.

33. Ibid.

34. For example, a French parliamentary report of the mid-1990s estimated that the French drawdown and shift to an AVF would save as much as $2.8 billion in noncapital costs. Instead, those costs rose slightly in real terms. Personnel compensation costs rose by about

10 percent in real terms between 1996 and 2002, despite a nearly 30 percent reduction in the total number of personnel. See William Drozdiak, "Chirac Pushes to Cut Back French Army, Eliminate Draft," *Washington Post,* 23 February 1996, p. 2; Vincent Medina and Sylvain Daffix, "Challenges in the French Transition to an All-Volunteer Force," presentation of the Economic Observatory of Defence, Ministry of Defence (France), to the transatlantic roundtable September 2003. Italy's parliament also presumed that its costs would be small; see Michele Zanini, "Italy's All-Volunteer Army: An Analytical Framework for Understanding the Key Policy Issues and Choices during the Transition," dissertation, RAND Graduate School (Santa Monica, Calif.: RAND, 2002), p. 12.

35. Martha Farnsworth Riche and Aline Quester, "The Effects of Socioeconomic Change on the All-Volunteer Force: Past, Present, and Future," paper prepared for U.S. Department of Defense Conference, "The All-Volunteer Force: 30 Years of Service," Washington, D.C., 16 September 2003.

36. Rickard Sandell, *The Demographic Obstacles to Military Recruitment: Benchmarks for Preserving the Numerical Strength of the Armed Forces* (Madrid: Real Instituto Elcano, 19 November 2003).

37. David R. Sands, "Even Military Experts Consider Draft Antiquated," *Insight on the News,* 12 February 2001. On the other hand, the high levels of draft resistance and conscientious objection may not make things worse for recruiting in European countries than youth antipathy toward the military and the draft did in the United States in the wake of the Vietnam War.

38. There are exceptions, and things may be changing. The French forces, for example, have a tradition of minority service, and they successfully recruit members from the territories outside continental France. Market research for the Dutch military indicates that "young people from ethnic minorities are more interested in a job in the armed forces than are indigenous youngsters"; see Ministry of Defence of the Netherlands, p. 13.

39. Canadian Ministry of National Defence, *A Benchmark Study of the Armed Forces of Australia, Italy, the Netherlands, Sweden, the United Kingdom and Canada* (Ottawa: 10 December 2002), available at www.dnd.ca/site/minister/eng/benchmark/bench_nether_e.htm; Shishkin; EUROMIL e.V., *Social Policy for Servicemen in Europe: Fundamental Principles of the European Security and Defence Policy Subsequent to Nice* (Bonn: Bundesdruckerei GmbH, October 2001); for a description of and materials related to EUROMIL, an umbrella organization for military associations in Europe, see www.euromil.org.

40. Anton Bebler, "The Evolution of Civil-Military Relations in Central and Eastern Europe," *NATO Review*, Web ed. no. 4 (August 1994), pp. 28–32; transatlantic roundtable September 2003.

41. "The Stability and Growth Pact (SGP) is the concrete EU answer to concerns on the continuation of budgetary discipline in Economic and Monetary Union (EMU). [The principal concern of the SGP,] adopted in 1997, . . . was enforcing fiscal discipline . . . [and safeguarding] sound government finances as a means to strengthening the conditions for price stability and for strong and sustainable growth conducive to employment creation." "The Stability and Growth Pact," [European Union] *Economic and Financial Affairs,* europa.eu.int/comm/economy_finance/about/activities/sgp/sgp_en.htm.

42. Transatlantic roundtable September 2003.

43. Interview with official of French Ministry of Defense, 29 November 2002.

44. Richard Buddin, Carole Roan Gresenz, Susan D. Hosek, Marc Elliott, and Jennifer Hawes-Dawson, *An Evaluation of Housing Options for Military Families*, MR-1020-OSD (Santa Monica, Calif.: RAND, April 1999).

45. Interview with official of French Ministry of Defense.

46. Transatlantic roundtable September 2003.

47. Ibid.

48. Ibid.

49. Ibid.

50. Interview at Sozialwissenschaftliches Institut der Bundeswehr, 4 February 2003.

51. Transatlantic roundtable September 2003.

52. Ibid.

53. Interview with personnel official of French Ministry of Defense; interview with personnel official of German Ministry of Defense, February 12, 2003; transatlantic roundtable September 2003.
54. Ministry of Defence of the Netherlands, p. 19; transatlantic roundtable September 2003.
55. See Cindy Williams, "Flawed Military Model, Made in the USA," *Wall Street Journal Europe,* 10 April 2003; U.S. Congressional Budget Office, *Budget Options* (Washington, D.C.: March 2001), "Health Care Benefits" and "Other Noncash Benefits," pp. 157–74.
56. For data on the growing representation of women in NATO's forces, see NATO Committee on Women in the NATO Forces, *Year-In-Review 2001,* 25th Anniversary Special Edition.
57. Transatlantic roundtable September 2003.
58. Interview at Sozialwissenschaftliches Institut der Bundeswehr.
59. Ministry of Defence of the Netherlands, p. 13.
60. Transatlantic roundtable September 2003.
61. Ibid.; and Ministry of Defence of the Netherlands, p. 19.
62. Transatlantic roundtable September 2003.

GRAND STRATEGIES FOR DEALING WITH OTHER STATES IN THE *NEW*, NEW WORLD ORDER

James F. Miskel

The art of statecraft has often involved efforts to improve the security of one state by taking advantage of the power and influence of other states. This is, for example, why a state typically seeks to forge military alliances with others. It is also why some states provide economic and military support to client or dependent states and why some advocate the formation of multistate trading blocs. The theory behind the trading-bloc strategy is that cooperation on security matters is more likely when there are strong economic and other mutually beneficial connections among the members of the bloc. Among the tools that have been and are being used to influence other states are trade preferences, loans, loan guarantees, concessionary pricing for military sales, export-import financing, technical assistance, foreign aid, and international disaster relief. While humanitarian altruism is a major factor in foreign aid and disaster relief, statesmen often see the reduction of suffering as a method of improving the stability of a recipient state or as an inducement for a recipient state to cooperate more fully on security matters.

Many ideas for making American foreign policy more effective have been offered in recent years. Some of them involve ways of prioritizing all forms of official, state-to-state assistance on those states whose stability or cooperation will most benefit the national interests of the United States. Obviously, there are

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Naval War College Review, Winter 2005, Vol. 58, No. 1

many states that are already stable and already do generally cooperate with the United States. Canada, Japan, and the states of Western Europe (disagreements over the second war with Iraq notwithstanding) fall into this category. Certainly the economically advanced and politically stable states of the collective "West" have a common interest in suppressing the signal threat—global terrorism—of the *new,* new world order that sprang from the rubble of the World Trade Center and Pentagon on 11 September 2001. Thus the real focus of foreign policy reform proposals is on the large number of states that are neither as economically advanced nor as stable as Japan, Canada, and Western Europe.

Three general approaches have been proposed for identifying the states outside the "winner's circle" of economically advanced and stable states whose cooperation and stability contribute most to the national interests of the United States. Each of these approaches—as should be expected, because of the emphasis of all on state-to-state relations—is realist in its assumption that the state is the most important actor in world affairs and thus that working through and with other states is an effective way for the United States to further its national interests. The general approaches would respectively devote the lion's share of state-to-state assistance to one of the following groups of states:

- Lever, or pivotal, states through which the United States can promote stability in a region and thus tamp down the threat of terrorism
- Buffer states that can be strengthened to become more effective insulators against terrorist attacks upon the United States and its interests
- Failed or failing states, the restoration of which to functionality would eliminate platforms from which terrorists might plan, prepare, or launch attacks upon the United States or its overseas interests.

Each of these options is based on distinctly different assumptions about the role that other states can play on the world stage and about the type of contributions that they can make in the global war on terror. This article examines these assumptions and finds that they are in some important respects inconsistent with security threats that will face the United States in the early twenty-first century.

PIVOTAL STATES

In the late 1990s, after the Cold War but before the global war on terrorism—that is to say, during the original new world order and before the *new,* new world order—the notion of pivotal states enjoyed considerable support, because it recognized something that should have been, even if it was not, intuitively obvious. That something was that it made sense for the United States to organize its

foreign policy priorities so as to ensure that states that deserved a lot of attention got a lot of attention, and conversely that states that deserved less attention got less. The approach, proposed by Professor Paul Kennedy and other authors, may appear somewhat dated now, but it is based upon an enduring principle—that state-to-state assistance would be most effective if it were targeted at states that would then exert favorable (to American interests) influence regionwide. The general rule for determining whether a state deserved a good deal of attention boiled down to the following: if a state's successes and failures had major ripple effects on neighboring states, that state was ipso facto a pivotal state.[1]

The pivotal-states strategy calls to mind the saying, "When Brazil [or any dominant state] sneezes, Argentina [or any smaller neighboring state] catches cold." Brazil was, indeed, designated by Paul Kennedy and his coauthors as a pivotal state by virtue of the size of its population and economy relative to neighboring states, and Argentina's economy did indeed actually "catch cold" when Brazil devalued its currency in 1999. Obviously the pivotal-states strategy aims at the positive effects that a pivotal state can have on its neighbors.

It is less than clear that the conditions in failed states actually offer better opportunities for terrorists than do conditions in certain functional states.

According to the strategy, the United States should target its foreign aid, economic preferences, concessionary military sales, and technical assistance on the "Brazils" of the world and at the same time reduce its aid and assistance to other states, including their nonpivotal neighbors—for example, Argentina. Extending the health analogy, the strategy called for the United States to give vitamins to Brazil in order to promote rosy cheeks in both Brazil and Argentina. To do otherwise, Kennedy and his coauthors argued, would spread state-to-state assistance so thinly among a large number of recipient states that no single one would get enough aid to make a real difference.

The image projected by the pivotal-states strategy is proactive. The strategy seeks to influence regionally dominant states precisely because those states *are* regionally dominant. They are pivots because they extend muscular tentacles of economic, cultural, political, and ideological influence into their respective hinterlands. Perhaps because of this focus on relatively powerful states, this strategy implies a high level of respect for the sovereignty and national interests of the recipient states.

Like all of the strategies discussed here, the pivotal-states strategy is easier to describe than to execute. It assumes that decisions about import quotas, tariffs, and foreign aid will actually be made (or perhaps only wishes they would be

made) on the basis of foreign policy considerations alone. The reality is, of course, often quite different. Such decisions are political judgments and will always be heavily colored by estimates about their likely effects on domestic constituencies. Higher quotas and lower tariffs are inevitably evaluated and voted up or down on the basis of their impact on the U.S. economy and, more particularly, on domestic American industries—often with only scant regard for their potential effects on a pivotal state in a distant region of the world. President George W. Bush's March 2002 decision on steel import tariffs is a good case in point. Although it has since been rescinded, the tariffs were very clearly designed to support the domestic steel industry regardless of its effects on foreign trading partners. Similarly, decisions about where to invest foreign aid or even sell military hardware at concessionary prices are always influenced by political pressures from constituency groups, be they individuals who want to extend the helping hand of foreign aid to whoever needs it regardless of the overall foreign policy, or industry representatives and labor lobbyists who want to maximize sales whether the opportunities are in high or low-priority markets.

Moreover, circumstances change, often in ways that disrupt the best-laid plans of strategists. For example, Afghanistan was never considered a pivotal or even moderately important state until after the Taliban refused to turn over the 11 September terrorists. Nevertheless, the country is getting a considerable share of American nation-building and peacekeeping resources. This seems to indicate that it would be impossible for the United States to adhere to any spending priority list over time.

On the other hand, a truly rigorous concentration of foreign aid, trade preferences, and intensive technical assistance, etc., on a very small number of pivotal states can have profoundly positive effects on a region. This was the case in postwar Germany and Japan, and it appears to be the strategy the United States is following with respect to Iraq. The objectives of the very heavy investment in postwar reconstruction in Iraq clearly include the stabilization of the Middle East region as a whole and the promotion of political and economic reform in neighboring states—including, of course, states with unrepresentative regimes that have been sponsoring terrorism or at least not acting effectively to suppress it.

Focusing on only one or two pivotal states (for example, Iraq and Afghanistan) amounts to a pivotal-*regions* strategy (or in this instance, *region*), a substantially different approach in that it does not identify pivotal states in every major region or focus aid on them as levers for the promotion of American national interests around the world. For the time being, considering the Greater Middle East as the pivotal region may make good strategic sense. The Middle East is, in fact, a crucially important region at this point, because it is the ideological and financial wellspring of Islamic extremism, and because its oil

resources play such an important role in the world economy. Nonetheless, the reconstruction project in Iraq will one day be completed, internationalized, or abandoned, and when that day comes questions about whether state-to-state aid should be concentrated on pivotal, buffer, or failed states will reemerge.

BUFFER STATES

Buffer-states strategies also envision that the United States would provide greater amounts of economic, political, and military support to some states than to others, but in this strategy the priority traditionally has been states that can solidify the local status quo, rather than states with resources that can be leveraged into greater influence over events in distant regions.

For example, the Soviet Union established the Warsaw Pact in order to provide a "cordon sanitaire" between the motherland and the West. Stalin's cocooning strategy clearly viewed the Eastern European satellites as insulators between the core of the Soviet empire and the sources of economic, cultural, and ideological contagion in the West. He saw the satellites also as shock absorbers that could contribute to the preservation of his hard-won empire by serving as first lines of defense in the event of a military attack by NATO. Ironically, before World War II some Western European leaders had viewed the very same Eastern European states as buffers against Bolshevism. Until the dawn of the nuclear age and now the global war on terrorism, the oceans were thought to constitute all the buffers that the United States needed, although there have occasionally been arguments for prioritizing aid to Mexico so that it could better protect the United States against infiltration and mass migration from Central America.

The image projected by buffer-states strategies is reactive. Buffer-states strategies aim at local, not widely dispersed, states. Their contributions are defensive, and their ability to project economic, cultural, political, and ideological influence over other states is immaterial.

Lately there has been interest in a strategy that appears to combine aspects of both the buffer and pivotal-states strategies. This "seam states" strategy was formulated and effectively articulated by a Naval War College colleague, Dr. Thomas P. M. Barnett.[2] As envisioned by Barnett, the seam-states approach forms part of a larger strategy involving improvements in homeland security and proactive interventions in nonseam states. Barnett's seams resemble the fault lines between civilizations or cultures that were envisioned by Professor Samuel Huntington in the early 1990s;[3] however, Barnett's lines in the sand are fewer in number, more fluid, and more heavily based on secular phenomena than were Huntington's cultural fault lines.

The seams represent the dividing line between two figurative tectonic plates. One plate contains the states that are connected with, or are attempting with at

least some success to connect with, the "West" through globalization. This plate accounts for approximately two-thirds of the world's population, and it represents, in Barnett's schema, an economic and political winners' circle of relatively stable and prosperous states. The other plate represents the remaining one-third of the world's population who reside in states that are disconnected, or are deliberately disconnecting themselves, from the evolving norms, practices, and institutions of globalization. Barnett argues that in the *new,* new world order this is where the main security threats originate. The threats may be from a state (North Korea), a terrorist group sponsored by a state (Hizbollah), or terrorists acting completely independently of a state (al-Qa'ida), but in each instance the threat is assumed to emanate from an entity based on the second tectonic plate.

According to this strategy, states along the seams between the tectonic plates are potentially important because they can serve collectively as a barrier inhibiting the ability of terrorist networks on the second plate to attack states on the first plate—but not every state on the seam is equally important.

Twelve of the most important seam states are designated by Barnett for priority attention. The twelve would get more economic, political, and military assistance from the United States; other advanced countries and other seam states would get less. Of the twelve most important seam states, Professor Kennedy and others earlier identified seven as pivotal states.

- *States (seven) on both the pivotal and seam-states lists:* Algeria, Brazil, Indonesia, Mexico, Pakistan, South Africa, Turkey
- *States (five) on seam-states list only:* Greece, Malaysia, Morocco, the Philippines, Thailand
- *States (two) on the pivotal states list only:* Egypt, India.

Although the focus of this essay is on the overall strategies, rather than nuts-and-bolts decisions about which states warrant higher priority, the list of key seam states does invite comment. Malaysia, Indonesia, and the Philippines share maritime borders primarily with each other and land borders with only four states: the first-plate states of Singapore and Brunei, the second-plate—but nonthreatening—state of Papua New Guinea, and Thailand, which is designated as another key seam state. In effect, Malaysia, Indonesia, and the Philippines do not actually abut any significant segment of the seam between the first tectonic plate and the second. This suggests that these three states are designated for priority attention for some reason other than their status as seam states, which in turn may raise questions about the assumptions upon which the strategy was built. It seems clear that the region as a whole is what is strategically important—the vast expanse of ocean, a huge number of islands, and heavily

trafficked sea-lanes that Malaysia, Indonesia, and the Philippines individually govern—not the ability of the three states to serve as buffers between the first and second tectonic plates.

Despite the high degree of overlap between the seam-states and pivotal-states lists, the seam-states strategy is, in fact, more closely aligned philosophically with the buffer-states approach. The seam and buffer-states strategies concentrate state-to-state assistance on a selected number of states that have primarily defensive functions and may or may not be able to project economic, cultural, political, or ideological influence at the regional level. In this strategy, influence is projected beyond the seam by the state that provides the assistance in the first place—the United States.

In concluding that the key seam states could function as effective barriers against terrorist networks, the strategy makes two important assumptions. One is that the seam states actually provide some sort of physical barrier between the first and second plates; the second is that terrorist networks would actually have to transit the barrier in order to attack the United States or one of its neighbors on the first tectonic plate. Both of these assumptions are questionable, given the nature of modern transportation networks and the relatively small volume of men and materiel that terrorist organizations would actually have to move from one location to another in order to attack a state in the winners' circle. As long as commercial airlines fly to places like Kabul and Khartoum and ships dock at ports in South Asia and West Africa, terrorist organizations will be able to fly over or sail around whatever barriers the seam states provide.

The pivotal-states strategy calls to mind the saying, "When Brazil sneezes, Argentina catches cold."

The strategy also assumes that the key seam states are now or soon will be (after having received state-to-state assistance) physically capable of controlling their borders and exerting on-the-ground control over remote internal regions. This indeed would seem to be the sine qua non of the strategy, for if a state cannot control its own territory, it can hardly serve as an effective barrier against intrusion or movement between the second and first plates.

At least four (Pakistan, Indonesia, the Philippines, and Brazil) of the twelve key seam states long ago demonstrated the inability to assert control over remote internal areas or effectively police their land and sea borders. Terrorists having already established bases of operation in three of them—Pakistan, the Philippines, and Indonesia—it is clear that none has presented a major barrier to terrorist networks in the past. Enough incidents of terrorism continue to occur in each of these countries (a March 2003 bombing in the Philippines' second

biggest airport, the August 2003 hotel bombing in Jakarta and the October 2002 bombing of a Bali resort in Indonesia, and the intermittent terrorism in Kashmir conducted or supported by Pakistani groups) to raise doubts that any of the three will become effective barriers any time soon. Although there are as yet no signs that the fourth, Brazil, is home to anti-American terrorist base camps, there are serious questions about the extent of Brazil's effective control over its remote interior sections, in particular near the western borders with Colombia and Peru and the southern frontier with Paraguay and Argentina.

The seam-states strategy envisions a robust program of state-to-state assistance (military sales, military advisers and trainers, foreign aid, technical assistance on law enforcement and government reforms, and favorable trade agreements) to help key seam states improve and extend their governing capacities so as to prevent second-plate terrorists from attacking first-plate targets.

A program of this magnitude is daunting, to say the least, and unlikely to be resourced adequately. Moreover, Indonesia, Pakistan, the Philippines, Brazil, and perhaps other key seam states ultimately lack sufficient incentives to exert themselves seriously in underpopulated rural zones; all face more direct challenges in their overcrowded cities. Demographic trends suggest that the urban challenges will get worse, not better. Pakistan, Indonesia, Brazil, the Philippines, and also Malaysia have vast land or maritime borders that are virtually impossible to control without unaffordable increases in their security budgets. For example, the coastlines of Indonesia, Malaysia, and the Philippines total about sixty thousand miles—five times the length of the coastline of the United States. It is hard to envision Indonesia, Malaysia, or the Philippines ever being able to control effectively more than a tiny percentage—that is, ever being truly effective at the role that the seam strategy envisions for them.

FAILING STATES

Failing-states strategies are of a completely different order than pivotal, buffer, or seam-states strategies. Theoretically, pivotal and buffer-states strategies target other states as being relatively capable of either projecting influence regionally or acting as barriers against intrusion by third parties. Failing states are capable of neither, and it is their very incapacity that causes some strategists to believe that they warrant high priority in state-to-state assistance.

Failed states have been variously defined. Some definitions include states that have simply ceased to exist and have been succeeded by others. For example, under some definitions the Austro-Hungarian Empire would be a failed state, because the geography and population centers once administered as one entity by the Hapsburgs are now administered by successor states. By this yardstick, the term "failing state" could have applied to the Soviet Union during the late

Gorbachev and early Yeltsin eras. For the purposes of strategies for dealing with current and future security issues, such inclusive definitions are useless; a state's failure is often positive in terms of U.S. national interests, as for example when a state that sponsors terrorism fails or, as in Iraq, is made to fail. A state's failure can also leave behind successor states that are politically stable, administratively competent, or connected with the norms of the economically advanced states on the first tectonic plate. Some of the Soviet Union's successor states (Russia, Lithuania, Estonia, Latvia) fall into this category, as do a number of Hapsburg successor states (Austria, the Czech Republic, and Hungary).

A more pertinent definition focuses on sovereign states that exist on paper as members of the United Nations and thus are candidates for state-to-state assistance but that have ceased to provide basic government services to their citizenry, often because of internal strife—as in Somalia in the early 1990s and Liberia in 2003. Initially of concern because of the humanitarian consequences of civil wars, forced starvation, and human rights abuses, failed states have come to be seen by some as launching pads for terrorists and major criminal organizations as well as wellsprings of destabilizing refugee movements and breeding grounds for virulent diseases.[4]

Quite a few scholars and government officials have burned a good deal of tread off their tires trying to devise taxonomies for failing states. This veritable cottage industry attempts to identify warning signs that might enable the international community to intervene early enough to prevent other states from failing. The theory behind these efforts is that concentrated state-to-state assistance for states in danger of failing will prevent failure and thereby:

- Eliminate opportunities for terrorist and criminal organizations to establish bases of operations
- Remove the incentive for refugees to flee into other countries
- Enable law enforcement, humanitarian, and public health agencies to expand their operations and thereby gradually improve living conditions and prevent the spread of crime and disease.

It is clear that the internal chaos and anarchy of failing states do indeed create fertile breeding grounds for crime, human rights abuses, disease, and starvation. But notwithstanding the assumptions of this strategy, it is much less clear that the conditions in failed states actually offer better opportunities for terrorists than do conditions in certain functional states.

For example, states that actively sponsor terrorism with money, police protection, or weapons and that share intelligence reports about impending antiterrorist operations tend not to be failing. Such "services" may simply not be

reliably available in a failing state. States that are genuinely failing are not typically well connected with Western intelligence sources and are thus usually not in a position to obtain or leak advance warning to terrorists. Further, they often exert little control over the internal security forces that might be expected to provide protection to terrorist base camps. Moreover, failing states may be viewed by terrorists as being unable to provide more than token resistance to antiterrorist incursions by neighboring states or special operations units from Western states. Failing states may even be seen by terrorist organizations as incapable of distinguishing between antiterrorist incursions and indigenous violence—and thus as unable or unwilling to offer even stout legal defenses of their sovereignty.

This is not to say that terrorists do not operate or establish base camps in failing states. They do. However, the issue for strategists seeking to prioritize the investments in state-to-state assistance is not whether there are terrorist organizations in failing states. For strategists the issue is whether the terrorist organizations and operations in failing states are more dangerous to the United States than terrorist organizations and operations in functioning states.

States along the seams between the tectonic plates are potentially important because they can serve collectively as a barrier—but not every state on the seam is equally important.

Fund-raising by terrorist organizations is one aspect of this issue. It has been noted that terrorist organizations finance their operations through criminal activity in failing states. For example, there have been reports that al-Qa'ida has been trafficking in diamonds smuggled from the failing states of Liberia and Sierra Leone.[5] The profits that al-Qa'ida earns from reselling diamonds apparently help finance the group's operations and enable it to maintain its communications network and purchase weapons. Obviously, anything that enables groups like al-Qa'ida to finance their operations ought to be of substantial concern to strategists, but it should be remembered that the problem is hardly unique to failing states. While smuggling is considerably easier in a failed state that cannot control its borders, goods are also smuggled out of functioning states (e.g., diamonds from Tanzania, drugs from Colombia, small arms from Russia), and the profits from these enterprises can also finance terrorist groups. In fact, criminal enterprises inside functioning states can also generate funds for terrorists. Even in the United States, terrorist operatives or their sympathizers have engaged in illegal activity (such as smuggling cigarettes from low-tax states like North Carolina for resale in high-tax states like New York, embezzling from charities, extorting money from legitimate businessmen and families) in order to raise funds for terrorism.

Another factor to consider is that the most serious recent terrorist attacks on first-plate states have been based either in the first-plate state itself or in a state that was not considered to have failed. The bombings in Indonesia were reportedly undertaken by an Indonesian terrorist group, and the 11 September attacks on the United States sprang from a complex of headquarters, training camps, and weapons caches in Afghanistan. On 10 September 2001 most observers felt that Afghanistan under the Taliban suffered from too much government, not too little. The Taliban might have failed to improve the living conditions in Afghanistan, but it did control enough of the country to make al-Qa'ida view the Taliban government as a sound strategic partner—one that would be able to assert state sovereignty and provide protection to al-Qa'ida operations. None of the individuals indicted for the March 2004 terrorist bombing in Spain was from a failing state—in fact, most were from one of the designated seam states, Morocco.

Events in Afghanistan and Indonesia strongly suggest that in terms of the war on terrorism, the threat posed by groups in failing states is no more serious than the threat posed by groups operating in lightly governed (or ungovernable) zones inside functioning states. As noted above in connection with the seam-states strategy, the phenomenon of remote and only nominally administered rural or coastal zones inside functioning states is already a serious problem in some parts of the world. As urbanization continues to deplete rural populations and force national governments to concentrate on governing cities, the phenomenon may become more widespread.

THE LURE OF ELEGANT CATEGORIZATIONS

This article has sought to compare and contrast the assumptions and conceptual approaches embedded in three broad strategies for maximizing the benefits the United States receives from state-to-state assistance programs. None of the three represents an adequate strategy for dealing with the security threats of the present day and age.

Each of the three depends heavily upon the ability of strategists to perform two functions well: first, to decide which states are more important than others in terms of their contributions to the "bottom line"; and second, to adhere to the designated priorities over extended periods of time, not just a single fiscal year. The difficulty of actually performing both tasks well should not be underestimated. Judgments about where the United States should invest its time and money are inherently and inescapably political, and in practice they are likely to reflect domestic considerations as much as strategic calculations. Political pressures from domestic interest groups and unanticipated developments overseas will not only shape the original priority list of recipient states but cause our

investment patterns to diverge from whichever strategy is officially adopted. In the unlikely event that an elegant game plan were actually adopted, it would not be long before we began to violate it.

Moreover, each of the general strategies reflects assumptions about the role of other states that may be inappropriate for the security threats posed in the *new,* new world order. Indeed, it may well be that the very idea of categorizing states according to the role that the United States would assign them (extending a stabilizing influence over a region, serving as a barrier against external threats, reestablishing stability over the territory of a failing state) is misguided, because of the quicksilver nature of the terrorist threats emanating from "beyond the seam." As we have seen, at least some terrorist groups seem able to disperse and reorganize (perhaps under different names), relocate at great distance (al-Qa'ida's relocation from Sudan to Afghanistan is the best example), and quickly form partnerships of convenience with groups in other countries, including first-plate states like Great Britain and France. The pivotal states, buffer/seam-states and failed-states strategies plod in comparison. By the time state-to-state assistance has had its hoped-for effects on a pivotal, key seam or failing state, the terrorist organizations will have moved on to other locations from which they could base operations, devise new routes for attack on the "West," or forge new alliances with dissident groups inside first-plate or seam states.

The pivotal, buffer, and seam-states strategies each more or less assumes that all states that are categorized as high priority will play roughly the same role. For example, a seam-states strategy assumes that once having received state-to-state assistance, all of the key seam states will at least attempt to serve as effective barriers to third-party threats. If this assumption were not made, there would be no logical reason to pursue the strategy in the first place. It is also assumed that a state could be a pivot or a nonpivot, but not both—a seam state or a nonseam state, but not both.

The problem is that at least some of the states that would be designated as pivotal and key seam states have characteristics of failing or beyond-the-seam states. That is to say, several of the pivot or key seam states contain zones where they have simply failed to exert effective control. These ungoverned or very lightly governed zones (such as the fastness of Pakistan's mountainous border with Afghanistan, where Osama Bin Laden has reportedly been managing to avoid capture and orchestrate terrorist actions in first-plate states), out-of-the-way islands in Indonesia, dense patches of jungle in the Philippine archipelago, and the isolated interior of Brazil are already home to terrorist organizations and could provide bases of terrorist operations in the future. Many of these pivot or seam states have pressing social problems in overpopulated cities and are not highly motivated even to attempt to play the role scripted for

them in the pivot and seam-states strategies—to assert control over remote and dangerous regions. In some of these states, governance is a delicate balancing act among ethnic minorities or religious factions. Their rulers may well see their own interests as being best served by lip service to the role of pivot or buffer.

Given these considerations, the lure of grand strategies based on elegant categorizations of states should be resisted. A more effective approach would be to do more of something we do not do enough of today—allocate security-related assistance to other states on the basis of that state's potential contribution to specific high-priority projects or functions in the war on terrorism. Examples are the collection and sharing of intelligence information about terrorist organizations, law enforcement action against indigenous terrorist groups with affiliations to al-Qa'ida, suppression of illegal fund-raising activities by terrorist organizations, and effective regulation and monitoring of financial transfers that support terrorist organizations.

NOTES

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3. Samuel Huntington, "The Clash of Civilizations?" *Foreign Affairs* 72, no. 3 (Summer 1993).
4. State Failure Task Force, *Internal Wars and Failures of Governance, 1955–2000.* The task force was initially commissioned by the U.S. government during the 1990s and has since continued its work under the auspices of the Center for International Development and Conflict Management, at the University of Maryland. The data are available at the center's website, www.cidcm.umd.edu/inscr/. Recent articles on failed states as platforms for terrorism include Robert I. Rotberg, "Failed States in a World of Terror," *Foreign Affairs* 81, no. 4 (July/August 2002); and Jeffrey Record, "Collapsed Countries, Casualty Dread, and the New American Way of War," *Parameters* 32, no. 2 (Summer 2002), pp. 4–23.
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THE MOSQUITO CAN BE MORE DANGEROUS THAN THE MORTAR ROUND

The Obligations of Command

Arthur M. Smith and Craig Hooper

We must be prepared to meet malaria by training as strict and earnest as that against enemy troops. We must be as practiced in our weapons against it as we are with a rifle.

FIELD MARSHAL VISCOUNT SIR ARCHIBALD WAVELL

These words, penned in 1943 by the commander in chief of British forces in Burma during World War II, underline the reality that losses to malaria and other preventable diseases among Allied forces operating in the China-Burma-India theater far exceeded the number of casualties inflicted by enemy action.[1] Today, as the global war on terrorism evolves, a similar failure to appreciate noncombat environmental threats—including mosquitoes and other disease-carrying insect vectors—will once again degrade combat effectiveness of deployed forces. The significance of Field Marshal Wavell's caveat was amply demonstrated in August 2003, when a U.S. Marine Corps team, while conducting stabilization operations in Liberia, was hit by a surprise disease outbreak. Almost 30 percent of the deployed military personnel contracted malaria, distracting military medical assets already committed to supporting combat operations in Iraq and Afghanistan.

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DEPLOYMENT RISKS

Disease and illness will likely generate more casualties than combat during military operations along the African littoral, in South Asia, or on East Asian shores. Up to 75 percent of the casualties suffered in previous conflicts in these regions resulted from disease.[2] Examination of U.S. Marine casualty data from Vietnam alone reveals that only a third of hospital admissions

were for wounds incurred as a result of combat action; two-thirds of hospitalized personnel suffered from diseases and, in lesser numbers, nonbattle injuries.

Malaria is a particular risk. Though the mosquito-borne disease has long been eliminated from the United States, it remains, according to the World Health Organization, one of the most significant health threats in the world. *Plasmodium falciparum,* the most severe and life-threatening form of malaria-causing parasite, kills more than a million people a year. The danger to American military personnel is twofold. Malaria victims who have never been previously exposed to malaria-causing parasites are at high risk of suffering acute infections. Symptoms of acute infection begin nine to fourteen days after an infectious mosquito bite; they are characterized by rapid onset of debilitating fever, headache, vomiting, or other flu-like symptoms that can be accompanied by life-threatening complications. If the victim survives a first bout of malaria without treatment, the infection then becomes a persistent health problem. Chronic, longer-term malaria infection causes successive bouts of severe fever that, if still left untreated, results in progressive deterioration and possible death.

The malaria threat is tied to the rate of transmission, and in most cases the transmission rate depends on the local mosquito population. During operations in sub-Saharan Africa, where mosquitoes are very effective malaria "vectors," malaria infection rates among unprotected troops may be expected to approach 100 percent, and if the infected soldiers are American, without prior exposure to tropical diseases, a high percentage will likely suffer acute infections and experience life-threatening complications that require immediate medical evacuation. These realities could easily render a U.S. military force ineffective without a combat engagement ever taking place.

But malaria and other insect-carried diseases are not the only threats. Military medical-care responsibilities for indigenous civilian populations bearing other communicable diseases unique to their regions could further impact the military medical-evacuation chain. Likewise, although it is not an acute phenomenon, the human immunodeficiency virus (HIV) has profoundly altered the medical risk to troops deployed worldwide. Disease is a constant battlefield threat that, if command engagement and interest are lacking, will endanger America's ability to project military power.

THE MARINES ENTER LIBERIA

Despite long international experience with expeditionary military engagements in Africa and a thorough understanding of the malaria threat, a significant proportion of Joint Task Force personnel inserted into Liberia in August 2003 (eighty out of 290 who had been ashore) experienced symptoms of malaria. The actual malaria "attack rate" will never be known, since the entire contingent

began anti-malarial treatment soon after medical authorities determined the causal agent. A number of latent, "incubating" infections probably went undetected as asymptomatic soldiers rushed to take anti-malarial medication. At any rate, the outbreak was a blow to combat effectiveness, and though there were no fatalities, several victims developed a dangerous complication, cerebral malaria. In cerebral malaria, the blood vessels that carry blood to the brain are clogged, and victims require mechanical lung ventilator support, intensive-care units, and rapid medical evacuation to survive.

What could explain this debacle? Why did most deployed participants—primarily Marines of the 26th Marine Expeditionary Unit (MEU) Quick Reaction Force from the USS *Iwo Jima* (LHD 7) Amphibious Ready Group (ARG)—become infected?

