

NAVAL WAR COLLEGE REVIEW

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Our cover image was designed by the artists of the Naval War College's Visual Communications Department to mark the entry to the office suite in newly renovated Luce Hall of the College's International Programs staff. Since then it has become familiar about the campus as a symbol of the extensive (and growing) activity of the International Programs organization—comprising primarily its two resident programs, the Naval Command College and Naval Staff College—and of the College's contribution to maritime security cooperation in general.

Title Page (opposite)

Wall mural in Sims Hall, Naval War College, by Gigi Davis, Visual Communications Department Head.

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CONTENTS

From the Editors 3

President’s Forum 7

The Future of Aircraft Carriers 13

Robert C. Rubel

As the geopolitical, technological, and budgetary environments change, the question of whether aircraft carriers will still be needed, and if so of what kind and how many, becomes urgent. The best way to approach it is in terms of how they are actually used and how they could be.

Sea Basing

Concept, Issues, and Recommendations 28

Sam J. Tangredi

In a flat or shrinking defense budget, resources for the joint capability of sea basing will become contentious. However, a prudent strategy for the United States in uncertain times is to balance long-range capabilities based in the continental United States with highly maneuverable and well defended sea bases.

Three Disputes and Three Objectives

China and the South China Sea 42

Peter Dutton

The complex disputes of the globally important South China Sea sort themselves into three categories, each with its own parties, rule sets, and politics. Unfortunately, states are pursuing win-lose solutions to all three, when win-win problem solving based on mutuality and commonality of interests is necessary and possible.

Progressing Maritime Security Cooperation in the Indian Ocean 68

Lee Cordner

In the Indian Ocean region, the obstacles to maritime security cooperation are especially severe, but the need for that cooperation is especially great. The prospect that nothing will be done is all too likely—and in view of the risks, unacceptable.

Operational Assessment

Why Operations Assessments Fail

It’s Not Just the Metrics 89

Jonathan Schroden

In any military campaign it is necessary to measure how well one is doing; in unconventional, counterinsurgency warfare, measuring progress is especially difficult; and in Afghanistan, the attempt to do so is doing more harm than good, and for fundamental reasons.

Operations Assessment in Afghanistan Is Broken

What Is to Be Done? 103

Stephen Downes-Martin

The operations assessments process in Afghanistan is untrustworthy and places at risk the credibility of commanders who support its products. But regional commanders have the authority and means to fix it.

Dewey at Manila Bay

Lessons in Operational Art and Operational Leadership from

America's First Fleet Admiral 127

Commander Derek B. Granger, U.S. Navy

Admiral George Dewey, his great victory at Manila Bay over a century ago, and even the Spanish-American War receive little attention, from either historians of naval warfare or its practitioners. But the nature of the challenges he faced, how he approached them, and how his career had prepared him to succeed so well are in fact highly relevant to the U.S. Navy's present environment.

Review Essay

Rising China's Forgotten Father 142

The Generalissimo: Chiang Kai-shek and the Struggle for Modern China,
by Jay Taylor

reviewed by Charles Horner

Book Reviews

Essays in Naval History, from Medieval to Modern, by N. A. M. Rodger

reviewed by John B. Hattendorf 146

Schattenarmeen: Die Geheimdienste der islamischen Welt
(Shadow Armies: The Secret Services of the Islamic World), by Wilhelm Dietl

reviewed by John R. Schindler 147

Atomic Obsession: Nuclear Alarmism from Hiroshima to Al Qaeda, by John Mueller

reviewed by Andrew L. Stigler 149

The Wrong War: Grit, Strategy, and the Way Out of Afghanistan, by Bing West

reviewed by Jeffrey J. Winters 150

The Education of Ronald Reagan: The General Electric Years and
the Untold Story of His Conversion to Conservatism, by Thomas W. Evans

reviewed by Stephen F. Knott 151

D-Day: The Battle for Normandy, by Antony Beevor

reviewed by David L. Teska. 152

The Origins of Political Order: From Prehuman Times to the
French Revolution, by Francis Fukuyama

reviewed by Matt van Hook 153

Common Purpose: How Great Leaders Get Organizations to
Achieve the Extraordinary, by Joel Kurtzman

reviewed by Roger H. Ducey 155

The Emperor's Handbook: A New Translation of the Meditations,
by Marcus Aurelius, translated by C. Scot Hicks and David V. Hicks

reviewed by Jeff Shaw 156

In My View. 158

Of Special Interest. 164

Reflections on Reading 166

FROM THE EDITORS

At a time when China's People's Liberation Army Navy and its national leadership appear to have committed themselves firmly to a program of aircraft carrier development over the coming decades, doubts are being voiced increasingly in the West, and not least the United States itself, over the affordability and operational effectiveness of carriers in the current fiscal and strategic environment. Aircraft carriers have served for some seven decades as in effect the capital ship of the U.S. Navy. Will they continue in this role in the future? In addressing this question, Robert C. Rubel, a retired naval aviator, offers a careful review of the evolving "doctrinal" roles aircraft carriers have played for the Navy in the course of their history and of the emerging strategic and operational challenges they face. He concludes that while some of these roles appear to be obsolescing, the carrier will likely be with us for the foreseeable future, though possibly in lesser numbers and with a reduced emphasis on traditional strike missions. Professor Rubel is dean of the Center for Naval Warfare Studies at the Naval War College.

Among military concepts that never quite seem to come into focus, "sea basing" surely ranks high. Sam J. Tangredi revisits the doctrinal and bureaucratic state of play on this issue. Sea basing continues to be viewed and evaluated in very different ways by the different services; the relative eclipse of the concept over the last several years is a somewhat depressing testimony to the continuing shortcomings of "jointness" in the U.S. military. Tangredi offers a cautious defense of the continuing relevance of sea basing, with reference less to the most frequently cited rationale—the potential political vulnerability of bases located in allied territory—than to the growing physical vulnerability of fixed land bases to long-range ballistic missile attack. Captain Tangredi, USN (Ret.), is a former head of the Strategy and Concepts Branch of the Office of the Chief of Naval Operations. This article will also appear in a forthcoming Newport Paper on U.S. forward presence in Asia, the Pacific, and the Indian Ocean.

In "Three Disputes and Three Objectives: China and the South China Sea," Peter Dutton next provides a careful review of the regional tensions in Southeast Asia generated over the last several years by China's increasingly aggressive assertion of its claims to the South China Sea at the expense of other littoral states, as well as by its challenge to freedom of navigation and foreign military presence

there, in contravention of a key and long-standing principle of American global maritime policy. Dutton emphasizes the extent to which China's sometimes inexplicable behavior in this arena has heightened its neighbors' suspicions of Chinese motives and intentions and led them to invite the United States to engage more actively on these issues. He argues that it is very much in China's own interest to refrain from unilateralist maritime claims, which can be invoked just as well against it by other states, and suggests that all parties should focus on a mutually advantageous diplomatic solution to the multiple disputes in question. Peter Dutton is a retired U.S. Navy commander and the current director of the China Maritime Studies Institute at the Naval War College.

In "Progressing Maritime Security Cooperation in the Indian Ocean," Lee Corder highlights the maritime security challenges facing the littoral states of the Indian Ocean and, citing in particular the lack of agreed maritime boundaries in many parts of the region, argues the need for new regional institutional structures that can address and help devise solutions to these challenges. Corder notes the progress achieved in the Indian Ocean Naval Symposium, which had its second meeting in Abu Dhabi in May 2010, but believes that engagement at a more political level would be required to advance the process significantly. He also stresses the importance of involving extraregional maritime powers in such a process. All of this can be seen as an invitation to U.S. naval planners and diplomats to explore ways to implement the agenda of the Navy's "Cooperative Strategy for 21st Century Seapower" in a maritime theater of growing global importance. Lee Corder is a commodore in the active reserve of the Royal Australian Navy.

As the United States begins shrinking its military footprint in Afghanistan, it becomes a matter of some urgency to understand what progress it and its coalition partners have actually made toward preparing the conditions desired for the eventual withdrawal of foreign combat forces from that country and the assumption of responsibility for its security by the Afghan government itself. Yet formal efforts to gauge such progress have been late in coming, and the methodologies they utilize have been widely criticized. Two authors with recent hands-on experience in Afghanistan and elsewhere analyze what has come to be known within the U.S. military as "operational assessment" and the reasons why it continues to fall short as a tool of the commander in contemporary counterinsurgency warfare. Jonathan Schroden is a research analyst at the Center for Naval Analyses; Stephen Downes-Martin is a professor in the Warfare Analysis and Research Department of the Naval War College.

Finally, in "Dewey at Manila Bay: Lessons in Operational Art and Operational Leadership from America's First Fleet Admiral," Commander Derek Granger, USN, revisits a signal but neglected moment in American naval

history—Commodore George Dewey’s decisive defeat of a squadron of the Spanish navy in Manila Bay on 1 May 1898. He argues that this action should not be seen merely as a tactical triumph but rather as a model of naval operational art that continues to have relevance for naval officers today. Commander Granger is a June 2011 graduate of the Naval War College.

IF YOU VISIT US

Our editorial offices are in Sims Hall, in the Naval War College Coasters Harbor Island complex, on the third floor, west wing (rooms W334, 334, 309). For building-security reasons, it would be necessary to meet you at the main entrance and escort you to our suite—give us a call ahead of time (841-2236) or use the phone at the main Sims Hall entrance (1-2236).



Rear Admiral Christenson became the fifty-third President of the U.S. Naval War College on 30 March 2011. The fourth of six sons of a Navy Skyraider pilot and a Navy nurse, he graduated from the U.S. Naval Academy in 1981.

At sea, he commanded USS McClusky (FFG 41), Destroyer Squadron 21 in USS John C. Stennis (CVN 74), Carrier Strike Group 12, and the USS Enterprise (CVN 65) Strike Group. He most recently served as President, Board of Inspection and Survey. He also served as the antisubmarine warfare officer and main propulsion assistant aboard USS Cook (FF 1083); as aide to Commander, Cruiser Destroyer Group 1 in USS Long Beach (CGN 9); as weapons officer aboard USS Downes (FF 1070); as Destroyer Squadron 21 combat systems officer, in USS Nimitz (CVN 68); and as executive officer of USS Harry W. Hill (DD 986). He deployed eight times on seven ships, twice in command of McClusky.

Ashore, he commanded the Surface Warfare Officers School in Newport, and as a new flag officer he served as Commander, Naval Mine and Anti-submarine Warfare Command, Corpus Christi, Texas. He also served at the U.S. Naval Academy as a company officer, celestial navigation instructor, assistant varsity soccer coach, and member of the admissions board; at Headquarters, U.S. Marine Corps, in the Strategic Initiatives Group; and on the Joint Staff, in J5 (Strategic Plans and Policy) and as executive assistant to the assistant chairman.

He graduated with distinction and first in his class from the Naval War College, earning his master's degree in national security and strategic studies. He was also a Navy Federal Executive Fellow at the Fletcher School of Law and Diplomacy.

Rear Admiral Christenson has been awarded the Defense Superior Service Medal, the Legion of Merit (five awards), the Meritorious Service Medal (two awards), the Navy Commendation Medal (five awards), and the Navy Achievement Medal.

PRESIDENT'S FORUM



Why Newport?

IN MARCH 2011, I WAS TOLD that I would be the fifty-third President of the Naval War College. After smiling and making a few phone calls to family to share the humbling news, I began to think about the great responsibilities that come along with the privilege of joining a line of leaders that includes Alfred Thayer Mahan, Raymond Spruance, James B. Stockdale, and Stansfield Turner. Filling their shoes would not be possible, but the potential to do our nation and navy great good was nearly unlimited. And as I am the fourth of six sons of a naval aviator and a Navy nurse who met and married in Newport, this city has a special place in my heart.

Newport has hosted great Sailors since well before America's independence and before the formation of the U.S. Navy. The "rebel" captain John Paul Jones sailed the Continental Navy sloop *Providence* in the waters off Newport in the days leading up to the Revolution. Two and a third centuries later, Newport remains a "Navy town," and the phrase "going to Newport" evokes a sense of anticipation and excitement unique to all the seaports of the world.

Although Newport is now more likely to be the port of call for cruise ships than for warships, it is still an internationally recognized venue for maritime study, research, and thought. Newport and the Naval War College mean different things to different people, and when we ask "Why Newport?" we need to consider the answer from a number of different perspectives.

Why Newport? The Global Perspective. Great nations have great navies, and great navies have world-class institutions of learning. The U.S. Navy is blessed to have three—at Annapolis, Maryland; Monterey, California; and here in Newport. For the past 127 years the Naval War College has served as America's home for the study of sea power and as a catalyst for international maritime security

cooperation. Officers from allied navies have been attending classes in Newport with their American counterparts since 1894, when Royal Swedish Navy officers contributed their insights into the revolution in maritime affairs that gripped the world at the end of the nineteenth century. Ever since, seamen speaking many languages have met as equals in the classrooms and on the game floors of the College and have selflessly shared the lessons of centuries of maritime heritage and experience. The decades have shown that wise judgment and sound tactics have no particular nationality and that the power of a persuasive argument is universal. This tradition continues in the twenty-first century, with over sixty-five nations participating annually in the College's international programs. Today, as in the past, free and open seas remain key to the preservation of peace and the expansion of international commerce. This fact energizes the students and faculty every day; it inspires them to study the lessons of history and to deepen the international friendships that build and maintain order on the ocean commons. The breadth of the global maritime partnerships that have been facilitated by Newport alumni will be evident this fall when the College hosts the Twentieth International Seapower Symposium, which will bring together the leaders of over a hundred of the world's navies for consultation, discussion, and thinking about our shared interests at sea.

Why Newport? The National Perspective. By tradition and by design, the intellectual endeavors in Newport have a decidedly saltwater flavor. The fact that the school is surrounded by the beautiful waters of a broad bay, however, does not obscure the reality that preservation of our nation's security demands not only mastery of seapower but also the learned application of the skills of the soldier, the airman, and the diplomat. Our student body consists (aside from about 150 international students) of a diverse group of leaders from all the military services, as well as from the federal government agencies and departments that must work effectively and seamlessly to "provide for the common defense," as called for in the Constitution. The academic and research programs in Newport address such issues as the size and composition of military forces necessary to meet the nation's worldwide commitments; the impact of the defense budget on the national economy and the industrial base; and the role of the military establishment in a free society. The composition of seminars and study groups ensures that the insights of the Foreign Service officer, the intelligence specialist, and the international student carry equal weight with those of the career U.S. military professionals during the spirited and sometimes heated debates that occur daily. The network of alumni created by each class provides interservice, interagency, and international connections that continue to make the world a better place for decades after graduation.

Why Newport? The Navy's Perspective. The unequaled size and technological complexity of the U.S. Navy requires that its junior officers be singularly focused during the early parts of their careers. Qualification and then proficiency as a naval aviator, a nuclear submariner, or a surface warfare officer (who is also often nuclear trained) provides the foundation upon which a full career is based. But as these officers mature and are promoted to higher levels of responsibility, their vision must expand beyond their tactical mastery. The Naval War College offers the professional development opportunity that enables students to refocus their attention on the operational and strategic aspects of their profession. The proven warfare specialists and associated restricted line and staff corps experts are required to consider the issues that arise from employing the Navy's core capabilities of forward presence, deterrence, sea control, maritime security, and humanitarian assistance and disaster response in an ever-changing world. They then consider how these expanded core capabilities are used in conjunction with the land, air, space, and cyberspace capabilities of all the services to support the national security strategy. The officers who depart from Newport—with joint-service, interagency, and international mind-sets—are truly qualified to lead forces into harm's way in any environment or contingency.

Why Newport? The Officer's Perspective. Military officers spend their careers more concerned about the welfare of others than about their own. They accept a call to service that frequently demands that they leave the safety and security of their homes and families to travel to distant and often dangerous foreign waters and lands.

As I told our students at my change of command ceremony, "This year in Newport is truly a gift from your country to you. The books, the faculty, the time at this point in your life will probably never happen again. You all know people who are struggling in this economy, you all know people who are in harm's way—you are neither. Your orders are to read, study, think, and write. Do that, and I promise, you too will be changed forever. And your country, in giving you this year, will most certainly receive the benefit when you leave here forever changed for the better."

Why Newport? The Family's Perspective. Most of our students are fortunate enough to be able to bring their families to Newport to share in the Newport experience. They find warm and welcoming communities outside the gates, beautiful waters everywhere, and history and adventures beyond compare. The military member is not on duty (in the same way), not deployed, and not at sea or in the field. Students here are busy, since the demands of the academic programs are significant, but the nature of the work in Newport is different, and the

rewards of a year here last a lifetime. It is amazing how many graduates seek me out to express their sincere gratitude for the exceptional education our faculty delivered to them—and to say that is was also the best year of their families' lives.

The folklore here is that getting all the reading done “is only hard if you do it”—to which I love to reply, “Well, I read every word, and it changed me forever.” And the reading continues. The pages that follow represent the ongoing contribution that Newport still makes to the things that matter to our maritime nation and our world.

The year I spent in Newport did change me forever, and I hope the previous paragraphs have answered the question, “Why Newport?”

A handwritten signature in black ink, reading "John N. Christenson". The signature is written in a cursive, flowing style with a long horizontal stroke at the end.

JOHN N. CHRISTENSON

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

Professor Rubel is Dean of Naval Warfare Studies at the Naval War College. Before retiring from the U.S. Navy in the grade of captain, he was an aviator, participating in operations connected with the 1973 Yom Kippur War, the 1980 Iranian hostage crisis, the TWA Flight 847 crisis, and DESERT SHIELD. He commanded Strike Fighter Squadron 131 and served as the inspector general of U.S. Southern Command. He attended the Spanish Naval War College and the U.S. Naval War College, where he served on the faculty and as chairman of the War Gaming Department, in the Center for Naval Warfare Studies, before his present appointment. He has a BS degree from the University of Illinois, an MS in management from Salve Regina University in Newport, Rhode Island, and an MA in national security and strategic studies from the Naval War College (1986).

THE FUTURE OF AIRCRAFT CARRIERS

Robert C. Rubel

The aircraft carrier has been around in various forms since the First World War. Its emergence as the key denominator of naval power is legendary, and its continuing prestige in this role is even yet spawning building programs among established and growing navies. The aircraft carrier is the largest and most complex of all warships and in most cases the most expensive. In addition to the cost of the ship itself, that of the embarked air wing must be considered, not to mention the extensive logistics and training infrastructure needed to keep carriers operating and useful. A recent Naval Postgraduate School study has shown that approximately 46 percent of the Navy's personnel—officer, enlisted, and civilian—are assigned to positions either on or supporting its carriers.¹ For these and other reasons, there has been almost constant debate over the past ninety years within navies, between navies and air forces, and within governments over the advisability of investing in carriers. As the prospects for major cutbacks in defense spending loom, the debate will again heat up. Both proponents and opponents of carriers have refined their arguments over the past nine decades, but these are now starting to wear thin as the geopolitical environment and the technology of war have changed. Also, the arguments both for and against have tended toward the theological, with many tacit or unacknowledged assumptions underpinning the argumentative maneuvers. In an attempt to improve the quality of the coming debates, this article will examine the prospects for future utility of the ship type, including that of the embarked air wing, from a different angle. Instead of making a holistic judgment on the future utility of aircraft carriers, it will focus on the ways they have been, are, or could be used.

Within the bounds of security classification, it will also attempt to sort out the risk factors that attend their use. Others may then proceed to decide whether a continued investment in them is justified.

In order even to begin to analyze the future of aircraft carriers, a definition of the type is warranted. It is easy to accept that the imposing, nuclear-powered *Nimitz*-class carriers (CVNs) of the U.S. Navy are truly aircraft carriers, operating as they do robust mini-air forces of sixty to eighty tactical jets and support aircraft. Similarly, the French *Charles de Gaulle* and the Brazilian *São Paulo* are clearly aircraft carriers, if significantly smaller. The former Russian *Varyag*, now being refurbished by the Chinese, is also clearly an aircraft carrier, meant as it is to handle fixed-wing jets as well as helicopters. There are a number of similar ships around the world that are meant to support operations of short-takeoff/vertical-landing (STOVL) jets. However, the definition becomes less clear in the case of ships that are capable of supporting STOVL jets but whose stated purpose is either amphibious assault (the U.S. *Wasp* and *Tarawa* classes, for example) or antisubmarine warfare (the Japanese *Hyuga*-class “destroyers,” which have ship-long flight decks).² Principally, though these latter ships are designed to operate helicopters, they could have—and they have in fact—operated STOVLs. However, despite their ability to operate STOVL jets, these ships cannot be considered true aircraft carriers, since, as will be seen, they cannot adequately perform the doctrinal roles that aircraft carriers have historically fulfilled.

A SHORT DOCTRINAL HISTORY OF AIRCRAFT CARRIERS

Most histories of aircraft carriers focus on the progressive development of their physical characteristics and their performance in battle. However, in order to understand the issues that will influence their future, it is necessary to understand how the doctrinal roles of aircraft carriers have evolved. Since navies in general and the U.S. Navy in particular do not publish doctrine along these lines, it is necessary to infer it from the way the carriers have been used.

The normal way to discuss doctrinal roles of aircraft carriers is in terms of “sea control” and “power projection”—this terminology being congruent with the way the U.S. Navy describes its strategic missions. However, these terms are too broad and indiscriminate to allow clear analysis of the strengths and weaknesses of aircraft carriers. Power projection could mean either one-time strikes or sustained, “level of effort” operations to prosecute air campaigns against enemy infrastructure or in support of ground forces with interdiction and close air support. However, it makes a critical difference whether operations against land require a carrier to constrain its movements or not. Thus terms like “power

projection” and “strike,” and even “sea control,” are too broad to be useful in this discussion. For the purpose of this article, they are subsumed, as appropriate, within the roles described below.