Investigators focused on a number of questions: Was the outbreak due to failure of commanders to ensure that members of the landing force took the prescribed anti-malarial medication, Mefloquine, for the necessary duration of time prior to their insertion into Liberia? Were the deploying forces properly trained to operate in a nation where insect- and water-borne diseases are everyday occurrences? Did the Defense Intelligence Agency's Armed Forces Medical Intelligence Center fail to warn commanders of the *Iwo Jima* ARG about the locally high rate of malaria transmission? Did Marines, having heard about a rumored association of Mefloquine with violent psychiatric reactions in returning Army Afghanistan veterans in Fort Bragg, North Carolina, willfully avoid their anti-malarial medication? Finally, could the prophylactic (preventive) agent have been manufactured incorrectly?

Failure to control malaria destroyed the combat effectiveness of "Merrill's Marauders" in Burma, in 1944. The loss rate was unsustainable.

A consensus conference at the Navy Bureau of Medicine and Surgery on October 9, 2003, revealed that the major contributory factors to the outbreak included insufficient intake of anti-malarial medication and a wholesale failure to employ protective measures.[3]

Blood samples taken from the 26th MEU showed that only 5 percent of affected personnel regularly took Mefloquine. Blood samples from 133 Marines were tested for Mefloquine levels at the U.S. Centers for Disease Control and Prevention (CDC). Seventy percent contained breakdown products of the drug, itself evidence that some Mefloquine had been taken in the preceding month, but only 14 percent had levels high enough to be effective at the time of insertion into Liberia. Only 5 percent of the samples indicated that the medicine had been taken every week. Analysis of Mefloquine taken from Marines' pockets revealed that the potency and formulation of the drug were adequate.

Logistical problems were responsible for some of the other failures. For example, the 26th MEU had ordered bulk Permethrin insecticide for uniform treatment before deployment, but the unit did not receive the Permethrin prior to departure from the United States. Instead, the unit received spray cans of the insecticide, which were then used to treat the desert-camouflage uniforms that the troops had worn in their earlier deployment to the Middle East. In Liberia, however, woodland-camouflage uniforms were worn, and only 12 percent of the troops treated those. Only 27 percent reported using the time-released insect repellant issued to them, and, making matters worse, none slept under insecticide-treated mosquito nets. The Liberia expedition was a "man-portable mission," in which each individual had to carry everything he needed from the transport to the deployment site. Permethrin-treated sleeping nets—a low-tech item previously shown to dramatically cut malaria mortality in West Africa—were not even taken ashore. In addition, many troops were reluctant to use the long-acting insect repellant DEET on the grounds that the repellant was too greasy for hot-weather operations.

The epidemiologic investigation concluded that better malaria-awareness training and wider access to anti-malaria equipment are the best ways to prevent future malaria outbreaks during deployments. Ironically, identical historical lessons, emphasizing the importance of individual, group, and command discipline, have been learned repeatedly since malaria was identified as a major degrading factor in military operations; all appear to have been forgotten. The Navy and Marine Corps have neglected the war fighter's long and proud disease-fighting legacy.

BURMA 1943

The Burma campaign in 1943 was a particularly brutal sideshow of World War II. But here, fighting under terrible conditions and at the end of a dauntingly long supply line, soldiers served in what can be seen now as a battle laboratory. Their experience laid the tentative foundations for today's joint, combined, and special warfighting strategies. Unfortunately, the innovative tactics explored in the China-Burma-India theater were ignored for years after the war, and few looked to exploit the innovative warfighting strategies pioneered in this marginally successful theater of operations, much less recognized that the ravages of preventable disease had bogged down the pace of operations.

Wingate's "Chindits"

Major General Orde Wingate, a commander of the "Chindit Special Force" (and a British military innovator) pioneered a brutal training regimen that quickly shaped soft, poor-quality infantry into a cohesive counterinsurgency-capable

force. Since the Chindits were expected by their commanders to endure all physical challenges, disease prevention was deemphasized.

Even during training, fundamental rules of sanitation and basic anti-malaria precautions were ignored. That neglect caused serious losses; within a period of six weeks one brigade lost over 70 percent of its soldiers to malaria-related hospitalization. Wingate, a survivor of cerebral malaria, used his experience to downplay the importance of anti-malarial measures. One soldier recalled, "In one respect we had the wrong attitude to Malaria; we looked on it as inevitable; we believed that we were all bound to get it every so often. . . . [W]e never treated Malaria as a disease meriting evacuation."[4] This prejudice ultimately became a self-fulfilling prophesy.

The importance of individual, group, and command discipline has been learned repeatedly since malaria was identified as a major threat to military operations; the lesson appears to have been forgotten.

In some respects, the training befitted the Chindits' difficult mission. The Chindit Special Force operated as a commando unit, tasked to infiltrate Japanese lines and conduct hit-and-run attacks against exposed railroads and bridges essential to enemy operations. The soldiers were expected to be constantly on the move, fighting without a base and supplied largely by air. The troops were initially provided with anti-malaria equipment—full green battle dress, anti-mosquito cream, head veils, arm-covering cotton gauntlets, and the anti-malarial medicine of the day, Mepacrine—but these force-protection measures crumbled under the extreme operational conditions and because their leaders believed that disease could be overcome by endurance rather than prevention.[5]

Full, extremity-covering uniforms were discarded, offering ample opportunity for malaria-carrying mosquitoes to bite and transmit malaria. The men preferred shorts to long trousers, especially when maneuvering in Burma's broken terrain; some cut most of the trouser legs from their battle dress. Sleeves were rolled up and uncomfortable arm-covering gauntlets discarded. Anti-mosquito veils were both ineffective and dangerous, offering little protection to sleeping soldiers and restricting vision during night operations.

Chindits rarely had organized and insect-free sleeping quarters. For malaria, this was a critical oversight, since most mosquito bites occur at night, when the insect can feed upon unaware and unresisting hosts. Jungle hammocks provided good shelter from rain and a measure of protection from flies, mosquitoes, and other jungle pests. The mere fact that the hammocks were raised off the ground reduced bites from typhus-carrying ticks and mites. Soldiers recognized that hammocks reduced the rate of typhus and malaria, but again, operational

drawbacks discouraged universal use. The hammock, when enclosed by a portable mosquito net, was difficult to exit in an emergency; further, the jungle hammock and net weighed seven pounds and was bulky. In general, the jungle hammocks, when available, were reserved for the injured and seriously ill.

The principal anti-malarial medication for World War II was Mepacrine (known among American forces as Atabrine). Though it was relatively effective, it was not fully supported at either the command or field level. Mepacrine had to be pressed into service to replace quinine, a time-tested and accepted anti-malarial medication, because by 1943 the Japanese had seized the quinine-producing areas of Java (Indonesia) and the Philippines. Military medical authorities in India and Burma were initially cautious about using Mepacrine as a prophylactic or suppressive (symptom-reducing) anti-malarial, fearing that the drug's potential to conceal infection would encourage combat leaders to keep men on duty when they were afflicted with the disease. Some medical leaders were also concerned that overreliance upon Mepacrine would lead troops to neglect other aspects of anti-malarial discipline. But the Chindits' failure to adopt basic habits that usually prevent exposure to malaria-carrying mosquitoes put Mepacrine to the test.

Eighty out of 290 personnel inserted into Liberia in August 2003 experienced symptoms of malaria.

Unfortunately for the troops, suppressive treatment with Mepacrine was not carried out with complete efficiency even when the drug was available. No regular formations and inspections were held to ensure that men took the anti-malarial medication at the times and in the dosages necessary to prevent malaria. Many personnel, in fact, refused to take Mepacrine. A myth that Mepacrine produced sexual impotence or sterility was rampant among all Allied forces. In one battalion the administration of the drug was suspended before troops went into action, because its officers believed the drug would reduce fighting efficiency. Such fallacies had a tendency to spread rapidly, become exaggerated, and gain credibility during circulation.

Deliberate failure to take Mepacrine on a regular and consistent basis led to confidence-eroding "breakthrough infections" when the level of Mepacrine in the blood became too low to control the proliferation of the malaria parasite. One medical officer discovered that the Mepacrine containers of two of his patients who had just died of cerebral malaria still contained the original quota of thirty tablets at a time when they should have been almost empty.

The enormous amount of labor required to reduce local hazards of contaminated water, insect bites, and fungus infections of the skin—indeed the impossibility of preventing them entirely during a long campaign—produced further laxity, bordering upon hostility, toward medical discipline. The admiration of

the line community for its own medical assistants was evidently counterbalanced by indifference and even resentment toward medical advice from the rear.

Command indifference to disease prevention denied soldiers the opportunity to exploit incremental improvements in malaria-prevention technology. Mosquito repellent, oil of citronella, was initially issued in an ineffective and greasy formulation. The uncomfortable repellant fell out of favor, and the Chindits resisted later nongreasy and more effective counterparts. Command elements failed to instill confidence in the new formulation, and no organized inspections were held to demonstrate or ensure proper and regular use of the mosquito repellant.

With the passage of time, the incidence of malarial fever attacks rose steadily; few men experienced less than three attacks. The majority had as many as seven malarial episodes—and many had to endure malaria attacks while actively engaged with enemy fighters. The fighting efficiency and morale of personnel who had experienced three or four attacks of malaria diminished rapidly. Dysentery, diarrhea, lung infections, and skin diseases were more likely to infect, and after infection to disable completely, a malaria-ridden soldier, compared with a soldier who had not suffered repeated bouts of malarial fevers. Deaths from cerebral malaria and typhus increased during operational deployments. The Special Force, as a result of its aggressive training and counterinsurgency mission, broke medical discipline, exposing itself to these preventable parasitic diseases. Compounding the failure of disease-prevention measures, members of the Chindit force gave up the suppressive benefits of Mepacrine. The medical officers, facing a situation that appeared insurmountable, gave up, allowing themselves to fall to the low standard set by the men. The casualty rate was enormous. Just two-thirds of the Chindit troops who embarked upon Operation LONGCLOTH in February 1943, a marginally successful four-month incursion into Burma, returned. Ultimately, only six hundred of the three thousand troops who commenced that operation were ever fit for military service again.

The realities of malaria could easily render a U.S. military force ineffective without a combat engagement ever taking place.

From a clinical viewpoint, the Special Force was more severely injured by malaria than by bullets and grenades. Considered tactically, unit battleworthiness was determined more by its state of medical discipline than by courage.[6] It has been said that the Chindit Special Force met a more dangerous enemy in disease than in the Japanese army. Disease did more damage than the enemy. Even Wingate's substantial legacy of innovation was diminished by his failure in Burma to ensure the health of his men.

Merrill's Marauders

U.S. forces in the China-Burma-India theater had similar problems. Like the British, the Americans relied primarily upon Atabrine (Mepacrine) to suppress and control malaria. The members of Brigadier General Frank Merrill's 5307th Composite Unit (Provisional)—known as "Galahad," or "Merrill's Marauders"—self-administered their anti-malarial medication. Each soldier was expected to take a Mepacrine tablet on a daily basis, conforming to a system already developed for the Pacific theaters. But again, many soldiers failed to follow precisely the protocol required if the medicine was to prevent malaria. Atabrine indiscipline became a particularly potent manifestation of the poor morale common in troops en route to the theater and within units experiencing their first weeks of training in India. Unfortunately, command interest in reinforcing individual Atabrine discipline was also lacking, often neglected until malaria brought training to a standstill. Disease made morale even harder to restore.

The Marauders entered Burma in February 1944 with inadequate collective anti-mosquito protection. As with the Chindit Special Force, little was done to control malaria-carrying mosquitoes. Means by which individuals could limit mosquito exposure—repellants and "mosquito bars" (protected sleeping enclosures)—were unpopular and used by only a handful. Predictably, malarial infection and reinfection were rife during operations in the theater. The theater commander, General Joseph Stilwell, exacerbated morale problems by pressing his men to extend offensive operations and placing restrictions on medical evacuation. Gradually, fatigued and disease-ridden men began to repudiate Atabrine. It was a vicious cycle. The sicker the troops became, the lower the morale. The lower their morale, the less hope there was of restoring Atabrine discipline and curbing malaria.

As reported by a malaria expert on the staff of General Stilwell, the failure to control malaria destroyed combat effectiveness. "It was incumbent upon any medical officer surveying a unit with a current malaria rate of 4,080 attacks/1,000 men per annum; with 7.4% of the men noneffective each week because of Malaria; and 57.3% of the remainder infected during the past year, to consider the unit as unfit for operations before adequate rest period and replacement is provided."[7] The loss rate was unsustainable.

Few of the original 2,750 combatants endured the entire campaign. At one point, the Marauders were losing seventy to a hundred men daily to malaria, dysentery, and scrub typhus. By August 1944 only two hundred of the original Galahad force remained, and these were utterly worn out.

> Thus were the Marauders destroyed, not by mis-leadership, although it played a part in the closing phase of the disaster, nor by the enemy. . . . Their destruction occurred

> on the ridges and jungle trails. . . . Of the three causes of the Regiment's collapse, the environment was the underlying cause. The tactical engagement was the precipitating cause; and the invasion of the troops by disease was the final and decisive cause. To an unknown extent the Marauders helped their enemies by their loose sanitary practices, by command ineptness in supporting the medical establishment, and by defiance of Atabrine suppressive discipline. In the end, disease producing parasites Amoebae (Dysentery) and Plasmodia (Malaria), as well as bacteria and Rickettsia (Typhus) organisms, rather than Japanese soldiers, vanquished Merrill's Marauders.[8]

THE RESPONSIBILITY OF COMMAND

In general, mere mention of hygiene and sanitation elicits tolerant but bored amusement from specialists in the combat arms. To this day, many senior officers are unwilling to accept the fact that hygiene is not only a function of discipline but one of the basic factors upon which discipline is built. Personal discipline aggregates to collective discipline; its absence in the individual produces the same absence in the operational unit.

The recent embarrassing experience with malaria during Liberian operations once again demonstrated the historically validated and fundamental axiom that training in the prevention of disease must be given top priority and be treated like any other battle exercise aimed at attainment of an objective with the least casualties. Training must be sufficiently intensive to ensure that all personnel can be relied upon to maintain personal hygiene, unsupervised, during any period of active operations. Without this, morale and fighting effectiveness will crumble.

Malaria is a particular challenge; aside from the intake of suppressive medications, strict anti-malaria discipline must be enforced during training periods, and any breach sanctioned. If compliance with expected anti-malarial measures proves unwieldy or unrealistic, a unit commander is obliged to facilitate the development of an engineering or medical solution. In operational theaters where malaria is endemic, administration of anti-malarial medication and compliance with personal and collective force protective measures can be ensured by evening inspections at the first indication of sundown, when mosquitoes are most active. Such measures of personnel protection from mosquito-borne illnesses must be practiced repeatedly until their observance becomes a conditioned reflex.

The importance of effective command discipline was validated by yet another historical example from the jungles of Burma during World War II. Like Wingate's Special Force and others, the British South East Asia Command's Fourteenth Army, in general, faced significant losses to malaria. A new commander, then Lieutenant General Sir William Slim, took over determined to

enforce vigorously a malaria-control program in the Fourteenth Army. As he later recalled in his memoirs, "In 1943 for every man evacuated with wounds, we had 120 evacuated sick. The annual malaria rate alone was 84 percent per annum of the total strength of the Army, and was still higher among the forward troops. A similar calculation showed me that in a matter of months, at this rate, my army would have melted away."[9]

Lieutenant General Slim saw correctly that more than half the battle against disease is fought not by doctors but by regimental officers. Those in direct, regular contact with the troops are best placed to ensure that personal anti-mosquito measures are observed and that daily doses of anti-malarial drug are taken. General Slim initiated surprise checks in which every man in the unit was examined. If men had not taken the drug, and if the overall results of blood tests for the medication within the unit were less than 95 percent positive, Slim "sacked the commander. I only had to sack three; by then the rest had got my meaning." Because of this emphasis from the top,

> slowly, but with increasing rapidity, "as all of us, commanders, doctors, regimental officers, staff officers and [noncommissioned officers] united in the drive against sickness, results began to appear. On the chart that hung on my wall, the curves of admissions to hospitals and Malaria in forward treatment units sank lower and lower until in 1945 the sickness rate for the whole 14th Army was one per thousand per day."[10]

As the recent incident in Liberia demonstrates, the global war on terrorism may become completely paralyzed without a wholesale commitment of leadership, "from the top," to the environmental protection of the troops. Flesh and blood remain the central element of all weapons systems. The will and physical capability to fight remain the crucial factors in any equation for victory. If commanders are unable to recall the hard medical lessons learned in previous conflicts, and fail to ensure the health of their soldiers, how can America expect to confront bioweaponry or other, more dangerous infectious threats?

Standards of hygiene and sanitation are not only indicative of discipline within a unit but are direct personal reflections upon the leadership capabilities of commanding officers and their staffs. Regular care and maintenance of vehicles are essential to trouble-free operation; so it is with human resources during combat deployments. Unless the war fighter's welfare receives constant attention, sickness and ill health are bound to ensue. In units where hygiene and sanitation are poor or lacking, commanding officers have neglected the interest and welfare of their soldiers, and their fitness for command is to be questioned.

NOTES

1. James H. Stone, *Crisis Fleeting* (Washington, D.C.: Office of the Surgeon General, Department of the Army, 1986), p. 256.
2. National Research Council, *The Navy and Marine Corps in Regional Conflict in the 21st Century* (Washington, D.C.: National Academy, 1996), p. 90.
3. *Malaria Outbreak among Members of JTF Liberia Consensus Conference Report,* 9 October 2003, available at www-nehc.med.navy.mil/downloads/prevmed/JTFMalaria.pdf.
4. Stone, p. 210.
5. Ibid., pp. 272–73.
6. Ibid., p. 243.
7. Ibid., p. 296.
8. Ibid., pp. 395–96.
9. Field Marshal Sir William Slim, *Defeat into Victory* (London: Cassell, 1956), p. 173.
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HOSPITAL SHIPS IN THE WAR ON TERROR

Sanctuaries or Targets?

Richard J. Grunawalt

Employment of military hospital ships in support of the war on terror is militarily, politically, and morally appropriate. White ships adorned with the red cross or red crescent are internationally recognized as protected platforms engaged exclusively in the care and treatment of the casualties of war or the victims of disaster, whether natural or man-made. Despite the humanity of their mission, outdated rules of conventional and customary international law, designed for a bygone era, hamper their effectiveness and imperil their safety. This enquiry examines these problems in the context of the war on terror and an adversary intent on destroying such "soft" targets as hospital ships in order to create the maximum in shock and horror. A brief overview of the development of the law pertaining to hospital ships is provided as well, with emphasis on rules governing methods of identification, modes of communication, and means of defense.

EVOLUTION OF LAW AND PRACTICE PERTAINING TO HOSPITAL SHIPS

The special protected status accorded to hospital ships during international armed conflict has a long and storied past. The utility of vessels especially designed or equipped to care for and transport wounded and sick soldiers and sailors has an even more extensive history. Indeed, there is some evidence that both the Athenian and Roman fleets employed vessels as hospital ships.[1]

Early Development (1868–1949)

By the seventeenth century, vessels especially configured to care for the wounded following engagements at sea routinely accompanied naval squadrons.[2] Pictet noted that by the time of the Crimean War (1853–56) "more than 100,000 sick

and wounded were repatriated to England on board hospital transports. Thereafter, no military expedition was ever undertaken without the necessary ships being assigned to evacuate soldiers from the combat area and give them the medical treatment they might require."[3]

It was not until 1868, however, that the international community sought to cloak ships engaged exclusively in the care and treatment of the wounded, sick, and shipwrecked with formal immunity from capture and destruction. Following adoption of the Geneva Convention for the Amelioration of the Condition of the Wounded in the Armies in the Field of 1864, a diplomatic conference was convened in Geneva for the purpose, among others, of extending to naval forces at sea the protections accorded in that treaty to wounded combatants on land.[4] That effort produced a convention entitled Additional Articles Relating to the Condition of the Wounded in War of 1868, which was never ratified but set forth basic precepts that continue to inform the law of armed conflict relative to hospital ships.[5] Principal among them is that "vessels not equipped for fighting which, during peace the government shall have officially declared to be intended to serve as floating hospital ships, shall . . . enjoy during the war complete neutrality, both as regards stores, and also as regards their staff, provided that their equipment is exclusively appropriate to the special service on which they are employed."[6] Although it was not in legal force, belligerents in both the Franco-German War of 1870–71 and the Spanish-American War of 1898 agreed to accept and abide by the 1868 accord.

By 1898, there was growing recognition of the need to revise and expand the 1864 Convention, and the International Committee of the Red Cross (ICRC) began the task of drafting an expanded version. This effort was overtaken, however, by the czar of Russia's initiative to convene the First Hague Peace Conference, which drafted and adopted, among other instruments, the 1899 Hague (II) Convention with Respect to the Laws and Customs of War on Land and the Regulations Annexed Thereto[7] as well as the 1899 Hague (III) Convention for the Adaptation to Maritime Warfare of the Principles of the Geneva Convention of 22 August 1864.[8] Given the failure of the 1868 Additional Articles to gain ratification, the Hague (III) Convention was the first successful attempt to extend to the maritime environment the formal protections applicable to medical facilities and the wounded and sick in the field on land.[9] Article 1 of the latter accord provides that vessels constructed or assigned solely for use as military hospital ships, and properly announced as such, "shall be respected and cannot be captured while hostilities last." Article 4, in turn, stipulates that hospital ships must accord relief and assistance to the wounded, sick, and shipwrecked without discrimination as to nationality, must not be used for "any military purpose," and must not "hamper the movements of the combatants." Article 4 also provides

that hospital ships are subject to visits, inspections, and some measures of control by the opposing belligerent. Article 5 states that military hospital ships are to be painted white (with a horizontal green stripe) and fly "the white flag with a red cross" to identify them as protected vessels.

The 1899 Hague (III) Convention was ratified by the United States in September 1900 and was incorporated into the U.S. Naval War Code of 1900.[10] Articles 21 through 28 of the latter correspond, more or less verbatim, with Articles 1 through 10 of the former.

The Russo-Japanese War of 1904–1905 provided the first real test of the 1899 Hague (III) Convention. Both Russia and Japan were parties to the treaty, and both accepted and (for the most part) abided by its terms. There were, however, allegations of intentional violation. Of particular note was a Russian claim that the Japanese deliberately fired at Russian hospital ships during the siege of Port Arthur in May 1904, an assertion that the Japanese denied.[11] The following year the Russian hospital ship *Orel* was captured and subsequently condemned by a Japanese prize court for "signaling" and providing other nonmedical services to the Russian fleet in ways that amounted to use for military purposes.[12]

The Second Hague Peace Conference of 1907 produced twelve separate conventions, including the 1907 Hague (X) Convention for the Adaptation to Maritime Warfare of the Principles of the Geneva Convention.[13] This treaty is essentially a reiteration of the 1899 Hague (III) Convention with several new articles added for clarity. Most important, for the purposes of this enquiry, is Article 8, which provides:

> Hospital ships and sick wards of vessels are no longer entitled to protection if they are employed for the purpose of injuring the enemy.
>
> The fact of the staff of the said ships and sick wards being armed for maintaining order and for defending the sick and wounded, and the presence of wireless telegraphy apparatus on board, is not a sufficient reason for withdrawing protection.[14]

The 1907 Hague (X) Convention continues the 1899 Hague (III) Convention regime with respect to mandatory steps to enhance the identification of hospital ships—for example, external surfaces painted white with a green stripe, and a white flag with a red cross.[15]

At the outbreak of World War I, the 1899 Hague (III) Convention and the 1907 Hague (X) Convention were recognized by the belligerents of both sides as governing the use and protection of hospital ships during international armed conflict. Indeed, these same rules applied during World War II. Although the Diplomatic Conference of 1929 produced the 1929 Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armies in the Field,[16] which revised and updated the 1906 Convention of the same name, and

the 1929 Geneva Convention Relative to the Treatment of Prisoners of War,[17] efforts to revise the 1906 Hague (X) Convention did not proceed beyond the draft stage before the onset of World War II.[18] Consequently, rules fashioned to accommodate warfare at sea in the nineteenth century were still in place as late as 1949. Indeed, this body of law was arguably obsolete even before the onset of hostilities in 1914. One observer, writing shortly after the end of World War II, noted that

> the framers of Hague Convention No. X had two main contingencies in mind: the first was the old-fashioned fleet action fought at short range with bloody carnage and consequently need for speedy succour of the wounded. Hospital ships were expected to accompany the fleet to sea and wait on the outskirts of the engagement with a view to picking up the wounded and drowning, and accordingly required protection while engaged on their task; thus, too, the obsolete provisions for respecting sick bays look back to the days when they might have been the scene of hand-to-hand fighting. Secondly, the Convention had to provide for the protection of sick and wounded combatant personnel such as might have been found on board troopers [*sic*] or merchant ships intercepted by the enemy. Having safeguarded them, its framers had completed their task of giving the sailor the protection to which the soldier was already entitled: they made no provision for the civilian, because none was needed.[19]

By the advent of World War I, the role of the hospital ship had evolved significantly. No longer hovering at the fringe of battle to attend to stricken seamen after engagements, the hospital ships of that conflict were principally engaged in the transport of wounded and sick combatants from theaters of operations ashore to hospital facilities at home—a role not envisioned by the framers of early conventions. The only specific admonition against using hospital ships for military purposes set forth in Article 4 of the 1907 Hague (X) Convention is that against hampering "the movements of the combatants," clearly a vestige of close-aboard fleet action of a bygone era. Nonetheless, the belligerents of both world wars accepted the applicability of Hague (X) to those conflicts, while differing, often markedly, as to its interpretation.[20]

Practice during World Wars I and II

Many of the problems encountered during both conflicts revolved around the difficulty of identification. White hulls, green stripes, and the distinctive flag may have served well in daylight encounters with surface vessels relatively nearby, but they proved largely ineffective in warfare at sea marked by long-range surface bombardment and air and subsurface engagements, often during darkness or in adverse weather conditions. Not surprisingly, damage to and destruction of hospital ships in both world wars was generally the result of misidentification, although deliberate attacks certainly did occur. In January

1917, alleging that British and French hospital ships were being used to transport troops and munitions, Germany announced that it would sink on sight enemy hospital ships found in certain designated waters.[21] Both Great Britain and France denied those allegations, but a number of British and French hospital ships were in fact sunk by German U-boats. Perhaps most grievous was the sinking of *Llandovery Castle* on 27 June 1918 by *U-86*. The British hospital ship *Llandovery Castle* was en route to England after delivering wounded and sick Canadian soldiers to Halifax, Nova Scotia, when it was torpedoed and sunk some 116 nautical miles southwest of Ireland. Two hundred thirty-four of its 258 crew and medical staff perished (there were no patients on board at the time). The German Supreme Court, in the war crimes trial of two of the U-boat's officers in 1921, found that

> up to the year 1916 the steamer *Llandovery Castle* had . . . been used for the transport of troops. In that year she was commissioned by the British Government to carry wounded and sick Canadian soldiers home to Canada from the European theatre of war. The vessel was suitably fitted out for the purpose and was provided with the distinguishing marks, which the Tenth Hague Convention . . . requires in the case of naval hospital ships. The name of the vessel was communicated to the enemy Powers. From that time onward she was exclusively employed in the transport of sick and wounded. She never again carried troops, and never had taken munitions on board.[22]

The Court further found that notwithstanding directives from the German high command that hospital ships (other than those encountered in designated barred areas) were exempt from capture or destruction,

> [the U-boat commander] was of the opinion . . . that on the enemy side, hospital ships were being used for transporting troops and combatants, as well as munitions. He, therefore, presumed that, contrary to International Law, a similar use was being made of the *Llandovery Castle*. In particular, he seems to have expected she had American airmen on board. Acting on this suspicion, he decided to torpedo the ship.[23]

The first controversy over the protected status of hospital ships in World War I, however, involved the capture and condemnation as prize of the German auxiliary hospital ship *Ophelia* in October 1914 by Great Britain. The prize court found that *Ophelia* was "adapted and used as a signaling ship for military purposes."[24] This instance of a hospital ship being used to obtain or transmit information of a military character—reminiscent of the *Orel* case previously mentioned—was, at least in part, responsible for the inclusion in Article 34 of the 1949 Geneva (II) Convention of a specific prohibition of the possession or use by hospital ships of a "secret code" for communications, a matter more fully addressed below.[25]

Hospital ships fared significantly better in World War II than in World War I. The scholar J. C. Mossop has noted:

> It is, perhaps, fair to say that during the 1939 war the British Admiralty, the United States Navy Department, and the German Naval Command respected the Principles of the [1907] Convention; such abuses as occurred were authorized at a low level and were corrected when discovered. Despite government statements on both sides there is little evidence to show that attacks on hospital ships were authorized by the respective commands and much to prove that the majority were accidental and due in the main to faulty recognition.[26]

Although Mossop's observations were addressed principally to the European theater of operations and war in the Atlantic, the conduct of the belligerents in the war in the Pacific followed a similar pattern. Violations were reported, both regarding the misuse of hospital ships to transport combatant personnel and munitions, and with respect to the intentional targeting of such vessels ostensibly operating in full compliance with the 1907 Hague (X) rules.[27] However, as was the case in the Atlantic, both sides recognized the practical value of hospital ships and sought to honor their protected status. In this respect the belligerents were "principled" adversaries, adhering to basic humanitarian values perceived to be in their respective interests. This general compliance with the law of naval warfare was not, then, entirely altruistic. Indeed, the importance of reciprocity in this calculus is reflected in an exchange of message traffic between Admiral H. P. Smith, USN, Senior Officer Present of U.S. Naval Forces in the Marianas, then providing blockade forces in the Bonin Islands, and the Commander in Chief Pacific. Admiral Smith had expressed his intention to

> exercise the privilege accorded in Article 4 of the Hague Convention to divert the [Japanese] hospital ship, on her departure from Chichi Jima, to Iwo Jima, where I would conduct an examination.
>
> I was immediately directed by the Commander-in-Chief not to undertake the action in view of the fact that every effort was being made to avoid any incident regarding hospital vessels, which might lead to a reprisal against our own.[28]

The practical difficulties associated with identifying hospital ships were, as noted above, amply and tragically exemplified in the two world wars. As the role of long-range artillery, submarines, and attack aircraft expanded exponentially in war at sea, so too did the likelihood of faulty identification. In recognition of this reality and the experience of World War I, a committee of experts that convened in Geneva in 1937 to draft revisions to the 1907 Hague (X) Convention reported:

> The development of means of modern warfare (aviation and long-range artillery) has rendered insufficient the means of identification heretofore provided in the Hague

> Convention. That is why the Commission has believed that it should stipulate the obligation for hospital ships, in addition to the red band on a white background, to be furnished on the bridge and the elevated parts with red crosses on a white background clearly visible from any direction whatsoever.[29]

Due to the onset of World War II, that effort did not come to formal fruition. However, the need to improve the identification regime for hospital ships was such that the belligerents adopted the markings proposed in the committee's report. William Bishop, in a U.S. State Department internal memorandum of 7 May 1943, noted,

> It would . . . appear that the provisions of Article 5 of Hague Convention X are being complied with in the present war, but that there is developing a practice by belligerents, approved by the International Committee of the Red Cross, of placing additional markings of red crosses on white backgrounds on their hospital ships. . . . [Such] additional markings are being used currently on Japanese hospital ships, as well as on those of the United States, Great Britain, Germany and Italy.[30]

These initiatives, and others during the course of the conflict, proved to be very beneficial. Mossop notes that

> during the 1939 war additional markings on the sides, stern, and deck of hospital ships to aid identification by day, and illumination at night with a band of green lights on the sides and red crosses on the sides and deck picked out with red lamps, were adopted by common consent and provided a high degree of protection against underwater attack—although errors are not unknown in practice.[31]

However, as Mossop also observes,

> the advent of the high-level bomber has provided a problem of an entirely different kind. Existing methods of marking and illumination have proved unsatisfactory even at close range, and objections raised by local military authorities to the presence inside their ports of illuminated ships have added a complication to an already difficult problem. At sea and in port accidental attacks on hospital ships have been all too frequent and the casualty lists heavy.[32]

The issue of effective identification of hospital ships was to remain a matter of importance in the drafting of postwar rules.

The 1949 Geneva Conventions

The experience of the two world wars, coupled with the revolution of that era in naval warfare technology and practice, mandated a thorough overhaul of the rules pertaining to the protections and obligations of military hospital ships. Accordingly, a diplomatic conference convened in Geneva in early 1949 to revise and expand the regime for international protection of war victims set about to include a comprehensive treaty with respect to the maritime environment. It

produced the Geneva (II) Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea.[33] The 1949 Geneva (II) Convention consists of sixty-three articles, whereas the 1907 Hague (X) Convention had but twenty-eight: "This extension is mainly due to the fact that the present Convention [the 1949 Geneva Convention(II)] is conceived as a complete and independent Convention whereas the 1907 Convention restricted itself to adapting to maritime warfare the principles of the [1906 Geneva] Convention on the wounded and sick in land warfare."[34]

Chapter III (Articles 22 through 35) of the 1949 Geneva (II) Convention sets forth the basic obligations and protections of hospital ships. They are to be protected at all times "and may in no circumstances be attacked or captured."[35] This language makes clear that hospital ships retain their protected status whether or not they are, at a given moment, engaged in the treatment or transport of casualties. It also clarifies the somewhat archaic wording that hospital ships "shall be respected," with the admonition that they may not be "attacked." Article 22 reflects the actual practice of the world wars in making clear that the permissible employment of hospital ships includes the transportation as well as the treatment of the wounded, sick, and shipwrecked, including military members rendered *hors de combat* in land warfare. Among the clarifications necessitated by disparate interpretations that surfaced during World War I, and again in World War II, is the assertion in Article 26 that the protections of the convention extend to hospital ships of any tonnage, as well as to their lifeboats.

Of particular relevance to this enquiry are those provisions of the convention that address the circumstances or actions that may lead to loss of protection. Article 30 sets forth the basic premise that hospital ships are not to be used for any military purpose other than, of course, the care and transport of casualties. Moreover, they "shall in no wise hamper the movement of the combatants." Article 30 also postulates, however, that "during and after an engagement" hospital ships "act at their own risk." Pictet, in his analysis of this latter provision, noted that

> in 1937, the question was raised as to whether a hospital ship should not waive the protection of the Convention when being escorted by warships since it would then no longer be possible to stop and search it. In fact that was the position taken by certain countries during the Second World War. A hospital ship is obviously bound to lose its immunity under the Convention if it is being escorted by warships.[36]

However, in a footnote accompanying that assertion, Pictet added: "Which does not mean that the humanitarian principles would not be applied in such a case, or that one would be justified in deliberately firing on the hospital ship."[37]

This rather confusing commentary is clarified in the ensuing paragraph, in which Pictet postulated that "if hospital ships draw near to warships, they do not lose their protection of the Convention but they may in fact expose themselves to danger." Clearly, warships in proximity to hospital ships do not thereby somehow assume immunity from attack; conversely, hospital ships do not lose their immunity when in the presence of warships. The language of Article 30 should be read in that sense, whether or not the hospital ship is under warship convoy. The likelihood that a hospital ship may be engaged in some nefarious purpose while under escort is so remote that any doctrine justifying its attack solely on the ground that the intercepting force is denied the opportunity to stop and search it becomes, in my view, indefensible.

Article 34 of the 1949 Geneva (II) Convention provides, in pertinent part,

> The protection to which hospital ships and sick-bays are entitled shall not cease unless they are used to commit, outside their humanitarian duties, acts harmful to the enemy.
>
> . . . In particular, hospital ships may not possess or use a secret code for their wireless or other means of communication.

Pictet, in his commentary on Article 34, stated that the term "acts harmful to the enemy" is "self evident and must remain quite general," noting that such acts include "carrying combatants or arms, transmitting military information by radio, or deliberately providing cover for a warship." He added,

> The fact that the use of any secret code is prohibited affords a guarantee to the belligerents that hospital ships will not make improper use of their transmitting apparatus or any other means of communication. Hospital ships may only communicate in clear, or at least in a code that is universally known, and rightly so, for the spirit of the Geneva Conventions requires that there should be nothing secret in their behaviour *viz-à-viz* the enemy.[38]

Unfortunately, this desire to avoid any possibility of using a hospital ship's communications suite in a manner harmful to the enemy, as was the case with the *Orel* in 1904, created a major problem for contemporary naval practice.[39] In order to carry out fully their humanitarian functions, hospital ships must be able to proceed to designated pickup points to evacuate wounded and sick personnel from facilities ashore and to rendezvous with combatant units at sea when and where necessary to embark casualties. To do so without providing critical military information to the enemy obviously requires the use of encrypted communications. The experience of the Royal Navy in the Falklands/Malvinas conflict of 1982 illustrates the point. The legal expert Philippe Eberlin has described the practical difficulties encountered:

> All communications were made in clear. As the use of secret codes is banned by Article 34 of the Second Convention, the radio communications exchanged by the hospital ships with their land bases were also in clear. It was not possible for them to communicate directly with the warships, since any communication in clear could reveal the warship's position to the adversary. Consequently the hospital ships were not informed about the movements of the fleet or about the development of military operations on land, and thus had to wait in readiness in a zone known as the "Red Cross Box," which could be equated with a neutralized zone. . . .
>
> To maintain long distance contact with their bases, the . . . hospital ships used radio telex via the Inmarsat satellite system. Telex messages were likewise exchanged in the clear, which meant that the hospital ships could not be informed in detail about the medical evacuations in which they were required to participate. . . . The Naval Command, from which the hospital ship received its orders, could not use coded radio communications to inform it directly, and thus rapidly, about the military situation and dangers in the area where it was operating, nor about the numbers of casualties to be evacuated, the wounds sustained, emergency cases, *etc.*[40]

It should be noted that the drafters of Article 34 were aware of at least some of the difficulties that were to be encountered in its application. Resolution 6 of the diplomatic conference that produced the 1949 Geneva Conventions states:

> Whereas the present Conference has not been able to raise the question of the technical study of means of communication between hospital ships, on the one hand, and warships and military aircraft, on the other, since that study went beyond its terms of reference;
>
> Whereas this question is of the greatest importance for the safety and efficient operation of hospital ships, the Conference recommends that the High Contracting Parties will, in the near future, instruct a Committee of Experts to examine technical improvements of modern means of communication between hospital ships, on the one hand, and warships and military aircraft, on the other, and also to study the possibility of drawing up an International Code laying down precise regulations for the use of those means, in order that hospital ships may be assured of the maximum protection and be enabled to operate with the maximum efficiency.[41]

This recommendation proved to be easier said than done. Unfortunately, the prohibition on the use of "secret codes" remains a serious problem for contemporary practice; it will be addressed further below.

Specific conditions set forth in Article 35 that do *not* deprive hospital ships of their protections include:

- Arming of crew members for the purpose of maintaining order, for their own defense or for the defense of the wounded and sick[42]

- The presence on board of apparatus exclusively intended to facilitate navigation or communication[43]
- Portable arms and ammunition taken from the wounded and sick
- Care of wounded, sick and shipwrecked civilians
- Transport of equipment and personnel intended exclusively for medical duties.[44]

The first condition cited, arming crew members, is essentially the same as that set forth in Article 8 of the 1907 Hague (X) Convention. While it is premised on an outdated view of the employment of hospital ships in naval warfare, it retains some contemporary utility with respect to the possible boarding of such vessels by terrorists, pirates, or other unauthorized forces.

Article 43 of the 1949 Geneva II Convention addresses the distinctive markings to be used to identify hospital ships. Pictet commented, "It is clear from the records that the lack of an up-to-date system of marking, visible at a great distance, was the cause of most of the attacks made on hospital ships during the Second World War. [T]he Diplomatic Conference therefore adopted far-reaching amendments to the 1907 text."

However, the improvements that were attained remained in the realm of what was to be painted how large and in what color—not solutions of problems associated with high-altitude bombers, let alone beyond-visual-range projectiles and missiles—considerations that even then were beginning to dominate war at sea. Article 43 provides, in pertinent part, that

> the [hospital] ships . . . shall be distinctively marked as follows:
>
> (a) All exterior surfaces shall be white.
>
> (b) One or more dark red crosses, as large as possible, shall be painted and displayed on each side of the hull and on the horizontal surfaces, so placed as to afford the greatest possible visibility from the sea and from the air.
>
> All hospital ships shall make themselves known by hoisting their national flag. . . . A white flag with a red cross shall be flown at the mainmast as high as possible.[45]

Comprehensive improvements in the regime for identification of hospital ships were not formally achieved until the coming into force of Additional Protocol I and its annexes.

Additional Protocol I of 1977

The 1977 Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (known simply as "Additional Protocol I"), has its origins in conferences of government experts under the auspices of the ICRC between 1974 and 1977. That

effort produced a draft treaty that was adopted by the Diplomatic Conference at Geneva on 8 June 1977 and opened for signature on 12 December of that year.[46] Additional Protocol I does not address the rules of international law applicable in war at sea, except as the conflict affects the civilian population on land (naval and air bombardment from sea to shore, etc.);[47] however, it does pertain to the protection of the victims of international armed conflict, including wounded, sick, and shipwrecked personnel—and, therefore, hospital ships.

The provisions of Additional Protocol I bearing on this enquiry include Article 22 (1), which stipulates that hospital ships may care for and transport civilian sick, wounded, and shipwrecked persons; and Annex I, which provides technical regulations for the marking and identification of hospital ships, among other things. The inclusion of civilian casualties reflected the practice of both world wars and was not controversial. Annex I, while adopted by consensus by the Diplomatic Conference, nonetheless poses some problems in its implementation.

Chapter III of Annex I, "Distinctive Signals," begins by asserting that use of the signals "is optional" (Article 5). Article 6 addresses a signal specifically for medical aircraft (a flashing blue light) but states that it may also be employed on other medical transports, including hospital ships. Article 7 prescribes an identifying radio message, preceded by a distinctive priority signal, for use exclusively by medical transports: call sign, position, and type; intended route, times of departure and arrival; and other relevant information, such as flight altitude, radio frequencies being guarded, and "secondary surveillance radar" (below) modes and codes. These messages are to be transmitted in English at appropriate intervals on an agreed frequency.[48] Article 8, in turn, establishes the secondary surveillance radar (SSR) system for identifying medical aircraft;[49] the parties to a conflict may agree to use the SSR system on hospital ships as well. Finally, Article 9 (as amended on 30 November 1993) provides in part that:

> 3. It should be possible for medical transports to be identified by submarines by the appropriate underwater acoustic signals transmitted by the medical transports.
>
> The underwater acoustic signal shall consist of the call sign . . . of the ship preceded by the single group YYY transmitted in Morse on an appropriate acoustic frequency, *e.g.* 5 kHz.
>
> Parties to a conflict wishing to use the underwater acoustic signal . . . shall inform the Parties concerned of the signal as soon as possible, and shall . . . confirm the frequency to be employed.[50]

The effectiveness and efficiency of the distinctive signals regime of Annex I have, of course, yet to be tested in the crucible of combat at sea. Given that adoption by the parties to Additional Protocol I of the various signals in Chapter III of Annex I is optional, and that hospital ships are today few in number, these

technical means of identification will likely remain untested under wartime conditions for the foreseeable future. Nonetheless, in an effort to optimize these provisions, the ICRC published in 1990 its *Manual for the Use of Technical Means of Identification.* W. E. M. Heintschel von Heinegg (the Naval War College's Charles H. Stockton Professor of International Law for 2003–2004) has observed that "in modern warfare, which is characterized by the use of electronic means of warfare, these additional technical means of identification are essential for minimizing the danger of mistaken attacks. . . . In view of modern weapons technology the methods recommended [in the 1990 manual] are, however, only a first step in the right direction."[51]

Assuming that these distinctive signals do prove effective in combat, there remains the potential for abuse, particularly with respect to the underwater acoustic signal concept set forth in Article 9 (as amended). However, attempts by vessels to pose as hospital ships are not likely in the war on terror and so will not be further pursued here.

The San Remo Manual *of 1994*

The purpose of the manual is to provide a contemporary restatement of international law applicable to armed conflicts at sea.

> A contemporary manual was considered necessary because of developments in the law since 1913 that for the most part have not been incorporated into recent treaty law, the Second Geneva Convention of 1949 being essentially limited to the protection of the wounded, sick and shipwrecked at sea. In particular, there has not been a development for the law of armed conflict at sea similar to that for the law of armed conflict on land with the conclusion of Protocol I of 1977 additional to the Geneva Conventions of 1949.[52]

The international-law specialists and naval experts from twenty-two different nations who produced the *San Remo Manual* did so in their individual, rather than official, capacities. Nonetheless, the manual is widely regarded as authoritative in its articulation of both the customary and conventional law of naval warfare. Accordingly, its rendering of the rules pertaining to cryptographic communications, defensive armament, and means of identification for hospital ships—the three principal areas of this enquiry into the employment of hospital ships in the war on terror—are particularly germane.

Article 171 of the *San Remo Manual* represents a fairly sharp departure from existing conventional law with respect to cryptographic equipment on hospital ships. Article 34 of the 1949 Geneva (II) Convention not only specifically prohibits the possession by hospital ships of "a secret code for their wireless or other means of communication" but does so in the context of "acts harmful to the enemy" that trigger loss of immunity from attack, albeit only after due warning

and failure to take remedial action.[53] The practical difficulties with adherence to this prohibition in the modern age have been addressed above in connection with the Falklands/Malvinas War; it comes as no surprise that the drafters of the new manual concluded that Article 34 is no longer workable:

> Technology has changed since the adoption of the Geneva Conventions. All messages to and from warships, including unclassified messages are nowadays automatically encrypted when sent and decrypted when received by communication equipment that organically includes the crypto function. Hospital ships, therefore, should have the same type of communication equipment to avoid delays in receiving vital information caused by having separate and outdated radio equipment that does not have the integral crypto function.[54]

Accordingly, Article 171 of the manual provides that "in order to fulfill most effectively their humanitarian mission, hospital ships *should* be permitted to use cryptographic equipment. The equipment shall not be used in any circumstances to transmit intelligence data nor in any way to acquire any military advantage" [emphasis added]. This formulation is an expression of what the drafters considered the law ought to be, not what it is. Nonetheless, it is certainly welcome as a step in the right direction.

The manual also takes a more realistic approach to the need for hospital ships to possess at least some means of self-defense. Long-standing conventional law prohibits "acts harmful to the enemy" by hospital ships.[55] While those proscriptions are silent as to the means that may be employed to defend the ship itself (as opposed to the wounded, sick, and shipwrecked being cared for on board), it is clear that offensive capability is impermissible. Indeed, interpretation of conventional law in this respect has historically been very restrictive, not even allowing a modicum of self-defense capability, beyond small arms to protect casualties and medical staff. This hesitation stems from the obligation of hospital ships to submit to boarding and inspection by warships of the opposing party; weapons sufficient to thwart such boardings would pose potential for abuse.[56] This restrictive interpretation is reflected in the military manuals currently in use by most navies.[57] Again, this is very understandable. In the abstract, there is a reluctance to take any initiative that could possibly lead to loss of immunity.

Article 170 of the *San Remo Manual* provides that "hospital ships may be equipped with purely deflective means of defence, such as chaff and flares. The presence of such equipment should be notified." The explanation accompanying this provision states:

> As there is no prohibition on hospital ships defending themselves, it would be unreasonable not to allow them to do so as long as it is in a way that cannot be interpreted

> as being potentially aggressive. In particular, with modern means of warfare, it is quite likely that a missile could be deflected from a military target using its deflective means of defence, and that the missile would then find a ship without such means, namely, hospital ships. As hospital ships are likely to be in the vicinity of warships, the chances of their being hit in this way are quite high and not allowing them this means of defence would mean that they are more likely to be hit than warships, which would be an absurd result. . . .
>
> This paragraph is formulated in a way as to leave no doubt that hospital ships can only use deflective means of defence, and not means that could be used in an offensive fashion, such as antiaircraft guns.[58]

This provision is also a welcome contribution. However, as will be discussed below in the context of the war on terror, much remains to be done if hospital ships are to be given a realistic chance to survive an attack, whether intentional or inadvertent.

With respect to identification, the manual provides in Article 172 that "hospital ships . . . are encouraged to implement the means of identification set out in Annex I of Additional Protocol I of 1977." Article 173, in turn, states, "These means of identification are intended only to facilitate identification and do not, of themselves, confer immunity." It is important here to bear in mind that the distinctive signals set out in Annex I are optional. Not using them does not deprive an otherwise protected platform of immunity from attack.

U.S. NAVY HOSPITAL SHIPS: CONTEMPORARY CAPABILITY, DOCTRINE, AND PRACTICE

The concept of employment of U.S. Navy hospital ships is officially characterized as follows:

> Hospital ships are flexible, capable and unique Navy HSS [health service support] assets that can be used in joint operations or combined/coalition wartime operations and peacetime operations. They are well suited for joint operations with a naval component because of their self-sustainability. They can be employed in war operations and in certain military peacetime operations, such as humanitarian assistance and disaster relief. In peacetime operations, the hospital ship may operate independently or as part of a joint or coalition force. Hospital ships are designed for operations of a long-term nature (i.e., 60 days or longer, 30 days without major resupply).[59]

U.S. Navy Hospital Ship Capability

The primary mission of a U.S. Navy hospital ship is to:

> Provide rapid, flexible, and mobile acute medical care to support a Marine air/ground task force (MAGTF) deployed ashore, Army and Air Force units deployed ashore, and naval amphibious task forces and battle forces afloat. Operations are governed by the principles of the *Geneva Convention for the Amelioration of the*

Condition of Wounded, Sick, and Shipwrecked Members of the Armed Forces at Sea of 12 August 1949.

As a secondary mission, the ships (with appropriate tailoring of manning, medical material/equipment, and provisions) are capable of providing mobile surgical hospital service for use by U.S. government agencies involved in disaster or humanitarian relief, or of limited humanitarian care incident to these missions or to peacetime military operations.[60]

The U.S. Navy currently has two hospital ships in active status, USNS *Mercy* (T-AH 19) and USNS *Comfort* (T-AH 20).[61] They joined the fleet in 1986 and 1987, respectively. Both are converted *San Clemente*–class commercial supertankers with a full-load displacement of 69,360 tons and an overall length of 894 feet. They have a range of thirteen thousand nautical miles at 17.5 knots. Each is manned (when activated) with a civilian master and sixty-three civilian mariners, as well as fifty-eight Navy communications and support personnel. Upon full mobilization, each ship would be staffed by an additional 1,100 medical/dental personnel. However, that number can be significantly lower, depending on the mission. As an example, *Mercy* operated in the Philippines as a hospital facility in 1987 with a medical/dental complement of just 375 personnel, treating over sixty-three thousand patients during a three-month deployment. Both *Mercy* and *Comfort* boast twelve operating theaters, four X-ray rooms, a pharmacy, and a blood bank. They each have an eighty-bed intensive care unit and 920 other patient beds to accommodate intermediate and minimal-care casualties. *Mercy* and *Comfort* are maintained in a "reduced operational status," *Mercy* in San Diego and *Comfort* in Baltimore. They can be fully activated and crewed within five days.[62]

Without question, the *Mercy*-class hospital ship represents a formidable capability in the treatment and care of casualties in the numbers that may be encountered in the course of the war on terror, whether or not weapons of mass destruction (WMD) fall into the hands of, or are employed by, al-Qaʿida or other terrorist entities. Obviously, mass casualties can result from conventional weapons and devices—witness the destruction of the Marine barracks in Beirut in 1983; the Federal Building in Oklahoma City in 1995; the Khobar Towers in Dhahran, Saudi Arabia, in 1996; Pan Am flight 103 over Lockerbie, Scotland, in 1988; the U.S. embassies in Kenya and Tanzania in 1998; the World Trade Center in New York City and the Pentagon in Arlington, Virginia, in 2001; the nightclub in Kuda, Bali, in 2002; and the train in Madrid, Spain, in 2004, to cite but a few such attacks. Nonetheless, the potential carnage from a nuclear, chemical, or biological attack makes WMD a terrorist threat of another order of magnitude. Nonetheless, whether attacks are conventional or unconventional, the

importance of the humanitarian contribution that platforms such as *Mercy* and *Comfort* can make in the war on terror is apparent.

Recent Practice and Current Doctrine

Both *Comfort* and *Mercy* were activated in August 1990 and deployed to the Persian Gulf in support of Operations DESERT SHIELD and DESERT STORM. *Comfort* was also activated in 1994 during the Haitian crisis to process refugees in Operation UPHOLD DEMOCRACY, and again in 1998 to participate in BALTIC CHALLENGE 98, a NATO Partnership for Peace exercise in the Baltic Sea.[63] More recently, *Comfort* was deployed to New York Harbor in the aftermath of the destruction of the World Trade Center in September 2001 and, in January 2003, to the Persian Gulf in support of Operation IRAQI FREEDOM.

Comfort's deployment following 9/11 illustrates the versatility of this class of ship. On departure from Baltimore on 12 September, *Comfort* was assigned to provide emergency medical assistance to victims of the terrorist attack. However, by the time the ship arrived on station, its mission had been changed to providing logistical and hotel services support to firefighters and emergency personnel.[64] In January 2003, *Comfort* returned to its primary mission while deployed in support of IRAQI FREEDOM, treating more than 650 battle-related casualties, including about two hundred Iraqi prisoners of war and Iraqi civilians.[65]

Current doctrine regarding identification of U.S. Navy hospital ships is premised on applicable provisions of the 1949 Geneva (II) Convention, in accordance with which such vessels (hospital ships and lifeboats) are "conspicuously marked. They are painted white with dark red crosses painted on their bow, side, stern, and horizontal surfaces for recognition from the air and sea. The red crosses should be illuminated at night. A hospital ship must fly its national flag and a white flag with a red cross at the main mast."[66]

To my knowledge, Navy doctrinal publications make no mention of the distinctive electronic identification signals outlined in Annex I to Additional Protocol I—flashing blue lights, priority radio signals, SSR modes and codes, or underwater acoustic signals.[67] However, flashing blue lights and the SSR system are in fact installed in *Comfort,* although the underwater acoustic signal system is not.[68] This is not surprising, in that the United States is not a party to Additional Protocol I, the distinctive signals regime of Annex I being optional in any event. Moreover, in the war on terror it is not at all clear that such signals would serve any useful purpose.

As regards the employment of cryptographic communications equipment in U.S. hospital ships, U.S. Navy doctrine continues to recite the 1949 Geneva II Convention prohibitions on the use of "secret codes":

> The second paragraph of Article 34 of GWS-Sea [i.e., the 1949 Geneva II Convention] provides that hospital ships may not possess or use a secret code for their wireless or other means of communication. This proscription may include many types of encryption devices that are common to many means of modern communication. United States policy is to follow all provisions of the Geneva Conventions, including the prohibition on use of secure and encrypted communications aboard hospital ships.
>
> The technological requirements of modern communications have clearly rendered this provision of GWS-Sea outdated. . . . [M]ost modern communications and navigation systems, including satellite systems, use some form of encryption even at the most basic level. While avoiding all use of encrypted equipment may be problematic, the prohibition contained in the Geneva Convention requires extreme vigilance in ensuring that hospital ships do not lose their protected status.[69]

This formulation is reflective of existing conventional law. However, as discussed above, compliance with these dictates poses severe practical problems for hospital ships in the modern era. Actual U.S. Navy practice reflects a more flexible approach. Michael Sirak, writing for *Jane's Defence Weekly,* has reported that encrypted communications devices were installed in *Comfort* before deployment to the Middle East in January 2003:

> USN officials argue that the rules preventing hospital ships from using encrypted communications devices—contained principally in the Second Geneva Convention of 1949—do not adequately account for technological advancements, such as satellite communications, which are today regarded as vital for these vessels to function effectively. "The way most naval warships communicate now is done on a level that even the most simple communications have some level of encryption," said one Navy official. "Even the actual navigation of the ship can sometimes be in jeopardy if you cannot use these encrypted forms of communication."[70]

Assuming this report is accurate, and I have no doubt that it is, the U.S. Navy has exercised very good sense in equipping *Comfort* with encrypted communications prior to deployment for IRAQI FREEDOM.

Current U.S. Navy doctrine respecting the placement of weapons in hospital ships notes that such ships lose their protection if they engage in hostile acts but that arming crews for the maintenance of order, for their own defense or that of the sick and wounded, does not deprive hospital ships of the protection otherwise due them.[71] As noted above, this formulation, taken from the 1949 Geneva (II) Convention, has historically been interpreted to mean that only light individual weapons may be employed.

Contemporary U.S. Navy practice is more realistic. *Jane's Defence Weekly* reports that .50-caliber machine guns were installed on *Comfort* prior to its deployment in support of IRAQI FREEDOM:

> USN officials say the small arms currently allowed on hospital ships, such as side arms and rifles, are not enough to thwart an attack by a non-state actor like a terrorist group. They say the limited protection afforded to these vessels under international law would be unlikely to deter terrorists and, unlike lawful belligerents, terrorists would consider them an attractive "soft" target. Therefore, they argue that it is necessary to place "crew-served" weapons like .30-cal. and .50-cal. machine guns on them, exclusively for defence, to fend off attacks by swarming, heavily armed speed boats or suicide craft.[72]

Again, I have no doubt that this report is correct. Indeed, it would have been inexcusable if *Comfort* had been dispatched to the Arabian Gulf, and thereby placed in harm's way, without at least this modicum of self-protection.

ASSESSMENT, RECOMMENDATIONS, PROPOSALS, AND OPTIONS

Both the conventional and customary law of international armed conflict cloaks hospital ships with immunity from capture or attack. This humanitarian dictate is premised on the principle that unnecessary suffering and destruction in armed conflict serves no valid military purpose and, accordingly, is to be minimized as much as possible.

Identification of Hospital Ships in the War on Terror

Wounded, sick, and shipwrecked military members, and the medical personnel who care for them, are considered noncombatants and therefore not subject to direct attack. Hospital ships caring for and transporting casualties of war enjoy immunity from deliberate attack, provided they are identifiable as such—hence the rules regarding distinctive markings, emblems, and signals. As this article has noted, most of the damage and destruction inflicted on hospital ships in past conflicts was the result of misidentification, a problem that has intensified in this era of beyond-visual-range targeting.

However, the notion that hospital ships will not be intentionally attacked if they can be properly identified is premised on the assumption that the adversary is principled. Members of the armed forces of sovereign states engaged in armed conflict are presumably fully conversant with the law of armed conflict and dedicated to compliance with it. Indeed, notwithstanding the carnage of the wars of the twentieth century, there was a decided effort by most, if not all, participating states to respect the law of armed conflict. The war on terror presents a far different paradigm. A terrorist organization, whether composed of nonstate actors or clandestine operatives of sovereign entities, is by definition an unprincipled adversary, with the will to target intentionally noncombatant personnel, facilities, and activities, both civilian and military. They consider protected places and platforms targets of choice, both for their vulnerability and the shock value of their destruction. In this context, effective identification of hospital ships

becomes academic—in the war on terror, hospital ships may be targeted *because* they are hospital ships. It is perhaps not unreasonable, then, to question the wisdom of painting them white, adorning them with red crosses or crescents, and illuminating them at night.

At this juncture it would be well to remember that the essence of the law is protection of the humanitarian function performed by the platform, not its coating of paint or the symbols it displays. A vessel devoted exclusively to the care and transport of wounded, sick, and shipwrecked personnel, and understood by an adversary to be so employed, is protected under the law whether it is painted white, green, or haze gray.[73] If identification worsens the vulnerability of a hospital ship to attack, a fresh coat of paint offers little comfort.

That said, however, I am not a proponent of removing protective markings from U.S. Navy hospital ships in the war on terror, *provided* they are defended by accompanying combatants or are equipped to protect themselves from attack, deliberate or inadvertent. In my view, the distinctive painting and the prominent display of the protective symbol serve a purpose beyond that of reducing the likelihood of inadvertent attack by a principled adversary. Hospital ships are symbolic of our humanity, in many ways. They provide hope and comfort simply by their visible presence. This is particularly so in an era of mass casualties inflicted by terrorists on innocent men, women, and children. In a world beset by savagery, hospital ships are internationally recognized as a potent moral force. We ought not to give that up lightly.

Encrypted Communications in Hospital Ships in the Twenty-first Century

As noted above, current U.S. Navy doctrine prohibits the possession or use by hospital ships of any cryptographic means of communications during armed conflict. While recent practice has somewhat eased that total proscription, the problem remains. The genesis of these constraints involves a few isolated incidents many years ago when hospital ships were alleged to have used coded wireless communications capability to transmit operational intelligence, a "military purpose" use inconsistent with their protected status and in violation of the 1899 Hague (III) Convention and the 1907 Hague (X) Convention. In an effort to prohibit such acts more clearly, the drafters of the 1949 Geneva (II) Convention created the "secret codes" prohibition of Article 34, discussed above, which now frustrates the effective and efficient operation of hospital ships. Moreover, combatant and logistic-support ships and aircraft transporting casualties to a hospital ship remain targetable. If such platforms communicate in the clear, they may reveal information that would help the enemy target not only themselves but the rendezvous location, thereby endangering the hospital ship as well. Domestic law considerations also are at issue in that Federal medical privacy

standards mandate the protection of health information of individuals, necessitating employment of secure means for the transmission of medical data. In short, compliance with the "secret codes" prohibition of Article 34 of the 1949 Geneva (II) Convention seriously degrades the ability of modern hospital ships to carry out their humanitarian mission, not only during the war on terror, but generally.

The time has now come to abandon formally U.S. Navy adherence to the prohibition of the possession and use by hospital ships of encrypted communications, whether for reception or transmission. Obviously, the conventional and customary rules mandating that hospital ships not be used for any military purpose other than the care and transport of the wounded, sick, and shipwrecked must remain inviolable. However, the likelihood that a hospital ship would be employed to collect and promulgate military intelligence in this age of satellite sensors, over-the-horizon radar, and fixed and mobile long-range hydrophones is extremely remote; it strains the imagination to conjure up a scenario where it would have any utility whatsoever. In my view, this is yet another instance of a convention provision that no longer serves the purpose for which it was intended and that adherence to which works at cross purposes with the greater good envisioned by the treaty as a whole. I applaud the U.S. Navy's reported decision to equip *Comfort* with cryptographic communications in January 2003; additionally, however, naval doctrinal publications should be modified accordingly and the international community informed. Lest anyone doubt the legitimacy of its purpose, the U.S. Navy should publicly reaffirm its adherence to the mandate that hospital ships not be utilized for military purposes in any way harmful to a potential adversary. To this end, the right of a principled adversary to board and inspect, and the presence on board of a neutral observer, should, in my view, both be specifically endorsed.

Defensive Arming of Hospital Ships in the War on Terror

Given that existing conventional law is silent with respect to the means that hospital ships may lawfully employ in their own defense, it is somewhat anomalous that the U.S. Navy, and modern navies in general, find the issue so difficult to address. I believe that there are two principal reasons for this hesitance. The first is that protected places, persons, and things historically have been by their very nature vulnerable to attack. This vulnerability, in turn, has been viewed as an assurance of their benign status; consequently, there can be no legitimate reason for a principled adversary to attack them. The personnel, assets, and activities of the ICRC are not intentionally targeted by principled combatants for precisely this reason. Universally respected for the humanity they bring to the face of war, they represent no threat to the belligerents; their ability to function effectively in

harm's way is dependent on this vulnerability. So too, with hospital ships. Intentional attacks on hospital ships in the course of the two world wars were premised on the conviction, mistaken or otherwise, that despite their distinctive markings and protected symbols, they were being employed in a manner harmful to the attacking side—for instance, carrying arms and ammunition, transporting combatant personnel, or transmitting intelligence. Defensive arming of such platforms could contribute to the suspicion that some such nefarious purpose was afoot.

That leads to the second reason for reluctance to give hospital ships defensive armament—that, as suggested earlier, it could be wrongfully employed to thwart legitimate boarding and inspection by the opposing party. Although I am unaware of any such misuse in actual practice, the potential for abuse remains. Clearly, the concept of reciprocity is also at play here. Were the United States to provide its hospital ships with a defensive capability, other states could do so as well, and perhaps with a view to misuse.

Although conventional law provides little guidance on the issue, customary practice has made clear that *any* arming of hospital ships beyond side arms and the like will be viewed with suspicion at best. The *San Remo Manual*'s sanctioning of "deflective means of defense" in hospital ships, such as chaff and flares, is most welcome. However, this timid formulation remains rooted in the concept of vulnerability. This is made clear by its accompanying explanation: "This paragraph is formulated in a way as to leave no doubt that hospital ships can only use deflective means of defence, and not means that could be used in an offensive fashion, such as antiaircraft guns. This is necessary to preserve the obviously innocent nature of the vessel."[74] While the notion that antiaircraft guns installed in hospital ships can plausibly be described as "offensive" gives pause, the manual's point is that vulnerability remains the sine qua non of protection.

Even assuming, for the sake of argument, that there is merit in restricting the defensive capability of hospital ships to "deflective means" during conventional warfare with a principled adversary, such niceties have no place in the war on terror. As noted above, hospital ships are an attractively "soft" target for terrorists.[75] Moreover, contemporary terrorist entities may have access to a variety of weapons and weapons systems, ranging from state-of-the-art surface-to-surface and air-to-surface missiles to unsophisticated but nonetheless deadly explosive devices. With regard to the former, chaff and flares do provide some measure of protection, but it would be irresponsible in the extreme to suggest that they can be relied upon to thwart a missile attack. As to the latter, the effectiveness of unsophisticated weaponry must not be underestimated; witness the destruction of the Marine barracks in Beirut in 1983.

In this instance, the delivery means was an apparently innocent Mercedes Benz stake-bed truck.[76] The explosive mechanism was a gas-enhanced device, probably consisting of bottled propane, butane, or acetylene, placed in proximity to a conventional explosive such as primacord, all of which are readily available on the retail market.[77] Despite the lack of sophistication and ubiquity of its component parts, a gas-enhanced device can be a very lethal weapon. Following the Beirut barracks tragedy, the realization that terrorist organizations have weapons of potentially enormous yield (the Beirut device is estimated to have had the power of over twelve thousand pounds of TNT), deliverable by an ordinary truck or van, led to the emplacement of protective barriers around critical government facilities throughout the United States. The appreciation that such a formidable weapon could also be delivered by a seemingly innocent small boat or aircraft against a target at sea led in early 1984 to specially tailored naval rules of engagement for U.S. forces in the eastern Mediterranean and the Persian Gulf. The attack on the USS *Cole* in Aden, Yemen, on 12 October 2000 is yet another case in point. In that incident a smaller device, apparently consisting of four to seven hundred pounds of C-4 military plastic explosive, detonated in a small boat that had come alongside *Cole.* The blast ripped a forty-by-forty-foot hole in *Cole*'s port side, killing seventeen members of the crew and injuring forty others. Had that attack occurred at sea, *Cole* might have been lost. The small boat that delivered the bomb was similar to the many boats providing various services in the harbor. The attacks both in Beirut and on *Cole* were suicide missions.

The point is that the risk of terrorist attack by a small boat or aircraft against a U.S. Navy hospital ship operating in such waters is very real. Consequently, the decision to place .50-caliber machine guns on *Comfort* prior to her deployment to the Arabian Gulf last year was sound.

That having been said, I believe it would be prudent to install more effective defensive means on U.S. Navy hospital ships. Specifically, and unless operational or manning considerations dictate otherwise, I propose that the Phalanx Close-In Weapons System (CIWS) be placed in *Comfort* or *Mercy* should either be again deployed in support of the war on terror.[78] Despite the curious comment in the explanation accompanying the *San Remo Manual* that antiaircraft weapons are offensive in nature, it is in my view ludicrous to suggest that Phalanx is anything other than defensive.[79]

> Phalanx provides ships of the U.S. Navy with a "last-chance" defense against anti-ship missiles and littoral warfare threats that have penetrated other fleet defenses. Phalanx automatically detects, tracks and engages anti-air warfare threats such as anti-ship missiles and aircraft, while the Block 1B's man-in-the-loop-system counters the emerging littoral warfare threat. This new threat includes small, high-speed surface craft, small terrorist aircraft, helicopters and surface mines.[80]

The Phalanx weapons system is essentially a Gatling gun capable of firing 20 mm rounds at a rate of 4,500 per minute. While its effective range is classified, its purpose, as noted, is to stop close-in, penetrating threats.

The placement of .50-caliber machine guns and the Phalanx CIWS in U.S. Navy hospital ships obviously would constitute a departure from the "safety in vulnerability" mind-set that heretofore has characterized our approach to the problem. I believe that these self-defense systems will not only enhance the capability of the platform to defeat a terrorist attack but provide a deterrent effect by announcing to terrorist entities that a U.S. Navy hospital ship may not be as "soft" a target as generally supposed. I therefore also propose that the United States then notify the international community that necessary and appropriate defensive means, namely Phalanx and .50-caliber machine guns, have been installed in both *Comfort* and *Mercy*. I further suggest that the United States again confirm its intentions to abide fully with the right of a principled adversary to board and inspect U.S. Navy hospital ships during international armed conflict. Moreover, doctrinal publications should be revised to reflect the view that the defensive arming of hospital ships is fully consistent with both the letter and the spirit of the law of armed conflict.