The six doctrinal roles aircraft carriers have performed are presented below in roughly the order they were adopted.

Eyes of the Fleet. In their earliest instantiation in the U.S. Navy, aircraft carriers were conceived of as platforms whose aircraft would be used to locate the enemy fleet before it broke the horizon so that one’s own battle line could maneuver to engage at best advantage. Once the battle lines were engaged within visual range, aircraft would spot the fall of shot, adjusting the fire of major-caliber guns more quickly and accurately and at longer ranges than could observers high in the battleships’ masts. In this role, the carrier would operate with its own fleet’s battle line interposed between it and the enemy; without substantial defense of its own, the carrier could not be subjected to risk. Its air wing would consist almost solely of scout planes, which was appropriate in view of the limited performance of the aircraft of the day. However, it did not take long to realize that the advantages of aircraft scouting and shot spotting were so great that an opposing fleet would obtain its own carriers and embark on them fighters to shoot down scouts. Thus carriers quickly became homes to fighter aircraft that could fight for and win air superiority over the enemy fleet so that the scouts could do their mission.

Cavalry. In some of the fleet battle experiments in the 1930s and throughout most of World War II, the carriers took on the mission of conducting hit-and-run raids, the most famous of which was the Doolittle raid on Tokyo in early 1942.³ Operating in a manner not unlike the cavalry of Confederate general Nathan Bedford Forrest in the Civil War, the fast carriers depended on speed and stealth to sneak into waters in which the Japanese fleet held sway in order to attack bases and otherwise disrupt enemy logistical operations. In this role, the carriers could not risk getting into a decisive engagement, any more than a Civil War cavalry brigade could risk becoming snared in a dismounted fight with infantry.

Capital Ship. A “capital ship,” rightly understood, is a ship type that can defeat any other ship type. In the days of sail and dreadnoughts, it was the type of ship having the most and biggest guns. It is the ship type around which fleet doctrine and fleet architecture are established. The question is what kind of killing weapon the capital ship supports. In the early 1920s, as naval aviation was gestating, it became clear from war games at the U.S. Naval War College that if aircraft performance kept increasing, a coordinated attack by carrier aircraft with

armor-piercing bombs could sink a battleship before it ever got in range of one's own fleet. This notion was validated by the Japanese attack on Pearl Harbor and by the sinking of two British dreadnoughts by Japanese land-based aircraft. Subsequently, the great carrier battles of the Pacific determined the outcome of the war as much as great sailing-ship battles had those of earlier conflicts. Used as capital ships, the acceptable risk profile for aircraft carriers changes substantially—they become consumables, just like any other capital ship. However, in subject-

Even if it does not build another carrier after USS Ford, the United States will have nuclear carriers around for at least the next fifty years.

ing themselves to risk they must be able to inflict such harm on the main enemy force that it is not capable of further contesting “command of the sea” at an acceptable

level of risk to itself. Since the battle of Leyte Gulf, carriers have not been used in this role.

When nations commit their capital ships to a battle, it is generally for command of the sea, having achieved which, by virtue of defeating and seriously weakening the opponent's main fleet, a force may use the seas for its own strategic purposes. Fighting for sea control in specific instances may still be necessary. The carrier battles of World War II were generally aimed at securing command of the sea; however, the carriers still had to function as local sea-control platforms, a role in which they were very effective. However, it should be noted that as the American fleet approached the Japanese home islands, threats from land-based defenses required ever greater concentrations of carriers to secure sufficient control of the sea to allow amphibious operations to take place.

Nuclear-Strike Platform. The advent of nuclear weapons caused significant turmoil within the U.S. military establishment. The newly independent Air Force argued that its intercontinental nuclear bombers made aircraft carriers obsolete. The Navy, for its part, sought to defend the carrier force by making it a part of the nation's nuclear war plans and deterrent posture. As a nuclear delivery platform, the carrier would operate a bit as it did in the cavalry role, depending on speed and stealth to reach a point at which it could launch its nuclear bombers. After that launch, it would attempt to survive as best it could, either to get back to the United States or to be ready for additional tasking. The point is that in this role, just as in the cavalry and capital-ship roles, its mode of operation was to deliver a pulse of power and then scoot—standing and fighting was a recipe for destruction. Keeping risk acceptable was a function of the ability to stay unlocated and untargeted. The ballistic-missile nuclear submarine replaced the aircraft carrier in this role because the risk of it being found before it could fire its missiles was all but eliminated.

Airfield at Sea. Three traditional rules govern how a fleet should be employed:

1. Keep the fleet concentrated.
2. Do not tie a mobile fleet to a piece of ground.
3. Do not become decisively engaged with land forces unless decisively superior.

These rules can be violated, but the conditions have to be right—namely, there can be no significant opposition at sea. In order to support a ground fight ashore or conduct a continuous air campaign (power projection in the “level of effort” mode), aircraft carriers have to break at least rules 2 and 3, and in order to maintain a carrier on station for months or years, as was done in Vietnam, they must break rule 1. The requirement to feed aircraft continuously into a land fight essentially robs the aircraft carrier of its maneuverability, due to the relatively short range of carrier-borne tactical jets. During the wars in Korea and Vietnam and all operations since the fall of the Soviet Union, in the almost complete absence of at-sea opposition, U.S. aircraft carriers have operated exclusively in this role. The one exception was the U.S.-Soviet face-down in the eastern Mediterranean in conjunction with the 1973 Yom Kippur War between Israel and an assortment of Arab powers. In that crisis, three American carrier groups were positioned to be ready to assist the Israelis with land strikes. Meanwhile, the numerically superior Soviet Fifth Eskadra positioned itself to sink or disable the carriers.⁴ This represented a fundamental paradox in doctrinal roles for the carriers, and they faced tactical defeat had hostilities broken out, having insufficient sea room to maneuver so as to adopt a capital-ship posture. The key to using carriers in the “airfield at sea” role is to take explicit account of their inability to tolerate much risk at all.

Geopolitical Chess Piece. It has been the habit of American presidents and their advisers in the gamut of crises since World War II to move aircraft carriers around to demonstrate American concern, resolve, or outright anger. The particular benefits of using carriers in this way are that they operate on the high seas, where permission to move is not needed from other countries, and that because they carry their own fuel, weapons, and maintenance, they are ready on arrival at the scene of a crisis to deliver power. Moreover, since modern U.S. carriers are large and imposing, and have been unchallenged on the seas, they “show the flag” to great effect—they provide excellent “visuals.” Here too, however, precisely because they need to be visible in this role, and because they normally must be ready to function also as an airfield at sea, carriers cannot tolerate any significant risk. This was the difficulty in the Yom Kippur War crisis mentioned previously. The Navy and the nation are so used to operating carriers

with impunity as airfields at sea that as new sea-denial threats emerge (as did the Soviet navy) the potential for a role/risk disconnect is magnified.

Another definition of “capital ship,” though not unrelated to its operational definition, is that of a ship type whose power, expense, and prestige are so great that it becomes the yardstick for measuring a nation’s naval power. This definition is essentially a different slant on the “geopolitical chess piece” role. This view arose especially during the age of dreadnoughts, when the Washington Treaty attempted to rein in naval arms races by formally limiting the tonnage of battleships.⁵ Aircraft carriers became the objects of this type of thinking, and this is one of the reasons that a number of emerging navies, as well as established navies under pressure from shrinking budgets, are electing to devote higher proportions of their resources to building them.

However, for the United States, this thinking could become a geopolitical trap. The *Nimitz*- and *Ford*-class carriers are built at only one yard, in Newport News, Virginia. Currently, they are being built at the rate of one every five years, in order to maintain the Navy’s inventory of them at eleven. One of these carriers, including its air wing, costs about as much as ten nuclear submarines or almost twenty guided-missile destroyers. When debates arise about how many carriers this nation really needs, one of the arguments employed to oppose reductions is that if it does not keep building these ships, it will lose the workforce needed to construct them. Not having the capability to construct a large nuclear-powered carrier would, some argue, put the nation at strategic risk. However, this line of reasoning seems to be based more on the general notion that carriers represent national strength than on any specific strategic or operational necessity. Even if it does not build another carrier after USS *Ford*, the United States will have nuclear carriers around for at least the next fifty years. It does not seem reasonable to presume that the strategic future of the United States hinges on a few thousand shipyard workers in Virginia.

OTHER ROLES FOR AVIATION SHIPS

In World War II, the majority of the aircraft carriers the United States built were termed “escort carriers.” These small ships could carry only a few aircraft and were used mostly for antisubmarine (ASW) work or for air support of amphibious operations. Because of their limited capacity and slow speed, they could not be adequately used in any of the six doctrinal roles outlined above. In the 1950s, a number of World War II fast carriers of the *Essex* class were converted to anti-submarine carriers. These ships carried mostly sub-hunting aircraft, with a few jets for self-defense. Other *Essexes* were turned into helicopter carriers, for helo-borne assaults over the beach. Once these ships had passed their useful service lives, vessels designed from the keel up as helicopter carriers were put into

service; progressively newer designs have entered the fleet ever since. Some new versions of the through-deck aviation ship now complicate the matter of designation. The recently commissioned Spanish “strategic projection ship” *Juan Carlos* would seem to blur doctrinal boundaries, because it features a “ski jump” for operating STOVL jets. Nevertheless, the ship’s design focuses on amphibious operations more than any of the doctrinal roles mentioned above.

Aside from ship designs or conversions with specific mission focuses of ASW or amphibious assault, regular aircraft carriers, by virtue of their inherent flexibility, have been pressed into service in a number of collateral missions in recent years, most prominently disaster relief and humanitarian assistance. In this mode they mostly operate helicopters, although other aspects of their capability come into play, such as communications, freshwater distillation, and medical capacity. It is worthwhile noting at this point that the impetus behind the forthcoming new Chinese aircraft carrier may have been more frustration at inability to participate in the 2004 tsunami relief effort in Indonesia (where the *Nimitz*-class carrier USS *Abraham Lincoln* played a key part) than a desire to face down American carriers.

In considering the future of aircraft carriers, we should understand that aviation-capable ships engaging in specialized or collateral missions will always be needed to some extent. Whether ships used for these purposes look like aircraft carriers or not, the calculus for the advisability of building them will be different from that which governs true aircraft carriers.

THE IMPACT OF FUTURE TECHNOLOGY

Armed with an understanding of their doctrinal roles, we can proceed to assess how current and future weapons and systems technologies might affect the utility of aircraft carriers. It is a matter not simply of whether the carrier can be defended or not but of whether it can fulfill the doctrinal role the nation requires of it.

Antiship Ballistic Missiles. Professional journals have been full of articles analyzing the potential impact of the recently developed Chinese DF-21F intermediate-range ballistic missile, fitted with a maneuvering reentry head that has an anti-ship seeker built into it. The purpose of this missile is thought to be not so much to sink the carrier as to achieve a “mission kill,” causing fires and damage to the air wing and topside structures. If the missile system is perceived to be effective at this, then its existence and the presence of its mobile transporter/erector/launchers would constitute a deterrent to U.S. interference in an invasion of Taiwan or in other Chinese initiatives within about a thousand miles of China’s coast. Assuming that a terminal, hit-to-kill defense is not feasible against it, this

missile would seem to threaten seriously the future utility of the aircraft carrier anywhere within its range. On the other hand, having a seeker, it could be vulnerable to decoying. If this is the case, the probabilities for missile success are reduced. This leads us to think in terms of what role the carrier might be playing as it sails into DF-21 threat range. If the carrier is functioning as cavalry, a capital ship, or a nuclear-strike platform—that is, delivering a pulse of power and then escaping—the risk tolerance inherent in those roles might be compatible with the reduced but still significant threat posed by the DF-21. If, however, the carrier is being used as either an airfield at sea or a geopolitical chess piece, its mobility sacrificed and the risk incurred likely would be incommensurate with the role.

Submarines, Antiship Cruise Missiles, and Other Access-Denial Systems. The effect of these systems is similar to that of the DF-21. Current and anticipated defensive systems for the carrier are likely to be able to handle small numbers of these weapons. However, when larger numbers are employed against the carrier—and this will probably only happen in littoral waters—the likelihood of “leakers” increases. Once again, depending on the role the carrier is playing, the risk may be tolerable, especially if the carrier is free to maneuver. If a combination of geography and doctrinal role constrains its mobility and maneuverability, the risk climbs quickly.

Some have advocated, on these grounds, that smaller carriers ought to be built in larger numbers to achieve “tactical stability,” the condition in which the defensive capabilities of the ship and its contributions to the overall offensive power of the force are in balance. Games at the Naval War College have cast some doubt on this logic, quite apart from considerations of the relative efficiency of large and small flight decks. It appears that doctrinal role is a governing factor. In general, it seems that if mobility is compromised by doctrinal role, the net risk to the force is the same, whether the force is composed of one or two large, or four to six small, carriers. Nothing changes, except in the inefficiencies and added cost of multiple small carriers.

Improved Air-Defense Systems. In one important sense, the viability of tactical airpower is the essence of the future utility of aircraft carriers. New types of surface-to-air missile systems have made operation of nonstealthy aircraft within their range excessively risky. Also, new generations of fighters, notably the Su-27, its derivatives, and even newer designs from Russia and China, have eroded the technical advantages traditionally enjoyed by American aircraft. New types of air-to-air missiles, fighter radars, and sophisticated crew/system interfaces have similarly lessened the advantage our superior training has conferred. All of this calls into question the utility of aircraft carriers as strike (cavalry) platforms or airfields at sea against a well armed opponent. The same trend holds in the arena of war at

sea, at least with respect to surface-to-air missiles, and may compromise the viability of the aircraft carrier in the capital-ship role. To fight modern, high-tech air defenses, sea or land based, missiles may be the only viable answer, although very stealthy unmanned aircraft operating from aircraft carriers may also be viable, especially if equipped with short-range attack missiles.

Short-Takeoff/Vertical-Landing Jets. The advent of the F-35B STOVL Joint Strike Fighter (JSF) promises to enhance significantly the overall capabilities of a ski jump–equipped carrier. The question is whether this increase in capability would both allow such smaller aviation-capable ships to function as regular aircraft carriers and change the calculus of the various doctrinal roles. It appears that the F-35B will offer increases in range and load-carrying capability over the AV-8 Harrier, the British-developed “jump jet” that has served a number of navies and the U.S. Marines for decades. However, these increases do not come close to bringing the F-35B into the same class as conventional-takeoff-and-landing carrier aircraft, and the range and endurance of even these are short enough to require the carrier to get in rather close to the fight. The principal advantages of the F-35B will be its increased connectivity, sensing, and stealth—all good things, but not sufficient to change the logic inherent in the doctrinal roles. Moreover, the small number of aircraft that can be carried on the ski-jump carriers limits their ability to perform some of the doctrinal roles. They will likely remain useful support ships for amphibious and antisubmarine operations, especially operating helicopters, and will constitute prestige platforms for small navies to show the flag.

Unmanned Aircraft (UAVs). What could potentially change the calculus of doctrinal roles is the unmanned aircraft. For a given “deck spot” (the square footage an aircraft takes up parked on a carrier’s flight or hangar deck), unmanned aircraft offer double or triple the range and endurance of manned aircraft. Moreover, without the need to accommodate a human, their form can be considerably more stealthy, and their operations do not need to take into account crew-rest factors, at least to the extent that they do in manned aircraft. What this may offer in terms of doctrinal roles is a return of the carrier as the eyes of the fleet, operating a wing of long-range UAVs for reconnaissance and perhaps line-of-sight communications relay. A carrier could then remain outside most threat “envelopes,” with much more scope for maneuvering to keep from being targeted. The longer range of UAVs (including unmanned combat aerial vehicles, orUCAVs) would also allow the carrier to function as an airfield at sea with less risk. In terms of command and control, however, UAVs that require a constant “man in the loop” would not offer as much flexibility to the carrier as those with higher degrees of autonomy.

FUTURE DOCTRINAL ROLES

The traditional rationale for aircraft carriers is that they provide tactical airpower independent of land bases and that—no small thing—they are ready to do so on arrival. While all of this is true and constitutes concrete benefits of having aircraft carriers, the real arguments for and against them reside in their doctrinal roles. Which of the traditional roles are obsolete? Do the remaining ones justify continuing investment in aircraft carriers? Are there emerging or potential roles for carriers that would justify building more?

As has been mentioned, the development of unmanned aircraft may revitalize the primordial role of aircraft carriers as eyes of the fleet. Operating a wing of various kinds of UAVs, the carriers could conduct what is known as C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance) or establish a grid of airborne relay nodes that would support a fleet battle network if satellites were destroyed or intense jamming occurred. Because of the vulnerability of land bases to ballistic missiles, and at increasing distances from potential war zones, the arguments that the Navy has used in the realm of tactical airpower to justify carriers also serve for carrier-based C4ISR. As with tactical airpower, regardless of how long aircraft range is and how much in-flight refueling is available, if land bases are distant from the area of operations, it takes far more aircraft to generate a continuous presence in the battle space and operations are far less responsive and flexible than they would be if based from a nearby carrier. A local source of UAVs, if land bases are far away, is invaluable operationally and strategically.

The cavalry role for carriers, practiced as late as the 1986 EL DORADO CANYON strikes on Libya, has become a victim of the missile age. In the most recent round of strikes on Libya, Tomahawk cruise missiles were used. Now possessing guided-missile submarines that can carry over a hundred Tomahawks, the Navy does not have to accept risks of running a carrier surreptitiously into hostile waters to carry out a strike or subjecting manned tactical aircraft to robust air defenses. In a similar manner, the introduction of the ballistic-missile submarine made the carrier nuclear-strike role obsolete. Whatever the trade-offs between tactical aircraft, manned or unmanned, and missiles, the lethality of modern air defenses and the difficulty of moving naval forces undetected militate strongly against using carriers in this role. It does not appear that a carrier operating UCAVs would offer any significant advantage in the cavalry role over a submarine carrying cruise missiles.

As for the capital-ship role, in the missile age the whole concept may be obsolete. There has been a constant ebb and flow of technical and tactical superiority of the offense and defense at sea, but mostly the offense now dominates—modern antiship missiles are very fast and hard to shoot down. Certainly, they

are dependent on the successful functioning of their seeker heads; these can be decoyed or blinded, and the prospect of close-in directed-energy defenses may tilt the balance in favor of the defense.⁶ However, a successful defense of the carrier does no good if the carrier cannot in turn succeed in attacking enemy naval forces. Improvements in air-defense technology by Russia and China and the prospects for their proliferation will make the tactical offense progressively more difficult and risky. It should be recalled that in the great carrier battles of World War II, the aircraft losses were brutal, on the order of 70 percent for the

Used as capital ships, the acceptable risk profile for aircraft carriers changes substantially—they become consumables.

Japanese and 28 percent for the Americans.⁷ In the late 1970s, as naval aviation developed aircraft-centric antiship tactics in the aftermath of the wake-up call of the

1973 episode, it became clear that a single strike on a single formation of Soviet ships might cost a quarter of an air wing.⁸ Whereas we were able to replace such losses in 1942–45, no such thing would be possible today, given the complexity and expense of modern jets.

The upshot is that the seas, at least certain areas of them, are becoming a no-man's-land for surface ships. Whether or not submarines ought to be considered capital ships is beside the point; the carrier will likely not be one. On the other hand, for scenarios short of high-end missile combat, there is no ship more able to exercise general control of a large ocean area than an aircraft carrier, fanning out its air wing to scout and identify surface vessels. Carrier aircraft probably are the best counter, for example, to the small-boat swarms that some countries, like Iran, have adopted, assuming the carrier can operate out of range of the densest littoral defenses.

Currently, the “airfield at sea” is almost the exclusive role for the large aircraft carrier, essentially fused with that of the “geopolitical chess piece.” This (combined) role will continue to be highly useful into the future, so long as the intensity of defenses stays below a certain threshold. If either high-tech air or naval defenses proliferate, the number of areas and scenarios in which carriers can function in this role will decline. If this happens, the value of the carrier as a geopolitical chess piece will erode proportionately. This is a key uncertainty about the future and a central difficulty in assessing the future value of aircraft carriers. If a ground fight occurs close to the coast and a carrier could move in with impunity to provide air support, perhaps through-deck amphibious ships flying STOVL aircraft would suffice. But their capacity to generate sorties and the number of targets they can strike are nowhere near what is possible for large carriers with catapults and arresting wires; moreover, if deep penetration is needed, as has been the case in Afghanistan, nothing less than a large carrier operating

conventional aircraft will do. Because of miniaturization, advanced electronics, and advances in missile, mine, torpedo, and submarine design, it is becoming easier to hide naval defenses. A particular case in point is the Club-K cruise missile marketed by the Russian company Novator. Four missiles could be housed in an innocuous-looking shipping container, hidden in plain sight and ready to be fired from trucks, railroad cars, or commercial ships.⁹ Similar advances in covertness can be expected in other weapons types. The implication is that it will be difficult or impossible to “sanitize” an area where a carrier can function as an airfield at sea.

What new doctrinal roles might emerge for the aircraft carrier? One that comes to mind is a variation on “eyes of the fleet.” If the struggle for sea control migrates to below the surface, an aircraft carrier might be highly useful as a submarine-support vessel. The carrier would not only provide C4ISR services for submarines but disrupt air and surface ASW efforts by the enemy, perhaps even conduct ASW itself. Especially if operating long-range UAVs, the carrier might be able to maneuver more widely and thereby perform this role at an acceptable degree of risk—or better put, at a level of risk commensurate with the doctrinal role.