When one considers the impressive humanitarian capability of the *Mercy*-class hospital ship and the enormous psychological damage, let alone the cost in human lives, that would be incurred if one should be lost to terrorist attack, the case for state-of-the-art defensive capability seems apparent. The case against rests not on any specific proscription of conventional law but upon adherence to a vulnerability philosophy wholly unsuited to the realities of modern warfare at sea generally or of the war on terror in particular. Heintschel von Heinegg makes the very salient point that:

> the law of naval warfare contains no rule or other provision that would justify the conclusion that a belligerent is obliged to suffer an illegal attack or other illegal act and to remain passive. In other words: the inherent right of self-defence that is not abolished by any known legal order is implicitly recognized also by the law of naval warfare. Accordingly, if there exist reasonable grounds for suspicion that hospital ships will be the target of an illegal attack, a belligerent is entitled to take all necessary measures to effectively prevent or counter that attack. If the only means available to achieve that aim is the—defensive—arming of a hospital ship then this would not constitute a violation of the law of naval warfare.[81]

The "Opt-Out" Option

Should the foregoing proposals prove politically unrealizable in the face of criticism by traditionalists unwilling to depart from practices and policies fashioned for a bygone era, serious consideration should be given to "opting out." By this I mean abandonment of the protections accorded to hospital ships by the 1949

Geneva (II) Convention. Much as the Royal Navy has done with RFA (Royal Fleet Auxiliary) *Argus, Comfort* and *Mercy* could be painted haze gray and designated as primary casualty receiving and treatment platforms rather than as hospital ships.[82] The Royal Navy, apparently concluding that the emplacement of cryptographic communications equipment and defensive armament in *Argus* would be inconsistent with conventional or customary law, elected not to rate *Argus* as a hospital ship within the meaning of the 1949 Convention. Instead, the ship is configured as a "highly versatile, self-defending and helicopter-capable PCRS [Primary Casualty Recovery Ship] rather than a dedicated HAS [Hospital Ambulance Ship] . . . [that] must be declared under the Geneva Convention, must be open to regular inspection, and cannot embark any military capability (even self-defense weapons) of any kind."[83]

As noted above, a vessel devoted exclusively to the care and transport of the wounded, sick, and shipwrecked, and recognized by a principled adversary as such, is not subject to intentional attack no matter what its color scheme.[84] It therefore would still be prudent to notify the international community of the vessel's name and characteristics and to make it available for boarding and inspection by a principled adversary.

I do not advocate "opting out" as the preferred solution, whether during the war on terror or in conventional conflict with a principled adversary. However, should it be determined that effective defensive capability cannot, for whatever reason, be emplaced in hospital ships, it would be prudent to give that option very serious consideration. Hospital ships adorned with white paint and displaying the protective symbol of the red cross or red crescent have a moral majesty about them that evokes the best of our humanity, even in the depths of destruction and despair that so often accompany armed conflict. That is most certainly worth hanging on to—but one must ask, "At what cost?"

NOTES

1. Jean Simon Pictet (1914–2002, scholar of international and humanitarian law, and a leading member of the International Committee of the Red Cross) noted that "Many centuries before our era, the Athenian fleet included a vessel called *Therapis,* while in the Roman fleet was a ship bearing the name *Aesculapius.* Their names have been taken by some authors as indicating that they were hospital ships." Jean Simon Pictet et al., *Commentary on the Geneva Conventions of 12 August 1949, II Geneva Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea* (Geneva: International Committee of the Red Cross, 1960), p. 154.
2. Ibid.
3. Ibid.
4. The convention was signed at Geneva 22 August 1864, entered into force 22 June 1868, and acceded to by the United States on 1 March 1882. Dietrich Schindler and Jiri Toman, eds., *The Laws of Armed Conflict: A*

Collection of Conventions, Resolutions and Other Documents, 3d rev. ed. (Dordrecht, Neth.: Martinus Nijhoff, 1988), p. 279.

5. Signed at Geneva 20 October 1868. Did not enter into force. Schindler and Toman, p. 285.
6. Ibid., Art. 9.
7. Signed at The Hague 29 July 1899, entered into force 4 September 1900, and ratified by the United States 9 April 1902. Schindler and Toman, p. 63.
8. Signed at The Hague 29 July 1899, ratified by the United States 4 September 1900, and entered into force 4 September 1900. Ibid., p. 289.
9. Howard S. Levie, *The Code of International Armed Conflict* (Dobbs Ferry, N.Y.: Oceana, 1985), vol. 2, p. 1024.
10. The United States Naval War Code of 1900 was issued in accord with General Order No. 551, Navy Department, Washington, D.C., 27 June 1900, which states: "The following code of naval warfare, prepared for the guidance and use of the naval service by Capt. Charles H. Stockton, United States Navy, under direction of the Secretary of the Navy, having been approved by the President of the United States, is published for the use of the Navy and for the information of all concerned." See *International Law Discussions: The United States Naval War Code of 1900,* International Law Studies 3 (Newport, R.I.: Naval War College, 1903), p. 101. Captain Stockton was then President of the Naval War College.
11. Amos S. Hershey, *The International Law and Diplomacy of the Russo-Japanese War* (New York: Macmillan, 1906), pp. 304–306.
12. See L. Oppenheim, *International Law: A Treatise,* ed. Hersh Lauterpacht, 7th ed. (London: Longmans, Green, 1952), vol. 2, p. 505; G. H. Hackworth, *Digest of International Law* (Washington, D.C.: U.S. Government Printing Office, 1943), vol. 6, pp. 460–61; *International Law Situations,* International Law Studies 35 (Newport, R.I.: Naval War College, 1935), pp. 107–108.
13. Signed at The Hague 18 October 1907, ratified by the United States 27 November 1909, and entered into force 26 January 1910. Schindler and Toman, p. 313. O'Connell noted that the 1907 Hague (X) Convention distinguishes between three separate classes of hospital ships—those constructed or designed by belligerent States for that specific purpose, those outfitted by private individuals or "officially recognized relief societies" of belligerent nationality, and those so equipped by such individuals or societies of neutral nationality. D. P. O'Connell, *The International Law of the Sea,* ed. I. A. Shearer (Oxford, U.K.: Clarendon, 1984), vol. 2, p. 1119. In reality, this trinity of classification can be traced to the Additional Articles of 1868, as well as the 1899 Hague Convention (III). Given the focus of this enquiry on military hospital ships, the latter two categories will not be further addressed.
14. This formulation may also be found in Article 44 of the 1913 *Oxford Manual,* "The Laws of Naval War Governing the Relations between Belligerents." For the full text of the 1913 *Oxford Manual* see Schindler and Toman, p. 857.
15. Persia ratified the 1907 Hague (X) Convention but reserved the right to employ the lion and red sun in lieu of the red cross. Similarly, Turkey reserved the right to employ the red crescent for that purpose. Schindler and Toman, p. 320.
16. Signed at Geneva 27 July 1929, ratified by the United States 4 February 1931, and entered into force 19 June 1931. Schindler and Toman, p. 325. Among the revisions of the convention relative to the distinctive emblem to be used to identify hospitals and other medical facilities on land is the formal recognition in article 19 of the lion and red sun, as well as the red crescent, as accepted alternatives to the red cross.
17. Signed at Geneva 27 July 1929, ratified by the United States 4 February 1931, and entered into force 19 June 1931. Schindler and Toman, p. 339.
18. Robert W. Tucker, *The Law of War and Neutrality at Sea,* International Law Studies 50, (Newport, R.I.: Naval War College, 1955), p. 117; Natlino Ronzitti, ed., *The Law of Naval Warfare* (Dordrecht, Neth.: Martinus Nijhoff, 1988), p. 534.
19. J. C. Mossop, *British Year Book of International Law* (Oxford, U.K.: Oxford Univ. Press, 1947), vol. 24, p. 399. Tucker, *The Law of War and Neutrality at Sea,* comments that "dissatisfaction with a number of the provisions of

Hague X, and an awareness of the necessity for its revision and expansion to account more satisfactorily for changing conditions, had been expressed even before the close of the 1914 war. During the second World War this need for revising and expanding the provisions of Hague X became even more clearly apparent, despite the efforts already made by the belligerents to interpret and adapt the Convention to some of the novel circumstances characterizing modern naval warfare."

20. One such varying interpretation involved the issue of warship escort of hospital ships. The Allied position adopted during the Second World War was that a hospital ship does not forfeit its immunity from attack when so escorted, although it would thereby be exposed to greater risk of unintentional targeting. Noting that warship escort would preclude enemy boarding and inspection to ensure compliance with the 1907 Hague (X) Convention, the German government reached the opposite conclusion—that a hospital ship loses its protected status if it accepts warship (or military aircraft) escort. See Mossop, *British Year Book of International Law,* p. 402. But see Burdick H. Brittin, *International Law for Seagoing Officers,* 4th ed. (Annapolis, Md.: Naval Institute Press, 1981), pp. 245–46, for an account of the intentional torpedoing of the Japanese ship *American Maru* by the USS *Nautilus*. The *American Maru,* which had been officially designated as a hospital ship, was encountered in a convoy sailing from the Marianas to Japan. The commanding officer of *Nautilus* later argued that because the hospital ship was not proceeding alone, it forfeited protection under the convention.

    For an interesting compilation of regulations pertaining to maritime warfare promulgated by various nations and in force during World War I, see *International Law Documents: Regulation of Maritime Warfare,* International Law Studies 25 (Newport, R.I.: Naval War College, 1925). Regulations as to hospital ships (pp. 94–97) suggest that the 1907 Hague (X) Convention provisions on the subject were often incorporated directly into the general orders and manuals issued to fleet units.

21. The announcement stated that because British hospital ships were being used for military purposes, the German government "would be entitled to free themselves altogether from the obligations contained in the [1907 Hague (X)] Convention." However, for "reasons of humanity" they did not do so, instituting instead a maritime barred area in which enemy hospital ships "will be considered as belligerent and will be attacked without further consideration." See *International Law Situations,* International Law Studies 35 (Newport, R.I.: Naval War College, 1935), pp. 110–11. For a fully developed account of the institution in 1917 of the unrestricted U-boat campaign waged by Germany in World War I and the events leading to it, see Nigel Hawkins, *The Starvation Blockades: Naval Blockades of World War I* (Barnsley, South Yorkshire, U.K.: Leo Cooper, 2002), pp. 191–207.

22. Leon Friedman, comp., *The Law of War: A Documentary History* (New York: Random House, 1972), vol. 1, p. 868.

23. Ibid., p. 870.

24. *International Law Situations,* p. 108.

25. The Geneva (II) Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea, signed at Geneva 12 August 1949, entered into force 21 October 1950, and ratified by the United States 2 August 1955. Schindler and Toman, p. 401.

26. Mossop, *British Year Book of International Law,* p. 402.

27. An example of the latter was reflected in a news report filed from Okinawa on 29 April 1945: "Violating the rules of war as written at the Geneva Convention in 1906 [*sic*], the fully lighted hospital ship *Comfort* was hit by a [Kamikaze] suicide plane as she departed Okinawa en route to Guam. . . . With no guns aboard except those needed for saluting and line throwing, her broad green band and big red cross easily discernible against her glistening white-enameled hull, [*Comfort*] was turned into an inferno." See Walter Karig et al., eds., *Battle Report: Victory in the Pacific* (New York: Rinehart, 1949), vol. 5, p. 438.

28. See Brittin, *International Law for Seagoing Officers,* pp. 218–19. Following the attack on the USS *Comfort* off Okinawa the following April (note 27 above), Admiral Smith was directed by Commander in Chief Pacific to dispatch a

destroyer to intercept a Japanese hospital ship on its emergence from Marcus Island to ensure that it was not in violation of the rules of the 1907 Hague (X) Convention. Admiral Smith subsequently reported: "The destroyer *Case* intercepted the ship. An inspection party, headed by the executive officer, was well received aboard the hospital ship, and allowed to make a thorough inspection. He found everything in perfect order. The ship had nothing aboard except a full load of hospital cases evacuated from Marcus Island" (ibid.). A similar example of the role played by reciprocity concerns in the Pacific campaign stemmed from an incident in the European theater. The German hospital ships *Tubingen* and *Gradisca* passed through Allied lines in the Adriatic to succor wounded and sick troops from Salonica. Allied forces diverted the outbound ships to Allied ports and removed some four thousand patients as prisoners of war. Mossop noted that many were only slightly wounded and most would likely be fit for duty within a year. He added, "This action brought forth no protest from the German Government, who considered it justified by the terms of the Convention. But curiously enough it did not pass without criticism in the higher councils of the Allies—Criticism possibly provoked not so much by legal considerations as by fear that the Japanese might be tempted to initiate similar action against Allied hospital ships in the Pacific theatre" (Mossop, *British Year Book of International Law,* p. 405).

29. Marjorie Whiteman, *Digest of International Law,* Publication 8367 (Washington, D.C.: U.S. State Department, 1968), vol. 10, p. 637.

30. Ibid.

31. Mossop, *British Year Book of International Law,* p. 401.

32. Ibid. See also Spaight's comments on German air attacks on hospital ships in World War II: "They [Germany] certainly began the attacks on hospital ships. The first of such attacks took place at Aalesund in April, 1940, when the *Brand IV* was bombed. Other hospital ships were attacked during the evacuation from Dunkirk at the end of May. There were subsequent incidents of the same kind, both in European waters and in the Far East. It is unlikely that the attacks were made deliberately. They were probably due to error and to the airmen's ignorance of the identity of the vessels which became their victims" J. M. Spaight, *Air Power and War Rights,* 3d ed. (London: Longmans, Green, 1947), p. 490.

33. The 1949 Geneva (II) Convention is one of four treaties that are collectively referred to as the "1949 Geneva Conventions." The other three are Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field; Convention (III) Relative to the Treatment of Prisoners of War; and Convention (IV) Relative to the Protection of Civilian Persons in Time of War. All four were signed at Geneva 12 August 1949, entered into force 21 October 1950, and were ratified by the United States 2 August 1955. For the full text of the Conventions see Schindler and Toman, pp. 373, 401, 423, and 495, respectively.

34. Schindler and Toman, p. 401.

35. Article 22.

36. Pictet, *Commentary,* p. 180. See also note 20 above.

37. Pictet, *Commentary,* p. 180.

38. Ibid., p. 193. This comment clearly focuses on the use of secret codes in the *transmission* of information by hospital ships. Indeed, an argument can be made that when comparing the English-language version of Article 34 with the equally authentic French and Spanish versions, the latter indicate that only the use of such codes for the transmission of communications was intended to be proscribed. For a discussion of this argument, see W. E. M. Heintschel von Heinegg, "The Law of Armed Conflict at Sea," in *The Handbook of Humanitarian Law in Armed Conflicts,* ed. Dieter Fleck and Michael Bothe (New York: Oxford Univ. Press, 1995), p. 1058.

39. See note 12 above.

40. Philippe Eberlin, "Identification of Hospital Ships and Ships Protected by the Geneva Conventions of 12 August 1949," *International Review of the Red Cross* 315 (November–December 1982), pp. 324–25.

41. Pictet, *Commentary,* p. 287.

42. In this context, the term "crew members" includes hospital-ship personnel as well as personnel manning sick bays in warships and in other auxiliaries.

43. "Apparatus" includes not only communications equipment but also radar transponders, signaling devices, flares, and the like.

44. This would include the resupply and remanning of medical facilities both at sea and ashore, as well as, presumably, their retrograde. Vessels other than hospital ships engaged exclusively in the transport of such equipment also enjoy protection under the convention (article 38), provided that the adverse party has been notified of, and has agreed to, the particular voyage.

45. For a discussion of the difficulty of discerning red crosses on hospital ships at a distance see Eberlin, "Identification of Hospital Ships," pp. 318–21.

46. Entered into force 7 December 1978. Schindler and Toman, p. 621. The United States is neither a signatory nor a party to Additional Protocol I. The rationale for the U.S. decision not to sign or ratify Additional Protocol I is contained in Senate Treaty Document 100-2, reprinted in 26 *International Legal Materials* 561 (1987).

47. Article 49(3). See also Yves Sandoz et al., eds., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949* (Geneva: Martinus Nijhoff for the International Committee of the Red Cross, 1987), pp. 600–608.

48. Article 7 is discussed in ibid., pp. 1215–19.

49. The SSR system is briefly described in ibid., p. 1249. Basically, the SSR utilizes the military IFF (Identification Friend or Foe) system, which consists of a primary radar, a secondary interrogator surveillance radar, and a transponder. The primary radar, installed on the seeking ship or aircraft, sweeps the horizon with electromagnetic pulses. When a pulse encounters an object an echo is bounced back, allowing the object to be detected. If the object is a ship or aircraft equipped with a transponder, the primary radar pulse will trigger an automatic transmission of the detected ship or aircraft's identification code. A full description of the IFF technology may be found in Trevor Dupuy, ed. in chief, *International Military and Defense Encyclopedia* (Washington, D.C.: Brassey's, 1993), vol. 3, pp. 1239–41.

50. The text of Annex I, as amended, may be found at the ICRC homepage, www.icrc.org. For a further discussion of the provisions of chapter 3 of Annex I, see Louise Doswald-Beck, ed., *San Remo Manual on International Law Applicable to Armed Conflicts at Sea, Prepared by International Lawyers and Naval Experts Convened by the International Institute of Humanitarian Law* (Cambridge, U.K.: Cambridge Univ. Press, 1995), pp. 237–41.

51. Heintschel von Heinegg, "The Law of Armed Conflict at Sea," p. 478.

52. Introductory Note, *San Remo Manual,* p. 5.

53. See note 38 above and accompanying text.

54. *San Remo Manual,* p. 236.

55. 1907 Hague (X) Convention, Article 8; 1949 Geneva (II) Convention, Article 34.

56. To my knowledge, there is no historical record of an actual employment by a hospital ship of weapons or weapons systems to prevent lawful boarding and inspection by an opposing force. Nonetheless, the possibility of such abuse seems to foster concern in some quarters.

57. See, for example, U.S. Navy Dept., *The Commander's Handbook on the Law of Naval Operations,* Naval Warfare Publication (NWP) 1-14M (Washington, D.C.: 1995). Paragraph 8.2.3 provides that "hospital ships may not be armed although crew members may carry light individual weapons for the maintenance of order, for their own defense and that of the wounded, sick and shipwrecked."

58. *San Remo Manual,* p. 235.

59. U.S. Navy Dept., *Hospital Ships,* Navy Tactics, Techniques, and Procedures Publication (NTTP) 4-02.6 (Washington, D.C.: February 2004), para. 2.1.1.

60. Ibid., para. 2.2.

61. Hospital ships are vessels of the Military Sealift Command and carry the designation "USNS" (U.S. Naval Ship). When in the active inventory they are "in active service," vice "in commission" (see 32 CFR 700.406[c]). U.S. Navy hospital ships are assigned "benevolent" names in keeping with their purely humanitarian function. The U.S. Navy has, of course, other afloat medical facilities. As an example, the *Wasp*-class amphibious assault ships (LHDs), of which seven are currently in

commission with an eighth under construction, boasts a formidable medical capability: "The ships have six fully equipped operating rooms and a 600-bed hospital, by far the largest at sea with the exception of hospital ships. The LHD 1 has medical and dental facilities capable of providing intensive medical assistance to 600 casualties, whether combat incurred or brought aboard ship during humanitarian missions. The corpsmen also provide routine medical/dental care to the crew and embarked personnel. Major medical facilities include four main and two emergency operating rooms, four dental operating rooms, x-ray rooms, a blood bank, laboratories, and patient wards. In addition, three battle dressing stations are located throughout the ship, as well as a casualty collecting area at the flight deck level. Medical elevators rapidly transfer casualties from the flight deck and hangar bay to the medical facilities" (*LHD-1 Wasp Class,* www.globalsecurity.org/military/systems/ships/lhd-1.htm).

62. See Stephen Saunders, ed., *Jane's Fighting Ships,* 2003–2004 (Coulsdon, Surrey, U.K.: Jane's Information Group, 2003), p. 857; Norman Polmar, ed., *The Naval Institute Guide to the Ships and Aircraft of the U.S. Fleet,* 17th ed. (Annapolis, Md.: Naval Institute Press, 2001), pp. 257–58.

63. See "Hospital Ships: T-AH," 15 September 2003, *United States Navy Fact File,* www.chinfo.navy.mil/navpalib/factfile.

64. See "Bringing Comfort to New York in Time of Need," 19 September 2001, *Navy & Marine Corps Medical News,* www.chinfo.navy.mil/navpalib/news.

65. See *U.S. Navy Press Release: Navy Hospital Ship USNS Comfort to return from Operation Iraqi Freedom,* 10 June 2003, available at www.msc.navy.mil/NOOp/pressrel.

66. NTTP 4-02.6, para. 4.2.1.

67. See notes 48 and 49 above and accompanying text.

68. Author's conversation with master of USNS *Comfort,* April 2004.

69. NTTP 4-02.6, para. 4.4.2. This prohibition on cryptographic communications, as it pertains to the transmission of encrypted messages during armed conflict, is also set forth in NWP 1-14M, para. 8.2.3, which provides, in pertinent part, that "use or possession of cryptographic means of transmitting message traffic by hospital ships is prohibited under current law." The Annotated Supplement to the handbook includes the following comment on this provision: "GWS-Sea [1949 Geneva (II) Convention], art. 35(2), authorizes hospital ships to carry and employ communications equipment necessary for their movement and navigation. GWS-Sea, art. 34, however, restricts the use of cryptographic means of communication. The English language version of art. 34 implies that the possession or use of such means for both *sending* and *receiving* encrypted communications is prohibited. The equally authentic Spanish and French texts of art. 34(2), however, prohibits only the *sending* ('pour leurs emissions') of encrypted traffic. . . . The requirement that hospital ships must transmit in the clear is undergoing critical review in various international fora and it is anticipated that this prescription will eventually be either relaxed or abandoned" (*Annotated Supplement to the Commander's Handbook on the Law of Naval Operations* [Newport, R.I.: Naval War College, 1997], p. 8-15, available at www.nwc.navy.mil/ILD/Annotated%20Supplement%20to%20the%20Commander's%20Handbook.htm).

70. Michael Sirak, "U.S. Navy Seeks to Revise Laws of War on Hospital Ships," *Jane's Defence Weekly,* 19 August 2003.

71. NTTP 4-02.6, para. 4.5. See also NWP 1-14M, para. 8.2.3.

72. Sirak, "U.S. Navy Seeks to Revise Laws of War on Hospital Ships."

73. See NWP 1-14M, para. 11.9.7, which states, "When objects or persons are readily recognized as being entitled to protected status, the lack of protective signs and symbols does not render an otherwise protected object or person a legitimate target. Failure to utilize internationally agreed protective signs and symbols may, however, subject protected persons and objects to the risk of not being recognized by the enemy as having protected status." See also Sandoz et al., eds., *Commentary on the Additional Protocols:* "These provisions [of Article 23 of Protocol I pertaining to coastal rescue craft] on marking are laid down only in the form of recommendations. . . . [T]hus ships and craft covered by Article 23 are protected even when they are not marked, though

in this case they obviously run the risk of sustaining damage due to mistaken identity" (p. 266).

74. *San Remo Manual,* p. 235.

75. In a recent example of the tragic results that can ensue from failure to appreciate the willingness of terrorists to hit "soft" targets that pose no threat to them, the United Nations headquarters in Baghdad was destroyed on 19 August 2003 by a car packed with explosives, killing twenty-two people and wounding more than 150 others. Following an exhaustive investigation into that attack, Secretary-General Kofi Annan fired his chief of global security, who was found to have been "blinded by the conviction that U.N. personnel and installations would not become a target of attack, despite clear warnings to the contrary." See "Five Penalized by U.N. Chief in Iraq Bombing," *New York Times,* 30 March 2004, p. A11.

76. Use of a seemingly benign vehicle to deliver a terrorist explosive device is also seen in the destruction of the Khobar Towers residential complex in Dhahran, Saudi Arabia, on 25 June 1996, which claimed the lives of nineteen Americans and wounded 372 others. In that instance, a tanker truck was loaded with an estimated five thousand pounds of plastic explosives, parked adjacent to the facility, and detonated. See *U.S. Department of Justice Press Release of 21 June 2001,* available at www.fbi.gov/pressrel/pressrel01/khobar.htm.

77. See *Report of the DOD Commission on Beirut International Airport Terrorist Act, October 23, 1983* (also known as the Long Commission Report), 20 December 1983, part 6, sec. 1, available at www.ibiblio.org/hyperwar/AMH/XX/MidEast/Lebanon-1982-1984/DOD-Report/.

78. I assume, and certainly recommend, that should Phalanx be installed in *Comfort* or *Mercy,* a military detachment would be embarked for that purpose. For a comprehensive discussion of the placement of defensive armament on USNS vessels and the embarking of military personnel to serve them, see *MSC* [Military Sealift Command] *Attorney's Deskbook: Topic—The Law of Armed Conflict as It Applies to MSC,* MSC internal publication, revised 6 July 2003.

79. *San Remo Manual,* p. 235.

80. See "Phalanx Close-In Weapons System," *Defense Daily Program Profiles,* www.defensedaily.com/progprof/navy/wep-phal.html.

81. W. E. M. Heintschel von Heinegg, "Current Legal Issues in Maritime Operations: Maritime Interception Operations in the Global War on Terrorism, Exclusion Zones, Hospital Ships and Maritime Neutrality," in *Israeli Yearbook of Human Rights* [forthcoming].

82. See David Foxwell and Rick Jolly, "The RFA *Argus:* A Gas-Tight, Floating Field Hospital," *International Defense Review* 24, no. 2 (1992), pp. 116–17.

83. Ibid.

84. See note 73 above. See also *San Remo Manual,* p. 241, para. 173: "These means of identification [distinctive signals] are intended only to facilitate identification and do not of themselves confer protected status." The explanation accompanying this paragraph adds: "The exemption from attack or capture of medical vessels is based on their function, namely, that their purpose is to rescue the shipwrecked and to give medical care to the sick and wounded. It is in order to give protection to these categories of persons that protection from attack and capture is given to the vessel, subject to certain procedures and regulations that have been instituted in order to assure the *bona fide* use of these vessels." Of course, U.S. Navy ships that are not devoted exclusively to humanitarian pursuits are not immune from attack no matter how formidable the medical-care capability—the *Wasp*-class LHDs being a case in point (see note 61 above).

Terrorist attacks can shake the foundations
of our biggest buildings, but they cannot
touch the foundation of America!
PRESIDENT GEORGE W BUSH
SEPTEMBER 2001
The military loses personnel every year.
Lives lost for something they believe in,
leaving behind friends, family, and shipmates
to bear the burden and celebrate their devotion
to our country. Freedom isn't free!
CDR DAN SHANOWER USN
MAY 1997

MIDWAY

Sheer Luck or Better Doctrine?

Thomas Wildenberg

Six decades after the spectacular American victory over the Imperial Japanese Navy's First Air Fleet, the reasons behind the U.S. Navy's success at the battle of Midway are still not fully understood. Though the details of this famous battle continue to be argued in the pages of scholarly journals, the critical role of doctrine has not been properly analyzed.[1] Yet it was better doctrine that ultimately led to the American victory once the forces were engaged, a victory that changed the course of war in the Pacific.

Doctrine, as defined by the U.S. Department of Defense, comprises the fundamental principles by which military forces guide their actions.[2] For the Navy it is the foundation upon which tactics, techniques, and procedures are built—a shared way of thinking that must be uniformly known and understood to be useful and effective.[3] Because doctrine articulates the operational concepts that govern the employment of armed forces, it is critical for the success of any military operation—thus its importance in evaluating the actions of the forces engaged at the battle of Midway. An analysis of the doctrinal thinking of the two protagonists reveals significant differences in their approaches to carrier warfare, differences that were fundamental to the victor's success.

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The battle of Midway also marked the final phase in a revolution in military affairs (RMA) in which the aircraft carrier supplanted the battleship as the absolute determinant of naval supremacy. It was the culmination of a technical revolution in which carrier airpower displaced gunnery as the primary means of delivering naval ordnance. Moreover, it is one of the few instances in the history of RMAs in which the dominant player (in this case the U.S. Navy) was successful in implementing a revolutionary change in the basic character of warfare.[4]

Technology-driven RMAs, such as the paradigm shift to carrier warfare, are characterized by the introduction of a number of technological innovations in a series of stages over time. Richard Hundley terms this process the "Multiple Innovation Model" of an RMA.[5] Evaluating the development of carrier warfare on the basis of this model (table 1) is useful for analyzing how the doctrine of carrier warfare evolved along parallel, though slightly different, lines in the Japanese and American navies. This article will explore how these differences affected the outcome at Midway and their ramifications vis-à-vis the theory of RMAs.

TABLE 1
MULTIPLE INNOVATION MODEL OF THE RMA IN CARRIER WARFARE

Stage*	Basic Model	Carrier Warfare Model
1	New technology	Science of Aeronautics
2	New device	Airplane
3	New system	Carrier and Its Aircraft
4	New operational concept	Carrier Air Strike
5	New force structure & doctrine	USN = Task Force IJN = Air Fleet

* The innovations associated with the stages in the basic model do not always occur in order.

The quintessential element in the development of carrier warfare took place in stage three of the model, as shown in table 1, when the aircraft carrier came into being as a totally new system for taking land-based aircraft to sea. The aircraft carrier, which was introduced by the Royal Navy in World War I, did not become an important capital ship until the Washington Treaty on Naval Arms Limitations was enacted in 1922. The treaty, which severely limited the size and total tonnage of battleships in service among the major navies of the world, placed limitations on the total carrier tonnage allowed each navy and restricted any new carrier (i.e., built from the keel up) to twenty-seven thousand tons standard displacement. A special provision of the treaty permitted the Japanese and American navies to exceed this limitation, however, by allowing each to convert two incomplete battle cruisers that would otherwise have been scrapped under the treaty. As a result of this provision the Japanese and American navies began plans to construct two thirty-three-thousand-ton aircraft carriers apiece.[6] Once completed, the ships would dwarf any aircraft carrier then in existence. Each

would be capable of operating far more aircraft than had ever been put in the air by a single ship. How to conduct flight operations in the most efficient manner with such a large air group had yet to be determined by either navy.

Neither the Japanese nor American navy had any operational experience with carriers at the time of the treaty's signing in February 1922. Though both were commissioning their first experimental carriers, the first flights (from the Japanese *Hosho* and the American *Langley*) would not take place for the better part of a year. In the interim, both navies had to rely for the most part on whatever knowledge could be gleaned from the British, who had been conducting flight operations from the full-deck carriers HMS *Argus* and HMS *Eagle*. *Argus,* which entered service in 1918, was the first aircraft carrier to have a single flight deck extending the entire ship's length. Although *Eagle* was not placed in commission until 2 February 1924, an extensive series of flight tests was conducted from its deck in 1920.

The Americans were fortunate in having acquired a great deal of information on flight operations and carrier design from their British allies during World War I and the period shortly thereafter.[7] The data provided a firm foundation for the carrier design studies conducted by the U.S. Navy in the early 1920s. These studies led to the continuous single-flight-deck arrangement on the *Saratoga* and *Lexington,* converted from the two battle cruisers allocated to the U.S. Navy by the Washington Treaty. The two navies had ceased to share information by the time of the treaty. The lack of direct contact may have been a godsend to the U.S. Navy, for it probably prevented a grievous error in carrier design—the twin-hangar dual flight deck.

This failed innovation appeared on the next generation of British carriers—*Furious, Glorious,* and *Courageous*—the basic design characteristics of which were established in 1920.[8] Unlike the Japanese and American conversions, the new British carriers were produced from fast but poorly armed and under-protected cruisers built late in the war. To accommodate the maximum number of aircraft in the smaller space available, with constraints regarding the arrangement of boiler uptakes, their designers added a second hangar. Adding a small second flight deck as well, forward of the upper hangar, would (the designers believed) permit dual-flight-deck operations. In theory this would increase the speed of launching, so more aircraft could be placed in the air in the least time—a necessary improvement, as demonstrated by the poor trial performance of the single-deck *Eagle*. Because of the time required to spot aircraft between launchings, *Eagle* could keep only six aircraft in the air at one time.[9]

The Japanese too benefited from their wartime relationship with the Royal Navy. Their first aircraft carrier, *Hosho,* had been designed largely with British help, and in 1920 a Japanese representative observed air operations on board

Furious.[10] In the absence of documentary evidence, one can only make an educated guess as to the design process for the *Akagi* and *Kaga*.[11] It seems likely, based on the timing and similarities in design to *Furious, Glorious,* and *Courageous,* that the multiple-flight-deck arrangement of the Japanese vessels was influenced by information obtained from the Semple Naval Air Mission, which arrived in Japan in 1921.[12] This unofficial delegation of British aviation experts was invited to provide technical assistance and training to the Imperial Japanese Navy (IJN) in all aspects of aviation. Although its members were mostly pilots and aircraft designers, it is logical to assume that at least one or two were familiar with the twin-deck carrier then under development in Great Britain.

The "smoking gun" for this assumption can be seen in features of the first large Japanese carriers, *Akagi* and *Kaga,* commissioned in 1927 and 1928 respectively. Like their British contemporaries, both Japanese carriers sported multiple flight decks when completed.[13] This arrangement proved so unsatisfactory, however, that both had to be redesigned and rebuilt in the mid-1930s with single flight decks.[14] This unfortunate detour cost the Japanese dearly in lost time—time that might have been used to explore better methods of conducting flight operations with the single-deck design that emerged as the standard for the fleet carriers operated by the IJN in World War II.

This is precisely what transpired on the American side. Like the Japanese flyers on board the *Hosho,* naval airmen on board *Langley* initially copied British operating procedures. Those procedures required a clear deck for landing; as soon as an aircraft landed it was struck below.[15] Although this practice gave flexibility in takeoffs and landings, the time it took to stop an airplane, move it onto the elevator, and bring it below lengthened the landing cycle. This in turn limited the number of aircraft that could be operated to the capacity of the ship's hangar; the number was also determined to some extent by the time it took a group of returning aircraft to form up overhead and land.[16]

The clear-deck landing procedure was used until Captain Joseph M. Reeves took command of Aircraft Squadrons, Battle Fleet in mid-October 1925. Reeves, then the U.S. Navy's foremost authority on battleship gunnery, had just come from the Naval War College in Newport, Rhode Island, where he had served two tours of duty—first as a student, then as head of the Tactics Department. It was there that Reeves learned the importance of aircraft and the critical need to secure command of the air in any future engagement of the Battle Fleet.[17]

When Reeves took over the Aircraft Squadrons he was surprised to discover that *Langley* had put no more than six planes in the air at one time.[18] This seemed an absurdly small figure to Reeves; he would dramatically change it. The years spent in the fleet perfecting gunnery had taught Reeves the critical importance of meticulous practice and thorough training. He had also learned the

value of faultless procedures for ensuring speed and safety during any potentially dangerous shipboard activity.[19] These same principles he used to cajole *Langley*'s air wing to find ways to speed up takeoffs and landings—the recovery cycle, in modern jargon—so that as many aircraft as possible could be put into the air and recovered, in the least time. Under Reeves's tutelage, *Langley*'s crew invented the deck park, the crash barrier, specialized teams of flight-deck personnel identified by jerseys of various colors, and a host of other innovations that radically changed the way operations were conducted on cramped flight decks.

At first the object was to get as many planes in the air as possible in order to defend the fleet against attacking bombers. Slowly but surely, the number of planes operating from *Langley* expanded, and the time required to launch and recover aircraft decreased. By February 1926 sixteen planes could be kept in the air at one time. One year later the number had increased to twenty-two. This was a big improvement, but Reeves, who had been promoted to flag rank in 1927, now wanted *Langley* to operate even more planes. When the ship returned from its yearly overhaul in early 1928, he ordered thirty-six aircraft placed on its flight deck.[20] Six more planes were stowed below, so that when *Langley* departed from San Diego on 9 April 1928 to join the fleet headed on a transit to Hawaii, it had forty-two aircraft on board.[21]

The carriers' position within the force structure was not fully resolved until Pearl Harbor, when carriers became the U.S. Navy's preeminent striking force by default.

By then *Saratoga* and *Lexington* had arrived on the West Coast. The progress made on *Langley*'s flight deck paved the way for a spectacular eighty-three-plane raid launched in an exercise from *Saratoga*'s flight deck against the locks and facilities of the Panama Canal on 26 January 1929. The success of this record-breaking operation—more planes put in the air at one time by one carrier than ever before—laid the groundwork for the developments that took place in stage four of the Carrier Warfare Model, establishing the operational concepts that would determine the carrier's role in the fleet's battle plan. During the next few years the *Lexington* and *Saratoga* faced off in a series of simulated engagements conducted during yearly exercises known as "Fleet Problems." The carrier-versus-carrier duels that frequently occurred during these exercises brought to light the importance of quickly locating the opposing carrier so that air strikes could be launched against the enemy's flight deck as soon as possible to forestall a counterstrike. Time after time, the carrier that struck first emerged victorious. Thus, by the mid-1930s it was understood that the job of the American carriers was to seek out and destroy the enemy's flight decks. This unwritten doctrine—it was not codified until 1941—was responsible for

the development of a new aircraft type unique to the U.S. Navy, the scout bomber.[22] It was also instrumental in determining the makeup of air groups aboard American carriers.

While the U.S. Navy was busy experimenting with the carrier-versus-carrier duels that would so heavily influence its future battle doctrine, the Japanese were still struggling to perfect their carrier doctrine. Sidetracked by the war in China, Japanese naval aviators made little progress in working out an effective strategy for dealing with enemy flight decks.[23] Like their American counterparts, the Japanese expected aerial operations to precede the "decisive" clash of battleships that both sides predicted would determine the outcome of the next war.[24] Unlike the Americans, however, they failed to anticipate the importance of carrier-based scouting, concentrating entirely on the attack mission.[25] No scouting units were assigned to the Japanese carriers, and little emphasis was placed on this important aspect of carrier warfare. Reconnaissance was relegated to a few floatplanes, which would be catapulted from accompanying cruisers. The Japanese also overlooked or failed to develop the deck park, relying instead on the hangar deck to store and prepare aircraft for flight. On the Japanese carriers, aircraft capacity was determined by the size of the hangar, not of the flight deck, as was the case for the Americans.[26] The disparity in aircraft-handling procedures and search strategies resulted in substantial differences in the makeup of the typical air group deployed by the two sides.

As can be seen from table 2, the U.S. Navy, because of its innovative use of the deck park, was able to deploy more planes per carrier. Each carrier operated with seventy-two aircraft, on average, organized into four squadrons: one fighter (VF), one scout (VS), one bombing (VB), and one torpedo (VT). The Japanese,

TABLE 2
STANDARD CARRIER AIR GROUP COMPLEMENTS ON THE EVE OF WORLD WAR II

	IJN			USN		
Type*	Mfg/Model	Number	%	Mfg/Model	Number	%
VF	Mitsubishi A6M	21	33	Grumman F4F	18	25
VB	Aichi D3A	21	33	Douglas SBD	18	25
VS		—	—	Douglas SBD	18	25
VT	Nakajima B2N	21	33	Douglas TBD	18	25
Total Aircraft		63			72	

* VF = fighter, VB = dive-bomber, VS = scouting, VT = torpedo bomber

on average, operated with just sixty-three aircraft, organized into three twenty-one-plane squadrons: one fighter, one carrier attack, and one bombing.

The VS squadron on American carriers and the preponderance of scout bombers in air groups attest to the significance the Americans placed on

scouting. The exercises of the early 1930s had pointed to the need for a fast, well armed scout plane that could not only find the enemy carrier but attack its flight deck. Heeding the advice of the aviators, the U.S. Navy's Bureau of Aeronautics began to develop a series of scout bombers that evolved into the SBD, a plane that proved to be a superb dive-bomber as well as an effective scout.

The contrasting lack of reconnaissance planes and the preponderance of torpedo and dive-bombing aircraft on board Japanese carriers were in keeping with the IJN's emphasis on attack. The IJN's preference for the torpedo plane (the "carrier attack plane," in Japanese naval parlance) was in keeping with the IJN's faith in the torpedo as a weapon that could inflict severe underwater damage on almost any warship. This was contrary to the view of U.S. naval aviators, who believed that the torpedo was an inefficient weapon of aerial warfare, based on the small size of its warhead in relation to the total weight. To the Americans, hitting under the waterline did not appear to be a unique advantage; tests conducted in 1924 on the incomplete battleship *Washington* had shown that a heavy bomb falling close alongside would produce the same damage.[27] American pilots were also skeptical of the torpedo plane's ability to survive at the slow speeds and low altitudes required for a successful attack. It was only because the torpedo (in the absence of an effective armor-piercing bomb capable of penetrating four inches of hardened steel) was the only aerial weapon that could significantly damage a heavily armored battleship that a VT squadron was retained in limited numbers on American carriers.[28]

While the airmen on both sides were perfecting the tactical procedures and aircraft that would ultimately define their respective air groups, their flag officers were wrestling with the force-structure and doctrinal issues (the last stage in Hundley's model) raised by the increasing combat effectiveness of air warfare and the growing number of carriers within their fleets. The conundrum facing all these leaders was how to protect the inherently vulnerable carrier and yet maximize its tactical effectiveness.

In the U.S. Navy, the main question was the positioning of carriers with respect to the main body of the fleet. Although the carrier task force had become a regular feature of exercises, the Navy's battleship admirals continued to insist that carriers remain with the battleships for mutual support.[29] At issue was the survival of the carriers, which were now considered essential for fleet air defense. Tying the carriers to the slow battleships was the kiss of death, according to the Navy's airmen, who argued "that evasive movements at high speed were a carrier's best protection against attack."[30] The Americans continued to experiment until the fleet moved to Hawaii in 1940; by then, carriers had become the center of the cruising formation when operating with the fleet. The question of the carriers' position within the fleet's force structure—both its physical location and

tactical function—was not fully resolved in the U.S. Navy until after the Japanese attack on Pearl Harbor, when carriers became its preeminent striking force by default. When hostilities commenced, however, all the pieces were in place for the deployment of a number of carrier task forces, complete with heavy escorts of cruisers and destroyers, and accompanied in every instance by an oiler for logistic support.[31]

In the meantime, the Japanese navy had embarked on a much different path. As Mark Peattie and the late Dave Evans explain in their groundbreaking history, the lessons learned during warfare with China inevitably led Japan's naval leaders to conclude that carriers had to be concentrated to provide the large numbers of aircraft that seemed needed to achieve air superiority.[32] However, like their American counterparts, they understood the vulnerability of aircraft carriers and that grouping them together would be extremely dangerous, not only tactically but operationally—all the force's carriers would be exposed to attack if any one of them was detected. A solution to this dilemma, one that Peattie and Evans describe as one of "tactical effectiveness versus strategic risk," emerged at the end of 1940, when the "box" carrier formation was first introduced in the IJN.[33] The arrangement enabled the rapid massing of air groups for offensive operations but also an augmented protective combat air patrol.

Langley's *crew invented the deck park, the crash barrier, flight-deck teams in jerseys of various colors, and a host of other innovations that radically changed the way operations were conducted.*

Operational experiments with this new formation were conducted in early 1941. By then Admiral Isoroku Yamamoto, commander in chief of the Combined Fleet, had submitted a paper to the navy minister, Koshiro Oikawa, insisting that the IJN "deliver a fierce attack on the American fleet at the outset of hostilities to demoralize the U.S. Navy."[34] The instrument that would be chosen for Yamamoto's surprise attack was the First Air Fleet, a unit of the Japanese navy that came into being in April 1941, when all three carrier divisions were combined with two seaplane divisions and ten destroyers into what was then "the most powerful agglomeration of naval air power in the world."[35] Although the First Air Fleet represented a radical innovation in terms of naval organization, it was not a tactical formation that could undertake a naval operation on its own, for it would need escorts and logistical support.

Though the multicarrier attack was a brilliant tactical innovation, it did not challenge the concepts underlying the IJN's overall strategy of overpowering the U.S. Navy by destroying its battle line at sea.[36] When the Combined Fleet sailed for Midway at the end of May 1942, the battleship remained the centerpiece of

Yamamoto's strategy for dominating the Pacific. "For all his lip service to the principle of the offensive and to naval air power," he "still . . . visualized the battleship as the queen of the fleet."[37] As part of the operation, Yamamoto hoped to draw out remnants of the U.S. Pacific Fleet so that it could be engaged in the "decisive battle" that still remained the focus of Japanese naval strategy.[38] Instead of using his battleships in direct support of his carriers (as suggested by Rear Admiral Tamon Yamaguchi), Yamamoto stationed the three powerful dreadnoughts of the Combined Fleet far to the rear, to surprise and destroy any American surface force bold enough to attempt to interfere with the invasion of Midway.[39]

While the First Air Fleet (designated the "Mobile Force" in this operation) was steaming in what would prove to be its highly vulnerable box formation toward Midway, the three carriers *(Yorktown, Enterprise, and Hornet)* available to the commander in chief of the Pacific Ocean Area at the end of May 1942, Admiral Chester W. Nimitz, sortied from Pearl Harbor. They steamed in two task forces, the tactical units that had come to dominate U.S. naval operations since 7 December 1941. Unlike its adversary across the Pacific, the U.S. Navy's love affair with the battleship now rested in the mud of Pearl Harbor, where a number of its cherished "battlewagons" were being laboriously salvaged. Though Nimitz still had a strong force of battleships (Task Force 1 comprised *Pennsylvania, Maryland, Colorado, Idaho, Tennessee, New Mexico,* and *Mississippi*), he chose not to deploy them; they would only slow the carriers down and would require screening ships that were needed more elsewhere.[40] Nimitz also deployed a number of submarines for the defense of Midway; however, they too would not be a factor in the battle, the outcome of which would be determined by airpower alone.

The outcome of the battle of Midway was decided, and the fate of the IJN was sealed, at precisely 10:22 AM on 4 June 1942, when the first of three squadrons of American dive-bombers from *Yorktown* and *Enterprise* attacked the First Air Fleet as it was preparing to launch its own planes against the U.S. carriers.[41] The American planes struck the *Kaga, Akagi,* and *Soryu* in quick succession, setting all three ablaze within three minutes. The surviving Japanese carrier, *Hiryu,* quickly retaliated. After an exchange of air strikes that afternoon, *Hiryu* was burning from stem to stern, while its opponent, *Yorktown,* was dead in the water, without power. *Hiryu* sank the next day. *Yorktown* survived long enough to be taken under tow but then was torpedoed by a Japanese submarine.

The different paths of carrier development taken by the Japanese and American navies led to differences in carrier doctrine—differences that had a tremendous impact once the two forces were engaged. First and foremost of these was the American airmen's obsession with locating the enemy's carriers first so they

could be struck first. This principle became sacrosanct in U.S. carrier doctrine as soon as commanders realized that the best way to achieve air supremacy was to attack the opposing carrier before it had a chance to get its own planes in the air. Once launched, such a strike would be almost impossible to fend off, since (prior to the introduction of radar) there was virtually no way to detect approaching enemy planes or direct fighters to intercept them.[42] Although the Japanese understood this principle, they made no attempt to find an adequate means of locating the enemy's carriers.[43] As Mark Peattie aptly points out, success "depended not only upon the time required for carriers to launch their attack squadrons but, even before that, upon finding the enemy first."[44]

That the lack of a carrier-borne capability for scouting (reconnaissance, in Japanese naval parlance) contributed greatly to the demise of the Japanese carriers was affirmed by *Akagi*'s former air officer, Mitsuo Fuchida. As Fuchida explained, writing in 1955, Japanese carrier forces were devoted entirely to the attack mission.[45] There were no organic scouting units of any appreciable size in the Japanese navy, and very little emphasis was placed on this important aspect of carrier warfare: "In both training and organization our naval aviators [devoted] too much importance and effort . . . to attack."[46] Reluctance to weaken the carriers' striking power led to a single-phase search plan that was insufficient—in Fuchida's opinion—to ensure the carriers' security. "Had Admiral [Chuichi] Nagumo [the commander of the Mobile Force] carried out an earlier and more carefully planned two-phase search . . . the disaster that followed might have been avoided."[47]

The second doctrine-based difference was the predominance of the scout/dive-bomber on the American side. This type was unique to the U.S. Navy and could both locate and attack an enemy carrier. The effectiveness of the scout/dive-bomber (particularly the superb SBD, which outflew, outdove, and outbombed the Japanese Val) was proved beyond the shadow of a doubt at Midway.[48]

Last, but certainly not least, was the adoption of the deck park and the associated handling procedures devised by American airmen to maximize the number of aircraft that could be operated at one time from an aircraft carrier. This system enabled the U.S. Navy to operate more aircraft per carrier than its Japanese counterparts and thus to fly almost as many aircraft as the Japanese at Midway, with one less carrier. The deck park allowed a second dive-bombing squadron (though bearing the VS designation) to be added to each carrier's air group. It was one of these squadrons, VS-6 from the *Enterprise,* that made up for the lost planes from the *Hornet,* which failed to locate the enemy carriers. The extra squadron allowed the United States to strike three carriers at once, leaving just one. The outcome at Midway would have been very different had VS-6 not been present.

On the downside, the U.S. Navy's reliance on the deck park meant that the entire air strike group had to be launched at one time. This worked well during the short-range simulated engagements conducted during the thirties, when the various squadron types could circle the carrier while the air group formed up. At Midway differences in aircraft range, cruising speed, and the takeoff run for each type (VF, VB, VTB), combined with the extreme range to target, played havoc with the air group's ability to conduct any kind of a coordinated attack. The piecemeal commitment of forces that resulted from this approach and the lack of satisfactory air cover had disastrous consequences for the torpedo squadrons, which were all but annihilated.

Midway is one of the few instances in the history of RMAs in which the dominant player was successful in implementing a revolutionary change in the basic character of warfare.

In terms of launching aircraft, the Japanese had devised a workable doctrine that was in some ways superior to the U.S. technique. By contrast they developed the concept of the "deckload spot," wherein each carrier contributed one of its attack units (VB or VTB) and then some number of escort fighters.[49] Not only was this technique better suited to the smaller flight decks of the *Hiryu* and the *Soryu,* but it was highly advantageous when it came to coordinating air strikes from multiple carriers. The latter enabled the Japanese to conduct the massive air strikes that were the hallmark of the First Air Fleet.

The lack of coordination among the American carriers was a major deficiency that could have cost them the battle. Instead of assembling for a coordinated strike, individual flights from different carriers—both torpedo and dive-bombing—arrived over the target independently of each other and attacked separately. This resulted in the ineffective torpedo plane attacks that preceded the arrival of the two flights of dive-bombers, whose simultaneous appearance at this critical juncture of the battle was extremely fortuitous (many would say "sheer luck"). A third flight of dive-bombers from the *Hornet* never found the Japanese carriers.

The American victory at the battle of Midway was abetted by major weaknesses in Japanese carrier doctrine. The most significant of these was the IJN's inability to ensure (its leadership having previously failed to allocate sufficient assets for searching) that no enemy carriers were in striking range of its own. This fatal flaw in doctrine caused the Japanese to be caught while their hangar decks were packed with aircraft being fueled and armed. The outcome of an attack in such circumstances had been first predicted in 1933 by Commander Hugh Douglas, U.S. Navy, before an audience at the Naval War College: "In case an

enemy carrier is encountered with planes on deck, a successful dive bombing attack by even a small number of planes may greatly influence future operations."[50] The deadliness of such a contingency was well understood by American carrier aviators, who continually worried about being caught in that perilous situation.[51]

The Japanese determination to deliver a massed air attack on Midway meant that all four Japanese carriers were committed to preparations for a follow-up strike just as the U.S. carriers were discovered. This deprived the Mobile Force of the flexibility it needed to preempt the threat. Further, the box formation, which was established to facilitate the massive aerial attacks invented by the IJN, also contributed to the demise of the First Air Fleet. It would have been much more difficult to locate and hit three Japanese carriers at once had the elements of the Mobile Force been separated. Various arguments have been put forward in defense of the box formation—indeed, the four-carrier task force was adopted by the U.S. Navy later in the war; nevertheless, the fact remains that all three carriers were caught together.

The doctrinal differences concerning the deployment of the naval forces available to each side indicate just how far each navy had come in adjusting to the concepts later embodied in the Carrier Warfare Model of seapower. The disparity has important ramifications for the theory of revolutions in military affairs, for it supports Hundley's contention that it is not enough to be aware of an emerging RMA. To avert the kind of disaster visited upon the Japanese at Midway, a military must also be responsive to the implications of that RMA.[52] The Imperial Japanese Navy failed at Midway to take account of the consequences of the fundamental changes in naval warfare that they themselves had helped to initiate at Pearl Harbor.[53]

Several conclusions can be drawn. First, force structure and doctrine play critical roles; both are crucial to successful transformation in an armed service's ability to wage war. Second—and this, to some bureaucrats at least, is a painful revelation—technological prowess alone is insufficient to achieve a revolution in military affairs. Lastly, but most unsettling to military leaders, different paths lead to different technical solutions. The examples analyzed here show that chance and circumstances often play major roles in the evolutionary path taken by a military establishment as it attempts to adapt to new technologies and the changes they bring to the character of warfare.

NOTES

1. See Dallas Woodbury Isom, "The Battle of Midway: Why the Japanese Lost," *Naval War College Review* 54, no. 3 (Summer 2000), pp. 60–100; and its rebuttal by Jonathan B. Parshall, David D. Dickson, and Anthony P. Tully, "Doctrine Matters: Why the Japanese Lost at Midway," *Naval War College Review* 54, no. 2 (Spring 2001), pp. 140–51.
2. *DOD Dictionary of Military Terms,* 29 October 2000, available at www.dtic.mil.doctrine/doddict/doctrine.htm.
3. U.S. Navy Dept., *Naval Warfare Doctrine,* Naval Doctrine Publication 1 (Washington, D.C.: Navy Staff, 1994), available at www.nwdc.navy.mil/navagation/doctrine.htm.
4. Richard Hundley, *Past Revolution, Future Transformations: What Can the History of Revolutions in Military Affairs Tell Us about Transforming the U.S. Military?* (Santa Monica, Calif.: RAND Corporation, 1999), rand.org/publications/MR/MR1029/, p. 12.
5. Ibid., pp. 22–24.
6. Although the Washington Treaty limited the nominal size of these ships to thirty-three thousand tons, another provision, providing for modernization of existing capital ships to protect them against air and underwater damage, was applied by the U.S. Navy to bring the tonnage up to thirty-six thousand. See Norman Friedman, *U.S. Aircraft Carriers: An Illustrated History* (Annapolis, Md.: Naval Institute Press, 1983), p. 43.
7. Ibid., pp. 31–32.
8. For design details of these ships and the dual-flight-deck arrangement see Norman Friedman, *British Carrier Aviation: The Evolution of the Ships and Their Aircraft* (Annapolis, Md.: Naval Institute Press, 1988), pp. 91–92.
9. Ibid., p. 91.
10. David Evans and Mark Peattie, *Kaigun: Strategy, Tactics, and Technology in the Imperial Japanese Navy 1887–1941* (Annapolis, Md.: Naval Institute Press, 1997), pp. 168, 180–81.
11. The incomplete battle cruiser *Amagi* was initially designated as one of the two battle cruisers slated for conversion, but it was ruined in the earthquake of 1923. The incomplete hull of the battleship *Kaga* was used instead. My thanks to Professor Frank Uhlig for pointing this out.
12. Evans and Peattie, p. 301; Mark R. Peattie, *Sunburst: The Rise of Japanese Naval Air Power, 1909–1941* (Annapolis, Md.: Naval Institute Press, 2001), pp. 19–20, 54.
13. *Akagi* had three separated, vertically arranged flight decks: an upper landing deck 190 meters (624 feet) in length, a middle takeoff deck for fighters 18 meters (60 feet) long, and a 49-meter (160-foot) deck beneath that for launching torpedo bombers (Peattie, p. 54).
14. Evans and Peattie, p. 249.
15. Friedman, *U.S. Aircraft Carriers*, p. 84.
16. Thomas C. Hone, Norman Friedman, and Mark D. Mandeles, *American & British Aircraft Carrier Development, 1919–1941* (Annapolis, Md.: Naval Institute Press, 1999), p. 113.
17. For a comprehensive analysis of Reeves's activities at the Naval War College and the reasons for his selection as ComAirBatFlt, see Thomas Wildenberg, "In Support of the Battle Line: Gunnery's Influence on the Development of Carrier Aviation in the U.S. Navy," *Journal of Military History* 65 (July 2001), pp. 702–707.
18. Logbook, USS *Langley,* entry for 18 December 1925, Record Group [hereafter RG] 45, National Archive and Records Administration, Washington, D.C. [NARA].
19. For example, see Joseph M. Reeves, "Divisional Officer's Report, Record Target Practice of the Aft Turret Division [Battleship *Wisconsin*]," 27 February 1905, serial file 17213, Bureau of Ordnance General Correspondence 1904–1911, RG 74, NARA.
20. Eugene Wilson, *Slipstream: The Autobiography of an Air Craftsman* (New York: McGraw-Hill, 1950), p. 124; *The Reminiscences of Eugene Wilson* (New York: Oral History Office, Columbia University), pp. 390–91.
21. DeWitt C. Ramsey to Emory S. Land, 16 April 1928, Ramsey Papers, Operational Archives, Naval Historical Center, Washington, D.C.
22. The doctrine was codified in the 1941 revisions to USF 74 ("Current Tactical Orders and Doctrine, U.S. Fleet Aircraft"). Included

were the following statements: "Once the enemy is located all other considerations are secondary to the delivery of heavy bombing and torpedo attacks"; and "The surest and quickest means of gaining control of the air is the destruction of enemy carriers."

23. Peattie, pp. 72–73; Evans and Peattie, p. 342.
24. Yoichi Hirama, "Japanese Naval Preparations for World War II," *Naval War College Review* 44, no. 2 (Spring 1991), pp. 70–71; Evans and Peattie, p. 262.
25. Mitsuo Fuchida and Masatake Okumiya, *Midway: The Battle That Doomed Japan* (Annapolis, Md.: Naval Institute Press, 1955), pp. 148–50.
26. Peattie, p. 63. While American carriers normally parked most of their aircraft on the flight deck and used the hangars below only for aircraft repair and maintenance, Japanese carriers used their hangars as their main aircraft-stowage area.
27. Board to the Secretary of the Navy, "Subject: Tests on BB47, Ex-Washington, November 1924," in binder "Ordnance Allowances," Bureau of Aeronautics Secret Correspondence, 1921–38, RG 72, NARA. For a summary of the results see Theodore Roscoe's *On the Sea and in the Skies: A History of the U.S. Navy's Airpower* (New York: Hawthorne Books, 1970), p. 161.
28. It could also be used in conditions of low overcast, which would preclude dive-bombing. The Navy abandoned its shore-based torpedo squadrons after the Pratt-MacArthur Agreement, and no torpedo squadrons were assigned to the *Ranger*. Only two torpedo squadrons were retained until the *Yorktown* entered service in September 1937.
29. Mark A. Campbell, "The Influence of Air Power upon the Evolution of Battle Doctrine in the U.S. Navy, 1922–1941" (master's thesis, History Department, University of Massachusetts, Boston, 1992), pp. 174–78.
30. ComAirBatFor [Frederick J. Horne], "Comments and Recommendations: Fleet Problem XVIII," p. 7, microfilm series M964 [reel 23], NARA.
31. See the author's *Gray Steel and Black Oil: Fast Tankers and Replenishment at Sea in the U.S. Navy, 1912–1992* (Annapolis, Md.: Naval Institute Press, 1996.), p. 170 table 17, and "Chester Nimitz and the Development of Fueling at Sea," *Naval War College Review* 46, no. 4 (Autumn 1993), pp. 52–62.
32. Evans and Peattie, p. 347.
33. Admiral Ernest J. King, then the commander of Aircraft Squadrons, Battle Force, reached this same conclusion in the early part of 1939, when he brought four U.S. carriers together for combined exercises; see Thomas Buell, *Master of Seapower* (New York: Little, Brown, 1974), pp. 114–15.
34. *Hawai Sakusen* [The Hawaii operation], Senshi Sosho Series (Asagumo Shimbunsha, 1979), pp. 83–84, as cited by Hirama, p. 75.
35. Evans and Peattie, p. 349.
36. As Peter Rosen points out, "A major innovation involves a change in the concepts . . . governing the ways it [a combat arm] uses forces to win a campaign, as opposed to a tactical innovation." See *Winning the Next War: Innovation and the Modern Military* (Ithaca, N.Y.: Cornell Univ. Press, 1961), p. 7; see also Gordon W. Prange's analysis in *Miracle at Midway* (New York: McGraw-Hill, 1982), pp. 249–50.
37. Prange, p. 34.
38. Fuchida and Okumiya, p. 78.
39. Prange, p. 29.
40. Ibid., p. 59.
41. Two more squadrons from the *Hornet* never found the Japanese and did not take part in the battle.
42. This was especially true for the dive-bomber, which was virtually unstoppable once it entered its dive.
43. The reasons for this remain unclear. Since Japanese carrier doctrine was integrated into the combined strategy for defeating the U.S. fleet in a decisive naval engagement, presumably the Japanese believed they would find the American carriers with the rest of the fleet. Thus it was not essential to allocate critical flight-deck resources to this task.
44. Peattie, pp. 153–55. As Peattie explains, maneuvers conducted by the Combined Fleet as early as 1939 had demonstrated that success in preemptive attack was usually a matter of only a few minutes' advantage.
45. Fuchida and Okumiya, pp. 148–50.

46. Ibid.

47. Ibid. For a contrasting view, see Dallas Woodbury Isom (in the article cited in note 1 above), who argues that Nagumo's choices at Midway were calculated and reasonable, if ill fated. See his "The Battle of Midway," esp. pp. 70–77, for the detailed calculus involved.

48. U.S. pilots attacking the Japanese carriers at Midway achieved a hit rate of 27.5 percent. This exceptional achievement—the average during prewar bombing exercises against maneuvering targets had been only about 20 percent—was aided by the Japanese carriers' having just turned into the wind when the American planes arrived overhead. The dive-bombers could dive out of the sun along the long axis of a non-maneuvering target, with no crosswind—an ideal situation.

49. Jonathan Parshall, correspondence to author, 16 August 2004.

50. Hugh Douglas, "Air Tactics," lecture delivered at the Naval War College on 23 October 1933, file 1846A, Historical Collection, Naval War College.

51. In 1936 Miles Browning (who later became Spruance's air adviser at Midway) wrote: "Every carrier we have has known what it means to be 'bopped' with all planes on deck, because her hands were tied by uncertainty as to her next move." See Clarke G. Reynolds, "The Truth about Miles Browning," in *A Glorious Page in Our History* (Missoula, Mont.: Pictorial Histories, 1990), p. 214.

52. Hundley, p. 3. Craig Koerner suggests that a case can be made that the Japanese were overresponsive to an RMA. As he points out, "One of their major fears in this battle was that land-based bombers out of Midway would savage the invasion fleet, leading them to strike the airfield from long range with the unified carrier force."

53. The Royal Navy deserves some of the credit for the Japanese success at Pearl Harbor, by paving the way at Taranto.

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RACE FOR THE DECISIVE WEAPON

British, American, and Japanese Carrier Fleets, 1942–1943

James P. Levy

It is popularly understood that after the spectacular American victory at the battle of Midway the aircraft carrier reigned supreme; that war at sea was changed completely; and that the presence of America's two surviving carriers after the sinking of Admiral Chuichi Nagumo's four flattops forced the cancellation of the Midway invasion and the retreat of Admiral Isoroku Yamamoto's eleven battleships, sixteen cruisers, and fifty-three destroyers from the Central Pacific.[1] The reality was more complex. Midway was, in fact, followed by nearly two years of war in which carriers notably failed to deliver knockout blows of the kind most proponents of new technology promise for their innovations. Even at the battle of the Philippine Sea, despite the lopsided carrier-air duel, more damage was inflicted on the Imperial Japanese Navy's ships by U.S. submarines than by carrier aircraft.[2] This is not to say that carriers were unimportant, just that they spent more of their time in Corbettian activities like providing cover for amphibious landings than in Mahanite fleet-to-fleet combat. Most naval battles in 1942–43 involved cruisers and destroyers rather than carriers. Of the seventeen engagements fought between the U.S. and Imperial Japanese navies in the Solomons, fifteen were fought by surface ships, two by carriers.[3]

> We think of the Pacific war as the "war of the carriers" and the "beginning of the carrier age." Well, that's technically true. But keep in mind that only five carrier-to-carrier battles were fought during the entire war. . . . The "carrier-versus-carrier era" lasted only twenty-five months . . . [a]nd actually, the last carrier-to-carrier combat that was anything like an even fight was in October 1942. . . . In effect, the "Golden Age of Carrier Battles" lasted from May to October 1942.[4]

In Europe, the major naval battles in Europe during 1942–43—the Barents Sea and the North Cape—were gunnery actions. Yet by 1944, everyone agrees, carriers ruled the waves. Why was it that the primacy of the aircraft carrier heralded at Taranto and Pearl Harbor, and confirmed at Midway, did not immediately come to pass? Why did not carrier forces from that day forward completely dominate naval combat? This seeming discrepancy between the emergence of the carrier as the dominant capital ship in 1942 and its full manifestation as the decisive weapon in naval warfare in 1944 was caused by a chronic shortfall in carriers and operational aircraft. This was true of all three "carrier powers": Britain, the United States, and Japan. They all knew what was needed, but previous losses, ongoing attrition, and regular maintenance made the massing of an overwhelming carrier fleet impossible. Only with the introduction of numerous *Essex*-class ships, along with a mass of trained pilots and excellent carrier planes, was the promise of Midway turned into reality.

This article will compare and contrast the carrier fleets of Great Britain, the United States, and Japan. In addition, it will examine their activities in the post-Midway strategic environment and see how each carrier power responded to the perceived need for additional carrier airpower. We will see how and why the United States won the race for the decisive weapon of modern naval warfare.

A note on the carriers available to the Americans, Japanese, and British in 1942–43 is in order. Carriers came in three main types: fleet, light fleet, and escort. We will limit our discussion here to fleet and light fleet carriers.

As we can see in table 1, the U.S. Navy's largest operational carrier in 1942 was its oldest—*Saratoga*. However, it was torpedoed on two separate occasions early in the war and was out of service for months.[5] Also operational during this period were the *Enterprise* and *Hornet,* but *Hornet* was sunk by the Japanese on 24 October 1942. The *Wasp* served in the Pacific briefly but was sunk by a submarine on 15 September 1942. The *Ranger* was classified as a fleet carrier, but because it had trouble reaching its designed speed and was very lightly protected, it was deemed unsuitable for Pacific Fleet operations. (It did serve in the Operation TORCH landings in Morocco and again with the Royal Navy's

TABLE 1
U.S. NAVY CARRIERS 1942–1943

Name	Full-Load Displacement	Speed (knots)	Aircraft Complement*
Saratoga	43,000	33	63
Ranger	17,500	29	72
Enterprise, Hornet	25,400	32.5	84
Wasp	18,450	29.5	76
Essex Class	34,800	32.5	90
Independence Class	14,700	31	30

* Theoretical total aircraft complement: 379

Home Fleet in the summer of 1943.) The U.S. Navy did not operate light fleet carriers until the summer of 1943, when the first of nine *Independence*-class ships, built from converted light cruiser hulls, made their appearance. All nine were completed in 1943, but only the first four were in action by the end of that year. More critical for U.S. Navy operations were the big *Essex* carriers on the way in 1942; four joined the Pacific Fleet by November 1943, with ten more building. It was these carriers that would sweep the Pacific.

The Imperial Japanese Navy (IJN) operated a substantial carrier fleet in 1942–43, as we can see in table 2. Despite the losses at Midway, Japanese carriers proved themselves a match for American ones in the battles around the Solomons. The centerpieces of their carrier force were the sisters *Shokaku* and *Zuikaku*—well armored and fast, and with large air groups. They were probably the best carriers afloat until the *Essex* class commissioned. The converted liners *Junyo* and *Hiyo* were much less impressive, with little armor, inadequate speed, and suspect engines. The light carrier *Zuiho* was a fine ship and served its country well. Confusingly, Japan successively commissioned two light carriers named *Ryuho*. U.S. carrier planes sank the first on 24 August 1942; it was replaced by a converted submarine depot ship that proved a disappointment in service. No new fleet carriers joined the IJN in 1943, but the armored fleet carrier *Taiho* and the light fleet carriers *Chitose* and *Chiyoda* were due to enter service in early 1944.

TABLE 2
IMPERIAL JAPANESE NAVY CARRIERS 1942–1943

Name	Full-Load Displacement	Speed (knots)	Aircraft Complement*
Shokaku, Zuikaku	32,105	34	72
Junyo, Hiyo	28,300	25	53
Zuiho	14,200	28	30
Ryuho1	8,000	29	37
Ryuho2	13,366	26	31
Taiho	37,000	33	72
Chitose, Chiyoda	15,300	29	30

*Theoretical total aircraft complement: 317

Table 3 gives us the details of Royal Navy carriers. The hard-to-categorize carrier *Eagle* served with the fleet briefly during the period under discussion.[6] It was a converted First World War–era battleship, and this author tends to categorize it as a light fleet carrier. *Eagle* spent its distinguished wartime career in the Mediterranean, where it was sunk by U-boat torpedoes during Operation PEDESTAL in August 1942. The British had five fleet carriers in commission during 1942–43: *Furious, Illustrious, Formidable, Victorious,* and *Indomitable*. *Furious* was a converted light battle cruiser, and despite age and dodgy engines that often sent it back to port for repairs, it performed yeoman service. *Illustrious, Formidable,* and *Victorious* were sturdy, well-armored carriers that sacrificed air

TABLE 3
ROYAL NAVY CARRIERS 1942–1943

Name	Full-Load Displacement	Speed (knots)	Aircraft Complement*
Eagle	22,600	24	21
Furious	22,450	30	36
Illustrious, Formidable, Victorious	28,620	30.5	33
Indomitable	29,730	30.5	45
Unicorn	20,300	24	35
Implacable Class	32,110	32	60

*Theoretical total aircraft complement: 236

complement (normally thirty-three to thirty-six aircraft) for deck and side protection.[7] They could carry additional aircraft by parking planes on the flight deck (which was standard American practice but contrary to Royal Navy policy). Their half-sister *Indomitable* had been redesigned during construction with somewhat less armor but additional hangar space. Two fleet carriers *(Implacable, Indefatigable)* that would join the fleet in 1944 struck a good balance of armament, speed, and air complement. The unique *Unicorn* had been designed before the war as a maintenance carrier to support overseas deployments. It was pressed into service as a light fleet carrier in 1943.