Another potential supporting role for the carrier is as a mother ship for the littoral combat ship (LCS). The LCS has limited sea-keeping capability and must have a source of logistical support relatively close by, especially if it is to operate at high speed and high combat tempo. If a squadron of LCSs must enter a high-threat area where there are no bases and where regular logistical ships would be at excessive risk, a nuclear carrier might be the answer. Having considerable fuel and ammunition-storage capacity, high sustained speeds, and self-defense ability (with its escorts), a carrier could range around undetected or untargeted until a covert rendezvous with one or more LCSs could be arranged. While a logistical support system that employs submarines might be the ideal, this arrangement may be the most feasible in the short term. In conjunction with this role, the carrier, operating both manned and unmanned aircraft, could provide tactical scouting for littoral combat vessels as well as a secure and robust local battle network.

A NEW CALCULUS

This assessment of doctrinal roles is revealing. Certain roles for the carrier are already obsolete, and others are eroding. A few new roles are emerging, but these place the carrier in a new position in relation to the rest of the fleet. Whereas the carrier has been the central pivot of the fleet since World War II, the arbiter and yardstick of naval supremacy and the keystone of fleet architecture, it will gradually become a more narrowly useful role player. There will be, for the foreseeable

future, situations that demand an aircraft carrier, so it can be said with confidence that the ship type will be needed. However, the constriction in its roles and in the locations and circumstances in which it could be appropriately used (i.e., where doctrinal role and risk intersect) indicates that a new calculus is needed to determine how many the U.S. Navy really needs.

This article has dealt only obliquely with the issue of small versus large carriers. The author has served on both types and is convinced that nonnuclear ships under about eighty thousand tons sacrifice too much total combat capability to be worthwhile investments as aircraft carriers. On the other hand, aviation ships that can support operationally significant numbers of helicopters and STOVL jets will be useful in amphibious and antisubmarine operations as well as a host of others, including disaster relief, noncombatant evacuation, and various types of humanitarian assistance.

An embedded implication in all this for amphibious operations should be noted. If things are too hot to allow a carrier to operate as an airfield at sea, they are too hot for an amphibious assault. If the number of times and places a carrier can operate as an airfield at sea decrease, they decrease as well for amphibious operations. Any assumptions about the ability to “roll back” enemy defenses must be severely tempered by the likelihood that new technologies will produce weapons that can be hidden from preemptive strikes—like the improvised explosive devices and car bombs that have been such intractable problems in Afghanistan and Iraq. There is no question that some capacity for amphibious operations from the sea will be needed in the future, but a rigorous and objective analysis of the number of times and places in which they would be possible is warranted, and as with carriers, a new calculus for sizing that capability is needed.

Another key consideration that would govern carrier force structure is deployment posture. Since World War II, the United States has maintained a forward-deployed posture for the Navy, at times severely stressing its capacity. The Navy has found that for each carrier it wants to keep forward, it needs two additional ones to account for crew deployment tempo, training, and maintenance requirements. In theory, then, any carrier force level ought to be divisible by three. However, an additional carrier is needed to compensate for the extended yard periods required for nuclear refueling. That adds up to ten CVNs, but Congress has legislated that the Navy maintain eleven, the “extra” carrier being available for surge operations. There is currently a carrier homeported forward in Japan, which provides additional scheduling flexibility. In practice, however, the demand for carriers by the combatant commanders, coupled with the Navy’s Fleet Response Plan deployment scheme (which seeks to maximize the number of carriers available for surge operations), makes even eleven carriers seem insufficient. But the increasing expense of tactical jets and delays in their development,

as exemplified by the JSF, means that there will not be enough aircraft to populate eleven flight decks adequately, let alone a higher number.

In the future, as the doctrinal roles of the aircraft carrier change and become more narrowly defined, the number of carriers needed forward at any time may decline. Using the reverse of the standard Navy calculus, for every carrier not needed to be stationed forward, the total inventory could, in theory, be reduced

Both proponents and opponents of carriers have refined their arguments over the past nine decades, but these are now starting to wear thin.

by three. The savings would be enormous, and, if this analysis of doctrinal roles is correct, there would be no reduction in the overall war-fighting effectiveness of the Navy, assuming the money

saved could be reinvested, at least in part, in missiles, submarines, and surface ships. On one hand, a reduction of one carrier on station would take the Navy to a force of eight CVNs. On the other hand, if new doctrinal roles do materialize, a higher number of carriers may be warranted. USS *Enterprise*, the first nuclear carrier, commissioned fifty years ago, is on a forward deployment as this article is written. There is no reason to think that the *Nimitz*-class carriers will have shorter service lives, and the newer ones may last even longer. There is at least reason to think that a number of these ships will outlive the utility of any given type of embarked aircraft. This makes it difficult to assess the return on investment of additional new construction beyond *Ford* or its follow-on ship. If the possible doctrinal roles for the aircraft carrier become too risky or are significantly constrained in terms of where and when they might be feasible, the value of so expensive a platform will be called into question.

The purpose of this article has been to explore the future of the aircraft carrier using the framework of doctrinal roles. It appears that despite changing technology there will be a continuing need for the ship type, although the obsolescence of some doctrinal roles and the anticipated constriction of its use as an airfield at sea may limit the numbers that are justified. New doctrinal roles may emerge, depending on the flexibility of mind shown by the naval aviation community. However, even if these new roles do pan out, they may not justify significantly greater numbers of ships. Moreover, the carrier's day as the supreme arbiter of naval power and the determinant of fleet architecture may be coming to a close. Its continuing utility will increasingly be in support roles. Once this shift occurs, it may actually be easier to arrive at an objective determination of numbers required, as much of the emotional and political baggage surrounding them will have been shed.

If we mark the emergence of the aircraft carrier as sovereign of the seas at the British carrier strike on the Italian fleet at Taranto in 1940, we see that the carrier has enjoyed a period of dominance of over seventy years, substantially longer than that of the dreadnought. To paraphrase Yogi Berra, the future of the aircraft carrier isn't what it used to be, but it is fairly clear the type will be around more than long enough to celebrate a century and a half of service.

NOTES

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1. Juan Carrasco [Lt., USN], "A Manpower Comparison of Three U.S. Navies: The Current Fleet, a Projected 313 Ship Fleet, and a More Distributed Bimodal Alternative" (master's thesis, U.S. Naval Postgraduate School, Monterey, Calif., 2009), p. xvii, available at edocs.nps.edu/.
2. See Vice Adm. Yoji Koda, "A New Carrier Race? Strategy, Force Planning, and JS Hyuga," *Naval War College Review* 64, no. 3 (Summer 2011), pp. 31–60.
3. For the interwar exercises see Albert A. Nofi, *To Train the Fleet for War: The U.S. Navy Fleet Problems, 1923–1940* (Newport, R.I.: Naval War College Press, 2010).
4. See Lyle Goldstein and Yuri Zhukov, "A Tale of Two Fleets: A Russian Perspective on the 1973 Naval Standoff in the Mediterranean," *Naval War College Review* 57, no 2 (Spring 2004), pp. 27–63.
5. Aircraft carrier tonnage too was limited by the treaty, indicating that the carrier had already become identified as a type of capital ship.
6. Obscurants might do so as well, as argued by Thomas J. Culora, "The Strategic Implications of Obscurants: History and the Future," *Naval War College Review* 63, no. 3 (Summer 2010), pp. 73–84.
7. Wayne Hughes, *Fleet Tactics and Coastal Combat* (Annapolis, Md.: Naval Institute Press, 2000), pp. 102–106.
8. The author was a weapons and tactics officer in the A-7 community at that time; this assertion is based on personal experience in both planning and conducting exercise strikes.
9. It should be noted that Russian officials have denied that these missiles could be launched from a shipping container. See "Club-K Container Missile System," *Kontsern Morinformistema-AGAT*, www.concern-agat.ru/, for the company's position. It is interesting, however, that the company has used in its advertisements web videos of the missile being fired from shipping containers.



SEA BASING

Concept, Issues, and Recommendations

Sam J. Tangredi

Sea basing is a strategic concept that has been defined in a variety of often contradictory ways. It is officially a joint concept, but it is widely perceived as a parochial tool to justify budget increases for the Department of the Navy. As an activity, sea basing has been described as both traditional and transformational.¹ Many proponents consider it a specific set of hardware—future platforms, such as the mobile offshore base or additional ships for the Maritime Prepositioning Force (MPF), like the proposed Mobile Landing Platform, which would allow for selective off-load of prepositioned material while still at sea.² A misperceived *exclusive* association with amphibious warfare, not currently a priority in the Pentagon, has largely driven sea basing out of policy discussions at the Office of the Secretary of Defense (OSD) level. Ironically, sea basing came to prominence in the past decade under a Chief of Naval Operations (CNO) determined to cut capabilities from the amphibious fleet so as to fund future surface combatants.³

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From 2002 to 2008, it appeared with great frequency and was discussed with great passion in many professional defense journals and reports. But it is not once mentioned in the Quadrennial Defense Review (QDR) 2010 report.

As a grand concept, it appears becalmed, if still visible out on the horizon. However, as a practical reality, U.S. forces engage in sea basing today—and every day. The U.S. Marine Corps—along with a sometimes supportive, sometimes reluctant U.S. Navy—is projected to continue to make incremental improvements.

WHAT IS SEA BASING ALL ABOUT?

There are both broad and narrow views of what sea basing is about. In its broad vision, “sea basing” refers to the capability to use the sea in the same way that U.S. forces use overseas regional bases, for deterrence, alliance support, cooperative security, power projection, and other forward operations.⁴ This broad vision stems from conceptual discussions that began within the Navy in the 1990s. It is also reflected in the introductory sections of the more recent Marine Corps/Navy/Army *Concept for Employment for Current Seabasing Capabilities*, released on 19 May 2010.

From that perspective, sea basing is decidedly not a new concept. U.S. forces have been sea basing since the Navy became a global force at the turn of the last century—and arguably even before. “The World War II ‘fleet train’ [auxiliaries, oilers, and supply ships that replenished the combatant ships at sea] that provided the U.S. battle fleet with such unprecedented range and freedom of action” could be considered a sea base, since it allowed the fleet to resupply at sea or in isolated anchorages.⁵ Likewise, it is easily observed that aircraft carriers are floating air bases that can be positioned and repositioned on a global basis. Surface ships are sea bases for strike systems (Tomahawk land-attack cruise missiles), as well as for theater ballistic-missile defense sensors and weapons. Submarines are also—depending on tactical employment—strike sea bases. Amphibious warships constitute the components of a base for forces (primarily Marine Corps) that can be rapidly inserted onto land by both surface and air. Combining with the Navy “grey hulls” of the amphibious fleet are the Military Sealift Command’s civilian-crewed MPF ships.⁶ The Army too operates prepositioning ships.

However, a narrower view, focused on improvements to amphibious and MPF ship capabilities—as exemplified in the report of the Defense Science Board’s 2003 Task Force on sea basing—currently predominates in operational discussions of joint capabilities. This narrower view is used by the Marine Corps when justifying incremental improvements in naval expeditionary platforms.

As stated earlier, sea basing has never had one generally accepted definition. We see the term rendered as “seabasing,” “sea basing,” “Sea Basing,” “Enhanced Networked Sea Basing,” “seabased,” “sea base,” and other variants. Each connotes a specific nuance designed to distinguish it from the others. It does have an official Department of Defense (DoD) definition, but one that many authorities agree is not complete: “the deployment, assembly, command projection, reconstitution, and reemployment of joint power from the sea without reliance on land bases within the operational area.” The entry adds, “See also amphibious operations (JP 3-02).”⁷

This definition is a great improvement over the previous DoD dictionary version (which stated that sea basing was a technique of amphibious operations), but the note betrays the lingering, near-exclusive association with amphibious warfare. This is one reason why significant discussions of sea basing have not appeared in the defense literature in the past two years. In his tenure as Secretary of Defense, Robert M. Gates—kept in his position primarily to prevail in the “wars we are in”—appeared to discount the likelihood of major amphibious operation in the coming years. As noted, the Quadrennial Defense Review 2010 final report and the report of the QDR Independent Review panel never mention sea basing. The QDR 2010 report does include a Mobile Landing Platform (MLP) in its listing of desired naval capabilities.⁸ But the MLP, of which the first is to be funded in the fiscal year 2011 defense budget, is designed to facilitate the movement of cargo by “connecting” existing maritime prepositioning ships and does not in itself indicate a strong commitment to sea basing.

If, however, sea basing is defined as using the sea in the same way U.S. forces use regional land bases, clearly there can be degrees of sea basing, in the same way that there are different types of land bases—from austere to well developed infrastructures. Within this range, sea bases currently exist and have existed; a naval task force—depending on its configuration—can provide joint C4ISR,* rapid strike capabilities using stealth or nonstealth assets, special operations forces (SOF) insertion, ballistic missile defense (BMD), control of regional airspace, search and rescue, emergency medical facilities, space for joint task force command elements, and a means of positioning of infantry, light armor, and artillery ashore beyond the beach.⁹ This capability is comparable to that of a regional land base, relative to the size of personnel assigned. Of course, it can move, thereby making enemy targeting more difficult. Its elements can also be widely dispersed throughout a regional sea, an advantage that can be duplicated ashore only by a network of land bases. Depending on operational requirements, sea-basing platforms may not have to operate in proximity of one another to provide mutual support.

However, physical limits prevent a current sea base from landing heavy-lift aircraft or storing “iron mountains” of supplies. Nor can it land significant amounts of heavy armor ashore. Nor can it make an Army or Air Force general feel fully in command of things—an unarticulated detriment to the perception of jointness (though the U.S. Army officially supports sea basing). Yet it can be most assuredly joint—and not simply by virtue of, say, operating Army helicopters off aircraft carriers near Haiti.

* Command, control, communications, computers, intelligence, surveillance, and reconnaissance.

In a practical sense, its *jointness* is not new. Army forces participated in amphibious assaults along with the Marines in the Pacific and on their own in the European theater. Although the largest landing force in World War II—that of the D-Day invasion—operated across a narrow channel and therefore was well supported by land-based aircraft, such was not true in North Africa or southern Europe.

Since the essence of sea basing appears a traditional American capability, the debate of the past decade primarily focused on the following questions:

- Is it an effective method of countering antiaccess defenses?
- How much more capable can sea basing be made by applying new technologies and greater resources?
- Considering that the Navy appears simultaneously to oversell the concept and underfund its resources, will the other services continue to support the concept in the joint arena?¹⁰
- Does the sea-basing concept justify improvements to Navy–Marine Corps amphibious lift, and will it help the Marine Corps in its struggles with the Navy over new ship programs and OSD over the future of MPF ships?
- Could sea basing become a replacement for, not just a supplement to, regional land bases? Unlike overseas land bases, sea basing remains under sovereign American control and does not require other nations' permission.

SEA CONTROL, SOVEREIGNTY, AND ANTIACCESS

Sea basing is a capability that depends on command of the sea, or sea control. In fact, it cannot exist *without* sea control. Since the collapse of the Soviet navy in 1991, U.S. sea control has been a given—unlike the situation in World War II, when the Allies had to fight to achieve sea control. Clearly the People's Liberation Army intends to contest American sea control in the western Pacific. However, China's maritime capabilities have not yet matched its aspirations and it is unclear whether Chinese efforts at sea denial would be as effective as the more alarmist reports would indicate.¹¹ American global sea control is not yet broken, presumably assuring the continued viability of sea basing. But the growing ambition among littoral states for regional denial capabilities—often referred to as “antiaccess” or “area denial” strategies—is itself undeniable.

Because it is dependent on sea control, the U.S. Navy would naturally provide the majority of resources for sea-basing platforms, out of its existing fleet and ship-construction budget.¹² Originally the Donald Rumsfeld-era Office of Force Transformation defined “sea-base” as “a noun; the sea and not the things

on it.”¹³ However, the sea base can be more properly thought of as the ships and platforms on which—and by which—the forces are positioned. The ocean is the fluid medium that provides both the terrain upon which heavy objects move and the reduction in friction that allows them to do so—metaphorically, the ocean allows castles to move. These iron castles constitute the sea base. Within the castles are stored and transported the means of military power, including the expeditionary strength of the Marine Corps and resupply for Army land forces. These castles also provide the best available logistical platforms for humanitarian assistance in littoral regions.

As mentioned earlier, a most attractive feature of sea basing is that it offers an overseas base of operation located close to or in a crisis area but that is itself completely under the sovereignty of the United States.¹⁴ The strike power that can be projected from the continental United States is just a small portion of that required to affect events on land in combat or crisis. Sea basing provides for a forward presence and thereby produces deterrence effects that might not be achievable through latent conventional capabilities in the continental United States. Sea basing is also a means of providing *sustained* security cooperation and humanitarian relief. All of this can be achieved without long-term violation of anyone else’s sovereign territory under international law.

Proponents of sea basing like to quote British naval strategist Sir Julian S. Corbett’s observation (1906) that Britain—then the world’s greatest sea power—traditionally favored sovereign ports and bases that made it “independent of uncertain neutrals and doubtful allies.”¹⁵ But to justify spending resources on sea basing by the need for such independence is to oversell the concept. America’s current allies or partners are for the most part neither weak nor uncertain, and in the current political environment it is doubtful that they would place disabling restrictions on basing in the face of a mutual threat. Indeed, if anything, current trends seem to be in the direction of an increasing willingness on the part even of nontraditional allies (such as Singapore) to accommodate an American military presence on their territory. However, it is valid to argue that spending on sea basing should be increased on the grounds that antiaccess capabilities of potential opponents (primarily China and Iran) have made fixed regional land bases extremely vulnerable.

Sea basing itself faces an increasing threat but because of its mobility represents a much more difficult targeting problem for opponents. Can, however, new sea-basing technologies ultimately outpace the antiaccess threat? The Navy and Marine Corps are planning incremental improvements in expeditionary off-load from sea to shore. The development of theater-ballistic-missile defenses and the improved air defense represented by destroyers and cruisers having the Aegis combat system gives additional protection to the sea base. But if future

survivability proves increasingly problematic, will a significant investment in improving overall sea basing have been warranted? If it appears that it would, what technological improvements should be prioritized?

Right now, technological and engineering improvements are being applied to expeditionary off-load. These are relatively low-cost improvements. But more extensive acquisition—such as the Mobile Offshore Base, proposed in the 1990s—has lost favor in light of other priorities and antiaccess issues. Proposed increases to the naval amphibious fleet are also vulnerable to these concerns. This debate—sea-basing versus antiaccess—has smoldered for some time and will likely get hotter.

SEA BASING IN SEA POWER 21

Sea basing (or “Sea Basing,” as it appears in that document) was touted as one of the pillars of the “Sea Power 21” plan, issued by Admiral Vern Clark as CNO, specifically as a means of “projecting joint operational independence.”¹⁶ It was also described “as the foundation from which offensive and defensive fires [that is, strikes from a distance, by artillery, air, missile, etc.] are projected—making Sea Strike and Sea Shield [two other pillars] realities.”¹⁷ But the plan omitted any discussion of amphibious ships and emphasized the strike capability of the cruiser-destroyer force.¹⁸ To omit in this way the capability of the sea base to put forces ashore would seem to ignore the most significant means by which the sea base can affect events on land and limits sea basing to fleet strike and defense—unless the omission in fact reflected a predecided budget priority. Clearly Admiral Clark intended to emphasize the Navy’s role in supporting joint forces already ashore; he expressed support for MPF shipping in resupply of those forces. But this role would be a joint supporting capability rather than a joint enabler.

Yet the emphasis on supporting joint forces via a new concept would not seem to have engendered much enthusiasm from other services in the joint arena except as a quid pro quo—*I’ll support your program if you’ll support mine*. In fact, it would seem almost a deliberate provocation of the Marine Corps, which would consider itself a full partner in any new naval concept. These factors resulted in the Navy’s overselling sea basing, in the sense that it relied on old missions to justify a supposedly new construct. This was not an auspicious way to advance the concept, but it did allow the Navy in 2002 to squeeze some money from amphibious shipbuilding—a decision that, given the length of time required for shipbuilding, directly affects today’s fleet.¹⁹ The overall result is that even today it is not clear—Admiral Clark’s successors having largely ignored Sea Power 21—what the Navy Staff considers sea basing to be.

THE FUTURE OF THE U.S. MARINE CORPS “EXPEDITIONARY OBJECTIVE”

Since the Navy construct of sea basing did not include the Marine Corps, the Marines did what they do best—declared it an expeditionary objective and took it. Sea basing was turned around from a concept that largely excluded amphibious-assault capabilities to one focused on improving them. Such a focus would seem natural, even within the broad vision. But it did not bank on Secretary of Defense Gates’s apparent discounting of the need for strong amphibious capabilities—capabilities that were not particularly needed in Iraq or Afghanistan. Recent OSD efforts to kill the Expeditionary Fighting Vehicle program—and the Marine Corps’s efforts to keep it alive despite significant operational limitations and cost increases—may have also colored the Secretary of Defense’s attitude toward amphibious capabilities, MPF, and sea basing.

Consequently, the Marine Corps now views sea basing as a program of incremental improvements in amphibious lift and is primarily interested in developing the ability to use MPF ships without having to off-load them in port. Off-loading at sea, particularly in a combat environment, requires modern connector ships, such as the MLP, which can transfer matériel from cargo carriers of the Maritime Sealift Command to air-cushion landing craft (LCACs) in the sequence it is needed ashore. This approach would increase expeditionary landing capacity without the higher costs of building more amphibious warships.

But although the Marines have experimented with incremental improvements and have received partial QDR endorsement, the Defense Department’s “program objective memorandum” for fiscal year 2012 has mandated a drastic cut in the Navy’s prepositioning budget. This could put two-thirds of the current MPF into reserve status or eliminate one of the three maritime prepositioning squadrons—specifically MPS Squadron 1, located in the Mediterranean.²⁰ The decision reflects OSD’s perception that the U.S. European Command and NATO will most likely not need the equipment in the immediate future. Nonetheless, a two-thirds cut, as opposed to an incremental reduction, does not bode well for the overall concept of sea basing.

Even as Under Secretary of the Navy Robert O. Work, an expert on sea basing, was outlining a future with more individually capable MPF ships in a 5 October 2010 speech at the National Defense Industrial Association’s Expeditionary Warfare Conference, it was becoming apparent that his view might not be shared on the OSD level. At the same conference, Brigadier General David Berger, director of the Operations Division at Headquarters, Marine Corps, described the defense leadership as divided between those who view MPS squadron ships as merely “floating warehouses” and those who see them as a forward crisis-response capability in support of the regional combatant commanders. General James

Conway, near the end of his tenure as Commandant of the Marine Corps, defended Navy-Marine prepositioning by contrasting it with the Army's view of prepositioning, which he described as simply a fast means of resupplying forces already engaged on the ground. As Conway put it, "The Army uses theirs to support a capability. In many ways, ours [Navy-Marine Corps MPF] is the [crisis response] capability."²¹

SUPPLEMENTING OR REPLACING LAND BASES?

Whether sea basing can replace land bases, or at least dependence on land bases, raises bureaucratic issues within DoD that contribute to the reluctance to commit to joint sea basing. For one thing, a greater commitment to sea basing—along with a qualitative or quantitative reduction in overseas land bases—might cause allies and partners to question American commitment to mutual defense. To some extent, however, it is a question of foresight. If the future of American war fighting consists of pacifying terror-supporting insurgent groups within landlocked countries or continuing the use of quick-striking SOF forces supported by land-based tactical aviation (including unmanned aerial vehicles flown from the continental United States), investment in sea basing would not seem a priority.²² At times this seems to be Secretary Gates's view, but not always.²³ If future wars are going to be dominated by ever more precise *global strike* from the continental United States—which would seem to be the U.S. Air Force's preferred future—sea basing would also seem a low priority.

However, if the future involves a range of regional crises in which the United States wishes to retain direct influence, there is a lot to commend sea basing as a primary instrument. As antiaccess capabilities of potential opponents expand, the survival of regional land bases becomes problematic. The exact locations of these bases are well known; they can be struck repeatedly by ballistic missiles relying solely on preprogrammed coordinates. But prioritizing sea basing could also mean a future defense posture in which overall DoD force structure is predominantly maritime. Relying primarily on naval assets as the foundation of most joint force regional basing could be seen as a defeat for jointness—which is still largely considered in DoD to mean proportional shares of the pie for all services (and major defense agencies). This is a formula that the Gates Pentagon did not break, and as defense cuts are imposed on major acquisition programs, it is likely that they will affect the services roughly equally.

Although the developing planning related to the "Air/Sea Battle" operational concept would seem to be bringing Air Force-Navy cooperation to a peak, the potential for competition for resources between sea basing and global strike in a flat defense budget is obvious. At the same time, the Air Force is not keen to admit the vulnerability of its long-term regional bases, which are presumed to be

required if land-based tactical aviation is to be effectively applied to a regional contingency. The Army has an interest in resupplying its forces—presumably already on the ground—by sea, but it has no interest in becoming a second marine corps. Until May 2011, the Army’s focus—with program leadership by the Department of the Navy—was the development of the Joint High Speed Vessel (JHSV), a ferry-based logistics catamaran built by Austal USA. The JHSV, which is not considered combat survivable, is designed for high-speed insertion of troops in “soft power” missions—responding to natural disasters, providing humanitarian assistance, conducting port visits and training partner military forces, among others.”²⁴ In May, the Army transferred its share of the JHSV program to the Navy.

Under these circumstances, sea-basing proponents might emphasize supplementing regional bases rather than replacing them. But in a flat or shrinking defense budget, “supplementing” any capability would likely be seen as a luxury.

THE REALITY IN THE ASIA-PACIFIC

At the same time, there is a practical crosscurrent in the Asia-Pacific region that might force the United States to look to sea basing as a land-basing replacement—the agreed shift of Marine Corps personnel from Okinawa to Guam.

Thus far the question of sea basing versus land bases has been discussed in terms of which posture is more defensible and could deliver more capabilities. But in the Asia-Pacific, the most troubling contingencies remain possible conflicts in the Taiwan Strait and Korea. Okinawa is 110 nautical miles (two hundred kilometers) from Taiwan and approximately 670 nautical miles (1,250 kilometers) from Seoul, Korea. Guam is over 1,470 nautical miles (2,700 kilometers) from Taiwan and 5,900 nautical miles (eleven thousand kilometers) from Seoul. The greater distances from Guam to either potential point of conflict would appear to require a more extensive amphibious transport operation than would be necessary from Okinawa. That means, first, a need for greater at-sea logistics, more fuel being but one consideration. Second, the force would be exposed to potential standoff attacks for a longer period before it could reach its effective operational area.

Another consequence of the shift is a possible reduction in practical deterrence. A swift Chinese campaign across the Taiwan Strait would likely be intended as a *fait accompli* that would preclude American reaction. In calculating the potential for success, whether an opposing force is 110 or 1,470 nautical miles away makes a considerable difference. It is unreasonable to argue that air transport can make up for this distance, since airlift cannot move significant amounts of equipment. Though the JHSV could transit quicker than amphibious warships, it requires port facilities for off-loading and has a limited payload.

The overall result is a lessening of a previously well established deterrent to precipitate action.

Options to overcome this tyranny of distance are to station more heavy equipment closer to the area of potential conflict and rely on the airlifting or “JHSV-ing” of troops into the theater, establish other land bases closer to the area, rely on global strikes from the continental United States, or maintain or be able to quickly assemble a robust sea base within striking distance of the area.

Stationing more heavy equipment in the region and relying on airlifted troops to man it reduces the footprint required by a land base, but the question of where the equipment sets can be located remains. A possibility is Okinawa, if the Japanese government were to agree. Another possibility is on Taiwan itself, but regional political considerations currently make that choice imprudent. Establishing extensive land bases would seem to pose the same problem: Where would they be put? Again, both equipment locations and land bases have fixed coordinates, well known to an attacker.

Strikes from the continental United States simply cannot be relied upon in such a scenario; the nation is not now capable of effective conventional strikes from that distance.

All this leads to the conclusion that the ability to assemble a robust sea base—defined broadly—from forward-deployed joint and naval forces would be the most effective tool and means of practical deterrence in such a conflict. Although antiaccess systems can certainly threaten a sea base, targeting moving ships at sea is still a much more difficult problem than is attacking fixed points on land. For example, deception is a much more viable tactic for a sea base than for an unmoving land base.

THE FUTURE OF SEA BASING: REALITY AND RECOMMENDATIONS

Thinking about Seabasing: All Ahead, Slow is the title of Robert Work’s magisterial study of this subject, and it reflects an approach he still espouses as Under Secretary of the Navy. It is an apt recommendation for a defense-program environment in which sea basing is not viewed as a priority. Under the constrained budgets of the 1920s and early 1930s, the Marine Corps experimented with amphibious warfare, ultimately developing the concepts and equipment that would enable the great advances in amphibious assault needed in World War II. Experimentation, with modest programmatic investment, might do the same in advancing sea basing until its need is apparent for future contingencies.

However, if one takes the broader view of sea basing, the responsibility for improving the capacity to sea base falls primarily on the Navy—which must also make particular efforts to gain joint support for that broad vision. Dispersed

platforms must be netted (securely) together, with the overall fleet functioning as a multiple-domain, combined-arms base rather than as a group of independent task forces. As CNO, Admiral Gary Roughead called for greater efforts in developing “revolutionary concepts” for naval information and computing, and his combining the naval intelligence (N2) and C4ISR (N6) branches of his staff indicated his interest in the tighter netting of information. Tighter netting of dispersed platforms is indeed a requirement for successful sea basing, but it is obviously not sufficient in itself.²⁵

The current Pentagon must deal with a quandary regarding sea basing. Experiences in Iraq and Afghanistan will sour future administrations on extensive commitments of ground forces in crisis-torn states. On the surface, this would seem to refocus DoD on improving naval capabilities, but because sea basing remains associated with putting ashore forces that are larger than SOF units (e.g., Marine expeditionary units), it is unlikely to attract more than incremental investment.

One mission that might increase interest in a tightly netted sea base is naval ballistic-missile defense, since reliable information from multiple sources (including land-based) can increase the probability of accurate target solutions. But it is easy to foresee BMD-capable ships as being treated as individual strategic assets, operationally separate from conventional forces. This would be a mistake. The Aegis destroyer providing ballistic- or cruise-missile defense is as much a part of the sea base as a Patriot battery defending an overseas land base is part of that base’s combat infrastructure. At the same time, the ballistic-missile defense provided to the land territory of allies by that same Aegis destroyer is as integral an aspect of the overall sea-base mission as is the capability for landing troops ashore. The logistical network that flows through the sea base—such as fuel delivery by fleet oilers—is the means of keeping the Aegis destroyer on station.

Here are four recommendations for the Pentagon’s consideration:

- Examine and experiment with the broad vision of sea basing, particularly in conjunction with developing a joint operational concept for antiaccess warfare and elaborating the particulars of Air/Sea Battle.
- If a decision is made to reduce MPS squadrons, a significant portion of the savings should be invested in the Marine Corps’s programs for increasing the capabilities of the remaining MPF through new technologies and platforms. This is in keeping with earlier statements by Secretary Gates that the services could keep most of the savings from cuts made.
- Maintain naval BMD platforms as integral parts of deployed conventional forces—part of the sea base as it exists today—rather than isolate them as an element of strategic deterrence.

- Assess the deterrent effect and responsiveness that sea basing can have in an Asia-Pacific region in which land bases are not close to potential points of conflict. This itself requires more extensive study of the comparative survivability of sea basing under antiaccess conditions.

Defense policy is all about making choices: who/what is the threat; what strategy should we adopt; how should we position or deploy our forces. As noted, it is also about managing resources, even for the United States, with its incomparable military but current fiscal crisis. Since there is no certain answer, risk is always involved, and alternative strategies must always be considered and evaluated. It is the responsibility of defense planners and, especially, the defense leadership to mitigate the risks as much as possible. As a concept, sea basing has the potential to mitigate risks involving overseas basing, antiaccess defenses, and regional presence. The priority given to mitigating these specific risks will be an accurate indicator of the future that the defense leadership envisions.

A prudent strategy for the United States that mitigates risk in uncertain times would be to strengthen capabilities that do not rely on nonsovereign overseas basing, even while working diplomatically to maintain alliances and access to overseas bases. It would appear best to invest in a balance among SOF capabilities, long-range capabilities based in the continental United States (such as global strike), *and* highly maneuverable and well defended sea bases. These capabilities would seem both compatible and complementary. U.S.-based forces can provide extensive firepower but cannot sustain “boots on the ground” in a contested region. Most current American interests overseas lie within range of sea-based forces, our involvement in Afghanistan notwithstanding.

However, tighter resource constraints usually bring out the worst in organizational rivalries and bureaucratic politics; a clash among sea basing, global strike, planning for future wars like the *wars we are in*, recapitalizing or “resetting” land forces, and expanding special-operations capabilities seems inevitable. Under the current Pentagon leadership and the economic constraints facing the U.S. government, such a clash would likely find sea basing on the short end.

NOTES

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1. Robert Work, *Thinking about Seabasing: All Ahead, Slow* (Washington, D.C.: Center for Strategic and Budgetary Assessments, 2006),

p. iv. See also Work, “On Sea Basing,” in *Reposturing the Force: U.S. Overseas Presence in the Twenty-First Century*, Newport Paper 26, ed. Carnes Lord (Newport, R.I.: Naval War College Press, 2006), pp. 95–181. Another excellent study that emphasizes historical continuity of sea basing while crediting its transformational attributes is Gregory J.

- Parker [Cdr., USN], *Seabasing since the Cold War: Maritime Reflections of American Grand Strategy* (Washington, D.C.: Brookings Institution, 30 June 2010).
2. One of the strongest proponents of the Mobile Offshore Base (MOB) in the 1990s was Adm. William A. Owens, USN. See his *High Seas: The Naval Passage to an Uncharted World* (Annapolis, Md.: Naval Institute Press, 1995), pp. 163, 165, and Owens and Ed Offley, *Lifting the Fog of War* (New York: Farrar, Straus, Giroux, 2000), pp. 175–76, 205. See also an excellent discussion in Henry J. Hendrix II [Lt. Cdr., USN], “Exploit Sea Basing,” U.S. Naval Institute *Proceedings* (August 2003), pp. 61–63. Commander Parker’s *Seabasing since the Cold War* study includes one of the best artist’s interpretations of the MOB—originally drawn by John Berkey for the April 2003 edition of *Popular Mechanics* (p. 8).
 3. This is my interpretation of Adm. Vern Clark’s decisions as Chief of Naval Operations in the early 2000s. Such a motive was never publicly stated. See Work, *Thinking about Seabasing*.
 4. Commander Parker has an admirably succinct way of describing what sea basing is about: “It’s about Land” (Parker, *Seabasing since the Cold War*, p. 5). Moreover, it can be described as *turning sea into land*.
 5. Work, *Thinking about Seabasing*, p. 9.
 6. This broad-vision interpretation is consistent with sea basing as defined in the U.S. Navy’s 2002 policy “Sea Power 21,” except that Sea Power 21 made *no* mention of amphibious ships as part of sea basing—an incomprehensible, albeit deliberate, omission. Work critically discusses this omission, dismissing Navy staff excuses that Sea Power 21 was a “Navy” document, not a “naval” document, that was accordingly not intended to include the Marine Corps or, thus, the amphibious ships associated with it (Work, *Thinking about Seabasing*, pp. 163–65). But he does not mention the key factor that the Chief of Naval Operations, Admiral Clark, whose career had been almost exclusively in ships of the cruiser-destroyer type, had little if any interest in expanding shipbuilding resources on amphibious ships. Rather, he saw reductions in amphibious capabilities as a “bill payer” for increasing the capabilities of the cruiser-destroyer force. On Sea Power 21, see Vern Clark [Adm., USN], “Sea Power 21: Projecting Joint Power,” U.S. Naval Institute *Proceedings* (October 2002), pp. 32–41.
 7. U.S. Defense Dept., *Department of Defense Dictionary of Military and Associated Terms*, Joint Publication 1-02 (Washington, D.C.: 12 April 2001 [as amended through 31 July 2010]), p. 412, available at www.dtic.mil/.
 8. U.S. Defense Dept., *Quadrennial Defense Review Report* (Washington, D.C.: February 2010), p. 46, available at www.defense.gov/.
 9. Primary stealth assets being cruise- and conventional-ballistic-missile-launching submarines (SSGNs).
 10. The development of a Seabasing Joint Integrating Concept (JIC) in 2005 can be seen as joint service support.
 11. See discussions in Sam J. Tangredi, “No Game Changer for China,” U.S. Naval Institute *Proceedings* (February 2010), pp. 24–29, and Craig Hooper and Christopher Albon, “Get Off the Fainting Couch,” U.S. Naval Institute *Proceedings* (April 2010), pp. 42–46.
 12. This would not seem as contentious an issue under the broad definition as it does under the narrow one—in which case it seems a more obvious case of resource trade-offs between surface combatants and amphibious warships.
 13. Work, *Thinking about Seabasing*, p. 8.
 14. Sovereignty might be shared with allies or partner nations if they provided ships, platforms, or personnel for the sea base.
 15. Quoted in Work, *Thinking about Seabasing*, p. 17.
 16. Clark, “Sea Power 21,” p. 36.
 17. *Ibid.*
 18. Work, *Thinking about Seabasing*, p. 9.
 19. See Grace V. Jean, “Marines Question the Utility of Their New Amphibious Warship,” *National Defense* (September 2008).
 20. Cid Standifer, “Work: Prepositioning Set for Big Changes,” *Inside the Navy*, 11 October 2010.
 21. *Ibid.* Italics supplied, to reflect emphasis as originally spoken.

22. It can be argued that sea basing is also valuable in small, often short-duration, operations that can be supported by air based in the continental United States and involve only a small number of troops on the ground, with naval forces providing the logistics, command and control, and quick-reaction “fires.”
23. In a 2009 *Foreign Affairs* article, Secretary Gates outlined his plan as being one that maintains balance “between trying to prevail in current conflicts and preparing for other contingencies, between institutionalizing capabilities such as counterinsurgency and foreign military assistance and maintaining the United States’ existing conventional and strategic technological edge against other military forces, and between retaining those cultural traits that have made the U.S. armed forces successful and shedding those that hamper their ability to do what needs to be done.” While “other contingencies” could indicate operations that sea basing could facilitate, it should be noted that he refers to maintaining “the United States’ existing conventional and strategic technological edge” rather than an existing edge in capabilities. Analyses of the article have pointed to “balance capabilities” as meaning a balance across the spectrum of conflict—but that may not be what was meant. In any event, the secretary’s natural focus has been on unconventional warfare, counterinsurgency, and counterterror—in which sea basing would play largely a supplemental, not a critical, role. Robert M. Gates, “A Balanced Strategy: Reprogramming the Pentagon for a New Age,” *Foreign Affairs* (January–February 2009).
24. Grace V. Jean, “Aluminum ‘Truck,’ Joint High Speed Vessels: Great Potential, but Questions Remain,” *National Defense* (March 2011).
25. Andrew Burt, “New Memo from CNO: Roughead Seeks ‘Revolutionary’ Concepts in Information and Computing,” *Inside the Navy*, 11 October 2010.

THREE DISPUTES AND THREE OBJECTIVES

China and the South China Sea

Peter Dutton

The recent heightening of the competition between China and its neighbors over sovereignty, resources, and security in the South China Sea has drawn the attention of diplomatic and military leaders from many countries that seek to promote stability and security in these globally important waters. For states that ring the South China Sea, its waters represent a zone of rich hydrocarbon and protein resources that are increasingly dear on land as populations exhaust their territories' ability to meet their increasing needs. This resource competition alone could be the basis of sharp-edged disputes between the claimants. However, the South China Sea also represents the projection of the cultural consciousness of the centuries-long relationship that each coastal nation has had with its adjoining seas. This fact fuels competing modern-day nationalist tendencies among claimant-state populations, tendencies that in turn magnify the importance of the disputes and, during times of crisis, narrow the options for quiet negotiation or de-escalation.

As American leaders discuss policies and strategies in support of regional stability, some have described the complex disputes in the South China Sea as essentially a tangled knot of intractable challenges. Actually, however, there are three severable categories of disputes, each with its own parties, rule sets, and

politics. There are disputes over territorial sovereignty, in the overlapping claims to the South China Sea's islands, rocks, and reefs; disputes over which coastal states claim rightful jurisdiction over waters and seabed; and disputes over the proper balance of coastal-state and international rights to use the seas

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for military purposes. Unfortunately, the region's states are currently pursuing win-lose solutions to all three of these disputes. A careful analysis of the nature of each dispute reveals, instead, opportunities for more productive pathways to resolution achieved through win-win problem solving and recognition of the mutuality and commonality of interests in these globally important waters.

THREE DISPUTES

The disputes in these three categories have resulted in recurring flashes of tension and conflict for approximately forty years. Notable incidents over sovereignty include the Chinese attack on the forces of the Republic of Vietnam in the Parcel Islands in 1974, China's attack on Vietnamese forces near Fiery Cross Reef in 1988, and China's military ouster of Philippines forces from Mischief Reef in 1995. The overall result of this series of incidents was the coalescence of a unified Association of Southeast Asian Nations (ASEAN) political position in opposition to China's behavior. A politically unified ASEAN persuaded China to accept the 2002 ASEAN Declaration on the Conduct of Parties in the South China Sea to decrease tensions among neighbors. The declaration includes an agreement by all parties to "resolve their territorial and jurisdictional disputes by peaceful means, without resorting to the threat or use of force."¹ The Declaration of Conduct became the centerpiece of more than a decade of relative regional calm after 1995, the product of a Chinese shift in policy to pursue improved regional integration with its Southeast Asian neighbors through generous economic, commercial, infrastructural, and cultural programs. The United States repeatedly professed neutrality as to the outcome of the sovereignty and jurisdictional disagreements, as long as all parties continued to pursue peaceful means of resolution.

This stability was shattered by a series of antagonistic Chinese actions that began in 2007. A flare-up in tensions in the South China Sea began when China pressured Vietnam and several oil companies in connection with oil exploration and drilling off the Vietnamese coasts. As the U.S. Deputy Assistant Secretary of State, Scot Marciel, testified before the Senate Foreign Relations Committee in July 2009, "Starting in the summer of 2007, China told a number of U.S. and foreign oil and gas firms to stop exploration work with Vietnamese partners in the South China Sea or face unspecified consequences in their business dealings with China."² The Senate hearing was being held in the wake of the March 2009 *Impeccable* incident, which had awakened many in the United States to China's more assertive stance in the South China Sea. In that incident, an American naval research vessel was aggressively harassed approximately seventy nautical miles off Hainan Island by Chinese "fishermen" with the support of Chinese civilian law-enforcement vessels and under the observation of a People's Liberation Army Navy intelligence ship.³

These Chinese actions resulted in a return of tension to the region. In response to China's new strategy, Secretary of State Hillary Clinton stated at the ASEAN Regional Forum (ARF) in July 2010, "The United States, like every nation, has a national interest in freedom of navigation, open access to Asia's maritime commons, and respect for international law in the South China Sea. . . . The United States supports a collaborative diplomatic process by all claimants for resolving the various territorial disputes without coercion. . . . We encourage the parties to reach agreement on a full code of conduct."⁴

Until this time, the only attribute common to all South China Sea disputes had been that they involved China as a party. However, China's turn in 2009 toward an assertive, even aggressive approach—especially in its efforts to control U.S. naval activities in the South China Sea—resulted in new American attention to and interest in all three categories of disputes. In order to find a pathway to return to the desired state of regional stability, it is helpful to examine the attributes of each of the three types.