As can be seen from table 4, carrier strength fluctuated widely throughout the period in question. The table clearly reveals how well major naval operations dovetail with carrier availability. One sees this with Operation WATCHTOWER (the Tulagi/Guadalcanal landings) in August 1942, Operation PEDESTAL the same month, TORCH in November 1942, and Operation HUSKY (the Sicily invasion) in July 1943. Operation GALVANIC, the Tarawa/Makin amphibious assaults, took place as soon as enough *Essex* and *Independence*-class carriers were ready for action, in November 1943. The exception to this pattern is the Japanese carrier force's inaction during 1943, for reasons discussed below. The IJN's carriers withdrew from combat after their costly victory at the battle of Santa Cruz in October 1942 and did not sortie again until June 1944. However, Japanese carrier planes, sans carriers, operated repeatedly from land bases throughout 1943.

Carriers are useless as combatants without proper aircraft. After the availability of hulls, the factors that determine the power and effectiveness of carrier forces are the number and quality of planes embarked and the training of their aircrews. In this respect the United States held a distinct edge over Britain and Japan. (The characteristics of the various aircraft types in use during the period under discussion are summarized in table 5.) The British were dependent on short-range fighters converted from land use and a slow biplane torpedo bomber for most of 1942–43. This is not to say that the Sea Hurricane, Seafire, and Albacore were objectively bad aircraft. What hurt them was how they fit into midwar carrier operations. The Seafire was basically an interceptor, with a weak undercarriage prone to damage and landing accidents. The British had a true

TABLE 4
OPERATIONAL CARRIER STRENGTH JULY 1942–NOVEMBER 1943

	Imperial Japanese Navy		Royal Navy		U.S. Navy	
	Fleet	Lt. Fleet	Fleet	Lt. Fleet	Fleet	Lt. Fleet
July '42	S		VIFIL	E	ESWR	
August	SZ	R	VIFILFu	E	ESWR	
September	SZ	Zu	ILFu		ESRH	
October	SZJH	Zu	ILFu		ERH	
November	ZJ		VFILFu		ER	
December	ZJ		VFILFu		ES	
January '43	ZJ	Zu	FILFu		ES	
February	ZJ	Zu	VFILFu		ESR	
March	ZJH	ZuR2	VFFu		ESR	
April	ZJH	ZuR2	VIFFu		ESR	
May	SZJH	ZuR2	VIF		SR	
June	SJ	R2	VIF	U	SR	
July	SZ	ZuR2	VIFILFu		SR	
August	SZJ	Zu	VFIL	U	EsYSR	In
September	SZJ	Zu	VFIL	U	LSR	InPBw
October	SZJH	ZuR2	VFILFu		EsYSRL	InPBwC
November*	SZH	ZuR2	VFu		EsYRLBhE	InPBwC

KEY

Japan: S = *Shokaku,* Z = *Zuikaku,* J = *Junyo,* H = *Hiyo,* R = *Ryuho,* Zu = *Zuiho,* R2 = 2nd *Ryuho*

Royal Navy: V = *Victorious,* I = *Indomitable,* IL = *Illustrious,* F = *Formidable,* Fu = *Furious,* E = *Eagle,* U = *Unicorn*

U.S. Navy: E = *Enterprise,* S = *Saratoga,* W = *Wasp,* R = *Ranger,* H = *Hornet,* Es = *Essex,* Y = *Yorktown,* L = *Lexington,* Bh = *Bunker Hill,* In = *Independence,* P = *Princeton,* Bw = *Belleau Wood,* C = *Cowpens*

Sources: A. J. Watts and B. G. Gordon, *The Imperial Japanese Navy* (Garden City, N.Y.: Doubleday, 1971); E. Bergerud, *Fire in the Sky* (Boulder, Colo.: Westview, 2000); N. Friedman, *British Carrier Aviation* (Annapolis, Md.: Naval Institute Press, 1988); H. A. Gailey, *The War in the Pacific* (Novato, Calif.: Presidio, 1995); H. Jentschura, *Warships of the Imperial Japanese Navy* (Annapolis, Md.: Naval Institute Press, 1977); *Dictionary of American Naval Fighting Ships,* ed. J. L. Mooney (Washington, D.C.: U.S. Government Printing Office, 1959–67); grateful acknowledgment is extended to D. Ashby of the Naval Historical Branch London and C. Rounsfell of the Fleet Air Arm Museum Yeovil for help in compiling this table.

**Saratoga* left service for major refit after the first week of November 1943.

carrier fighter that could escort strike formations, the Fulmar, but it was too slow to deal with modern opposition. The Albacore was optimized as a torpedo bomber, and most Albacore crews were trained for night antishipping strikes with torpedoes. Many Albacores had surface search radar attached to their underbellies.

Unfortunately, the Royal Navy in 1942–43 needed an aircraft for bombing and close air support much more than an obsolescent torpedo plane best suited to antishipping strikes. The Barracuda, though not the failure it is sometimes portrayed as having been, was not the major improvement the Fleet Air Arm (FAA) needed. Its deficiencies forced the British to procure U.S. planes under Lend-Lease. British pilots were good, but relatively small carrier air groups and less than stellar aircraft limited FAA effectiveness. A comparison of air groups in the summer of 1943 is illuminating. When the name-ship of the *Essex* class became operational, it carried an air group of thirty-six Hellcats, thirty-six

TABLE 5
CARRIER AIRCRAFT

	User	Max. Speed (knots)	Combat Radius (nm)	Armament
FIGHTERS				
Zero	IJN	267	335	2 x 20 mm, 2 x 7.7 mm
Fulmar	RN	211	275	8 x .303-in.
Sea Hurricane	RN	252	200	4 x 20 mm
Seafire	RN	289	237	2 x 20 mm, 4 x .303-in.
Wildcat	USN/RN	274	265	4 x .50-in.
Hellcat	USN/RN	280	324	6 x .50-in.
TORPEDO BOMBERS				
Kate	IJN	178	209	1 x 21-in. torpedo
Jill	IJN	225	355	1 x 21-in. torpedo
Albacore	RN	122	348	1 x 18-in. torpedo
Barracuda	RN	198	196	1 x 21-in. torpedo or 1 x 1,600-lb. bomb
Avenger	USN/RN	209	348	1 x 24-in. torpedo or bombs (2,000 lbs.)
DIVE-BOMBERS				
Val	IJN	201	332	816 lbs.
Judy	IJN	272	450	1,300 lbs.
Dauntless	USN	192	382	1,000 lbs.
Helldiver	USN	222	652	1,000 lbs.

Sources: Owen Thetford, *British Naval Aircraft since 1912,* 6th rev. ed. (Annapolis, Md.: Naval Institute Press, 1991); and James F. Dunnigan and Albert A. Nofi, *Victory at Sea* (New York: William Morrow, 1995).

Dauntlesses, and eighteen Avengers—a staggering ninety aircraft.[8] That July *Indomitable* embarked thirty Seafires and twenty-one Albacores, while *Formidable* had six Seafires, twenty Martlets (the British name for Wildcats), and eighteen Albacores aboard—in all, ninety-five planes. Thus these two British carriers together only roughly equaled the combat power of *Essex* alone. Their only advantage over a single *Essex*-class ship would have been that two hulls are harder to disable than one, and RN carriers had a slight edge in armor and survivability. By way of comparison, in October 1942 *Zuikaku* operated its designed maximum of seventy-two aircraft: twenty-seven Zeroes, twenty-seven Vals, and eighteen Kates.[9] In terms of planes, the U.S. Navy and Marine Corps during 1942 averaged 3,191 combat aircraft in their collective inventory; the Fleet Air Arm fielded 461 combat aircraft in frontline service (carrier and land-based) in September of that year.[10]

Also problematic for the British was carrier doctrine. Rear Admiral Reginald Henderson had experimented with multicarrier operations in the early 1930s. The 1939 Fighting Instruction specified that the role of the carriers was to "deny the use of aircraft to the enemy" by finding and sinking his carriers.[11] When war came, the Home Fleet had a flag officer, "Vice Admiral Aircraft Carriers," tasked

with overall control of carrier operations. He had up to three carriers under his direct command *(Ark Royal, Furious,* and *Glorious)* during the Norwegian campaign in May and June 1940—although they tended to work in pairs, two on operations and one back at Scapa Flow (in the Orkneys) refueling.[12] Even the strike on Taranto, Italy, in November 1940 was to have been a multicarrier operation, but damage to *Eagle* precluded its participation.[13] However, in 1943 opinion was still divided within the RN on how many carriers could work together effectively, whether each carrier should have its own screen or all should share a collective one, and whether one carrier should maintain the defensive combat air patrol overhead or each should contribute a small number of fighters to a combined CAP.[14] Although the RN was prepared to use up to three carriers together defensively (as in Operation PEDESTAL, the crucial relief convoy for Malta in August 1942), it lacked experience and training in multicarrier offensive operations. Because carriers were so widely needed, and because of losses, battle damage, overhauls, and transit times to the many theaters of operation, the British rarely got the chance to mass their carriers. So even if the Royal Navy had had a coherent carrier doctrine based on massive strikes delivered by massed carriers, as the United States and Japan did, real-world demands would have militated (as in fact they did) against its implementation.

British operational procedure was also different, partly for philosophical reasons, partly for practical ones. To avoid corrosion from constant exposure to sea spray and reduce the risk of multiple losses in landing accidents, British practice was to strike aircraft immediately below into the hangar upon landing, not park them on the flight deck forward. This made sense, given the paucity of British planes and typical Atlantic sea conditions. However, combined with the slow speed of British aircraft, it meant that RN air groups took more time launching, forming up, and landing than did their U.S. and Japanese counterparts. This consumed fuel, reduced combat radius significantly, and slowed the tempo of operations.[15]

By contrast, Japanese carrier planes were very good. Two outstanding aircraft, the Judy dive-bomber and the Jill torpedo plane, entered service in large numbers by the end of 1943. However, the Zero remained in the order of battle long after the American Hellcat made it obsolete. Losses were hard to make up, and replacement-pilot quality was low. The IJN devoted great effort after Midway to revamping its naval air force, but the process took two years. By then, the United States, with twice Japan's population and ten times its gross national product, had far outstripped anything Japan could hope to match in terms of ships, planes, or trained personnel.

The U.S. Navy, after the replacement of the Devastator with the Avenger, had no real weakness in its air arsenal, and its training program and rotation policy could produce high-quality pilots with ease. Crucial in the period under

discussion was the replacement of the very good Wildcat with the excellent Hellcat; the capture of a crashed, yet largely intact, Zero fighter in the Aleutians in June 1942 helped American designers produce in the Hellcat a superb Zero-killer. Late in 1943 the Dauntless dive-bomber was replaced by the marginally better Helldiver. Overall, by November 1943 the U.S. Navy enjoyed a spectacular advantage over the RN and the IJN in the sheer bulk of high-quality ships, planes, and aircrews it could throw into action. Even in the interwar years planes and pilots had not been in as short supply in the U.S. Navy as they had been in the Royal Air Force–dominated Fleet Air Arm or the quality-obsessed IJN, wedded to the "invincibility of refined technique."[16]

American carrier doctrine flowed out of the big air wings of *Lexington* and *Saratoga*. It has been argued that tests using these large air groups prior to World War II made the U.S. Navy uniquely conscious of the emerging primacy of the aircraft carrier. This assertion has been partially undermined by two pieces of evidence: first, the U.S. Navy's building program up through the Vinson Act in 1940 devoted more money to battleship procurement than to building aircraft carriers; second, American fleet tactics as developed in the 1930s were battleship-centric.[17] Yet it is true that the atmosphere of relative scarcity in which the British and Japanese carrier air forces developed were in marked contrast with the situation in the United States. British and Japanese admirals were obliged to ponder anxiously the likelihood of having to fight a "come as you are" war, without the massive infusion of new ships, planes, and pilots that American admirals could largely take for granted. What one historian of D-Day has written in response to critics of the U.S. Army is just as true for the Navy: "To accuse Americans of mass-production thinking is only to accuse them of having a mass-production economy and of recognizing the military advantages of such an economy. The Americans were power-minded."[18] This cornucopia of power would underwrite the swift disintegration of Japan's military position after November 1943.

For the U.S. Navy, the period from Midway to the carrier raids on Rabaul (June 1942–November 1943) embodied two themes: wearing down the Japanese and building up overwhelming strength for the decisive drive across the Central Pacific. This is why operations during that period were largely confined to the Solomons and the southwest Pacific. Before the war, the "Rainbow Five" plan envisioned a drive across the Central Pacific at the earliest possible opportunity. But the need to protect Australia and keep the restless and influential General Douglas MacArthur occupied intervened; Pearl Harbor and carrier losses in 1942 delayed the effort also. But in the southwest Pacific land-based airpower could augment carrier forces until the *Essex* and *Independence*–class ships became fully operational. Between December 1942 and June 1943 *Essex, Lexington,*

Yorktown, Bunker Hill, Independence, Princeton, Belleau Wood, Cowpens, and *Monterey* all commissioned.[19] The Americans, however, refused to rush them into service, preferring to work them and their air groups up to great efficiency before committing them to battle. This decision left a serious gap in available carrier strength throughout the winter and spring of 1943. *Enterprise* being not at 100 percent efficiency due to damage inflicted in autumn 1942, the Pacific Fleet was down to *Saratoga* in May, June, and July 1943. (It was backstopped by the Royal Navy's *Victorious,* which was deployed to the Pacific Fleet from March through July.)[20] Whenever a large carrier force was available (August 1942, November 1943) the U.S. Navy could independently take the offensive, otherwise not. Despite this, MacArthur and Admiral William F. Halsey (then commanding the South Pacific Force) could keep up the pressure on the Japanese, because they had substantial U.S. Army Air Forces and Marine Corps air assets in New Guinea and the Solomons. But by November 1943, when five fleet and four light fleet carriers were ready for action in the Pacific, Admiral Chester Nimitz (commanding the Pacific Ocean Area) could begin his island-hopping campaign at Tarawa with little fear of successful Japanese intervention. In December 1943 Nimitz's Task Force 50, comprising four fleet and two light fleet carriers, could operate independently against Japanese air bases at Kwajelein Atoll with 386 combat aircraft embarked.[21] Carrier aircraft could now cover any attack the Americans chose to make.

The Japanese, by contrast, faced in the period from Midway to the battle of the Philippine Sea a bewildering series of strategic dilemmas that proved well nigh insurmountable. The physical and psychological damage inflicted at Midway haunted the Imperial Japanese Navy and sapped its will; the battles of attrition in the Solomons and New Guinea sapped its strength. No fleet carriers joined the Combined Fleet in 1943, and the two converted liners that were pressed into service in 1942 *(Junyo, Hiyo)* were both inferior to any of the four ships lost at Midway. Although the number of Japanese carriers available often exceeded those of the U.S. Pacific Fleet, Japanese admirals were unwilling to risk them, as more would not be immediately forthcoming; American land-based airpower acted as a further deterrent to offensive action. In addition, the quality of Japanese pilots was in near free fall during 1943, and things would get worse, not better. Lack of fuel curtailed training, a desperate need for new pilots led to a shortened curriculum, and the Combined Fleet refused to release combat-experienced men to become instructors; all three factors took their toll.[22] By the winter of 1943–44 Japanese pilots were lucky to get 275 hours of flight training, while American pilots were not released to squadrons until they had 525 hours in the air.[23] Added to this, the effective assassination of Admiral Yamamoto in April 1943 further

increased the gloom within the IJN. Wherever his successor, Admiral Mineichi Koga, turned, he could perceive only Allied strength and Japanese weakness. The fact that Koga's intelligence picture was at best rudimentary while American intelligence efforts were huge and largely successful did not help matters.[24] Should Koga defend Truk? Bougainville? Rabaul? New Guinea? Should he husband his resources or make a stand somewhere in 1943?[25] The grimness of the situation seems to have paralyzed the upper echelons of the Japanese navy until early in 1944, when the threat of a landing in the Marianas galvanized its planners.

Japanese carrier planes after the Pyrrhic victory at Santa Cruz in October 1942 fought exclusively from land bases until the Combined Fleet's last realistic throw of the dice at the Philippine Sea in June 1944. *Zuikaku, Junyo,* and *Zuiho* had been poised to cover the evacuation of Guadalcanal in January 1943, but the Americans failed to intervene.[26] In April, after a general lull as both sides licked their wounds from Guadalcanal, Yamamoto ordered ninety-six Zeros and sixty-five Vals from his carrier air groups to Rabaul in support of Operation I-GO. The plan was to launch four big air raids on bases in the Solomons and western New Guinea to disrupt Allied operations in the area. Because the defenders were alerted by decrypts of Japanese signals, the raids netted a disappointing twenty-five enemy planes knocked out and a U.S. destroyer, a New Zealand corvette, a tanker, and two transports sunk, at the cost of forty Japanese carrier aircraft. The planes were ordered back to Truk on 17 April.[27] In July ninety-two planes were dispatched from *Junyo, Hiyo,* and *Ryuho* to Rabaul, where all were lost. In November, 150 more aircraft from *Shokaku, Zuikaku,* and *Zuiho* were thrown into the maelstrom after Allied air raids by as many as 213 heavy and medium bombers and 138 P-38 Lightning fighters threatened to neutralize Rabaul, thus uncovering both Bougainville and the northern coast of New Guinea. Half the planes were lost, and the rest were withdrawn after two weeks.[28] The resulting absence of fighters away at Rabaul rendered infeasible any attempt by the Combined Fleet to intervene when the U.S. struck at Makin and Tarawa later in November.

The strategy of diverting carrier planes to Rabaul has often been criticized, but one is left with the impression that Admirals Yamamoto and Koga had little choice. If planes were hard to replace, ships were irreplaceable entirely, and land-based operations did not risk them. If we can see now that pilots were the true key asset and that Japanese pilots by the time of the "Marianas Turkey Shoot" were hopelessly outclassed by more experienced and better trained American ones, all that was probably not so clear in April 1943. Given the power of American land-based air forces in the southwest Pacific, it is difficult to imagine that planes would have fared better operating from carriers than they did deployed to land bases. Furthermore, the Judys and the Jills reaching squadron

service in 1943 were excellent attack planes, and Admiral Jisaburo Ozawa went into battle in June 1944 with more carriers and operational planes—approximately 460 to 420—than Nagumo had at Pearl Harbor.[29] Using carrier planes to protect Rabaul, the key to Japan's entire position in the South Pacific, and to buy time for new ships and planes to come on line must have seemed a good bet. In any case, given the immense American strength then on the way, two hundred pilots saved in 1943 could in no way have turned the tide for Japan in 1944. Therefore, although in theory and hindsight we may find fault with the Japanese decision to use carrier planes to prop up Rabaul, it was probably no worse than doing nothing—an inevitable consequence of Japanese material inferiority vis-à-vis the United States.

For its part, the Royal Navy's Fleet Air Arm was obliged throughout 1942 and 1943 to tailor its force to the defense of convoys and amphibious operations. The FAA's major combat area from Operation PEDESTAL in August 1942 to the Salerno landing in September 1943 was the Mediterranean. With no enemy carrier fleet to contend with, the British needed fighters, fighters, and more fighters to deal with German and Italian aircraft. This led to a skewing of carrier air groups. Whereas *Victorious* was operating a standard mix of twenty-one Albacore torpedo bombers and twelve Fulmar fighters in July 1941, in August 1942 it carried only six Albacores but eighteen Fulmars and six Sea Hurricane fighters. By the summer of 1943 it had embarked thirty-six Martlets (Wildcats) but only twelve Avengers. In May 1942 *Formidable* operated twenty-one Albacores and twelve Martlets; in November 1942 it carried six Albacores, six Seafires, and twenty-four Martlets for Operation TORCH.[30] Thus the 1941 ratio of attack planes to fighters had been reversed. With few if any targets for its Albacores' torpedoes, the FAA failed to garner the wider experience the U.S. Navy and IJN found in the Pacific. When the FAA went back onto the offensive in 1944 it had to readapt to strike missions that were very different than Taranto, Matapan, or the *Bismarck* chase. Although the Royal Navy on average operated as many fleet carriers in the period under discussion as the U.S. Navy or the IJN, smaller air groups and less combat experience left the British carrier fleet behind those of the other two carrier powers in flexibility and striking power. Also, whereas the U.S. Navy could field over nine hundred carrier planes in June 1944 and the Japanese about half that number, in the summer of 1944 squadrons on the Royal Navy's six operational fleet carriers totaled about 288 planes.[31] Thus it was that by the summer of 1944 American carriers were first to reach the critical mass necessary to smash any surface fleet within reach. Ozawa's ships survived the battle of the Philippine Sea because they fled and Admiral Raymond Spruance did not pursue. Potential had been transformed into reality.

All three carrier powers understood the value of carriers, but due to losses, damage, and the relentless need for maintenance there were never enough of them operational to suit any navy in 1942–43. Without carriers, it proved impossible to sustain continuous operations. The timing and pace of campaigns, especially for the Americans and British, were largely determined by the availability of carriers. Although land-based airpower substantially substituted for carrier forces in the southwest Pacific and in Italy (after the Anglo-Americans were firmly ensconced in Sicily and southern Italy), operations like HUSKY, GALVANIC, and later FLINTLOCK (Guam) and ICEBERG (Okinawa) were unthinkable without carriers. Only they could neutralize enemy airfields and counterattacks. Further, the carriers of the United States and Britain became indispensable for the defense of amphibious operations and convoys. Only carriers—fleet, light, and escort—could respond in a quick and timely manner to events in and around distant beachheads. Carrier airpower had become the decisive weapon in naval warfare.

The U.S. Navy, the Royal Navy, and the Imperial Japanese Navy all raced to achieve a critical mass of carriers, pilots, and planes in 1942–43. Ironically, the Japanese and the British, often portrayed as too wedded to the battleship, had become at least as "carrier conscious" in their construction priorities as the Americans. Although the idea that the U.S. Navy had a unique interest in carrier airpower going back to the early 1930s is widespread, it is illuminating to consider that whereas the Royal Navy's 1937 "wish list" of capital-ship strength as of late 1942 was twenty battleships and fifteen carriers, in July 1940 the U.S. Navy's General Board envisioned a future fleet of thirty-two battleships and fifteen carriers.[32] Obviously, the U.S. Navy was as enamored of the big gun as anyone. More concretely, after the British completed the battleships *Anson* and *Howe* in June and August 1942, respectively, and the Japanese commissioned the *Musashi* in August, that was it. Dock space, steel, and labor were shunted thereafter by both Britain and Japan into carrier and antisubmarine escort construction. The British battleship *Vanguard*, under construction in 1942, was given such low priority that it did not commission until 1946, and the Japanese completed *Musashi*'s sister ship *Shinano* as a carrier.[33] The British completed two fleet and five light fleet carriers between Midway and the end of the war, with two more fleet and eleven light fleet carriers still building at the termination of hostilities. Japan completed six fleet and three light fleet carriers between Midway and final defeat.[34]

Yet the United States won the race hands down. Once the primacy of the carrier was established, the Americans applied their vast economic strength and engineering know-how to the problem and so decided the issue.[35] It took time, but economic strength was converted into military power quickly and effectively. Archetypal carrier-versus-carrier battles ceased because in the two years 1942–44 the Americans completely outstripped the competition. They commissioned

sixteen fleet and nine light fleet carriers prior to VJ Day. They also managed to finish five battleships and two battle cruisers of the *Alaska* class between the time of Midway and Nagasaki (although the four *Iowa*s and the *Alaska*s were rather gilded lilies).[36] The Americans also built their ships faster than the other carrier powers. The British fleet carriers *Implacable* and *Indefatigable* took over four years from keel-laying to commissioning. The Japanese fleet carrier *Taiho* took thirty-two months to complete. By comparison, the USS *Intrepid* took twenty months from laying down to completion, *Franklin* twenty-five months.[37] It was thanks to the prodigious output of U.S. shipyards, aircraft factories, and flight training schools that the promise of Midway was fulfilled in the great Central Pacific offensive of late 1943 through 1945.

All weapons systems require time to develop both the numbers and the doctrine necessary for optimal effect in combat conditions. Like the tank before it, carrier airpower needed time to reach a critical mass of units and experienced operators before its full potential could be realized. In the race for the decisive weapon of naval warfare, the navies of Britain, Japan, and the United States all quickly identified the primacy of the aircraft carrier once they were seriously engaged in the war at sea. The United States alone was able to mobilize the financial, technological, and industrial resources needed to procure a force of ships and planes that could humble enemy battle fleets and seize local command of the sea. In this unique ability to manifest huge material and intellectual assets in the form of carrier airpower lie the roots and reality of American naval supremacy from June 1944 until today.

NOTES

1. For the order of battle of the Japanese navy at Midway see Paul Dull, *A Battle History of the Imperial Japanese Navy* (Annapolis, Md.: Naval Institute Press, 1978), pp. 139–41.
2. The standard work is William Y'Blood, *Red Sun Setting* (Annapolis, Md.: Naval Institute Press, 1981).
3. Dull, pp. 175–296; and James F. Dunnigan and Albert A. Nofi, *Victory at Sea: World War II in the Pacific* (New York: William Morrow, 1995), pp. 156–59.
4. Dunnigan and Nofi, pp. 164–65.
5. All ship details in tables and text are, unless otherwise specified, from *Conway's All the World's Fighting Ships 1922–1946* (London: Conway Maritime, 1980).
6. *Eagle* details in E. H. H. Archibald, *Fighting Ships of the Royal Navy* (New York: Military Press, 1984), p. 267.
7. In an interesting sidebar to the controversy over armored protection versus large air groups, the assistant U.S. naval attaché in London, Captain A. G. Kirk, wrote back to the States on 12 December 1940 comparing *Formidable* very favorably with *Yorktown*. He believed *Formidable*'s extra protection a better bet in a war against Japan than the bigger U.S. air groups. See Record Group 38, Intelligence Division Confidential Reports of Naval Attachés, box 1202, U.S. National Archives, College Park, Maryland.

8. Andrew Faltum, *The* Essex *Class Carriers* (Baltimore: Nautical and Aviation, 1996), p. 34.
9. Statistics on the battle of Santa Cruz from S. E. Morison, *The History of U.S. Naval Operations during the Second World War* (Boston: Little, Brown, 1949), vol. 5, pp. 204–206; at the Philippine Sea *Zuikaku* carried twenty-seven Zeros, twenty-seven Judys, and eighteen Jills. See Y'Blood, app. 2.
10. Roy Grossnick, *U.S. Naval Aviation 1910–1995* (Washington, D.C.: Naval Historical Center, 1997), p. 448; and Stephen Roskill, *The War at Sea* (London: H.M. Stationery Off., 1956), vol. 2, p. 450.
11. Admiralty file ADM 239/261, p. 49, The National Archives (TNA): Public Record Office (PRO).
12. Correlli Barnett, *Engage the Enemy More Closely* (New York: Norton, 1991), pp. 129–39.
13. Ibid., p. 244.
14. See file ADM 1/15576, "Operational Grouping of Carriers," TNA:PRO.
15. J. Greene and A. Massignani, *The Naval War in the Mediterranean 1940–1943* (Rochester, Kent, U.K.: Sarpedon, 1998), pp. 36–37.
16. Quote from Richard Overy, *The Air War 1939–1945* (London: Europa, 1980), p. 142.
17. Trent Hone, "The Evolution of Fleet Tactical Doctrine in the U.S. Navy, 1922–1941," *Journal of Military History* 17, no. 4 (October 2003), pp. 1107–48, shows that the battle fleet remained the core of the interwar navy and was seen as the weapon of decision by fleet commanders. It was the damage inflicted to the battle line at Pearl Harbor that forced the U.S. Navy to adopt the carrier.
18. Quoted in Peter Paret, *Makers of Modern Strategy* (Princeton, N.J.: Princeton Univ. Press, 1986), p. 691.
19. For the commissioning dates, Norman Polmar, *Aircraft Carriers* (Garden City, N.Y.: Doubleday, 1969), p. 315.
20. John Winton, *Find, Fix and Strike!* (London: Batsford, 1980), p. 87.
21. Morison, vol. 7, pp. 116, 190.
22. Harry Gailey, *The War in the Pacific* (Novato, Calif.: Presidio, 1995), pp. 63–64; Eric Bergerud, *Fire in the Sky* (Boulder, Colo.: Westview, 2000), pp. 666–67; and Dunnigan and Nofi, pp. 50–51.
23. Eric Grove, *Sea Battles in Close-Up* (Annapolis, Md.: Naval Institute Press, 1993), vol. 2, p. 174. Overy (*The Air War 1939–1945,* p. 144) shows how the situation deteriorated even further after June 1944.
24. For the relative intelligence information from this period see John Prados, *Combined Fleet Decoded* (New York: Random House, 1995), esp. pp. 481–515.
25. For Koga's dilemma see John Costello, *The Pacific War* (New York: Quill, 1981), pp. 420–39, and Gailey, pp. 237–41.
26. Dull, p. 259.
27. Details of I-GO from Dull, pp. 272–73; Bergerud, pp. 425–26; and Stephen Howarth, *The Fighting Ships of the Rising Sun* (New York: Scribner's, 1983), p. 317.
28. Bergerud, pp. 426–27.
29. Nagumo had six fleet carriers for the Pearl Harbor raid, Ozawa had five fleet and four light fleet carriers. See Y'Blood, apps. 1 and 2.
30. British carrier air groups are enumerated in Winton, pp. 54, 73, 78–79, 82–83.
31. Ibid., pp. 112–13, 117–18.
32. ADM 1/9081; and Joel Robert Davidson, *The Unsinkable Fleet* (Annapolis, Md.: Naval Institute Press, 1996), table 1.
33. *Conway's,* pp. 15–16, 178.
34. Ibid., pp. 21–23, 183–84.
35. For the sheer scale of U.S. economic power see John Ellis, *Brute Force* (New York: Viking, 1990), esp. pp. 443–524, and Paul Kennedy, *The Rise and Fall of the Great Powers* (New York: Viking, 1988), pp. 320–56.
36. *Conway's*, pp. 98–99, 104–105, 122. For a comparison of British and American warship construction see James Levy, *The Royal Navy's Home Fleet in World War II* (Basingstoke, U.K.: Palgrave, 2003), p. 191 note 157. The fifth battleship mentioned as being completed was USS *Alabama* (BB 60), in August 1942.
37. Faltum, p. 168.

REVIEW ESSAY

A NEW STANDARD FOR THE USE OF FORCE?

Lawrence J. Korb

Barnett, Thomas P. M. *The Pentagon's New Map: War and Peace in the Twenty-first Century.* New York: Putnam, 2004. 320pp. $26.95

From the fall of the Berlin Wall in 1989 to the collapse of the twin towers in 2001 to the present, after the invasion and occupation of Iraq, the United States has not had a consistent national security policy that enjoyed the support of the American people and its allies. This situation is markedly different from the Cold War era, when our nation had a clear, coherent, widely supported strategy that focused on containing and deterring Soviet Communist expansion.

The tragic events of 9/11, the increase in terrorist attacks, and possible threats from such countries as North Korea and Iran that are capable of developing weapons of mass destruction make it imperative to develop a new national security strategy to safeguard the United States. In *The Pentagon's New Map: War and Peace in the Twenty-first Century,* Thomas Barnett, a senior strategic researcher and professor at the U.S. Naval War College, attempts to provide one.

Unfortunately, he does not succeed. The failure of Barnett's strategy is most vividly demonstrated by the strategic rationale he offers for the Bush administration's poorly planned invasion and occupation of Iraq.

According to Barnett, the world is divided into two parts, the Functioning Core and the Non-Integrating Gap. The Functioning Core consists of those stable countries in North America, much of South America, the European Union, Russia, Japan, China, India, Australia, New Zealand, and South Africa. There is little threat of war or widespread violence in the Core, because its members enjoy the benefits of

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globalization, specifically rising standards of living. The Gap, on the other hand, consists of areas such as the Caribbean Rim, most of Africa, the Balkans, the Caucasus, Central Asia, the Middle East, Southwest Asia, and much of Southeast Asia. In those areas there is a great deal of violence and turmoil, because they are not connected to the Core. This lack of connectivity results from the rejection of modernity by the elites in the Gap. Therefore, the members of the Gap do not enjoy the benefits of globalization, and hence these areas become incubators for terrorists.

If the United States wants to win the war against terrorism, Barnett argues, it must take the lead in shrinking the Gap. To do this, it must export security to the Gap until it is ready to integrate into the Core, or else the Gap will continue to export terrorism to the Core. Barnett calls this a "global transaction strategy."

His global transaction strategy makes the war against Iraq a war of necessity, not one of choice. According to Barnett, the invasion of Iraq was justified because "Saddam Hussein's outlaw regime was dangerously disconnected from the globalizing world—from our rule sets, our norms, and all the ties that bind the Core together in mutually assured dependence. He was the Demon of Disconnectedness and he deserves death for all his sins against humanity over the years." Wow!

These words are eerily reminiscent of what President George W. Bush said on board the USS *Abraham Lincoln* in May 2003, in his infamous "mission accomplished" speech. In remarks onboard the carrier the president claimed that "the battle of Iraq is one victory in a war on terror that began on September 11th, 2001" and that the defeat of Saddam Hussein was "a crucial advance in the campaign against terror."

It does not seem to matter to Barnett or his strategic view that the reasons the president gave for invading Iraq were spurious or that the war in Iraq represented a substantial setback in the struggle against al-Qa'ida. The unnecessary invasion of Iraq not only diverted attention away from Afghanistan, thus damaging the prospects for crippling al-Qa'ida, but created a new justification among the radical jihadists for attacking Westerners, drained the reservoir of goodwill that the United States enjoyed in the global community, and in the eyes of many Muslims transformed the war against terrorism into a war against Islam.

Instead Barnett characterizes the Bush administration's decision as "amazingly courageous," because "it has committed our nation to shrinking a major portion of the Gap in one fell swoop." This decision makes the author love and admire the U.S. government and, by extension, the Bush approach to the global war on terror.

As a consequence of the framework he has developed, Barnett is also an unabashed supporter of Bush's preemption doctrine when it comes to dealing with

actors and regimes in the Gap. There are two problems with his approach. First, it confuses preemption with preventive war. It is not only legal under international law but moral for a nation to take preemptive military action when it has what Secretary of Defense Rumsfeld calls "elegant intelligence" about an imminent threat. But this is not what the United States did in Iraq. President Bush has stated repeatedly that Iraq was not an imminent threat, yet he waged a preventive war against what he claimed was "a grave and gathering danger." If this is the new standard for the use of force against members of the Gap, what is to prevent India from waging a preventive war against Pakistan? Or Russia against Georgia?

Second, while Barnett concedes that the traditional strategies of containment and deterrence will work against other Core states, he argues that it will not work against members of the Gap. Yet Barnett fails to recognize that while nonstate actors like al-Qa'ida cannot be deterred, even the most evil regimes in the Gap can be deterred, because their rulers wish to remain in power. The recent report of the Senate Select Committee on Intelligence demonstrates that Iraq was contained and that the sanctions and American and British military pressure helped to destroy Saddam's military machine and his capacity to produce conventional weapons and weapons of mass destruction. As Deputy Secretary of Defense Paul Wolfowitz testified, the cost of containing Saddam amounted to $2.5 billion a year. At the time of this writing the Bush administration has spent $144 billion in Iraq, without making us safer.