Sovereignty

Disputes over sovereignty center on questions of which coastal states have the right to exercise the full measure of state authority over the physical territory of the islands in the South China Sea. They involve Vietnam, Malaysia, the Philippines, and perhaps Brunei, as well as China and Taiwan.⁵ Vietnam claims "indisputable sovereignty" over all of the Spratly (Truong Sa) and Paracel (Hoang Sa) Islands;⁶ one possible interpretation of some of its recent submissions to the United Nations (UN), however, is that it might be willing to relinquish its claims, at least as regards the Spratlys, in return for recognition of wider resource rights in the South China Sea.⁷ Malaysia claims sovereignty over approximately twelve of the southernmost Spratly Islands, based on their situation on its claimed continental shelf. Likewise, Brunei appears to make a similar claim to sovereignty over Louisa Reef, on the basis of its location within its claimed exclusive economic zone. The Philippines claims sovereignty over many of the easternmost Spratly Islands, a cluster to which it refers as the Kalayaan Island Group.⁸

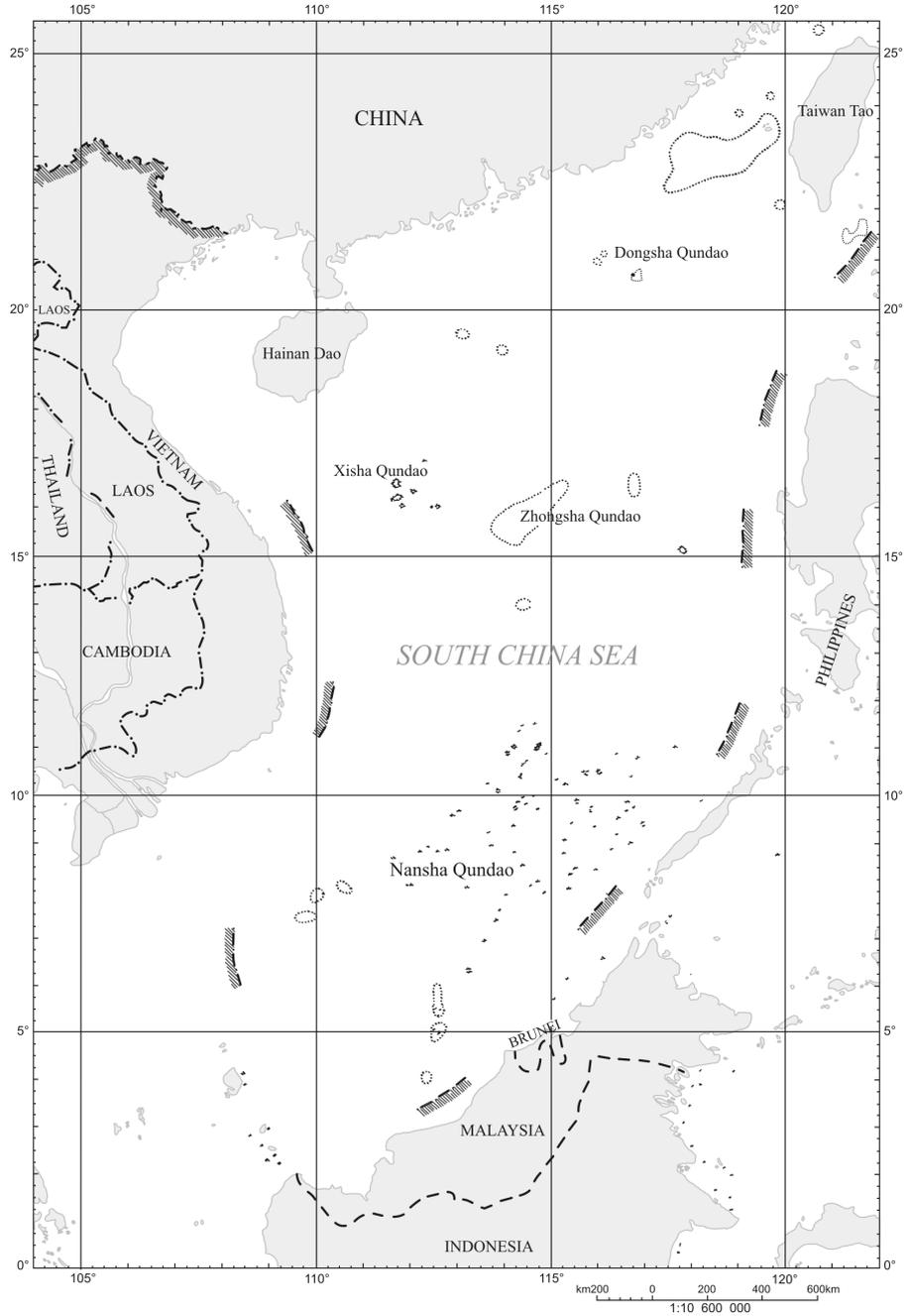
China and Taiwan maintain overlapping, related claims to all the islands in the South China Sea. In 1947 the Nationalist government of the Republic of China began to publish maps with a U-shaped series of lines in the South China Sea delineating its maritime boundaries (see map). These maps were based on a 1935 internal government report prepared to define the limits of China, many parts of which were dominated by outside powers at the time.⁹ Though the exact nature of the claim was never specified by the Nationalist government, the cartographic feature persisted in maps published by the Communist Party after it came to power on the mainland in 1949, and today the U-shaped line's nine

dashes in the South China Sea remain on maps published both in China and on Taiwan.¹⁰ In 1992, further clarifying its claims of sovereignty over all the islands in the South China Sea, the People's Republic of China enacted its Law on the Territorial Sea and Contiguous Zone, which specifies that China claims sovereignty over the features of all of the island groups that fall within the U-shaped line in the South China Sea: the Pratas Islands (Dongsha), the Paracel Islands (Xisha), Macclesfield Bank (Zhongsha), and the Spratly Islands (Nansha). The U-shaped line therefore represents one factor in understanding the competing claims to the numerous islands, shoals, rocks, and islets contained within its nine dashes.

The Chinese government appears to maintain a studied policy of ambiguity about the line's meaning. Among Chinese scholars and officials, however, there appear to be four dominant schools of thought—some related to sovereignty and others more relevant to China's jurisdictional claims (which will be analyzed below).

Sovereign Waters. The first approach taken by some Chinese policy analysts is that the expanse enclosed by the U-shaped line should be considered fully sovereign Chinese waters, subject to the complete measure of the government's authority, presumably as either internal waters or territorial seas. One group of senior Chinese defense analysts, for instance, describes the nation's offshore interests as “the area extending out from the Chinese mainland coastline between 200 nautical miles (to the east) and 1600 nautical miles (to the south),” or roughly to four degrees north latitude as claimed in the 1935 report. They consider these “sea domains under Chinese jurisdiction . . . [as] the overlaying area of China's national sovereignty.”¹¹ Another researcher refers to “China's debates with neighboring countries over China's maritime sovereignty” in advising that the correct strategy is for China “to struggle rather than to fight.”¹² It has been easy for some to dismiss this perspective as based on mistranslation or the failure of nonspecialists to appreciate the distinction between sovereignty, sovereign rights, and jurisdiction. However, experienced Chinese legal specialists have specifically used the term “sovereignty” in presentations about China's claims in the South China Sea delivered to legal practitioners of other nations in international forums.¹³ The concept that China exercises full sovereignty over all the waters embraced by the U-shaped line is also implicit in the description by at least one military scholar of the seas surrounding China's shores as “China's ‘blue-colored land’” and as a region “owned” by China.¹⁴

Historic Waters. Some Chinese have suggested that the concept of “historic waters” enables the government legitimately to claim broad control over the South China Sea.¹⁵ The concept, a variation on China's claim of sovereignty in the



The U-shaped line formed by the nine dashes reflects China's claim over the waters and islands of the South China Sea. Three types of legal disputes arise from the claim: sovereignty disputes related to the island features, disputes over resource jurisdiction in the surrounding waters, and disputes over the extent of coastal-state authority to prohibit foreign military activities. (United Nations, www.un.org.)

South China Sea, reflects the view held by many Chinese academics and policy makers that the nine-dash line represents a claim to historic waters, historic “title,” or at least some kind of exclusive rights to administer the waters and territory within the line’s boundaries.¹⁶ Perhaps the most authoritative statement of

international law on the point was issued in 1951 by the International Court of Justice in the *Fisheries Case*, in which the United Kingdom challenged before the International Court of Justice a claim by Norway to sovereignty over waters along its craggy coastline beyond the traditional three-mile territorial-sea limit of the time.¹⁷

The court considered three relevant factors. The first was the close geographical dependence of the territorial sea upon the land domain—the relevant portions of the Norwegian coastline being deeply indented, with complex geographic features and an estimated 120,000 minor islands, islets, rocks, and shoals. The second factor was the presence or absence of links between the land formations and the sea space sufficiently close to make the region susceptible to a fully sovereign regime of governance. Finally, it considered unique economic interests belonging to the coastal state as clearly evidenced by long usage. Ultimately the court approved Norway's extension, based on its historic claims, of sovereignty over the sea areas and the features contained within them.

The requirements laid out in the *Fisheries Case* for an extension by a coastal state of sovereignty over water space do not lend support to China's claim. In particular, there is no close geographical dependence between the sea and the land in this region. Indeed, the land features are so insignificant that they have long been seen more as navigational hazards than as productive territory. Additionally, the islets themselves are more widely dispersed than are the features along the Norwegian coastline. The merely sporadic presence of fishermen and traders and the lack of freshwater and arable land to support an indigenous population in any case strongly suggest that the region is not susceptible to a fully sovereign regime of governance. Accordingly, China's claim of historic waters has weak support on these bases.

Concerning the question of unique economic interests, China has had well documented contact with the islands of the South China Sea for many centuries through fishermen, traders, and the occasional government official. But the historical record reflects similarly well documented contact by Vietnam. Neither country has a record of sustained, exclusive use of or reliance upon the resources of the South China Sea. The peoples of the Philippines, Malaysia, and Indonesia have also maintained contact with these islands, in support of traditional fishing and local trade. Thus, no evidence points to unique economic interests of China or any other single country in or around the islands of the South China Sea. Rather the evidence suggests the contrary—that the waters of the South China Sea and their sparse islands, islets, rocks, and reefs have for many centuries been the common fishing grounds and trading routes of all regional peoples. Indeed, this long-standing common usage suggests that far from having been supervised as any party's zone of sovereignty, the South China Sea developed as a sort of

regional common in which all parties pursued their interests without fear of molestation by the authorities of other coastal states.

Island Claims. Some Chinese academics and policy makers view the U-shaped line as asserting a claim to sovereignty over all the islands, rocks, sandbars, coral heads, and other land features that pierce the waters of the South China Sea, as well as to whatever jurisdiction international law of the sea allows coastal states based on sovereignty over these small bits of land.¹⁸ On its face at least, a Chinese claim to sovereignty over the islands and to jurisdiction lawfully derived from it is legitimate, in that it complies with the general provisions of the 1982 United Nations Convention on the Law of the Sea (UNCLOS) and other aspects of law of the sea. However, a series of fundamental problems undermine it, including the fact that Vietnam, Malaysia, the Philippines, and Taiwan all maintain claims to sovereignty over some or all of the islands in the South China Sea. Since the 1995 Mischief Reef incident between China and the Philippines, a certain stability has been achieved since the five claimants that occupy certain features have agreed to maintain the status quo.

China, of course, occupies and administers all of the Paracels, though Vietnam still maintains its claim to sovereignty over them. The Spratlys represent a mixed case. Since 1996, Vietnam has occupied or controlled approximately twenty-two features, China roughly ten features, the Philippines eight, Malaysia four, and Taiwan one.¹⁹ In order to support a claim of sovereignty over an island, international law requires that a coastal state demonstrate effective occupation or continuous administration and control.²⁰ Accordingly, China's claim to those of the Spratly Islands that it does not occupy or effectively administer or control is unsupported by international law. The same is true of the claims of any other parties that do not actually occupy features over which they claim sovereignty. Some observers wrongly conclude that the non-Chinese claims are based solely on European claims from the colonial era. In fact, those of Southeast Asian states are at least in part expressions of the contacts all coastal peoples have had with the South China Sea's islands and waters for many centuries and of national consciousness that international law should protect those interests.

Security Interests. Finally, a fourth Chinese perspective is that the U-shaped line reflects China's long-standing maritime security interests in the South China Sea and that these security interests should have legal protection. The Chinese have long viewed the Bohai Gulf, the Yellow Sea, the East China Sea, and the South China Sea—the "near seas"—as regions of core geostrategic interest and as parts of a great defensive perimeter established on land and at sea to protect China's major population and economic centers along the coasts. As one

People's Liberation Army (PLA) major general recently put it, the South China Sea constitutes part of China's maritime "strategic stability belt."²¹

China's assertiveness about its claims in the waters of its near seas has grown in tandem with the size of its navy and maritime services. As one Chinese analyst put it, "The Navy is just one of the means of protecting our maritime rights and interests[;] . . . the primary means should be to rely on the law, on international law and internal legislation." To enforce these laws and sovereign interests at sea, "in recent years we have started to carry out periodic patrols to safeguard our rights in the East and South China Seas."²² Thus, some Chinese see international law, in conjunction with their developing maritime power, as a means to establish the long-desired maritime security buffer throughout the near seas, including the South China Sea. That international law does not provide protection for a coastal state's security interests beyond the narrow territorial sea has not deterred Chinese proponents from seeking to change those norms.

Jurisdiction

A second category of disputes involves the delimitation of jurisdictional boundaries between neighboring sea zones, including exclusive economic zones (EEZs) and continental shelves. China complicates these disputes through its ambiguous claims of authority over the water space within the nine-dash line, but it is clear that the claim encompasses aspects of jurisdiction as well as aspects of sovereignty.²³ "Jurisdiction" under international law is something less than full sovereignty, in that it does not include the same degree of absolute and exclusive authority to govern all matters of interest to the state. Like sovereignty, jurisdiction is a reflection of *state power* within *specified boundaries*, but the concept of jurisdiction connotes the application of state authority only over a *limited, specified set of subject matters*. All the disputants involved in the question of sovereignty are also involved in the jurisdictional disputes, plus Indonesia, which has an EEZ claim extending from Natuna Island that overlaps with China's nine-dash line.²⁴

The two main sources of jurisdictional disputes in the South China Sea are the boundaries of the various national EEZs and continental-shelf zones over which each state may exercise its authority. Within the geographic limits outlined in UNCLOS article 76 (specified boundaries), coastal states are afforded exclusive authority (state power) to regulate the exploration and exploitation of the resources of the seabed, although the legal character of the water space above the continental shelf remains unchanged (a limited, specified set of subject matters). Thus, international law provides for limited coastal-state jurisdiction within a specified zone known as the continental shelf.

Similarly, one of the key innovations of UNCLOS was that it specified coastal-state authority in the water space beyond the territorial sea, a concept that had been steadily developing over the course of the twentieth century. UNCLOS Part V established coastal-state jurisdiction over a vast littoral swath of water space known as the EEZ, which may extend to two hundred nautical miles from the coastal state's baselines (specified coastal boundaries), and in which the coastal state has "sovereign rights" to the resources plus related jurisdictional authorities (exclusive state power over the specified resource-related matters), for the purpose of managing those resources. Thus, UNCLOS completed the creation of jurisdictional regimes over resources in littoral waters. Accordingly, this second category of disputes is at its core a disagreement over jurisdictional authority in the South China Sea to explore and exploit the resources on and under the sea's continental shelf and in its water column.

China's Ambiguous Jurisdictional Claims. All states with coastlines that border the South China Sea claim continental shelves and EEZs; however, very little actual delimitation of the boundaries between coastal-state zones has occurred.²⁵ China's nine-dash-line claim presents a particular problem for resolving these disputes, because in addition to relying on the line as a source of sovereignty, Chinese policy makers also refer to it as the basis for China's South China Sea jurisdictional claims. As noted above, some Chinese scholars and policy makers assert that the concept of historic rights (as an alternative to, or in addition to, China's claim to historic waters in the South China Sea) applies as a basis for jurisdictional control over water space within the nine-dash line. The concept of historic waters has only the briefest mention in UNCLOS, but it exists in customary international law related to bays. It allows coastal states to claim extended jurisdiction over water space or islands when their claims have been open and long-standing, exclusive, and widely accepted by other states.

China's claim to a historic right to jurisdiction over the waters of the South China Sea is seriously undermined by similar, overlapping claims maintained by the Philippines, Vietnam, Malaysia, Brunei, and Indonesia, not to mention parallel claims made separately by Taiwan. This demonstrates that however long-standing China's claims of jurisdiction in the South China Sea may be, clearly they are not exclusive or widely accepted by other states. Nonetheless, Chinese law asserts historic rights as a basis for jurisdiction over the South China Sea. The 1998 Law of the People's Republic of China on the Exclusive Economic Zone and Continental Shelf claims an exclusive economic zone emanating from all Chinese territory, which would logically mean all relevant Chinese territory as specified in the 1992 Territorial Sea Law, which in turn, as noted above, specifically includes each of the island groups in the South China Sea. Thus, in combination,

these two Chinese laws assert an EEZ and therefore jurisdictional control over nearly the entire South China Sea area within the U-shaped line.

This impression was reinforced in April 2011 when China submitted a *note verbale* to the Commission on the Limits of the Continental Shelf, formed under the terms of UNCLOS.²⁶ Ostensibly, China's note protested a Philippines submission that had asserted jurisdiction in the waters surrounding the Kalayaan Islands (i.e., the Philippine-claimed group of Spratly Islands).²⁷ However, these submissions both join a lengthening portfolio of legal briefs submitted by the various claimants to clarify and justify their various South China Sea claims.²⁸ China's note stated, "Under the relevant provisions of the 1982 UNCLOS, as well as the Law of the People's Republic of China on Territorial Sea and Contiguous Zone (1992) and the Law on the Exclusive Economic Zone and the Continental Shelf of the PROC (1998), China's Nansha Islands is [*sic*] fully entitled to Territorial Sea, EEZ and Continental Shelf." Given that the domestic laws referred to in China's note specifically assert additional "historic rights" that are not relinquished by China's creation of an EEZ or continental shelf, the *note verbale* does little to clarify the ambiguity with which China has so carefully cloaked its claims, since such historic rights continue to leave room to assert legal protection for maritime sovereignty or security interests.

In addition to its ambiguity and lack of specificity, there are many other problems with China's approach to jurisdiction in the South China Sea. For instance, only a very few of the South China Sea's islands qualify under UNCLOS for more than the mere twelve-nautical-mile territorial sea. Article 121 requires that islands support human habitation or economic activity before they can accrue a full two-hundred-mile exclusive economic zone or continental shelf. Smaller islands, referred to as "rocks," accrue no more than a twelve-mile territorial sea. Virtually all of the features in the Spratly Islands group clearly fall into the latter category. Another weakness of China's claim of jurisdiction over the South China Sea based on its assertion of sovereignty over the sea's rocks and sandbars is that it has objected to similar claims made by Japan to an exclusive economic zone and continental-shelf rights around Okinotorishima, a small coral feature in the Pacific Ocean about 1,050 nautical miles south of Tokyo.²⁹ International law prevents a state from claiming legal rights if it objects to the same type of claims by other states. Accordingly, neither the provisions of UNCLOS nor historic rights are especially persuasive sources of law on which China can base its claims.

Jurisdictional Claims by Other States. The jurisdictional claims of Vietnam and Malaysia conform much more closely than China's assertions to international law. Vietnam, for instance, claims an exclusive economic zone that "is adjacent

to the Vietnamese territorial sea and forms with it a 200-nautical-mile zone from the baseline used to measure the breadth of Viet Nam's territorial sea."³⁰ In addition to clarity about the boundaries of its claim, Vietnam also specifies the extent of its national jurisdiction.³¹ Vietnam's jurisdictional claims track nearly word for word with the requirements of UNCLOS articles 57 and 56, respectively, although it should be noted that Vietnam's baselines are considered by the U.S. State Department to be excessive.³²

Malaysia's Exclusive Economic Zone Act 1984 make similarly normative EEZ and continental-shelf claims.³³ Additionally, the Joint Submission of Malaysia and Vietnam to the Commission on the Limits of the Continental Shelf makes a reasonable claim to an extended continental shelf beyond the two-hundred-nautical-mile EEZ in accordance with UNCLOS article 76.³⁴ The submission starts with each coastal state's baselines and measures two hundred nautical miles without regard to any island features. Concerning the Spratly Islands, the legal approach taken by Vietnam and Malaysia, in contrast with the various Chinese approaches, complies with UNCLOS article 121 concerning the regime of islands and with recent case law. Specifically, the Malaysia-Vietnam approach recognizes that the various islets, reefs, and shoals in the southern part of the South China Sea are too small to form the basis of a claim to an EEZ or a continental shelf (or any other form of jurisdiction other than a territorial sea) of their own right.

Another important aspect of Malaysia's and Vietnam's claims is that they are specific and public. They represent a choice made by each government concerning how international law should be interpreted in regard to its jurisdiction over offshore zones. They provide a basis for discussion, negotiation, and even potentially litigation by other states that have different perspectives. They do not rely on power—military or economic—to decide the issue. In these ways, the Malaysia-Vietnam approach provides a basis for a stable resolution to any disputes, which is the point of the comment by the International Court of Justice in the *Fisheries Case* discussed above.

The government of the Philippines established archipelagic baselines for its main islands in legislation completed in 2009 and filed on deposit with the UN.³⁵ This legislation also claims a separate, nonspecific regime of islands for its Kalayaan Islands claims and its separate claim to the Scarborough Shoal. The Philippines also maintains an EEZ claim based on a 1978 presidential proclamation.³⁶ The Philippines EEZ extends two hundred nautical miles from its baselines, which were publicly established by the 2009 legislation. Thus, with regard to its main islands, the Philippines made a specific and public claim concerning the extent of its EEZ.

Concerning its continental-shelf claim, the Philippines retains on file with the UN its Presidential Proclamation of 1968, which claims a continental shelf “to where the depth of the [Philippines] superjacent waters admits of the exploitation of such resources, including living organisms belonging to sedentary species.”³⁷ This outdated expression of the jurisdictional limits of the Philippines continental-shelf claim stems from the definition that appeared in the 1958 Continental Shelf Convention, the provisions of which were updated by UNCLOS article 76.³⁸ Additionally, the Philippines made a claim to an extended continental shelf in the Philippine Sea, but not in the South China Sea. The Philippines could improve the clarity of its jurisdictional claims to a continental shelf by bringing its proclamation into alignment with UNCLOS. Additionally, the government of the Philippines should publicly state what, if any, claims to jurisdiction over maritime zones it maintains, based on its claim of sovereignty over some of the Spratly Islands and Scarborough Reef. These steps would promote stability by removing sources of ambiguity and allowing for negotiations or arbitration in concert with international law.

In sum, the jurisdictional claims of Malaysia and Vietnam are fully public and stated with specificity. The claims of the Philippines are improving in clarity, but there continues to be room for improvement in that regard. The claims of Brunei should be made more publicly accessible by placing them on deposit with the UN. The jurisdictional claims of China (and Taiwan) in the South China Sea, however, remain ambiguous and therefore contribute to regional instability and present problems for all states whose vessels operate in the South China Sea.

Control

The third category of disputes relates to attempts to assert coastal-state control over the activities of military vessels operating in the South China Sea and is fundamentally about the correct interpretation of international law concerning the balance of coastal-state and international rights and obligations in the EEZ and other jurisdictional waters. As a practical matter there are only two parties to the dispute in this category, China and the United States. Many other countries around the globe, however, have interests and stakes in its outcome, since this category involves China’s various attempts to alter international norms concerning freedom of navigation for military purposes and to roll back the balance of coastal-state and international rights in coastal zones that were negotiated in the development of UNCLOS. This resulted in a series of confrontations between American and Chinese government vessels in the South China Sea between 2001 and 2009 that, although tension producing, were manageable from a political and military perspective.³⁹ China ended this mutual policy of “managed

friction,” however, on 8 March 2009, when it confronted USNS *Impeccable* (T-AGOS 23) with five vessels—a PLA Navy intelligence ship, a government fisheries patrol vessel, a maritime surveillance service vessel of the State Oceanographic Administration, and two small fishing trawlers.⁴⁰

Under the observation of all three Chinese government vessels, the fishing trawlers maneuvered dangerously to within eight meters ahead of *Impeccable* and then abruptly stopped. This forced *Impeccable* to take emergency action to avoid a collision. Additionally, the Chinese aboard the fishing trawlers used a grappling hook to try to snag *Impeccable*'s towed cable and its related acoustic equipment.⁴¹ These Chinese actions violated international norms related to the duty to exercise due regard in navigation of vessels at sea and also constituted unlawful interference with a sovereign vessel of another state. *Impeccable* left the scene in order to reduce immediate tensions but returned to the exact location several days later in the company of an American warship, USS *Chung Hoon* (DDG 93).⁴² Thus, the Chinese escalation from past patterns raised the dispute over navigation issues from “managed friction” to one of “near conflict,” thereby initiating renewed American strategic attention to the waters of the South China Sea and to the international norms governing freedom of navigation for military purposes in the EEZ.

The creation of the exclusive economic zone in 1982 by UNCLOS as a region extending beyond the territorial sea to a maximum of two hundred nautical miles from a coastal state's shores was a carefully balanced compromise between the interests of coastal states in managing and protecting ocean resources and those of maritime user states in ensuring high-seas freedoms of navigation and overflight, including for military purposes. Thus while in the exclusive economic zone the coastal state was granted sovereign rights to resources and jurisdiction to make laws related to those resources, high-seas freedoms of navigation were specifically preserved for all states, to ensure the participation of maritime powers in the convention.

Nonetheless, China has persistently attempted to shift this carefully balanced compromise by making more expansive claims of legal protection for its security interests, especially in the South China Sea. For instance, one statement by a Chinese military spokesman concerning international freedoms of navigation in the South China Sea is typical. A Chinese Defense Ministry spokesman, Senior Colonel Geng Yansheng, stated, “We will, in accordance with the demands of international law, respect the freedom of *passage* of ships or aircraft from relevant countries which are in compliance with international law.”⁴³ When pressed to explain the distinction between “passage” and “navigation,” other senior Chinese officials have stated that the Chinese government has not objected to the passing

of U.S. Navy vessels through the Chinese EEZ en route to another destination. However, when such vessels conduct exercises, gather intelligence or other militarily useful data, or undertake activities other than mere passage, these officials argue, they are in violation of international and Chinese domestic law.⁴⁴

Secretary Clinton, however, made clear at the ASEAN Regional Forum in July 2010 that in the South China Sea the United States will not accept China's limitations on freedoms of navigation for military purposes. She stated that the United States, like all nations, has "a national interest in freedom of navigation, open access to Asia's maritime commons, and respect for international law in the South China Sea."⁴⁵

THREE OBJECTIVES

China is pursuing three main objectives in the South China Sea and Southeast Asia: regional integration, resource control, and enhanced security. Chinese actions over the past four decades are better understood in relation to its various strategies for achieving these objectives.

Regional Integration

Regional integration between China and the states of Southeast Asia is a priority for China, as part of its overall policy of "Peaceful Rise."⁴⁶ Regional integration with other South China Sea states, therefore, has both political and economic aspects. To achieve growth, it is helpful for a state to have peaceful borders so that resources can be channeled into economic development rather than armies and border defense systems.⁴⁷ Accordingly, in order to focus domestic energy on its rapid economic rise, China entered into a period of "strategic pause" with respect to physical confrontation over the Spratly Islands beginning in the mid-1990s and after the political setbacks China suffered in connection with the Mischief Reef incident. This new strategy, pursued from the late 1990s until at least 2007, resulted in major progress, in that opportunities for regional political and economic integration with China were largely welcomed by Southeast Asian states as promoting region-wide economic growth and counterbalancing other outside powers, such as the United States.

In order to facilitate the political aspects of regional integration, China undertook numerous political relationships with ASEAN. Perhaps the most successful aspects of China's pursuit of regional integration, however, were the programs of economic, commercial, and infrastructural development. Two-way trade, for instance, soared from less than eight billion dollars in 1991 to \$106 billion in 2004 and to \$231 billion in 2008. The last figure is higher than the trade between ASEAN states and the United States for the same year, which amounted to \$172 billion. For many years, ASEAN enjoyed a trade surplus with China; that

has slipped in recent years, and to compensate, China has agreed to increase its bilateral investment in the region by 60 percent over two years.

Additionally, China has supported major infrastructure projects in the region. One such project, the Nanning–Singapore economic corridor, focuses on the construction of an integrated railway transportation system that links Nanning, Hanoi, Ho Chi Minh City, Phnom Penh, Bangkok, Kuala Lumpur, and Singapore. A second project, the Greater Mekong Subregion, similarly links Kunming, in China’s Yunnan Province, with Singapore via high-speed rail. More difficult for China to achieve are Pan Beibu Gulf development and the Hainan Initiative. These programs face the obvious challenge of dealing with areas in which sovereignty and jurisdiction remain in dispute.

Some commentators suggest that China’s many initiatives in support of regional integration reflect a “ripe fruit” strategy in which time is on China’s side. According to this line of thinking, regional integration efforts were designed to freeze the disputes and create favorable regional political conditions while China increased its economic and military power. In this view, once a high level of comparative development is achieved, “if . . . [China] continues to press its expansive claims in the South China Sea aggressively, the islands and their attendant maritime space may simply fall into its hands like ripe fruit. At the least, [China] will dominate the issue and obtain the lion’s share of any settlement.”⁴⁸

Some Chinese believe that the aims of China’s substantial investment in Southeast Asia and of its policy of freezing disputes were to earn gratitude, or perhaps leverage, that would result in willing abandonment, in China’s favor, of South China Sea claims by other states. Recent events, however, suggest that Southeast Asian states prefer that no major power, including China, gain too much influence in the region. Thus, in a pendulum swing opposite to the one in the 1990s that led ASEAN states to welcome greater Chinese regional involvement, Southeast Asian states now invite the attention of outside powers, including the United States, to offset China’s present rising regional influence, in part to ensure that negotiations over South China Sea disputes proceed on a reasonably equal footing.

Resource Control

In addition to regional integration, China is also pursuing the objective of enhancing its long-term resource security by ensuring its control over most of the South China Sea’s living and nonliving resources.⁴⁹ As one Chinese commentator stated, “What is the major challenge now confronting our nation? It is the question of resources.”⁵⁰ Zhou Shouwei, vice president of the China National Offshore Oil Corporation, has stated, “Offshore and especially deep-water oil

and gas discoveries have great significance for replenishing China's and the world's oil resources."⁵¹

Fishing resources are also important to the Chinese leadership. One government publication states, "The . . . Sino-Vietnamese Northern Gulf Fishing Agreement has dramatically compressed the working space for our nation's fishermen. These new difficulties for our hard-pressed fleets undoubtedly constitute one disaster after another. Not only have [such agreements] worsened the situation, but there is also the possibility that it could touch off social instability in various coastal towns and villages."⁵² Indeed, the Chinese navy sees the importance of sea power as an aspect of this resource security.

In the new century, the oceans are . . . strategic treasure troves of natural resources for the sustainable development of humankind. Humankind's full exploitation and utilization of the oceans and joint management of the oceans in keeping with the law is essentially a redistribution of the world's maritime rights and interests. Whoever has the greatest investment in the oceans, whoever has the greatest capacity for exploiting the oceans, and whoever controls the oceans will have the upper hand and will acquire more wealth from the oceans, and that nation will be rich and powerful. Therefore it is inevitable that the oceans will become an important arena for international political, economic, and military struggles as well as an important objective in the struggle of every nation for rights and interests.⁵³

Perhaps this unidentified author's primary intention was to justify expansion of China's navy. However, that he chose to do so using arguments about resource insecurity and the importance of national control over maritime resources is an indication of anxiety among the Chinese people and leadership over the prospect of providing food and energy for more than 1.3 billion people, especially as expectations rise along with China's economic status. Thus, an important objective for China is to ensure its future access to the resources of the South China Sea.

Enhanced Security

China's third objective appears to be to enhance its control over the South China Sea in order to create a maritime security buffer zone that protects the major population centers, industry, and rich cultural sites of China's developed eastern coastal area.

As a retired PLA major general has stated,

China's sea area is the initial strategic barrier for homeland security. The coastal area was the front line of growth during China's economic development and the development of Chinese civil society. China's most developed regions are along the coastline.

. . . The coastal area also possesses the largest population of any of the country's regions, the highest concentration of high-technology industries, and the most modernized culture. If coastal defense were to fall into danger, China's politically and economically important central regions would be exposed to external threats. In the context of modern warfare, military skills such as long-range precision strike develop gradually, which makes the coastal sea area more and more meaningful for homeland defense as a region providing strategic depth and precious early-warning time. In short, the coastal area is the gateway for China's entire national security.⁵⁴

The idea that China needs to control its littoral maritime zones is based on the classic approach to geostrategy of a country having security concerns with regard to both land and sea. Such countries generally follow security strategies that balance land and maritime strength in order to develop concentric circles of strategic control, influence, and reach around their central regions of vital national interest.⁵⁵ Thus, the South China Sea, East China Sea, and Yellow Sea collectively represent an area in which Chinese strategists believe they need to develop military control in order to exclude external threats and thereby to raise the level of security of China's coastal region.⁵⁶

However, China's recent actions to enhance its security by competing with other claimants for sovereignty, jurisdiction, and control over the South China Sea fail to account for the interests of other states. Thus, beginning in March 2009, when China shifted its regional strategy away from integration and resource cooperation toward competition over sovereignty and security, it allowed the "ripened fruit," the political benefits, gained by more than a decade of cooperation to rot on the vine unharvested. Chinese policy makers would do well to remember that regional integration, resource control, and enhanced security are the shared objectives of all regional states and that in the past cooperation has produced substantial results that the recent turn to competition is unlikely to duplicate. Win-win solutions that focus on mutual interests are more promising than win-lose solutions based on competition for sovereignty, jurisdiction, and control.

NEW THINKING ABOUT AN OLD PROBLEM

It is striking how much the South China Sea interests of China and its Southeast Asian neighbors overlap. Regional political and economic integration has greatly benefited each of them. Each has an interest in sustainable development of the South China Sea's rich fisheries and other living resources. Each has a growing economy and a similarly growing demand for hydrocarbons to support it. The national security of each depends in part on the security of the waters off its shores. What is also striking, however, is that one of the primary reasons for

the failure to resolve the disputes is that the chosen mechanisms for resolution are all win-lose—that is, exclusive state sovereignty and jurisdiction allow for only one winner and create many losers.

Because the islands and reefs of the South China Sea were for many centuries open to fishermen and traders of all coastal peoples—Vietnamese, Chinese, Malay, and Filipinos alike—each nation developed a connection to and an interest in these islands. Similarly, for many centuries the rich fishing grounds were open to all without fear of exclusion or dominance by others. The present competition for exclusive sovereignty over the islands and for jurisdiction over the resources is shortsighted and self-referential, and it fails to account for the mutuality of the interests at stake. This type of conflict resolution, in fact, fails to resolve anything—losers of one round become incentivized to begin a new campaign to reverse or compensate for their loss. In Asia, where memories are long, a win-lose dynamic would essentially institutionalize tensions rather than reducing them permanently.

Some in China seem to recognize this reality. One Chinese commentator has observed that “as China’s comprehensive national strength has increased along with its military capabilities and its requirements for energy resources, so ASEAN states’ anxiety about a China threat has been increasing by the day since independently they have no prospect to balance against China. . . . [Thus, they have taken steps to] unite together in order to cope with China.”⁵⁷ Because it helps overcome the perception that growing Chinese strength is a danger to its neighbors’ interests, this author praises the benefits of joint development. Others are less sanguine. As one military scholar put it, “China’s policy toward the South China Sea is ‘sovereignty is ours, set aside disputes, pursue joint development.’ But ‘setting aside disputes’ does not mean setting aside our sovereignty. . . . China is already not a weak country. . . . [I]t is hoped that related countries will not make a strategic miscalculation.”⁵⁸

Although in China there is a rich and varied debate about how best to pursue the nation’s interests in the South China Sea, there is a common center to the range of Chinese perspectives.⁵⁹ All reflect dissatisfaction with the status quo, in which the Chinese perceive that only China is exercising restraint while all other claimants actively develop and exploit the resources in the disputed zones. There is also general recognition that China has few good options for protecting its interests. Finally, there is general agreement that militarization would only aggravate the disputes and that improving and energizing China’s civilian enforcement capabilities can best protect Chinese interests.

Thus, there is a kernel of hope that solutions to the Three Disputes can be found in win-win, interest-based approaches that accommodate all and exclude none.⁶⁰ A good place to begin would be meaningful implementation of the

principles of the Declaration on the Conduct of Parties in the South China Sea, which emphasize peaceful approaches to the many disputes that currently disturb regional tranquility.⁶¹

Win-Win Thinking about Sovereignty Disputes

China's muscular insistence in the years between 1975 and 1995 on severing the sovereignty interests of other countries in the Paracel and Spratly Islands resulted only in a coalescence of political and military opinion in Southeast Asian states against China. Even China's policies of the past fifteen years of gaining political and economic rather than military leverage have failed, because they remained focused on obtaining exclusive Chinese domination of territories that China has never in its history fully controlled and in which all other peoples in the region were traditionally able to operate. The policy failed because it would have thwarted the interests of other states in the region to use the physical territory of the Spratly Islands to pursue commercial interests, research, enhanced regional and national security, and recreation. This situation suggests that past proposals for shared regional "ownership" of the islands should be revived.

One such proposal, originally made by Mark Valencia, Jon Van Dyke, and Noel Ludwig, was to establish a form of "regional sovereignty" over the islands themselves—that is to say, shared authority over the islands among regional states, to the exclusion of all others.⁶² A regional authority established by agreement among the claimants could exercise this authority over the islands, their territorial seas, and sovereign airspace. Representation in the regional authority could take many forms but would be based on a combination of such factors as national population, length of coastline, and extent of current and historical usage—all of which are recognized in international case law as legitimate bases for resolving maritime disputes. This arrangement would allow all regional claimant-states to pursue their interests in the physical territory in the South China Sea through a political mechanism designed to manage the territory efficiently and effectively on behalf of them all.

A second approach that bears consideration is represented by Svalbard, between the north coast of Norway and Greenland. In order to resolve Svalbard's indeterminate status and to avoid international conflict over its resources, concerned states attending the Paris Conference in the aftermath of World War I negotiated the Treaty of Spitsbergen of 9 February 1920. The treaty gave primary sovereignty to Norway but allowed resource-related rights to all signatories. Original signatories included Australia, Canada, Denmark, France, Italy, Japan, Netherlands, Norway, Sweden, the United Kingdom, and the United States. The Soviet Union signed in 1924 and Germany in 1925; currently there are more than forty signatories, including China.⁶³ When the treaty came into force on 14

August 1925, Norway took over sovereignty, subject to rights of all parties to fish and hunt, to enjoy “equal liberty of access and entry for any reason, [and] to carry on there without impediment all maritime, industrial, mining and commercial operations on a footing of absolute equality.”⁶⁴ This creative approach to sovereignty, which accommodated the mutual interests of the various parties with the support of the international community, has contributed to regional security by avoiding conflict and effectively managing living and nonliving resources, and it has productively contributed to international scientific research. As such, it should be considered a potential model for a negotiated resolution of the disputes over the Spratly Islands.

Win-Win Thinking about Jurisdiction Disputes

There are many examples of collaborative regimes to share jurisdiction over maritime resources that could be effectively applied in the South China Sea, including several in East and Southeast Asia. The joint Chinese-Vietnamese fishing zone in the Gulf of Tonkin/Beibu Gulf is one example of an approach to overlapping jurisdictional rights and accommodation of mutual, long-standing interests.⁶⁵ Useful elements of this agreement include delimited zones of national jurisdiction, a cooperative-management zone of mutual jurisdiction, and an agreement to cooperative management.⁶⁶

Specifically, the agreement establishes a Joint Fishery Committee (JFC) that includes representatives from each party. Together they manage common functions, such as fisheries research, consultation with members of the fishing industry, and recommendations concerning catch quotas for the different types of species. The JFC is quite powerful, in that it has authority to take binding conservation and management measures in order to ensure that fish stocks do not become endangered through overfishing. Decisions are made on the basis of consensus, which promotes willing compliance among state parties. At annual meetings the JFC employs a “quantity-control approach” that sets a “total allowable catch” per species for each of several target species and specifies the number of vessels that may fish them. The total allowable catch is based on the status of each species, the extent of traditional fishing activity, and the impact of modern fishing and management techniques.⁶⁷

A multilateral entity that could potentially serve as a model for the South China Sea is the Northwest Atlantic Fisheries Organization (NAFO). NAFO manages the high-seas fisheries in a rich fishing ground outside any EEZ in the northwestern Atlantic Ocean. NAFO’s “objective is to contribute through consultation and cooperation to the optimum utilization, rational management and conservation of the fishery resources of the Convention Area.”⁶⁸ The convention establishes a Fisheries Commission whose purpose is to achieve “optimum utilization of the fishery

resources” and to adopt a total annual catch quota based on the recommendations of a Scientific Council. The total annual catch quota, by species, is allocated by the commission among the members, giving special consideration to traditional fishing patterns and coastal communities whose livelihoods are based on resources from fishing regional waters.

The commission is also responsible for the adoption of “international methods of control and enforcement” by which member states may engage in mutual enforcement of quotas.⁶⁹ Mutual-enforcement measures include a mandatory vessel-monitoring system that uses satellite tracking to provide position updates every two hours; a mandatory observer program in which every vessel fishing in the regulatory area must carry an independent and impartial observer to report any infringements; and a joint inspection and surveillance scheme in which contracting parties have, in rotation, “inspection presence” responsibilities (currently Canada and the European Union) to monitor compliance by the vessels of all contracting parties and report apparent infringements of any vessel to its government for investigation and administrative or judicial action.⁷⁰ NAFO’s well developed scheme for multilateral accommodation of mutual fisheries interests and enforceability shows promise for fisheries cooperation in the South China Sea.

Win-Win Thinking about Disputes Related to Military Activities

There is at least some geostrategic rationale for Chinese antiaccess-oriented norms. China seeks to develop control over its near seas in order to enhance its own security and enjoy a freer hand in Asia to pursue its political objectives. However, China’s approach to the normative relationship between coastal states and foreign military power in the EEZ is shortsighted in that it focuses on China’s regional objectives, seemingly without regard to the importance of naval power to the security of sea-lanes around the globe. China relies for its economic growth and development on those very sea-lanes. Thus there appears to be a gap between China’s expression of antiaccess legal norms and its own global interests, since the logical result of a normative shift from international access to the EEZ toward coastal-state authority to exclude foreign military power would be an expanded zone of instability at sea and increased sanctuary for such destabilizing elements as piracy, human trafficking, and illegal weapons and narcotics trafficking.