Unlike the Bush administration, Barnett does not appear to have learned that the doctrine of launching preemptive strikes against established states in the Gap died in Iraq. Barnett wants to launch a preventive war against North Korea. According to his analysis, Kim Jong Il has become "globalization's enemy number one following Saddam Hussein's demise and must be removed from power." He believes that Bush's reelection means that such action is inevitable.

Finally, Barnett's analysis falls into the trap of thinking that terrorists in the Gap attack the West for what it is and what it thinks. However, as demonstrated in the book *Imperial Hubris: Why the West Is Losing the War on Terror* by Anonymous (a twenty-three-year CIA veteran), America is hated and attacked for what it does—that is, the policies it pursues that impact the Islamic world, such as its support for apostate, corrupt, and tyrannical Muslim governments. He notes that "the Islamic World is not so offended by our democratic system of politics, guaranties of personal rights and civil liberties, and separation of church and state that it is willing to wage war against overwhelming odds to stop America from voting, speaking freely, and praying or not, as they wish."

Because of these failings, Barnett's global transaction strategy will not gain the support of the American people or its allies that containment did. Rather, the global transaction strategy is in reality an updated version of the domino

theory, which led the United States to believe that if it did not intervene to prevent South Vietnam from becoming communist, all of Southeast Asia would become part of the Soviet empire. Just as the domino theory led successive American presidents to commit national blood and treasure to a peripheral cause that was not essential to the goal of containing Soviet communist expansionism, the invasion of Iraq, even though it is a member of the Gap, was not essential to winning the struggle against radical jihadists like al-Qa'ida.

Unfortunately, these conceptual weaknesses undermine some of the sensible recommendations that Barnett makes, particularly about U.S. force structure. Yet even the best organized and equipped military will be of little use if it is employed incorrectly.

For those looking for a twenty-first-century version of containment, I recommend Zbigniew Brzezinski's *The Choice: Global Domination or Global Leadership*. The "Global Balkans," which he identifies as a source of political instability, is similar to Barnett's Gap. However, Brzezinski shows how the self-defeating arrogance of the Bush administration has undermined what must be the American goal of creating a new global system based on shared interests.

BOOK REVIEWS

THE EXPANSION OF NATO

Simon, Jeffrey. *Hungary and NATO: Problems in Civil-Military Relations.* Lanham, Md.: Rowman and Littlefield, 2003. 131pp. $26.95
Simon, Jeffrey. *Poland and NATO: A Study in Civil-Military Relations.* Lanham, Md.: Rowman and Littlefield, 2004. 195pp. $28.95
Simon, Jeffrey. *NATO and the Czech and Slovak Republics: A Comparative Study in Civil-Military Relations.* Lanham, Md.: Rowman and Littlefield, 2004. 307pp. $34.95

The enlargement of the European Union and the consummation of the second wave of the North Atlantic Treaty Organization's expansion in the spring of 2004 would tempt one to believe that the postcommunist transition is coming to a close as a kind of normalcy settles over the region. Jeffrey Simon's careful and informative series of books concerning civil-military relations in four Central and Eastern European countries reminds us that in important respects, transition is still under way. Or rather, given the state of civil-military relations across the region, we should hope that it is, for the difficulties that postcommunist states face in democratizing, rationalizing, and strengthening their military-security apparatuses are still manifold. Placing Simon's insights against the backdrop of NATO's own strategic transition—the outcome of which is very unclear—one has continuing reason to worry about the stability of postcommunism. By extension, European security is at stake insofar as stability and security stem from constructive military-societal relations, sophisticated defense expertise, and well institutionalized democratic accountability.

In each of the three volumes, which cover Hungary, Poland, and Czechoslovakia (now the Czech and Slovak republics) respectively, Simon provides a detailed chronology of defense reforms since communism's collapse. In all cases, Simon's narrative is set against four consistent criteria to which he continually refers as he assesses the merits and shortcomings of reform. The four criteria revolve around: the division of civilian authority in democratic societies; parliamentary oversight, especially in matters of budgeting; subordination of general staffs to civilian institutions; and military prestige, trustworthiness, and accountability. According to Simon's analysis, Poland has clearly been the best at transforming its military-security apparatus, despite some fairly serious

setbacks in the early 1990s. Measured in terms of the four criteria, the Czech Republic has fared somewhat better than its Slovak counterpart, which, after the "velvet divorce" of 1993, found itself building a range of military and security institutions from scratch. The biggest surprise in the series for students of the postcommunist transition will be how poorly Hungarian civil-military relations have developed—especially given Hungarian politicians' strenuous efforts to enter the alliance.

These books are essential reading for anyone writing on NATO, because, concerning as they do half of NATO's newest members, the problems within these states will no doubt have some bearing not only on the functioning of the alliance but also on its political orientation. Certainly, there are few people better placed to report on events and persons crucial to the military-security reform process than Jeffrey Simon, given his long-standing role as a leading American adviser to postcommunist governments on how to advance institutional change in this area. More generally, those interested in the postcommunist transition and cross-national variation would do well to spend time trying to understand this somewhat arcane sector's evolution, not least because military-society relations carry with them implications for democratic consolidation. Admittedly, Simon does not make this an easy or inviting task. He has evidently been so close to the intricacies of reform that one unfamiliar with the issues or the personnel could conceivably drown in the detail.

Despite the particular challenges that Simon's intimate portrayal poses, I would nevertheless suggest that his findings provide some puzzling questions for the literature on postcommunist transition. For example, Poland and Hungary are very often grouped together as states whose strong opposition to state socialism made them especially susceptible to Westernizing reform. The more repressive nature of the Czechoslovak regime contributed to relatively less political competition after the transition, allowing policy errors to endure. Although Poland's ability to exploit NATO's criteria for membership in order to achieve reform confirms the democratic opposition hypothesis, Hungary's relatively poor performance in restructuring the military and accompanying political oversight raises new questions about what provides the impetus for reform. The military could require explanations distinct from those that cause variation in other kinds of political and economic reform. On the other hand, the logic underpinning the democratic opposition hypothesis is sufficiently broad that national defense establishments should be susceptible to Westernizing influences.

With specific respect to military-security reforms, Simon points repeatedly in all three volumes to problems that can plague civil-military relations generally, as well as to those issues that may be peculiar to the region. The lack of civilian expertise in former Warsaw Pact countries figures prominently in the initial failure to formulate effective restructuring such that new lines of authority allow ministries of defense to take on the bulk of planning and management. From lack of civilian expertise flow other problems, including the failure to provide transparency, discipline military malfeasance, or dedicate adequate funding to militaries in decline. Other perennial issues have included

the lack of acceptance of civilian control as NATO defines it—among both military personnel and civilians, tension between general staffs and ministries of defense, and a behavioral gap between formal institutions and lived experience.

The news from Central Europe is, of course, not all bad. Probably owing to the legacy of some form of political control dating back to the Warsaw Pact, in combination with public enthusiasm for communism's collapse, none of the militaries in question has in any serious way attempted to interfere in the democratic transition. More often than not, politicization of the armed forces has been the will of errant politicians rather than ambitious generals. On the whole, attempts at reform have been consistent with NATO's objectives of improving transparency and accountability. Parliamentary committees have gradually gained competence over a decade and a half and are increasingly comfortable exercising their authority over defense budgets. Nevertheless, in spite of the generally positive trajectory, Central and Eastern European states continue to have real trouble committing the necessary resources to reorient their capabilities toward NATO's evolving strategic challenges, democratic political control has not been fully established in some instances, and, in the Czech Republic and Hungary in particular, backsliding away from initial goals has been evident since their accession in 1999.

The massive variation over time and across the issues under consideration leaves one wishing that Simon had used his vast knowledge to impose some order on the data. This is especially the case with respect to the following two questions: What accounts for such variation across countries, and what difference has NATO made to the domestic politics and foreign policies of Central and Eastern European countries? Although standard explanations of postcommunist performance by themselves generally do not explain this variation very well, Simon's analysis does provide some starting points. The combination in Poland of having had a strong democratic opposition committed ultimately to Westernization and a relatively high level of public respect for the armed forces as an institution, despite the military's past participation in domestic repression, proved to be a big advantage relative to the Czech Republic or Hungary. In the latter two instances, while the existence of democratic oppositions under communism (albeit in different forms) certainly informed transition in positive ways, the very low standing of the armed forces in these societies inhibited complete reform. Slovakia is the reverse of both variables—it has a relatively high level of respect for the military coupled with a political ambivalence toward Westernization, as opposition movements in the other three countries conceived of it under state socialism.

On the second question, concerning the extent to which NATO enlargement has shaped domestic political reform and, equally important for regional stability, informed foreign policies, Simon has remarkably little to say. This is a shame, because someone of Simon's stature could be a powerful advocate for NATO's engagement in domestic policy reform on the basis that the consolidation of democratic oversight, defense budget transparency, and humane treatment of conscripts improves the quality of governance in postcommunist

states. We might infer from Simon's books that he is skeptical of NATO's transformative capacity and truly does view the evolution of civil-military relations as primarily a domestically generated phenomenon. This would be a difficult conclusion to defend, however, given that Simon himself points out that NATO made the Czech-Slovak relationship much easier to manage after the split than it otherwise would have been. Beyond that single, very important insight, the reader is left wondering whether the logic of NATO's stabilizing capacity could be extended elsewhere.

In all likelihood, NATO's inclusiveness has not only stabilized relations between states in Central Europe and between Russia and former Soviet satellites, but it also improved the quality of a range of domestic institutions throughout the region. Speculating about postcommunist Europe without NATO's engagement, one imagines a historically vulnerable set of states with all the domestic dysfunctions that accompany acute military insecurity. All of the democratic adaptations that NATO requires to improve the interface with its members and consolidate a particular set of values would have been the subject of protracted debate. Moreover, without NATO's support, those values, even in the most Western-oriented societies, might never have prevailed. There is indeed evidence of the contingent nature of democratic civil-military relations in the Polish case, where a series of crises and dissent over the value of democratic control delayed the subordination of the general staff to the Ministry of Defense. Although Hungary, Slovakia, and, to a lesser extent, the Czech Republic continue to have problems in consolidating democratic civil-military relations, it is worth asking where these countries would be if NATO had never introduced the norm as a desirable and functional feature of democratic governance.

For those concerned with NATO's impact on the region, Simon's series is, of course, an invaluable resource in understanding exactly what happened. Yet one has to look further than Simon to see the subtle, as well as the not-so-subtle, ways in which NATO has transformed the politics of postcommunist Europe. Now would be a particularly apt time for Simon to contribute to the debate about whether NATO has salutary political effects, because as the strategic environment has worsened, the United States in particular is manifesting less interest in the quality of democratic institutions in new member states than in foreign policy support for wars in Afghanistan and Iraq. Although cultivating policy loyalty might be politically expedient, NATO could be missing an opportunity afforded by the transition's political and institutional fluidity to facilitate reforms that would not only improve the quality of domestic governance but also help consolidate a widening democratic community.

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Kaufman, Joyce P. *NATO and the Former Yugoslavia: Crisis, Conflict and the Atlantic Alliance.* Lanham, Md.: Rowman and Littlefield, 2002. 231pp. $74

As the world steps farther away from the Cold War, the evolving structure of the international system continues to fascinate informed citizens as well as professional scholars. In this work, Joyce Kaufman, professor of political science at Whittier College, contributes to the debate on the evolution and future of the Atlantic Alliance, particularly as the situation in the Balkans confronted a post–Cold War (and expanding) NATO. In detailing the events between the collapse of Soviet communism (1990) and the attack on the twin towers (2001), the author makes a forceful case for the need for a unified NATO alliance that is willing to use force if necessary to quell international instabilities.

Kaufman's effort is particularly helpful in plotting the movement of theory into practice in international relations. While no one at NATO headquarters in 1990 suggested that the world had not materially changed with the fall of the Berlin Wall, the alliance's premier strategists could only make reasonable guesses about this "new world," as they drew up the alliance's Strategic Concept of 1991. It took the decade-long dissolution of the former Yugoslavia to force alliance planners to appreciate the detailed complexities of this world.

In one sense, this book is merely a confirmation of much of the conventional wisdom on diplomatic theory and the operations of alliances. On numerous occasions the author explicitly makes the point that diplomatic threats without military power are in vain; collective decision making is tortured, difficult, and slow; domestic politics intrude on the capacity to be statesmanlike; and the absence of a clear enemy provides an inducement for an alliance to lose focus. However, as Kaufman develops the story with names, personalities, and events, the reader can watch these theories come to life.

No one expects that alliance strategy would be made in a vacuum, and this work clearly and persuasively shows how constraints of domestic politics must be factored into NATO politics. Of particular interest to makers of American foreign policy is Kaufman's documentation of how the United States evolved from an attitude that the Balkans was a "European problem" to being the alliance's most forceful advocate for military intervention.

This work's principal flaw is that its sources are almost exclusively official NATO documents and interviews with the people directly associated with those documents. The story is told from NATO's viewpoint by someone who spoke to insiders but was not herself a member. Unfortunately, this provides the reader with a conventional, albeit well supported, interpretation of events.

However, this work's positive attributes overwhelm this shortcoming. This easy-to-read historical account provides significant value for the student of international affairs, because it documents a perfect contemporary test case of how alliances evolve in the face of a changing security environment. While most pundits saw the Balkans as the most likely spot for crisis and conflict in Europe a decade ago, few would have guessed that the NATO alliance would have ultimately achieved such a preeminent role in its resolution. Indeed, just prior to the signing of the London Declaration in 1990, numerous editorials were suggesting that while NATO had done an admirable job during the Cold

War, we should make preparations to "turn out the lights" in Brussels. Today, as we find ourselves involved in a global war on terrorism, the United States is faced with a similar quandary. Does NATO have the capacity, flexibility, and will to engage the international terrorist movement? Do our European allies view the threat of terrorism as we do, allowing for unity of action and willingness to use force? Do adversaries such as al-Qa'ida allow the alliance to consider the entire globe its ultimate area of responsibility? Can NATO, as Madeleine Albright asked, move to a more expansive concept of collective security? These questions may also require a decade to resolve, but Kaufman previews the kind of difficulties the alliance is likely to encounter en route and sheds some light on the ultimate answers.

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Purdum, Todd S. *A Time of Our Choosing: America's War in Iraq.* New York: Times Books, 2003. 319pp. $25

The late *Washington Post* publisher Philip Graham once said that journalism is the first draft of history. Todd S. Purdum's *A Time of Our Choosing: America's War in Iraq,* is the first draft of the history of the U.S. occupation of Iraq. Months before the Department of Defense made the controversial decision to embed reporters within U.S. units, Purdum was in Iraq reporting the war.

The military's major criticism of the practice is that those assigned to the same unit throughout the campaign would only have a "soda straw" view of the war and would thus miss the big picture. Others (primarily the media) were concerned that reporters would lose their objectivity once the shooting started. However, Purdum's professional work puts that argument to bed.

Early on, Purdum states that his task was to "draw the work of my colleagues into a single narrative." In other words his job was to bring those "soda straws" together into a comprehensive and concise chronicle of the war. He certainly has the necessary credentials for the task—he has worked for the *New York Times* for over twenty-five years and is a former White House and diplomatic correspondent.

Although Purdum's narrative style is appealing, it is his ability to bring together all the different material that makes this book hard to put down. One reads of the Bush administration's intensive efforts to convince a skeptical world of its case for invasion and of the debate over UN Security Council Resolution 1441. Divisions deepened as Secretary of State Colin Powell and France's charismatic foreign minister Dominque de Villepin both courted the United Nations and public opinion. Meanwhile, military planning proceeded at the Pentagon and U.S. Central Command. Defense Secretary Donald Rumsfeld and Deputy Secretary Paul Wolfowitz, expecting the Iraq army to implode, deployed a force much smaller than that of the nearly 550,000 troops in Operation DESERT STORM. Their plan was a test of a new American style of warfare that engaged large numbers of special operations forces and used highly accurate precision weapons and new technology in the form of unmanned aerial vehicles.

The book's primary focus is the relentless twenty-one-day fight to Baghdad by the Marines on the right flank and the Army on the left flank. Purdum excels in tying together all the resulting reporting. What emerges is a factual and very human account of the intense ground campaign. Included are events of 23 March, which saw the ambush of the 507th Maintenance Company and the devastating losses suffered by the 11th Attack Helicopter Regiment. The brief campaign also saw some excellent soldiering, such as the feint and race for the Karbala Gap and the "Thunder Run" armored thrusts into central Baghdad. Ever the concise chronicler, Purdum also discusses the northern front that was opened by the airdrop of a thousand paratroopers, and the operations conducted by the British in and around Basra. Purdum weaves all this together in such a way as to make this work an excellent read for military professionals and armchair strategists alike. It is a bit thin on the air and naval aspects of the war, due to the lack of threat posed by the Iraqi air force and navy and because the bulk of the embedded reporters accompanied ground units.

One of the successes of the program, however, was how the reporting brought out the human side of the war. Purdum discusses numerous examples of how the war directly affected such individuals as the U.S. Army officer who, after witnessing the results of an air strike, commented, "It's a helluva thing watching people die," or how an Iraqi man, his hands swollen from recent beatings by Iraqi security forces, emotionally thanked the Americans for saving him.

The book's main strength—its immediacy in telling the whole story of the conflict—is also a major drawback. Toward his conclusion, Purdum recounts the events of July 2003 surrounding the deaths of Saddam Hussein's infamous sons, Uday and Qusay. One of the vexing questions remaining was the whereabouts of Saddam Hussein. The coalition would wonder about the fate of the former Iraqi leader for another five months. The book concludes before Saddam's capture in December.

Future historians and scholars will no doubt revisit this war and debate endlessly on the merits of preemptive self-defense, the effectiveness of the coalition of the willing, and whether the outcome achieved was the one desired. For now, however, Todd Purdum's *A Time of Our Choosing* will more than suffice as the first draft of history.

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Bush, Richard C. *At Cross Purposes: U.S.-Taiwan Relations since 1942.* Armonk, New York: M. E. Sharpe, 2004. 320pp. $27.95

For years, "one China" has meant two completely different Chinas masquerading as one country—the People's Republic of China (PRC) and Taiwan (a.k.a. the Republic of China [ROC]). The PRC is huge, with a population of 1.3 billion, while Taiwan has only twenty-two million people in comparison. There are other differences as well: Taiwan is rich, with a per capita income in 2003 of over $23,000, versus the PRC's per capita $5,000; Taiwan's 5 percent unemployment rate is half, its 1 percent poverty rate is a tenth, and its seventy-seven-year life expectancy is

five years more than those of the PRC. More importantly, during the past decade Taiwan adopted a multiparty democracy, while the PRC has only one legal political party that is holding tightly onto its autocratic powers—the Chinese Communist Party.

How can two such divergent Chinas possibly reunite? What role has the United States played in their sixty-year standoff? These are the questions that Richard C. Bush, former chairman and managing director (September 1997 to June 2002) of the American Institute in Taiwan (AIT—the pseudo–American embassy in Taipei), asks in *At Cross Purposes.*

Bush starts with an extremely useful historical summary of the origins of the PRC-Taiwan problem. He asks, for example, what would have happened if Chiang Kai-shek had not requested in 1942–43 that Japan cede Taiwan to China. Would there even be a PRC-Taiwan problem today? After all, China at one point considered, then rejected, demanding Okinawa as well. If circumstances had been different, could Taiwan have remained a part of Japan or a UN protectorate, or even been given its independence?

Bush argues that the great powers' (the United States, the United Kingdom, and China) decision at Cairo to return Taiwan to China was the real origin of the "one China" problem, even though cross-strait tensions did not erupt until after the Nationalist retreat from the mainland in 1949. To this day, the PRC takes this World War II decision very seriously. For example, from 21 to 26 July 1995, the PRC marked the fiftieth anniversary of the July 1945 Potsdam Declaration, which confirmed the Cairo Decision, by lobbing "test" missiles off Taiwan's shores.

After World War II, the U.S. government quickly found itself in a dilemma, since it appeared obliged to support the repressive Kuomintang. February 28, 1947, was the beginning of the massacre by the Nationalists, who arrested and killed hundreds, perhaps thousands, of Taiwanese; it was followed by an era known as the "White Terror." Nationalist repression on Taiwan continued for more than three decades, until 10 December 1979 and the Kaohsiung Incident, which was the turning point in Taiwan's transition to democracy.

Following Washington's decision to recognize the People's Republic of China in 1978 (part of America's Cold War strategy aimed at the Soviet Union), Taipei's increasing dependence on Washington for security actually gave the United States greater leverage to sponsor democratic reforms. Thus, quixotically, democratic reforms in Taiwan appear to have been spurred rather than halted by U.S. recognition of the PRC.

It is understandable that Bush, as former head of the American Institute of Taiwan, would want to credit U.S. diplomats and government officials with sponsoring Taiwan's democratic development (one chapter even investigates the impact of the U.S. Congress and Taiwanese-Americans on this process). Granted, this is a subject he knows well; however, lest Taiwanese democracy be mistaken as simply an American knockoff, even Bush is forced to admit that these non-Taiwanese factors "made but a tertiary contribution to the democratization of Taiwan" when compared to the impact of Taiwanese reformers both inside and outside of the Nationalist

party. For better or worse, Taiwan's democracy is completely homegrown.

To evaluate how Taiwan's democracy and the Sino-U.S. Cold War diplomacy impacts relations today, Bush discusses the four diplomatic communiqués and congressional acts that have regulated U.S.-PRC-Taiwanese relations, including the Shanghai communiqué (1972), the U.S.-PRC normalization communiqué (1978), the Taiwan Relations Act (1979), and the U.S.-PRC communiqué on arms sales to Taiwan (1982). The commitments included in these four "sacred texts" were not trivial and have created fixed constraints on Washington's and Beijing's behavior. Although necessary to defeat the Soviets, these diplomatic agreements have often worked to the PRC's advantage in putting diplomatic pressure on Taiwan to accept its "one country, two systems" formula.

As for what will happen in the future to this "one China" conundrum, Bush cautions that Taiwan's recent democratic reforms have not given twelve million voting Taiwanese their own seat at the table in any future cross-strait talks leading to Chinese reunification. Democracy will make any satisfactory political solution of the PRC-Taiwan divide even more difficult to negotiate. He cautions, therefore, that the "Taiwan and China positions are sufficiently at odds that they cannot be papered over. If the stalemate is to be broken peacefully, either Beijing will have to abandon one country, two systems, or Taipei will have to accept it." Since neither of these options appears likely, one is forced to conclude that PRC-Taiwan reunification can only be accomplished as a result of war.

BRUCE ELLEMAN
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Goldman, Emily O., and Leslie C. Eliason, eds. *The Diffusion of Military Technology and Ideas.* Stanford, Calif.: Stanford Univ. Press, 2003. 415pp. $75

This book offers a rich collection of research papers on very important topics: the much discussed revolution in military affairs (RMA), and the less discussed diffusions of new military technology and the accompanying changes in military doctrine to other countries. The authors were carefully chosen experts in history, political science, and sociology, who address the very important factors of national culture as they affect the application of new military technologies.

The product of a series of workshops, this work owes a considerable debt to the prodding of Andrew Marshall, Director of Net Assessment in the Office of the Secretary of Defense, who has been encouraging scholarly analysis of the full implications of the RMA.

Although recognizing the ambiguities relating to the exact definition of such a "revolution," the book does not get bogged down in the debate, but rather directs its analysis to the sociological, cultural, bureaucratic, intellectual, and other processes by which such revolutions are, or are not, replicated. Military weapons may spread through arms sales, the commercial development of "dual-use" technologies, or by simple imitation, but the military doctrines appropriate to such new kinds of weaponry sometimes do not spread so rapidly.

There are some very stimulating and provocative historical case studies, including the foreign penetrations of the past five centuries into South Asia, the development of "blitzkrieg" armored

warfare in World War II, aircraft carriers, and the Soviet impact on Arab armies (Soviet tanks were delivered, but Soviet doctrine was not adopted). More recent examples include the Soviet approach to managing the Warsaw Pact, the "special relationship" that has existed since 1945 among English-speaking democracies, and the patterns of nuclear proliferation and the spread of information technology.

This work is directed to both the social scientist and the policy practitioner. The chapters are well written and rich in detail, with excellent footnotes, thus making this a handy volume for anyone doing research in these areas.

There are times when the unifying theme of the diffusion of "technology and ideas" becomes so broad that it seems to include everything militarily that has happened or that is going to happen, for what else is there to a strategic confrontation but the weapons owned and how they will be used? Yet this work brings the subject into sharper focus, revealing how ideas about the appropriate use of weapons do not always travel as well as the weapons themselves. The introductory outline thus helps to maintain that focus, and the concluding chapter by Emily Goldman and Andrew Ross is extremely valuable for sifting out the recurring patterns that emerge from the evidence presented.

Among the important conclusions mentioned are that transformation leaders do not long monopolize their transformations; leaders are frequently surpassed by followers; leadership effecting a military transformation is no guarantee of victory; and wholesale replications of the innovations of a transformation may not be necessary. Most central to this work is the finding that "software"(ideas and doctrine) does not travel as well as "hardware" (physical weapons). The explanation for this last limitation is the basic theme of the entire book.

Collections of conference papers often do not hang together well, or when they do, they typically do not wander far enough away from a simple theme. This book suffers from neither drawback, being rich and eclectic in the materials it offers, yet at the same time remaining focused on an important set of questions. It offers a great deal for anyone concerned with the military-technology revolution.

GEORGE H. QUESTER
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Record, Jeffrey. *Making War, Thinking History.* Annapolis, Md.: Naval Institute Press, 2002. 216pp. $28.95

Jeffrey Record is professor of strategy and international security at the Air War College, Maxwell Air Force Base. He is the author of four books and numerous monographs on U.S. military strategy and has extensive Capitol Hill experience, including service as a professional staffer for the Senate Armed Services Committee.

This work assesses how the experiences of Munich and Vietnam influenced presidential decisions on the use of force in every administration from Harry Truman to Bill Clinton. Both Munich and Vietnam are regularly invoked in current political debate in an attempt to justify a viewpoint, especially since the Cold War foreign policy consensus has broken down in recent

years. The terms have become shorthand for "appeasement" and "quagmire." Yet the real influence of these two cases on presidential decision making about the use or nonuse of force has been subtler, and has depended considerably on the background of individual presidents and on the formative experiences they brought with them into office.

For some presidents, historical analogy was an explicit factor in their use of force. After 1945, there was broad consensus that "Munich is about *whether* to use force and about what can happen when force is *not* used." Thus Truman based his 1950 decision to intervene in Korea on what happened, or more precisely on what did not happen, in Munich, noting that a president "must make the effort to apply this knowledge [of history] to the decisions that have to be made." John F. Kennedy was heavily influenced during the Cuban missile crisis of 1962 by Barbara Tuchman's *The Guns of August* (1962). Munich was a powerful factor in leading both Kennedy and Lyndon Johnson into Vietnam, on the basis of the imperative to stop cross-border aggression.

Vietnam is a more complex matter. Indeed, thirty years after Vietnam, there is still little agreement on the lessons from that conflict. There are many arguments about *how* force should have been used there, many implying that the "right" use of force would have resulted in a U.S. victory, or at least not a defeat. Others argue that Vietnam "teaches that force should have never been used in the first place, thus rendering moot discussions about the amount of force necessary and how it should have been employed."

Record traces the predominant post-Vietnam schools of thought that influence political discussion today. He discusses major intellectual themes, such as Caspar Weinberger's six "tests" for use of U.S. military force, later subsumed by Colin Powell's principle that "winning meant going in with overwhelming force, getting the job done quickly, and getting out cleanly"—though he notes wryly that the real world is rarely that immaculate. Another policy discussed is the imperative to avoid anything like Vietnam. Presidents have been more willing to cut their losses in places like Lebanon and Somalia. "On balance, post-Vietnam presidents have displayed significantly greater risk aversion, and especially sensitivity to incurring casualties, than their predecessors. In this they have been reinforced by an even more timid Pentagon."

The consequences have been great. Indeed, the lessons of Munich were the basis for U.S. Gulf intervention in 1990–91. "The haste with which the Bush administration terminated the war . . . reflected a Vietnam-driven dread of involvement in postwar Iraq. This fear of getting sucked into a bloody Arab quagmire drove the Bush administration to end the war prematurely," with all the dire consequences that follow today. Similarly, "U.S. behavior before and during Operation ALLIED FORCE [in Kosovo] constituted the most dramatic display to date of the Vietnam syndrome at work and its operational and political consequences for American foreign policy." Indeed, Saddam was not wholly foolish to wonder whether the United States would really invade Iraq in March 2003.

Moreover, the continuing differences within administrations over what Vietnam means has been actively harmful to American policy. The deeply hostile relationship between George Shultz and Caspar Weinberger, based on their differing views of the post-Vietnam use of force as a tool of American foreign policy, damaged the Reagan administration. Similar ongoing antagonism between Colin Powell and Donald Rumsfeld has done considerable harm to U.S. post–11 September strategy and policy execution.

Record briefly ponders whether the 1991 Iraq war constitutes a third seminal case that could serve as a historical marker, but then suggests not, because it did not entail "bloody and soul-searing foreign policy disasters." Yet it suggests another key issue, namely the recurrent American failure to tie in a war's military ending with political and strategic objectives. Examples include the abandonment of Europe in the aftermath of World War I; the failure to take Berlin in April 1945, when doing so might have forestalled some of what was to come in the Cold War; and the premature cease-fire ordered by George H. W. Bush, which is not unconnected with why we occupy Iraq today (which in itself may yet become another instance).

Reasoning by historical analogy has many pitfalls. While analogy may be helpful in making decision makers ask the "right questions" in a current crisis, "past employment and deployment of the Munich and Vietnam analogies suggest that they can teach effectively at the level of generality, but are insensitive to differences in detail." Whatever the utility of reasoning by historical analogy as a tool of policy formation and implementation, it is clear that policy makers will continue to be influenced by past events and what they believe those events teach. It is also clear that a presidents' (and key advisers') knowledge of history varies widely and that reasoning by historical analogy is but one of a host of factors at play in presidential decision making, that "every president's knowledge of past events is different and is subject to political bias." Perhaps the greatest actual effect of historical analogy is how it frames the worldviews of key protagonists, not how it may lead to "the right answer" in new situations.

The 2003 Iraq invasion and its aftermath make this book particularly interesting and topical. While the cases discussed end in the 1990s, surely the "lessons" of Munich and Vietnam (and likely the first Gulf War) influenced the post-9/11 views of President George W. Bush and other key actors about how to react to al-Qa'ida and what to do about Iraq and Saddam and other perceived threats. In fact, one of the reasons the Bush administration has come under such fierce criticism in the national security realm is that its decisions and actions are so counter to the general run of post-Vietnam American policy, as described in *Making War, Thinking History.* This book provides a good framework for thinking about the vital security issues the United States faces today.

JAN VAN TOL
Captain, U.S. Navy

Wright, Evan. *Generation Kill: Devil Dogs, Iceman, Captain America, and the New Face of American War.* New York: Putnam, 2004. 354pp. $24.95

Generation Kill may be the best war book to have such an interesting title since *The Naked and the Dead*. The book's author, *Rolling Stone* contributing editor Evan Wright, was an embedded journalist with 1st Recon Battalion when it made its rush north into Iraq at the head of the 1st Marine Expeditionary Force (I MEF) during the 2003 invasion. The title might lead one to expect a sensational account of young people desensitized by video games and brutalized by rap music engaging in random acts of violence—a book perhaps combining titillation and moral censure in an uneasy mixture. It would be a mistake to pass up Wright's book because of its title. He has produced a thoughtful, well written story that people in the military should read. This book perhaps belongs to the genre of "hip" journalistic accounts of war like Michael Herr's *Dispatches* about Vietnam, or Bob Shachochis's *The Immaculate Invasion* about Haiti. Lacking any military background, Wright proves to be a quick study, as a good journalist must be. His fresh viewpoint provides valuable insights into the world of a Marine unit in combat.

The title does betray one of the book's few incorrect assumptions, which is that the generation of young men in their late teens and early twenties who fought in this war are different in some essential way from the Marines of the past. Wright says that the Marines of Iraq belong to "what is more or less America's first generation of disposable children," but his observations about the men of 2d Platoon, B Company, 1st Recon are similar to those made by Phillip Caputo and James Web about the Marines of Vietnam. Many were dispossessed, underprivileged, "disposable," or abandoned. Wright also marvels at the disparity in social origin among the enlisted ranks. It was ever so. A writer in World War II observed that the Marine Corps seemed to be made up of a combination of dead-end kids and boys named Percival. The language, music, and mores have changed, but more continuities exist than Wright appears to realize.

Just as the people who fought and are fighting in Iraq now are both different from and similar to those who fought in previous wars, the conflict is both similar to and different from those of the past.

The invasion of Iraq was distinguished by a rapid advance into an enemy country, unexpected resistance by irregulars, and a great preponderance of accurate firepower on the part of U.S. forces. None of this was exactly unique or unprecedented, but all these factors gave the war its tenure and feel for those involved. Wright experienced all this, and he lets us know again and again that the sum of these characteristics was to make problematic the notion and practice of rules of engagement (ROE). Marines found themselves moving quickly through unfamiliar and often hostile territory, opposed by an enemy who usually wore no uniform and who was often unscrupulous about using civilians for deception and concealment. These Marines had at their disposal enormous firepower, and in general they hit what they aimed at, but where to fire and how much?

No one encountered these questions more often than the men of 1st Recon. Based on his observations, Wright states that the ROE give the illusion of order amid chaos, when in fact it is left up to the individual or small unit leader to make a determination in a situation

that may be changing from minute to minute. The decision will be based on instinct born of training, individual disposition and character, and the perception of immediate danger. These perceptions were often as limited as those of soldiers in any war. For all our new technology, the fog of war descended as quickly and completely as a desert sandstorm, and even on sunny days and clear nights it could blank out an individual's surroundings beyond a narrow range.

These are points worth having driven home, and Wright's descriptions of the events he witnessed are vivid and often moving. Some of the best writing is in the quotations of the Marines of 2d Platoon. When the Marines accidentally shoot and kill an Iraqi child in her father's car at a roadblock, a corporal later states, "War is either glamorized—like we kick their ass—or the opposite—look how horrible, we kill all these civilians. None of these people know what it's like to be there holding that weapon."

Wright's book represents American war writing in its maturity. He avoids the pitfalls of glamorizing or moralizing. Many of the Marines he writes about are complex men. The staff sergeant nicknamed "Iceman" is an efficient and a somewhat emotionally remote professional fighting man who is also a sympathetic figure. It would be easy for Wright to dislike General James N. Mattis as a man of a different generation and completely different outlook, especially once Wright learns that he and the rest of Recon Battalion have been functioning as a diversion, a virtual decoy, during the attack north. The portrait of Mattis that emerges, however, is understanding and even admiring. Wright has the common sense to realize that sometimes leaders must risk their own in war, and that he himself must have the courage to accept his role as a tactical pawn when his profession as journalist requires it.