It is Chinese pressure on the norms that govern military activities at sea that is now drawing the United States into disputes in the South China Sea in the first place. The United States has long withheld any opinion as to the ultimate disposition of questions of sovereignty and jurisdiction in the region. But freedom of navigation and the freedom to pursue traditionally lawful military activities at

sea are critical interests of the United States. Thus, at the 2010 ASEAN Regional Forum in Hanoi, the United States and ASEAN nations made it clear to China that its excessive claims in this regard are politically and legally unsustainable. Secretary Clinton took the opportunity to remind ARF attendees that freedom of navigation for all purposes, including for military activities, is a vital American national interest and is in the interest of all states that rely on open and secure sea-lanes—and indeed, “all” includes China.

During the tense ARF session in Hanoi, published reports pointed to another by-product of China’s policies—a desire, born of rising friction over South China Sea security issues, by many regional states for renewed American attention to regional security dynamics. As one Australian defense scholar stated, “All across the board, China is seeing the atmospherics change tremendously. . . . The idea of the China threat, thanks to its own efforts, is being revived.”⁷¹ Unfortunately, the Chinese policy-making community currently seems unwilling or unable to accommodate the interests of either its regional neighbors or the United States, despite China’s pledge in the Declaration on the Conduct of Parties in the South China Sea to “respect . . . freedom of navigation in and overflight above the South China Sea as provided for by the universally recognized principles of international law, including the 1982 UN Convention on the Law of the Sea.” This intractability reflects a national self-assertion that has only reaped instability. More traditional Chinese cultural thinking reflects elements of self-restraint and responsibility for others, especially those who are weaker, elements that appear to have been suppressed from the Chinese political body as present policies were made in 2009 and 2010.

Underlying the concern of other states about China’s behavior and international law perspectives is the question of what kind of major power China will become as it continues to rise. Will it use its increased power to achieve only its own interests, at the expense of the important interests of others? If so, this is a win-lose path that is likely to lead to continued tensions and possibly even conflict. Or will China undertake a more active leadership role from within the current architecture of norms, institutions, and international law and seek to develop win-win solutions to problems of overlapping interests? Whether the end of the twenty-first century sees a strong United States or a strong China, or a strong United States *and* a strong China, a regional partnership to address nontraditional security concerns will have been a win-win approach, accommodating the dynamics of mutual interests among the inevitable tensions of international relations.

The Three Disputes in the South China Sea have been sources of instability and even aggression for more than four decades. Only after the negative reaction to

the 1995 Mischief Reef incident and China's shift of policy toward regional integration and joint resource development was there a period of relative peace. Future peace and security in the South China Sea require all regional countries to remain focused on mutual interests rather than on the pursuit of national interests alone. This mutuality should include a renewed commitment to political, economic, and commercial integration and joint development of living and non-living maritime resources, which form a common Asian heritage. Nonregional states with regional interests, including the United States, can provide meaningful assistance and support in these endeavors.

Achieving a lasting situation of regional stability will require new approaches. The current pursuits of sovereignty, jurisdiction, and control are by nature win-lose. Power alone may produce settlements, but such settlements may not be final, because they do not account for the long-standing mutual interests of others. New, win-win forms of problem solving are needed today—forms marked by shared rather than exclusive authority and mutual rather than nationalistic interests. Only such approaches will ensure that the twenty-first century does not mirror the rivalry and conflict that dominated the twentieth.

NOTES

1. "Declaration on the Conduct of Parties in the South China Sea," *Association of Southeast Asian Nations*, www.aseansec.org/.
2. Jason Folkmanis, "China Warns Some Oil Companies on Work with Vietnam, U.S. Says," *Bloomberg*, 16 July 2009, www.bloomberg.com/.
3. Raul Pedrozo, "Close Encounters at Sea: The USNS *Impeccable* Incident," *Naval War College Review* 62, no. 3 (Summer 2009), p. 101.
4. "Comments by Secretary Clinton in Hanoi, Vietnam," 23 July 2010, available at www.america.gov/.
5. Joshua P. Rowan, "The U.S.-Japan Security Alliance, ASEAN, and the South China Sea Dispute," *Asian Security* 45, no. 3 (May/June 2005), pp. 414, 419–29.
6. See, e.g., Permanent Mission of the Socialist Republic of Viet Nam to the United Nations, letter ser. 86/HC-2009 to H.E. Mr. Ban Ki-moon, 8 May 2009, available at www.un.org/.
7. *Joint Submission to the Commission on the Limits of the Continental Shelf Pursuant to Article 76, Paragraph 8 of the United Nations Convention on the Law of the Sea 1982 in Respect of the Southern Part of the South China Sea, Part I: Executive Summary* (n.p.: Government of Malaysia/Government of Socialist Republic of Vietnam, May 2009) [hereafter *Malaysia-Vietnam Joint Submission*], available at www.un.org/.
8. Philippine Mission to the United Nations, letter ser. 11-00494, no. 000228, to the Secretary-General of the United Nations, 5 April 2011, available at www.un.org/.
9. Li Jinming and Li Dexia, "The Dotted Line on the Chinese Map of the South China Sea: A Note," *Ocean Development and International Law* 34 (2003), pp. 287–95.
10. It should be noted that on Chinese maps there is a tenth dash outside the South China Sea, to the southeast of Taiwan, that clearly indicates China's claim over that island.

11. Wang Shumei, Shi Jiazhu, and Xu Mingshun, "Carry Out the Historic Mission of the Army and Establish the Scientific Concepts of Sea Rights," *Zhongguo Junshi Kexue* [China Military Science], 1 February 2007, OSC CPP20070702436003, pp. 139–46.
12. Li Haitao, "It Is Appropriate to Struggle Rather than to Fight in Order to Defend Maritime Sovereignty," *Ta Kung Po Online*, 9 November 2009, OSC CPP20091109710010.
13. For example, a research fellow of the People's Republic of China's National Institute for South China Sea Studies asserted at a conference at the Richardson School of Law, University of Hawaii (Manoa), in September 2010, that one Chinese perspective is that these waters are fully sovereign, similar to territorial seas.
14. Peng Guangqian, "China's Maritime Rights and Interests," in *Military Activities in the EEZ: A U.S.-China Dialogue on Security and International Law in the Maritime Commons*, ed. Peter Dutton, China Maritime Study 7 (Newport, R.I.: Naval War College Press, 2010), p. 15.
15. "South China Sea: Controversies and Solutions—Interview with Liu Nanlai," *Beijing Review*, 4–10 June 2009.
16. Hong Nong, National Institute for South China Sea Studies (presentation delivered at the Univ. of Hawaii and the Asia Pacific Center for Strategic Studies, Honolulu, 1 October 2010) [hereafter Hong Nong, presentation].
17. Fisheries Case (United Kingdom v. Norway) Judgment of December 18, 1951, *International Court of Justice Reports*, 1951, p. 116.
18. Hong Nong, presentation.
19. Mark J. Valencia, Jon M. Van Dyke, and Noel A. Ludwig, *Sharing the Resources of the South China Sea* (Honolulu: Univ. of Hawaii Press, 1999), plate 1. Note that statements on occupation and control over various of the Spratlys features vary; for instance, see Rowan, "U.S.-Japan Security Alliance, ASEAN, and the South China Sea Dispute," for a somewhat different count.
20. "Arbitral Award of His Majesty the King of Italy on the Subject of the Difference Relative to the Sovereignty over Clipperton Island (France v. Mexico), January 28, 1931," in *American Journal of International Law* 26 (1932), p. 390; "Arbitral Award Rendered in Conformity with the Special Agreement Concluded on January 23, 1925, between the United States of America and the Netherlands Relating to the Arbitration of Differences Respecting Sovereignty over the Island of Palmas (Miangas), April 4, 1928," in *American Journal of International Law* 22 (1928), p. 867; The *Minquiers and Ecrehos Case* (France/United Kingdom), 1953 International Court of Justice 47; *Land, Island, and Maritime Frontier Dispute* (El Salvador/Honduras; Nicaragua intervening), 1992 International Court of Justice 351.
21. "Major General: 'South China Sea Is China's Core Interest' Is Not an Official Policy," *China Review News*, 12 October 2010, www.chinareviewnews.com.
22. "China's Maritime Rights and Navy," *Shijie Zhishi* [World Knowledge], 1 January 2009, OSC CPP20090123587001.
23. Valencia, Van Dyke, and Ludwig, *Sharing the Resources of the South China Sea*, p. 77. The authors note that "China seems to have developed a three noes policy to deal with the Spratlys issue—no specification of claims, no multilateral negotiations, and no internationalization of the issue, including no involvement of outside powers." China's policy seems to have remained unchanged over the past eleven years.
24. For a recent version of China's nine-dashed-line claim, see Permanent Mission of the People's Republic of China to the United Nations, letter ser. CML/18/2009 to H.E. Mr. Ban Ki-moon, 7 May 2009, available (in English) at www.un.org/.
25. "Table of Claims to Maritime Jurisdiction (as of July 31, 2010)," *United Nations Organization*, www.un.org/. For Taiwan's claim, see "Maritime Claims," *CIA World Factbook*, www.cia.gov/.
26. Permanent Mission of the People's Republic of China to the United Nations, letter ser. CML 8/2011 to the Secretary-General of the United Nations, 15 April 2011, available (in English) at www.un.org/.
27. Philippine Mission to the Secretary-General, 5 April 2011.
28. The entire body of documents submitted by the various disputants, which no doubt will

- have grown while this article was in press, can be found at "Oceans and Law of the Sea," *United Nations Organization*, www.un.org/.
29. "China Dismisses Japan's Claim of Tiny Atoll in Pacific," Xinhua, 19 January 2010.
 30. *Statement on the Territorial Sea, the Contiguous Zone, the Exclusive Economic Zone and the Continental Shelf of 12 May 1977*, available at www.un.org/.
 31. *Ibid.*
 32. U.S. State Dept., *Straight Baselines: Vietnam, Limits in the Sea 99* (Washington, D.C.: Bureau of Intelligence and Research, 12 December 1983), available at www.state.gov/.
 33. Exclusive Economic Zone Act, 1984, Act No. 311: An Act Pertaining to the Exclusive Economic Zone and Certain Aspects of the Continental Shelf of Malaysia and to Provide for the Regulations of Activities in the Zone and on the Continental Shelf and for Matters Connected Therewith, available at www.un.org/.
 34. Malaysia-Vietnam Joint Submission.
 35. Republic of the Philippines Public Act No. 9522, available at www.un.org/.
 36. Presidential Decree No. 1599 of 11 June 1978 Establishing an Exclusive Economic Zone and for Other Purposes, available at www.un.org/.
 37. Presidential Proclamation No. 370 of 20 March 1968 Declaring as Subject to the Jurisdiction and Control of the Republic of the Philippines All Mineral and Other Natural Resources in the Continental Shelf, available at www.un.org/.
 38. Convention on the Continental Shelf, Geneva, 29 April 1958, available at untreaty.un.org/.
 39. The first such episode was the EP-3 incident of 1 April 2001, which had been preceded by increasingly frequent and aggressive Chinese intercepts of U.S. reconnaissance flights, especially in the South China Sea region. On this point see Shirley A. Kan, *China-U.S. Aircraft Collision Incident of April 2001: Assessments and Policy Implications*, Report for Congress (Washington, D.C.: Congressional Research Service, 10 October 2001), p. 2. Between 2001 and 2009, Chinese vessels frequently harassed but did not directly interfere with U.S. hydrographic and military survey vessels operating in the East and South China Seas. The USNS *Impeccable* incident on 8 March 2009, therefore, represented a departure.
 40. Pedrozo, "Close Encounters at Sea," p. 101.
 41. Mark MacDonald, "U.S. Navy Provoked South China Sea Incident, China Says," *New York Times*, 10 March 2009; "Pentagon Says Chinese Vessels Harassed U.S. Ship," CNN.com, 9 March 2009.
 42. Ann Scott Tyson, "Destroyer to Protect Ship near China," *Washington Post*, 13 March 2009.
 43. Ben Blanchard, "China Says Will Respect South Seas Navigation Freedom," Reuters, 31 July 2010, available at www.abs-cbnnews.com/.
 44. Dutton, ed., *Military Activities in the EEZ*.
 45. Donald K. Emmerson, *China's "Frown Diplomacy" in Southeast Asia*, PacNet 45 (Honolulu: Pacific Forum CSIS, 6 October 2010), csis.org/.
 46. I am indebted to my colleague Nan Li for much of the information in this section.
 47. M. Taylor Fravel, *Strong Borders, Secure Nation: Cooperation and Conflict in China's Territorial Disputes* (Princeton, N.J.: Princeton Univ. Press, 2008).
 48. Valencia, Van Dyke, and Ludwig, *Sharing the Resources of the South China Sea*, p. 87.
 49. I am indebted to my colleague Lyle Goldstein for much of the information in this section.
 50. Zhang Wenmu, *China Report* (n.p.: August 2009), p. 28. Translation by U.S. Naval War College China Maritime Studies Institute (CMSI).
 51. Comments posted on the company's website, 10 June 2010.
 52. *Fisheries Management: Focusing on a Rights-Based Regime* (Beijing: 2006) [in English].
 53. "Fifth Stroll around the World Expo: A Blue Water Navy—Imaginations in the World Expo Garden," *Dangdai Haijun*, 1 August 2010, OSC CPP20100928090014, p. 28.
 54. Peng Guangqian, "China's Maritime Rights and Interests."

55. H. J. Mackinder, "The Geographical Pivot of History," *Geographical Journal* 23, no. 4 (1904).
56. Peng Guangqian, "China's Maritime Rights and Interests."
57. Lyle Goldstein (CMSI), trans., "On the 'Seeking Joint Development' Issue in the South China Sea," *Ocean Development and Management* (2008).
58. Lyle Goldstein (CMSI), trans., "Special Military Intelligence Report on the South China Sea," *Inside Defense* (May 2009), p. 21.
59. My colleague Lyle Goldstein carefully translated and analyzed this range of perspectives in an excellent paper entitled "An Abundance of Noise and Smoke, but Little Fire," which he delivered at the International Studies Association's annual conference in Montreal on 19 March 2011.
60. "Ma Xiaotian Speaks at Xinagshan Forum," *China Review News*, 22 October 2010, www.chinareviewnews.com/.
61. "Declaration on the Conduct of Parties in the South China Sea."
62. Valencia, Van Dyke, and Ludwig, *Sharing the Resources of the South China Sea*, chap. 8.
63. Treaty between Norway, the United States of America, Denmark, France, Italy, Japan, the Netherlands, Great Britain and Ireland and the British overseas Dominions, and Sweden concerning Spitsbergen signed in Paris 9th February 1920, available at www.lovdatta.no/.
64. *Ibid.*, art. 3.
65. Yu Yunjun and Yongtong Mu, "The New Institutional Arrangements for Fisheries Management in Beibu Gulf," *Marine Policy* 30, no. 3 (May 2006), pp. 249–60.
66. Thao Nguyen Hong, "Maritime Delimitation and Fishery Cooperation in the Tonkin Gulf," *Ocean Development and International Law* 36 (2005), pp. 25–44.
67. David Rosenberg, "Managing the Resources of the China Seas: China's Bilateral Fisheries Agreements with Japan, South Korea, and Vietnam," *Asia-Pacific Journal: Japan Focus*, www.japanfocus.org/.
68. See *Northwest Atlantic Fisheries Organization*, www.nafo.int/.
69. Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries, art. XI, available at www.nafo.int/.
70. *Ibid.*
71. Edward Wong, "China's Disputes in Asia Buttress Influence of U.S.," *New York Times*, 23 September 2010.

PROGRESSING MARITIME SECURITY COOPERATION IN THE INDIAN OCEAN

Lee Corder

The theme of the second Indian Ocean Naval Symposium (IONS), hosted in Abu Dhabi by the United Arab Emirates (UAE) Navy on 10–12 May 2010, was “Together for the Reinforcement of Maritime Security in the Indian Ocean.”¹ Navy chiefs of service and senior maritime security officers or their representatives from thirty of the thirty-two Indian Ocean region (IOR) navies and maritime security forces gathered for this significant event. Participants from the diverse Indian Ocean littoral came from the Arabian Gulf and the Red Sea, Africa, South Asia, Southeast Asia, and Australia.² Pakistan, which had declined an invitation to attend the first IONS meeting, in New Delhi in 2008, was represented by the local air attaché. In addition, extraregional maritime force participants included the U.S. Navy, represented by Commander, Naval Forces,

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U.S. Central Command, Vice Admiral William Gortney, and the Deputy Chief of Naval Operations, Vice Admiral Bruce W. Clingan; the Italian Navy, represented by its chief, Admiral Bruno Branciforte; and the Royal Navy of the United Kingdom, which sent a senior delegation. Notable was the absence of participants from the navies of other external countries with significant and growing interests in the IOR, for example, China, Russia, Japan, and the Republic of Korea.

The opening ceremony saw India, the founder and inaugural chair of IONS, represented by Admiral

Nirmal Verma, the Indian Navy chief, pass chairmanship for the next two years to his UAE counterpart, Brigadier Naval Staff Ibrahim Salim Mohamed Al-Musharrakh. Admiral Verma spoke of the vision of IONS bringing regional navies together for the greater collective good: to enhance safety and security, to share knowledge, and to support disaster relief and humanitarian assistance for “the larger benefit of mankind.” Brigadier Al-Musharrakh noted that the concept of security had changed, that it was no longer simply about territory but now encompassed issues like water availability and the environment. He stated that trade protection, law and order, regional stability, and the effects of climate change were key collective-security issues for the region. He emphasized the need for regional naval forces to work together to ensure that the IOR continued to be a source of growth and well-being in the face of common threats and challenges.

Indian Ocean regional maritime security has become a key factor as the IOR transitions from an international backwater, a mere thoroughfare for maritime trade, to status as a major global nexus of resource, human, economic, and environmental issues. The IONS theme suggested a region moving toward maritime security cooperation; there was considerable convergence of views on related issues and recognition of the need to take collective approaches.

Moving from a common understanding of issues and aspirations to cooperation to effective action presents enormous challenges. This is particularly the case for the Indian Ocean, which does not have region-wide security architectures, a common regional identity, a history of regional cooperation, or accepted regional leadership frameworks. Significant problems are also posed by the need to recognize the interests and accommodate the involvement of regional powers, as well as of extraregional powers, like China and the United States. Nonetheless, emerging strategic and security circumstances in the medium and long terms dictate a compelling need for effective IOR maritime security cooperation. This article analyzes the prospects of, and offers ideas for, progressing maritime security cooperation in that region.

COMMON INTERESTS, THREATS, RISKS, AND VULNERABILITIES

The international system is fundamentally anarchic, with states acting in accordance with their perceived national interests.³ If progress is to be made toward effective maritime security cooperation among nation-states, there needs to be a strong sense that commonly held interests are threatened, at risk, or vulnerable and that cooperative action among states will help to protect them. States are most likely to embrace cooperative security measures when there is a compelling, shared belief that the defense of their own interests can be usefully enhanced through that course. Pertinent questions that arise include: What are the

common regional security interests? Whose national interests are affected? How are those interests threatened? What are the key strategic vulnerabilities? Critically, how would maritime security cooperation help manage the risks posed? Short- and long-term regional risk assessments and strategic-level analyses are required to answer these questions.

The evolving strategic environment in the IOR is profoundly impacted by divergent perceptions about its unique regional political and geographic circumstances. For many in this region, especially South Asians, the Indian Ocean has historically been one of the region's strongest unifying factors. For centuries, its waters have carried religions, languages, traditions, and indeed people across thousands of miles and bound them together in a cultural brotherhood. According to those who hold this view, it is only the failure of the inhabitants to record the region's maritime history that has deprived it of the status of a cohesive regional entity. For most others, however, the IOR appears to be a largely disaggregated oceanic and littoral zone, more a collection of subregions than a coherent, single region.⁴ This view appears to have been reinforced by its division by the United States between the Pacific, Central, and Africa unified commands, whose trijunction is in the northwest Indian Ocean.⁵

The IOR is demonstrably maritime. The national interests of its states range from the need to ensure the unfettered flow of maritime trade to support burgeoning, or emerging and struggling, economies to the need for effective management of the Indian Ocean's vast "maritime commons," both national jurisdictions and high seas.⁶ It is in the maritime domain that the interests of IOR states largely converge, and it is at sea that the need for cooperative security is most pressing.⁷ It is also at sea that the best opportunities lie to develop mechanisms, and ultimately habits, of security cooperation that may in the future have application to more controversial security agendas.