Recon units are different. They probably contain a higher percentage of the "natural warrior" type than do other Marine Corps units. These fine-tuned combat thoroughbreds often come across as sensitive and complex. Despite the implications of the title, it is often these young men, rather than the elders, who display the greatest humanity and restraint. The Marines of 2d Platoon were sometimes surprised to find that they preferred saving or preserving life to taking it.

Make no mistake, these are the Marine breed—"Generation M." No apologies are needed for the wars they fought. We should be humbled and instructed by their example. After the rush of combat comes reflection, and after the battle is the effort to restore and rebuild. Courage will always be required of soldiers in war, but it is also required of us to be wise, if we can.

REED BONADONNA
Colonel, U.S. Marine Corps

Saccone, Richard. *Negotiating with North Korea.* Hollym International Corp., 2003. 215pp. $22.95

Perhaps the potentially most volatile part of the world is North Korea. Talks between the United States and North Korea seem to be a series of impasses, confrontations, brinkmanship, threats, and blusters. The usual explanation for this state of perpetual frustration for U.S. negotiators is that they are dealing with an enigmatic regime that has no

regard for peaceful resolution of the confrontations between it and the rest of the world. This work provides an alternate path for understanding and working toward more successful negotiations than has been the historical case for over half a century.

Richard Saccone, retired U.S. Air Force, alumnus of the Naval Postgraduate School, has spent over fourteen years in the Koreas. He has written six books on Korea covering history, culture, tourism, and business, and he is well qualified to discuss the topic of negotiations. He is a former representative for KEDO, the Korean Peninsula Development Organization, building nuclear power plants as required under the 1994 Agreed Framework between the United States and the Democratic People's Republic of Korea. Saccone currently teaches international relations and national government at St. Vincent's College in Latrobe, Pennsylvania.

Saccone explains such concepts as *Juche* (self-reliance), *Kibun* (spirit), and *Cheymyon* (saving face) in a manner that goes deeper than the caricature-like definitions found in the common press. Examination allows the reader to appreciate that the concept of communication requires both sending and receipt of information and ideas by at least two parties. When I was a college student, I read an essay by the noted semanticist S. I. Hayakawa about *denotation* and *connotation*. *Negotiating with North Korea* reveals that American negotiators may have been concentrating on the denotative aspects of communication and neglecting the connotations. It gives me hope that negotiations can progress beyond the cultural misunderstanding and confrontational nature of U.S.–North Korea relations.

Fully half the book concerns itself with the tactics used by North Korean negotiators. Saccone enumerates them in forty specific categories, which include threats, loaded questions, requests for compensation, red herrings, and appeals for fairness. This by itself is useful, but the author offers specific examples and provides countertactics that will help negotiations go forward to a mutually acceptable conclusion. The forty specifics are grouped into eight general headings: coercion, offensiveness, manipulation, assertiveness, confounding, obstruction, persuasion, and cooperation. Understanding and appreciating the analysis and advice provided by Saccone should allow U.S. negotiators greater success.

For example, one category, labeled "Lessons of History," points out that North Korean negotiators are generally much better versed in past meetings and negotiations than American negotiators, who tend to be constantly rotated. Saccone provides the following advice, "The best counter to lessons from history is another lesson of history. This requires considerable preparation. U.S. negotiators are notoriously ignorant of history. If one is ignorant of the record you cannot even be sure that what the opponent is quoting is correct. Do your homework and counter history with lessons of your own choosing." Saccone's advice appears obvious, but the United States too often neglects to heed the obvious.

This work should be required reading for all who must deal with North Korea. Saccone understands its negotiating behavior. He distinguishes between myths and reality, and offers alternatives to improve U.S.-Korea relations. However, this work should not be confined

only to those involved with North Korea. Anyone involved in negotiations will benefit from this book.

XAVIER K. MARUYAMA
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Betts, Richard K., and Thomas G. Mahnken, eds. *Paradoxes of Strategic Intelligence: Essays in Honor of Michael J. Handel.* London: Frank Cass, 2003. 210pp. $114.95

The essays in this collection were written for an international conference held in honor of the late Michael J. Handel at the U.S. Naval War College. Handel wrote several seminal pieces in the relatively new field of intelligence studies, and his colleagues are to be complimented for producing this impressive Festschrift. Betts and Mahnken put together an impressive group of practitioners and academics to write on various aspects of the work of intelligence agencies. It begins with four articles of a theoretical nature, followed by three articles that focus on historic case studies.

This volume appropriately opens with a classic by Handel on strategic surprises, published almost thirty years ago, which serves as an excellent introduction to a book devoted to intelligence. It is typical of Handel's general thinking on strategic affairs, pointing out several paradoxes inherent to the potential for strategic surprise that have become the common wisdom of the intelligence field. Handel claims that due to the great difficulties in differentiating between "noise" and "signals" (relevant information), all data amounts to noise, making the collection of additional information designed to clarify the situation additional noise. Handel also stresses the paradox of estimating risk. The riskier a military course of action, the less a rival anticipates and prepares for it, paradoxically making its eventual adoption less risky. Handel also suggests that successive intelligence successes increase not only the agency's credibility but also the risk of strategic surprise, because its conclusions will be less subject to critical questioning. There is also the self-negating prophecy. A warning of an impending attack triggers military preparations that in turn prompt the enemy to delay or cancel his plans. Such a scenario makes it almost impossible even in retrospect to know if the military preparations were warranted. Another scenario that may lead to a strategic surprise is a quiet international environment that may be used to conceal the preparations for an attack. Following a fascinating analysis of the problems of perception, the politics of intelligence, and the organizational and bureaucratic features, Handel reaches the realistic conclusion that surprise is almost always unavoidable.

The second article, by editor Richard K. Betts, starts with the unconventional premise that politicization of intelligence services is not necessarily bad, and sometimes it is even advisable. Betts presents two opposing models of intelligence work. The first portrays the intelligence agency striving to achieve professional credibility by presenting thorough analysis, while the second depicts the intelligence organization stressing the supply of data that is useful and relevant to decision makers. In the second case, the managers of intelligence organizations make compromises and tailor the information

to influence the decision-making process. Betts points out that there is inevitable tension between maximizing credibility and utility, but he makes a convincing case for reducing this tension by accepting a certain level of undefined politicization. Betts's recommended recipe for minimizing the damage of politicization in the intelligence community is organizational pluralism.

Woodrow J. Kuhns, a senior CIA official, next points out that despite the fact that a significant number of intelligence failures have been documented, there is no clear track record for estimates or warning judgments issued by the intelligence community. Moreover, there is no accumulated knowledge for distinguishing between failures attributed to collection, or to analysis. Nevertheless, Kuhns still tends to regard intelligence forecasts as closer to science than to pseudoscience, despite the methodological problems in producing forecasts, and suggests additional systematic research to clarify the issues he has raised.

James J. Wirtz then discusses the theory of strategic surprise and admits to operational difficulties. Wirtz claims that every curriculum of the officers corps stresses strategic surprise as a force multiplier, and as such, military doctrine is predispositioned to carry out surprises. Wirtz elaborates on the risk paradox first mentioned by Handel, pointing out the attraction of surprise for the weaker parties of the conflict. At this point, Wirtz argues that surprises may produce only temporary spectacular results, leaving the general balance of forces to finally determine the result of armed conflict. Nevertheless, Wirtz concludes that strong countries such as the United States must do their best to prevent unpleasant surprises—such as 9/11, for example.

John Ferris reviews the evolution of British military deception during the two world wars. He provides a detailed narrative on the deception efforts that were highly regarded by the British generals. Ferris argues that deception benefits the stronger player in the conflict and the one holding the initiative, but he displays skepticism of its final utility. This article could have benefited from heavy editing, as it is deficient in organization and in the use of theoretical concepts.

Uri Bar-Joseph's article addresses the question of why some Israeli intelligence officers—even at the highest rank—erred in their estimates of the probability of an imminent war in 1973. He argues convincingly that the two officers most responsible for the intelligence failure were Y. Bandman and E. Zeira, making the more general point that organizations cannot transcend the weaknesses of their personnel. However, Bar-Joseph could have made this important point concerning the human factor by explaining the lack of a strategic warning before the 1973 war without belittling other reasons for the main misfortunes of the Israeli military in its encounter with the Egyptian and Syrian armies.

The final chapter, by Mark M. Lowenthal, who is also with the CIA, looks at the U.S. war-fighting doctrine that originally emphasized information dominance (Joint Chiefs of Staff, 1997), and subsequently more modestly aspired to superiority only (2000). Lowenthal warns against the belief that technological advances can remove the fog of war. Even the best technologies need appropriate

doctrine to be useful. He argues cogently that advanced intelligence systems have their own vulnerabilities, and that lacunae of information are inevitable both before and during war. Moreover, by using examples from the American Civil War, Lowenthal demonstrates that good information about the enemy's moves and intentions is not enough for winning the battle. It is generalship, the human factor, that will continue to be decisive in the outcome of a war.

This is an excellent introductory collection for students and the professional reader to the gamut of issues with which the field of intelligence grapples.

EFRAIM INBAR
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Clancy, Tom, with General Tony Zinni (Ret.) and Tony Koltz. *Battle Ready.* New York: Putnam, 2004. 440pp. $28.95

This excellent book documents the military and postmilitary career of General Tony Zinni, USMC (Ret.). It should appeal to any reader interested in the U.S. military, the U.S. Marine Corps, and national security affairs.

The book follows an engaging and mixed style. Clancy and Koltz use short biographical sections to introduce phases of General Zinni's career. At the end of each phase, Zinni's own words (in italics) pick up the action. One has the sense of being right there with the general, sharing his experiences and watching him develop into an exceptional military role model and leader.

The book actually begins with the end of Zinni's career. It is November 1998, and he is halfway through his last assignment as the sixth commander in chief of Central Command. We are introduced to the refined thinking of a fighting soldier and leader, thinking based on his extensive tactical, operational, and strategic experience in war, conflict resolution, and peacemaking. At that time, Zinni's immediate focus was Saddam Hussein and supporting the UNSCOM (United Nations Special Commission) inspectors under Richard Butler. By mid-December, UN teams began departing Iraq. What follows is the four-day, preplanned attack of Operation DESERT FOX. Although the planning for the attack provides insight into General Zinni's war-fighting skills, such as the importance and execution of surprise, it is the introduction to his breadth of strategic thinking that is most interesting.

At the start of his command in August 1997, Zinni proposed a six-point strategic program for Central Command to President Clinton's secretary of defense, William Cohen. His objective was to take a more balanced approach to a wide range of evolving security issues, not just Iraq and Saddam Hussein. After presenting the program to Cohen and senior members of Congress, Zinni was politely told to "stay out of policy and stick to execution." That raises an important point for military officers preparing themselves for high command. Civilian control of the military and selfless military service to the country are fundamental to our government, going back to George Washington and George Marshall. Based on the rest of the book, it is apparent that Zinni consistently struck that delicate professional balance between the truthful, informed, and forceful advice and respect for civilian authority.

A further example of this followed DESERT FOX. General Zinni asked himself what would happen if Iraq suddenly collapsed. Who would pick up the pieces and help rebuild the country? To examine these questions, Zinni sponsored a war game called "Desert Crossing" in late 1999, with a wide range of government agencies and representatives. In his words, "The scenarios looked closely at humanitarian, security, political, economic, and other reconstruction issues. We looked at food, clean water, electricity, refugees, Shia versus Sunnis, Kurds versus other Iraqis, Turks versus Kurds, and the power vacuum that would surely follow the collapse of the regime (since Saddam had pretty successfully eliminated any local opposition). We looked at all the problems the United States faces in 2003 trying to rebuild Iraq. And when it was over, I was starting to get a good sense of their enormous scope and to recognize how massive the reconstruction would be." Although the game failed to stimulate government-wide planning, the episode at the start of the book is compelling. One wonders at Zinni's background, and how he developed the interest, knowledge, and experience to conceptualize and deal with such complex theater-level issues.

The general served two tours in Vietnam, where he suffered life-threatening combat wounds and illnesses. His time there was fundamental to his development: "The biggest lesson, in fact, is learning how to be open to surprising new experiences and then turning that openness into resourceful and creative ways of dealing with challenges you face." Zinni builds on that insight along with the sensitivity and ability to work effectively within other cultures, a skill he developed during his first tour as an adviser with the South Vietnamese marines.

Zinni's rise to the rank of general in December 1986 followed command, staff, and professional military education assignments, emphasizing operational competence. However, it is his first assignment as general to deputy director of operations at the U.S. European Command in 1990 that impressed upon him the nature of the rapidly changing world following the collapse of the Soviet Union.

The reader is taken through Zinni's subsequent assignments: director of operations for Combined Task Force RESTORE HOPE in Somalia, commander of the 1st Marine Expeditionary Force (I MEF), and commander in chief of Central Command. After his retirement from the military in the summer of 2000, Zinni's experience and diplomatic skills are further called into service for peacemaking and conflict resolution around the world, offering us further insight into such complex, ongoing situations as the Israeli-Palestinian conflict.

Battle Ready makes clear that Zinni has the credentials, both professional and personal, to present his forceful and unvarnished opinions, honed by a lifetime of service to his country. This book should be of particular value to military officers of all services preparing for higher command in this volatile world.

HENRY BARTLETT
Naval War College

Wildenberg, Thomas. *All the Factors of Victory: Admiral Joseph Mason Reeves and the Origins of Carrier Airpower.* Washington, D.C.: Brassey's, 2003. 326pp. $27.50

Admiral Joseph Reeves was an important influence on the development of American naval aviation during the interwar period, but like many other senior officers who served in peacetime, he has not received the attention he deserves. Thomas Wildenberg, building upon his previous work on dive bombing in the U.S. Navy prior to the Battle of Midway, strives to honor Admiral Reeves with a scholarly biography focused on his professional life and contributions.

Wildenberg argues that Reeves's background, attention to improved training and doctrine, and ability to push innovation within the existing organizational structure were key factors behind the nascent idea of carrier strike forces, which subsequently came to maturation during the U.S. Navy's Pacific operations in World War II. Like another well known admiral, William Moffet, Reeves was a true pioneer in naval aviation. He was among the first to recognize its potential and work out the practical application of this new form of warfare within the fleet.

Reeves followed a unique career progression. Wildenberg traces Reeves's scholastic and athletic achievements as a young engineering naval cadet at Annapolis; his combat experience during the Spanish-American War; conversion to an ordnance specialization; various sea and shore appointments before reaching command of the battleship USS *North Dakota;* time as a student and tactical instructor at the Naval War College; and his entry into the naval aviation world at the age of fifty-two. As Commander Aircraft Squadrons, Battle Fleet onboard the experimental carrier USS *Langley,* Reeves challenged his flyers to solve a "thousand and one questions" to which even he did not have the answers. He concentrated the squadrons for intensive training and practice with new types of aircraft then being delivered. After a short stint with the U.S. delegation to the 1927 Geneva Conference, Reeves was promoted to rear admiral and returned to lead naval aviation from an experimental status to full-fledged integration into the fleet.

Wildenberg's description of Reeves, with entourage in tow, personally directing the movement of planes around *Langley*'s flight deck when a subordinate officer named John Towers dared to report that no more could be crowded onboard, is priceless. The new purpose-built aircraft carriers USS *Lexington* and *Saratoga* provided the means for Reeves to test novel concepts of deployments in peacetime fleet exercises on a larger scale—the turning point being Fleet Problem IX in January 1929, when Reeves launched the mock aerial strikes against the Panama Canal described so well by Wildenberg at the book's opening. Thereafter, Reeves quickly rose in responsibility before his retirement as commander in chief of the U.S. Fleet with the rank of admiral in 1936—the first naval aviator to hold the appointment.

During World War II Reeves returned to the Department of the Navy to coordinate Lend-Lease activities on behalf of Secretary Frank Knox, as well as to act as U.S. naval representative on the Combined Munitions Assignment

Board alongside Harry Hopkins. Having given so much to his country, Reeves died on 25 March 1948.

Although a powerful speaker and orator, Reeves published very little and left behind no personal papers. In writing this biography, Wildenberg has done an admirable job of detective work, collecting together information from a diverse range of official and private sources. He uses a 1943 Princeton University undergraduate thesis based on interviews with Reeves, but little remains known of the admiral's family and personal life, other than the impression that he was a lonely man devoted full-heartedly to the navy. A ruthless streak in Reeves's character, however, comes out in his treatment of hapless Lieutenant Commander Robert Molten—an episode to be repeated during a run-in with a Royal Navy ordnance officer, Stephen Roskill, in Washington, D.C., during the summer of 1944. Wildenberg's conclusions about Reeves's attitude toward the British might have been tempered by closer study of his wartime work on the Combined Munitions Assignment Board. No reference is made in the book to Reeves's working files from the Lend-Lease Office of Record in Record Group 38 at the National Archive and Records Administration, or the diaries of Vice Admiral James Dorling, his British naval counterpart on the Combined Munitions Assignment Board at Greenwich's National Maritime Museum. In Reeves's second service tour, he facilitated American production behind the global war effort at sea and actually excelled in office work and the numbers game.

Even though biographies are somewhat out of fashion today and Wildenberg shows a tendency to give a little too much weight to the man than to larger international trends in naval aviation at the time, Reeves clearly pressed, with single-minded determination, the existing technological and doctrinal limits of U.S. naval aviation and prepared his forces accordingly.

The book, which offers interesting insights into experimentation and innovation for future warfare in peacetime navies, is highly recommended for specialist historians and interested general readers.

CHRIS MADSEN
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Toronto, Ontario

De Kay, James Tertius. *A Rage for Glory: The Life and Times of Commodore Stephen Decatur, USN.* New York: Free Press, 2004. 237pp. $25

Accomplished historian and author James de Kay captures the essence of an age, as well as the spirit of a man, in his biography of Commodore Stephen Decatur. This finely written narrative, aimed at a general readership, may lack the scholarly apparatus expected of historical monographs, but it certainly does not lack the scholarship and analysis that is the hallmark of de Kay's work. Yet if this book sometimes appears to be a cross between an action-thriller and a hagiography, there is a reason. Decatur's active quest for fame and glory, as well as the deep sense of honor that would clip short his thread of life at age forty-one, earned the commodore a place in the hearts of his countrymen perhaps more appropriate for a saint. His name still echoes in those of some forty-five towns, five warships, and numerous other pieces of Americana.

Born amidst the upheaval of the American Revolution in 1779, Stephen Decatur spent his youth steeped in the twin influences of a national hubris born of victory against the tyrannical British Empire and a family tradition of seafaring, usually against that same entity (Dutch and French ancestry, and the master of a privateer as a father). His time as a midshipman during the Quasi-War with France may have lacked in naval action, but it certainly imbued in Decatur the ethos of the quarterdeck, that almost mystical triumvirate of glory, fame, and honor that not only defined a gentleman but all too frequently forced recourse to the *Code Duello.* It is de Kay's analysis and presentation of this triumvirate that is the strength of his study of Decatur.

From 1801 through 1815, Decatur earned a place in the pantheon of naval heroes. His part in the burning of the frigate *Philadelphia* at Tripoli in 1804 made him the darling of the nation. Further daring actions against the Barbary corsairs catapulted the young lieutenant over the heads of other officers to the rank of captain. In October 1812, Decatur steered his *United States* to victory over HMS *Macedonian,* then fought an even harder battle with Washington for prize money. Trapped in New London by a British blockade in 1813, he shifted his flag to the large frigate *President* in 1814. Beset by a British squadron shortly thereafter, Decatur surrendered the largest American warship lost during the War of 1812. Exonerated by a court of inquiry, he proceeded to regain his lost honor by leading a squadron to thrash soundly the Barbary corsairs in 1815. De Kay's portrayal of these actions is excellent, using imagery appropriate to the concepts of glory, fame, and honor, central to the story. More importantly for general readers, naval jargon of the era is minimized; thus they do not become lost somewhere between the gudgeons and the mainsail clewlines.

The commodore spent his few remaining years as a member of the Board of Navy Commissioners. Then, on 22 March 1820, Stephen Decatur paid the ultimate price for his honor. Fellow captain and former mentor James Barron and he exchanged shots on a traditional dueling ground outside Washington. Mortally wounded, Decatur died a few hours later. Winding through de Kay's last chapters in the life of this American hero is a fascinating conspiracy theory involving the "bad boys" of the early U.S. Navy: Jesse Duncan Elliot, Captain William Bainbridge, and Captain James Barron. In de Kay's mind, there exists little doubt that both Elliot and Bainbridge contributed as much as Barron to the death of Decatur. His arguments are convincing.

Historians, particularly those familiar with the era, may be somewhat disappointed with this book. De Kay presents a narrative driven by specific events; thus, details such as Decatur's contributions to strategic planning during the War of 1812 are missing. On the other hand, those souls less knowledgeable of the U.S. Navy during the Age of Sail will have little to disappoint them and much to gain from reading this exciting biography of a most famous American naval officer.

WADE G. DUDLEY
East Carolina University

Thomas, Evan. *John Paul Jones: Sailor, Hero, Father of the American Navy.* New York: Simon and Schuster, 2003. 381pp. $26.95

America seems to have lately rediscovered its founding fathers, if recent best-seller lists are any indication. As much as the infant republic needed thinkers and statesmen such as Thomas Jefferson, John Adams, and Ben Franklin, it also required those who were willing to fight and turn their aspirations into reality. Francis Marion, Daniel Morgan, "Mad" Anthony Wayne, and even Benedict Arnold were among the warriors who concretized fine words and ideas into battlefield deeds. One more name that belongs on this fierce list is John Paul Jones, the father of the American navy.

Thomas, a *Newsweek* editor and amateur sailor, offers a marvelous portrait of a proud, insecure, ferocious, and highly ambitious figure. He convincingly suggests that Jones was that most elemental of American characters, the self-made man. Although Jones most likely never made the celebrated declaration "I have not yet begun to fight" during the epic sea battle between his *Bonhomme Richard* and HMS *Serapis,* he did possess an unconquerable spirit. This is a splendid biography of John Paul Jones.

The penniless son of a Scottish gardener on the run from the law, John Paul adopted the surname Jones and sailed to America. Possessing an unslakable thirst for glory, a genius for seamanship, a combative nature, and a Gatsby-like desire to be recognized as a gentleman, Jones offered his services to the cause of American independence. Along the way, he accumulated many grievances—some imagined, many not. He did not feel appreciated or rewarded by Congress. Jones watched desirable commands handed over to corrupt and incompetent hacks, and he suffered mutinous crews and disloyal officers. Indeed, comparison with Benedict Arnold, another prickly sort, is instructive. Both gifted men were at times disgracefully ill used. The difference is that Jones ultimately placed duty over self.

In Thomas's hands, the real-life story of this courageous master and commander is every bit as enthralling and humorous as any Patrick O'Brien novel. Thomas writes colorfully of blackguards and mistresses, salty sea dogs and young midshipmen, bloody quarterdecks and Parisian salons. He also provides a thrilling description of Jones's apotheosis—the *Bonhomme Richard* and *Serapis* duel. His depiction of riding out a terrific storm is better than the obligatory chapter found in fictional yarns, as are the evocations of the sights, sounds, and smells of shipboard life in the age of sail. Simultaneously, Thomas perceptively evaluates Jones as tactician, strategist, and leader. Unparalleled at tactics, Jones was also surprisingly advanced as a strategic thinker who devised schemes to bring the war to the British home islands and foresaw the need for the United States to field a blue-water navy. It is only as a leader that Thomas finds Jones wanting. Audacious, persistent, and visionary, the brittle Jones lacked what we today would call team-building skills to inspire subordinates to consistent greatness. Nevertheless, Jones's legacy is well summarized by the words engraved on his tomb at Annapolis: "He gave our navy its earliest traditions of heroism and victory."

ALAN CATE
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OF SPECIAL INTEREST

NASOH: THE JOHN LYMAN BOOK AWARD

Each year the North American Society for Ocean History (NASOH) presents the John Lyman Book Award to authors who have made significant contributions to the study and understanding of naval and maritime history. This year the award for "Best Book in U.S. Maritime History" went to Captain Alex R. Larzelere, U.S. Coast Guard (Ret.), a 1968 graduate of the Naval War College's School of Naval Command and Staff (as the College of Naval Command and Staff was then known). Captain Larzelere's *The Coast Guard in World War I: An Untold Story* (Naval Institute Press, 2002) is the story of, in the prize committee's words, "a new service and how it gained its 'sea legs' in the cauldron of war."

FROM THE EDITORS

NEWPORT PAPER 21

A new title in our Newport Papers series, *Latin American Security Challenges: A Collaborative Inquiry from North and South,* edited by Paul D. Taylor, has just been issued in print and electronically. A senior strategic researcher at the Naval War College and a former career Foreign Service officer, Paul D. Taylor served as U.S. ambassador to the Dominican Republic and Deputy Assistant Secretary of State for Inter-American Affairs. His new collection helps reopen the door to serious analyses of the relationship between Latin American national security issues and American strategic interests. The monograph consists of an introduction and three substantive chapters analyzing specific issues facing Latin America. The first chapter provides a solid introduction to the interconnection of economic development and the national security threats facing both Latin American governments and the United States. The second builds upon the concepts of failed states and borderless regions to suggest how criminals and perhaps terrorists can find refuge and perhaps support in localities outside the control of states. The final chapter speculates on the interest of China in the region, with particular attention to the potential roles played by immigration and Chinese ownership of firms charged with the operation of the Panama Canal. Print copies (and free subscriptions to the series) are available from the editorial office.

1948–2004 ARTICLE AND ESSAY INDEX

An omnibus index of all articles and essays from 1948 (the founding of the journal) through the 2004 publishing year is available on compact disc. Acrobat Reader is required for the compact disc (it can be downloaded free). For a copy of the CD-ROM index, contact the editorial office. An online index, current through the most recent issue, is also available. A print article/essay index supplement for volume 57 appears in this issue.

STATEMENT OF OWNERSHIP, MANAGEMENT, AND CIRCULATION

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Pelham G. Boyer, Managing Editor

INDEX OF VOLUME 57

Articles and Essays

AUTHOR

Burns, William F. The Education of "a Modern Major General." Winter 2004:20–33

Cherpak, Evelyn M. The Naval Historical Collection: Recent Acquisitions. Spring 2004:159–61

Collins, Thomas H. Change and Continuity: The U.S. Coast Guard Today. Spring 2004:9–26

Crawford, Neta C. *Principia Leviathan:* The Moral Duties of American Hegemony. Summer/Autumn 2004:67–90

Fink, Susan D. The Trouble with Mixed Motives: Debating the Political, Legal, and Moral Dimensions of Intervention. Summer/Autumn 2004:19–32

Goldstein, Lyle J., and Yuri M. Zhukov. A Tale of Two Fleets: A Russian Perspective on the 1973 Naval Standoff in the Mediterranean. Spring 2004:27–63

Haass, Richard N. A Premium on Good Judgment. Summer/Autumn 2004:11–15

Hauner, Milan L. Stalin's Big-Fleet Program. Spring 2004:87–120

Iasiello, Louis V. *Jus Post Bellum:* The Moral Responsibilities of Victors in War. Summer/Autumn 2004:33–52

Ji, You, and Ian Storey. China's Aircraft Carrier Ambitions: Seeking Truth from Rumors. Winter 2004:77–93

Jóhannesson, Gudni Th. To the Edge of Nowhere? U.S. Icelandic Defense Relations during and after the Cold War. Summer/Autumn 2004:115–37

Johnson, Gregory G. A Larger Meaning, a Larger Purpose. Winter 2004:35–37

Johnson-Freese, Joan. Space *Wei Qi:* The Launch of *Shenzhou V.* Spring 2004:121–45

Klein, John J. Corbett in Orbit: A Maritime Model for Strategic Space Theory. Winter 2004:59–74

Labs, Eric J. Building the Future Fleet: Show Us the Analysis! Summer/Autumn 2004:138–46

Lacquement, Richard A., Jr. The Casualty-Aversion Myth. Winter 2004:39–57

Larsen, Jeffrey A., and Timothy D. Miller. Dealing with Russian Tactical Nuclear Weapons: Cash for Kilotons. Spring 2004:64–86

Liotta, P. H., and James F. Miskel. Still Worth Fighting Over? A Joint Response. Winter 2004:102–108

Miller, Timothy D., and Jeffrey A. Larsen. Dealing with Russian Tactical Nuclear Weapons: Cash for Kilotons. Spring 2004:64–86

Miskel, James F., and P. H. Liotta. Still Worth Fighting Over? A Joint Response. Winter 2004:102–108

Rosenthal, Joel. New Rules for War? Summer/Autumn 2004:91–101

Skelton, Ike. National Security Book List. Winter 2004:109–12

Stillman, Patrick M. Small Navies *Do* Have a Place in Network-Centric Warfare. Winter 2004:95–101

Storey, Ian, and You Ji. China's Aircraft Carrier Ambitions: Seeking Truth from Rumors. Winter 2004:77–93

Terry, James P. A Legal Appraisal of Military Action in Iraq. Summer/Autumn 2004:53–66

Uhlig, Frank, Jr. The Submarine, 1776–1918. Spring 2004:146–58

Wolfowitz, Paul. "The Greatest Deeds Are Yet to Be Done." Winter 2004:13–19

Wolthusen, Stephen D. Self-Inflicted Vulnerabilities. Summer/Autumn 2004:103–13

Zhukov, Yuri M., and Lyle J. Goldstein. A Tale of Two Fleets: A Russian Perspective on the 1973 Naval Standoff in the Mediterranean. Spring 2004:27–63

SUBJECT

Aircraft Carriers

Storey, Ian, and You Ji. China's Aircraft Carrier Ambitions: Seeking Truth from Rumors. Winter 2004:77–93

Casualties

Lacquement, Richard A., Jr. The Casualty-Aversion Myth. Winter 2004:39–57

China

Johnson-Freese, Joan. Space *Wei Qi:* The Launch of *Shenzhou V.* Spring 2004:121–45

Storey, Ian, and You Ji. China's Aircraft Carrier Ambitions: Seeking Truth from Rumors. Winter 2004:77–93

Cold War

Goldstein, Lyle J., and Yuri M. Zhukov. A Tale of Two Fleets: A Russian Perspective on the 1973 Naval Standoff in the Mediterranean. Spring 2004:27–63

Hauner, Milan L. Stalin's Big-Fleet Program. Spring 2004:87–120

Corbett, Sir Julian

Klein, John J. Corbett in Orbit: A Maritime Model for Strategic Space Theory. Winter 2004:59–74

Doctrine

Klein, John J. Corbett in Orbit: A Maritime Model for Strategic Space Theory. Winter 2004:59–74

Ethics/Morality

Crawford, Neta C. *Principia Leviathan:* The Moral Duties of American Hegemony. Summer/Autumn 2004:67–90

Fink, Susan D. The Trouble with Mixed Motives: Debating the Political, Legal, and Moral Dimensions of Intervention. Summer/Autumn 2004:19–32

Haass, Richard N. A Premium on Good Judgment. Summer/Autumn 2004:11–15

Iasiello, Louis V. *Jus Post Bellum:* The Moral Responsibilities of Victors in War. Summer/Autumn 2004:33–52

Rosenthal, Joel. New Rules for War? Summer/Autumn 2004:91–101

Force Planning

Labs, Eric J. Building the Future Fleet: Show Us the Analysis! Summer/Autumn 2004:138–46

History—General

Cherpak, Evelyn M. The Naval Historical Collection: Recent Acquisitions. Spring 2004:159–61

Jóhannesson, Gudni Th. To the Edge of Nowhere? U.S. Icelandic Defense Relations during and after the Cold War. Summer/Autumn 2004:115–37

History—Naval and Maritime

Goldstein, Lyle J., and Yuri M. Zhukov. A Tale of Two Fleets: A Russian Perspective on the 1973 Naval Standoff in the Mediterranean. Spring 2004:27–63

Hauner, Milan L. Stalin's Big-Fleet Program. Spring 2004:87–120

Uhlig, Frank, Jr. The Submarine, 1776–1918. Spring 2004:146–58

Iceland

Jóhannesson, Gudni Th. To the Edge of Nowhere? U.S. Icelandic Defense Relations during and after the Cold War. Summer/Autumn 2004:115–37

Information Technology

Wolthusen, Stephen D. Self-Inflicted Vulnerabilities. Summer/Autumn 2004:103–13

Iraq

Terry, James P. A Legal Appraisal of Military Action in Iraq. Summer/Autumn 2004:53–66

National Interests

Liotta, P. H., and James F. Miskel. Still Worth Fighting Over? A Joint Response. Winter 2004:102–108

Naval War College

Cherpak, Evelyn M. The Naval Historical Collection: Recent Acquisitions. Spring 2004:159–61

Johnson, Gregory G. A Larger Meaning, a Larger Purpose. Winter 2004:35–37

Network-centric Warfare

Stillman, Patrick M. Small Navies *Do* Have a Place in Network-Centric Warfare. Winter 2004:95–101

Wolthusen, Stephen D. Self-Inflicted Vulnerabilities. Summer/Autumn 2004:103–13

Nuclear Weapons

Miller, Timothy D., and Jeffrey A. Larsen. Dealing with Russian Tactical Nuclear Weapons: Cash for Kilotons. Spring 2004:64–86

Professional Military Education

Burns, William F. The Education of "a Modern Major General." Winter 2004:20–33

Johnson, Gregory G. A Larger Meaning, a Larger Purpose. Winter 2004:35–37

Skelton, Ike. National Security Book List. Winter 2004:109–12

Wolfowitz, Paul. "The Greatest Deeds Are Yet to Be Done." Winter 2004:13–19

Russia (Imperial, Russian Federation)

Miller, Timothy D., and Jeffrey A. Larsen. Dealing with Russian Tactical Nuclear Weapons: Cash for Kilotons. Spring 2004:64–86

Soviet Union

Goldstein, Lyle J., and Yuri M. Zhukov. A Tale of Two Fleets: A Russian Perspective on the 1973 Naval Standoff in the Mediterranean. Spring 2004:27–63

Hauner, Milan L. Stalin's Big-Fleet Program. Spring 2004:87–120

Space

Johnson-Freese, Joan. Space *Wei Qi:* The Launch of *Shenzhou V*. Spring 2004:121–45

Klein, John J. Corbett in Orbit: A Maritime Model for Strategic Space Theory. Winter 2004:59–74

United Nations

Terry, James P. A Legal Appraisal of Military Action in Iraq. Summer/Autumn 2004:53–66

United States—Security Policy

Lacquement, Richard A., Jr. The Casualty-Aversion Myth. Winter 2004:39–57

Liotta, P. H., and James F. Miskel. Still Worth Fighting Over? A Joint Response. Winter 2004:102–108

U.S. Army

Burns, William F. The Education of "a Modern Major General." Winter 2004:20–33

U.S. Coast Guard

Collins, Thomas H. Change and Continuity: The U.S. Coast Guard Today. Spring 2004:9–26

Stillman, Patrick M. Small Navies *Do* Have a Place in Network-Centric Warfare. Winter 2004:95–101

U.S. Navy

Labs, Eric J. Building the Future Fleet: Show Us the Analysis! Summer/Autumn 2004:138–46

Warfare—Submarine

Uhlig, Frank, Jr. The Submarine, 1776–1918. Spring 2004:146–58

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