CLIMATE CHANGE, MARINE ENVIRONMENTAL DEGRADATION, AND OCEAN MANAGEMENT

The direst long-term threats to the collective interests of regional countries and peoples are nontraditional security risks. The combined impacts of climate change, environmental degradation, and ocean resource exploitation will profoundly affect the lives of millions in a region where many states have little capability to manage or respond to them.⁸

The Impact of Climate Change

The Geneva-based Intergovernmental Panel on Climate Change has concluded that the evidence of warming of the global climate system is unequivocal.⁹ Sea temperatures of the equatorial areas of the Indian Ocean are rising more quickly

than elsewhere, and the likelihood of significant variances in the monsoon season has increased, which could create drought conditions for much of South Asia. There are increasing incidences of very intense storms, with higher peak wind speeds and heavier precipitation than has been typical, which could result in major coastal damage and massive flooding.¹⁰ The changing frequency and intensity of extreme weather events, together with sea-level rise, are expected to have significantly adverse effects.¹¹

The scale of the potential climate change impact in the IOR is so immense as to be difficult to comprehend. The region is likely to be faced with a series of major weather-related events that, over time, will impose human suffering and environmental damage that will cumulatively overwhelm and drain response resources and undermine resilience. The impact will be deeply felt in Asia;¹² more than a billion people will have been adversely affected by the 2050s.¹³ Africa is also very vulnerable.¹⁴ The number of people annually subject to flooding in coastal populations is projected to increase from thirteen million to ninety-four million, primarily in South Asia and Southeast Asia.¹⁵ Millions of people in low-lying areas of Bangladesh, Pakistan, Sri Lanka, India, Vietnam, Burma (Myanmar), and Indonesia will be affected. The incidence of increasingly intense tropical cyclones, combined with growing coastal populations, will result in massive loss of life, damage to property, and large-scale transmigration, resulting in turn in very frequent requirements for humanitarian assistance and disaster relief.

Marine Resources. Global warming will also have far-reaching implications for marine ecosystems.¹⁶ The effects of climate change will be compounded by increased competition for and environmental degradation and overutilization of the ocean's resources. Illegal, unreported, and unregulated fishing is predicted to increase in the Indian Ocean as stocks in traditional fishing areas are exhausted and fishermen are forced to move to deeper and more distant waters. There is already significant evidence of the wider implications of the illegal plundering of stocks by distant-water fishing fleets off Somalia, for example.¹⁷ Local fisheries are being progressively dispossessed by external enterprises catching marketable fish, like tuna, to meet international demand.¹⁸ These circumstances exacerbate already tenuous food-security concerns in the IOR.

Maritime Boundary Delimitations. The delimitation of the maritime boundaries of many IOR states has not been agreed, although progress is better here than in some other parts of the world.¹⁹ Maritime disputes between adjacent littoral states are likely to occur due to boundary uncertainty and overlapping claims. There are ocean-management concerns in some areas due to the lack of clarity over which nations are to exercise rights and accept obligations for

husbanding, regulating, and enforcing marine zones. Many Indian Ocean states have submitted extended-continental-shelf claims to the United Nations (UN) Commission on the Limits of the Continental Shelf; these claims, if established, will extend the marine zones that require responsible management.²⁰

Maritime and Marine Challenges: Managing the Risks

Many IOR states have little or no capacity to fulfill their responsibilities for managing marine zones effectively. Exploitation, pollution, and water-security infringements will proceed unchecked in many parts of the Indian Ocean, both under national jurisdiction and in the high seas. Very few regional countries have the individual capacity to deal with human tragedies and environmental damage to coastal areas on a massive scale resulting from repeated natural disasters. The overall regional capacity to mitigate the risks from climate change is grossly inadequate.

The widespread coastal devastation and loss of life caused by the 2004 Asian tsunami and the 2007 and 2009 Bangladesh cyclones point to the collective human-security challenges that lie in the future. In those instances, many regional countries rallied in mutual support; significant response and recovery assistance was also provided by extraregional nations and organizations.²¹

The combined effects of climate change and marine environmental degradation pose profound threats over the medium and long terms to many IOR littoral states. Natural-disaster response and humanitarian aid will demand the application of resources and the coordination of collective efforts on scales and at frequencies far beyond anything so far experienced. Related human, food, and environmental security concerns will be greatly magnified. Vast cooperative responses will be required that will involve regional and extraregional maritime security forces.

MARITIME TRADE, ENERGY, AND ECONOMIC SECURITY

Law and order threats to maritime trade that are prevalent in the IOR pose significant risks to both regional and extraregional economic and energy security. The proliferation of failed and failing states in the region adds further dimensions to the security challenges that—along with competition and perhaps conflict between regional and extraregional powers, for example, China and India—could impinge upon freedom of navigation and therefore the flow of maritime trade.

Energy Supply and Demand. Asia is forecast to experience by far the world's greatest increase in energy demand into the medium term.²² China and India's proportions of world energy use have greatly increased.²³ More than a third of the world's oil exports come from the IOR, with the vast majority of known

reserves in the Arabian Gulf subregion; “energy-surplus nations” have assumed increased importance in the global economic hierarchy.²⁴ The largest energy-growth area is in the demand for coal, forecast to grow by 73 percent between 2005 and 2030, most of the increase coming from China and India. Australia is the world’s largest exporter of coal, with South Africa close behind;²⁵ both countries ship much of it via the Indian Ocean.

The Indian Ocean Sea-Lanes. The Indian Ocean is now the world’s most important route for the movement of long-haul cargo.²⁶ More than 80 percent of the world’s seaborne trade in oil passes through the Indian Ocean’s choke points: the straits of Hormuz, Malacca, and Bab el Mandeb.²⁷ In addition to energy, vast quantities of bulk commodities and manufactured goods are moved by sea as part of the increasing intra- and extraregional trade.²⁸ The integrity of the Indian Ocean sea lines of communication (SLOCs) is vital to global and regional economic security. In the complicated international shipping and trading context, maintaining the flow of trade is very much in the collective interest of the world’s nations; to ensure it, cooperative maritime security efforts are required.

Piracy. The current international response to piracy off Somalia presents an example of the complexities of maintaining that flow. The multinational nature of the interests involved is clearly evident, as are the great challenges of dealing with even a relatively small piracy problem in a vast oceanic area. Despite the requirements of international law for flag states to exercise jurisdiction over ships and crews, the onus upon all states to repress piracy, ten UN Security Council resolutions since 2008, and the commitment of naval task forces, the international community continues to struggle with the problem of piracy off Somalia.²⁹

The incidence of piracy elsewhere in the IOR—for example, the Malacca Strait—has lessened, due to the combined efforts of littoral and extraregional nations. The advent of international cooperative entities—including the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP) and, more recently, the Djibouti Code of Conduct, aimed to “help address the problem of piracy and armed robbery against ships off the coast of Somalia and in the Gulf of Aden”—brings together regional nations and other interested parties to combat piracy.³⁰ Both are cooperative maritime security initiatives; however, there are some significant differences between them. ReCAAP is supported by Asian nations with capable maritime security regimes and some history of cooperation. The Djibouti Code of Conduct nations, in contrast, have very limited maritime security capabilities and little experience of cooperation.

Maritime Terrorism. The likelihood of terrorist attacks continues to be a major concern;³¹ the IOR retains the dubious distinction of being one of the world’s

sanctuaries for violent extremism.³² Although the threat of terrorist attack on shipping remains relatively low, it must be taken seriously, and some incidents have occurred in the IOR.³³ The terrorist threat at sea must be viewed as credible; major attacks can disrupt global security and the global economy.

In recent years, the need to counter that threat has led to substantial changes in the international maritime security environment. The International Ship and Port Facility Security Code and the Suppression of Unlawful Acts conventions and protocols have profoundly improved the security preparedness of the international maritime community, with respect to both ports and shipping.³⁴

Other Threats to Law and Order at Sea. Other law and order issues that threaten the interests of IOR states include illegal immigration, illegal fishing, marine pollution, and the smuggling of people, drugs, and arms. The protection of maritime boundaries and the policing of maritime domains are largely the responsibilities of individual nations. Threats to law and order at sea often have transnational dimensions—for example, crime and illegal immigration, which require collective regional or subregional responses. Illegal immigration is likely to increase significantly, given the impacts of climate change on burgeoning populations, combined with local conflicts.

REGIONAL STABILITY

The Indian Ocean region contains a large proportion of the world's failed and failing states, including eleven of the twenty states listed in the journal *Foreign Policy's* 2009 "Failed State Index."³⁵ Parts of the IOR have been labeled the "arc of crisis";³⁶ the term "arc of instability" has also been used.³⁷ Conflicts in the Middle East; political instability and conflict in Yemen, Sudan, and Eritrea; the "Talibanization" of Pakistan, extending from Afghanistan;³⁸ social unrest in parts of India; the political polarization in Bangladesh; the prodemocracy movement in Burma; simmering ethnic tensions after the recently concluded civil war in Sri Lanka—all these add fuel to the perception of a region riddled with political instability, actual or potential conflict, and uncertain security.

Somalia is the quintessential failed state, having long disintegrated as a functioning entity. A key consequence is a "yawning maritime security gap off the Horn of Africa," both a symptom and a result of the lack of law and order ashore.³⁹ The prospect of the degeneration of other states adjacent to vital international SLOCs and straits must be seriously considered. The maritime security interests of regional and extraregional states are likely to be affected if this occurs.

In a related vein, the Mumbai terrorist attacks are symptomatic of a lack of effective maritime-border control.⁴⁰ India and (to a lesser extent) Pakistan have capable naval and other maritime security forces, as do Arabian Gulf states

(Saudi Arabia, Iran, the UAE). Some other countries, however, have small naval forces of little effectiveness (Yemen, Kenya, and Djibouti, in the western Indian Ocean), and in many respects the region is a maritime security void. Many IOR states lack intelligence, early warning, and maritime air surveillance and reconnaissance or the coordinated maritime security patrol and response capabilities necessary to exercising sovereign control over their maritime domains. The lack of national capabilities is exacerbated at regional and subregional levels by the lack of cooperative bodies to coordinate the use of sparse resources.

Many extraregional countries have significant and legitimate interests to protect in the IOR. The extensive involvement of the U.S., Chinese, South Korean, and various European navies in the antipiracy effort off Somalia, for example, is aimed at protecting a common stake in the free flow of maritime trade. The United States, Britain, and other Western powers remain deeply engaged in the Middle East in support of global energy security and in addressing the sources of Islamist extremism. It can be argued that the involvement of external states helps to stabilize regional security; in many cases such involvement is essential to make up for shortfalls in the capabilities of regional states. However, in many IOR nations that experienced colonial rule it remains easy for politicians to invoke the specter of imperialism or “gunboat diplomacy.” External intervention is not universally welcomed by regional states, and certain types of intervention are potentially destabilizing. However, realization has dawned, especially since the 2004 tsunami disaster relief episode, that “cooperative engagement” with outside powers offers many benefits.

The emergence of China as a maritime power with increasing involvement in the Indian Ocean has created angst among some IOR states, particularly India. The Indian–Chinese strategic circumstance, in fact, presents a “security dilemma.”⁴¹ New Delhi perceives Chinese involvement as an attempt to strategically encircle India.⁴² The pace and scope of Chinese naval expansion and military modernization and the lack of transparency with which they have proceeded are certainly causing concern around the IOR.⁴³ China has extensive and legitimate interests there, including maritime trade and cooperative relationships with several IOR states.⁴⁴ However, China’s assertion that “it will never seek hegemony or engage in military expansion now or in the future, no matter how developed it becomes” is viewed with suspicion in India.⁴⁵ India too is modernizing and expanding its naval capabilities, which it seeks to justify because of its extensive coastline and maritime domain and broadened interests in IOR security and freedom of the seas.⁴⁶

India’s relationships with China are characterized as “cooperative at present but there is a competitive rivalry in trade and power projection.”⁴⁷ Some analysts consider that a potentially dangerous security situation is developing between

the two great Asian powers.⁴⁸ Strategic competition is likely to be played out largely at sea.

All parties with security interests in the IOR are likely to benefit from cooperation to manage the challenges presented by failed and failing states, as well as by great-power competition, with its attendant potential for miscalculation. Present circumstances represent compelling reasons why IOR states should collaborate among themselves and with extraregional states to promote regional stability.

MARITIME SECURITY COOPERATION

The case for cooperative security in the Indian Ocean region, then, is driven primarily by extreme vulnerability to the combined impacts of climate change and environmental degradation. This situation presents dire consequences over the medium and long terms for both regional and extraregional countries. Significantly, environmental security-related interests converge in the maritime domain.

A Compelling Case for Maritime Security Cooperation

The threats posed are insidious. There is unlikely to be a single defining moment that will galvanize collective action—and herein lies a major difficulty. Without a stark and immediate threat, like the prospect of global nuclear war during the Cold War period, persuading political leaders to act upon cooperative responses will present major difficulties. But unless regional and extraregional leaders exercise vision and imagination and take early, proactive action, crises will inevitably arise of enormous and unmanageable proportions, and only highly inefficient, largely ineffective, and essentially inadequate reactive responses will be available. The hard lessons will ultimately be learned by the international community, but it will be too late in many respects. Regrettably, it is difficult to avoid a pessimistic sense that late and ineffectual reaction is the most realistic and likely scenario.

The outcomes will be costly—financially, environmentally, and morally, in terms of human misery and lives. The threats to maritime trade security and energy security will also significantly affect the interests of external and regional nations. In the IOR, threats to the economic, environmental, and human security interests of regional and external countries have already grown to the extent that the common interests—especially in the maritime realm—of maintaining a stable region have become paramount.

Conversely, however, maritime security issues in the IOR could, if managed astutely and prudently, bind a diverse and largely disaggregated region. The maritime and marine context provides the opportunity for nations to cooperate to protect common interests—against a range of vulnerabilities that no single

state has the power to mitigate effectively—without significantly compromising territorial integrity or sovereignty. The risks posed in the maritime context are huge and must be faced, but in cooperative security terms they represent the “low-hanging fruit” that offer the potential for rapid and mutually beneficial action. Dealing with them could catalyze habits of region-wide cooperation that might arguably be applicable to harder and more sensitive security issues, like arms control and territorial, ethnic, ideological, and religious disputes ashore.⁴⁹

Risk Management

Managing the risks posed by an environment beset with uncertainty needs to be at the core of cooperative security in the IOR. Risk management is fundamentally about a structured approach to uncertainty. The international standard *ISO 31000:2009—Risk Management: Principles and Guidelines* presents a comprehensive framework that is intended to help “ensure that risk is managed effectively, efficiently and coherently . . . in a systematic, transparent and credible manner.”⁵⁰ A formal, strategic risk-management approach would be useful in defining the magnitude of challenges and identifying mitigation options. In a regional, cooperative context, the hard questions to be addressed include: How will risks be recognized? Who has the capability, capacity, and will to respond? What cooperative arrangements and mechanisms are needed? What would be the consequences of doing nothing?

Governments are increasingly applying risk-management approaches to strategic issues. The international risk-management standard offers an internationally accepted framework, a systemized approach to dealing with regional security. An independent, collaborative, and authoritative regional risk assessment would help inform IOR and external nations about the scale of the risks being faced and options for addressing them. In the maritime domain, a regional maritime-security risk assessment represents a way to initiate cooperation. Such a proposal would need regional champions and a deal of support from extraregional nations to proceed.

How Are IOR Maritime-Security Cooperative Arrangements to Be Developed?

Deciding the nature of cooperative arrangements and devising methodologies to achieve cooperative agendas present serious problems and pose many questions. What is meant by “maritime security cooperation”? What are the desirable extent and scale of cooperation? Who needs to participate? To what extent should extraregional nations and forces be involved? How can regional and extraregional capabilities be effectively coordinated in the common interest? Who has the capability and capacity to contribute, and who should do so? Who is responsible, and who will pay? Where are capability and capacity lacking? What alternate options and models for cooperation need to be considered? For

example, do we need standing, combined naval forces and formal agreements, or will loose coalitions of the willing assembled on ad hoc bases suffice? Are there lessons to be drawn from security cooperation in other regions? What are the risks associated with various possible courses of action versus the risks of inaction? What international instruments are in place (e.g., the 1982 UN Convention on the Law of the Sea), and to what extent have these been adopted by regional states? Do these instruments aid or impede cooperation? What leadership structure would accommodate most appropriately the aspirations and concerns of both regional and extraregional participants? Importantly, what maritime security cooperative arrangements are likely to be achievable in practice?

It is much easier to ask such questions than to formulate acceptable, workable, and achievable solutions in the IOR context. Real progress toward maritime security cooperation is likely to be torturous, slow, and frustrating.

MECHANISMS FOR COOPERATION: EXPLORING OPTIONS

The distinct nature of the geostrategic environment must be at the core of any cooperative-security considerations. The circumstances of the Indian Ocean region are in many respects quite different from those of the Atlantic or Pacific, for example. In the IOR, the concept of regionalism is not well developed. The disparate and disaggregated subregional IOR geography, lack of common region-wide historical integration and identity, and an absence of accepted regional leadership represent considerable obstacles. The Indian Ocean is too big, too diverse, and too important and the challenges too large to be dominated or “owned” by any single nation or small group.

There is a strongly held view in some states, particularly India, that the responsibility for IOR maritime security should rest primarily with the regional states. However, as outlined earlier, most of them lack the capacity, whereas external powers have both the capacity and interests to protect; they need, therefore, to be constructively engaged. For reasons of identity, security and long-term stability, and to take account of regional peculiarities, some tailor-made version of regional cooperation must be devised.⁵¹ International regimes that are self-generated and based on negotiation are likely to offer the greatest utility and the greatest chances of success for the IOR, in terms of legitimization and regional cooperation.⁵²

Does ARF Provide a Useful Model for the IOR? The ASEAN (Association of Southeast Asian Nations) Regional Forum, focused primarily on the western Pacific and East Asia, may provide a model to work from.⁵³ ARF has been operating for sixteen years and provides a forum for nation-to-nation dialogue on political

and security issues. In some respects, ARF represents a strategic and security parallel to Asia-Pacific Economic Cooperation (APEC).⁵⁴ Notably, however, India and Pakistan are participants in ARF but not of APEC. Neither ARF nor APEC is a formal alliance or treaty arrangement; both are nonbinding forums for dialogue and cooperation. ARF includes the major Pacific powers—the United States, China, India, Japan, and Russia—both Koreas, Australia, and many smaller states. Importantly, ARF has established a very active agenda for discussion of security-related matters.

However, there are significant factors that make direct translation to the IOR less than ideal. ARF has at its core ASEAN, originally established in 1967, a collection of ten mainly small (except for Indonesia) Southeast Asian states; there is no IOR equivalent.⁵⁵ Given the Indian Ocean geography, there are several subregional groups that would need to be accommodated. Participation by external countries with significant interests in IOR maritime security, like the United States, China, France, Japan, and Russia, could be envisaged for an IOR version of ARF. However, underpinning ARF is a web of bilateral and multilateral formal security alliances between the United States and many western Pacific states; that is not the case, at least to the same extent, in the IOR.

CSCAP. The Council for Security Cooperation in the Asia Pacific in many respects parallels and feeds directly into the ARF and other official regional-security and defense forums.⁵⁶ This “Track 2” entity performs a very useful function in enabling sensitive and controversial issues to be informally discussed by experienced former diplomats, officials, and academics, generating proposals that can be put forward to official forums and regional governments for consideration.⁵⁷ CSCAP includes four IOR states: India, Australia, Indonesia, and Thailand, but there is currently no similar Track 2 organization to deal with security-related matters specifically in the IOR. Creation of such an entity would be worth consideration.

Does NATO Offer Lessons Relevant to the IOR? NATO, of course, was devised in the context of the Cold War; it is a formal security alliance originally created to coordinate U.S. and European responses to the threat of invasion and potential nuclear war with the former Soviet Union and Warsaw Pact. The clear, compelling, and immediate threat to the survival of Western Europe drove the need for formal cooperative security arrangements. The shared history of two world wars and the key leadership role of the United States have been central to NATO. Strong political and military leadership and a cooperative approach generated by a shared sense of threat to individual interests have been essential. There would seem to be little in common with the evolving situation in the IOR. In any case, NATO’s journey of over sixty years highlights the challenges of building,

gaining, and maintaining consensus between nation-states in a formal alliance even with survival at stake.

What about the IOR-ARC and Other Existing Regional Entities? The Indian Ocean Rim Association for Regional Cooperation is cited by some analysts as potentially meeting the need for an IOR security forum.⁵⁸ However, it does not currently encompass all the key players.⁵⁹ Its charter is to facilitate and promote economic, business, and cultural cooperation by bringing together government, business, and academia. It specifically does not deal with security matters, although piracy off Somalia has been discussed in the context of trade implications.⁶⁰ In fact, senior Indian officials have been outspoken about the ineffectiveness of the IOR-ARC.⁶¹ There may be an opportunity to revitalize it when India assumes the chair (and Australia the vice chair) during 2011–12, and when Australia succeeds India 2013–14.⁶² However, the charter, national memberships, participants (including government ministers and officials), and the nature of IOR-ARC business would need to be significantly changed if political, strategic, and security issues were to be included.

How Useful Is IONS? The emerging role of the Indian Ocean Naval Symposium, along the lines of that of the Western Pacific Naval Symposium (WPNS), represents useful progress toward regional maritime security cooperation.⁶³ However, in the absence of something akin to the Track 1 ARF, perhaps supported by the Track 2 CSCAP—to work security, strategy, and policy issues at head-of-government, senior-minister, senior-official, and academic levels—IONS is likely to facilitate only minor and relatively low-level, navy-to-navy cooperation. Such issues as regional strategic-risk assessments, national security policies, rules of engagement, and multinational strategic and operational directives, and regional security regimes, arrangements, and agreements need to be considered at and directed from national political levels. As does WPNS, IONS may usefully consider and coordinate issues like military and naval doctrine, naval procedures and training, and technological compatibility (protocols, information technology connectivity, logistics). But WPNS took many years to evolve to the stage where worthwhile multilateral naval exercises and training were possible, and IONS is currently well short of achieving this.

At the second IONS meeting, in Abu Dhabi, much useful discussion occurred on a range of naval professional, technical, and tactical matters. There was also a well supported session that discussed development of a common maritime security strategy. However, in the final plenary, involving only the lead national representatives, a proposal that this idea be pursued gained no support. There was no appetite even for preliminary work that would inform the possibility of common strategic perspectives. IONS is the wrong level for such matters; they

lie more appropriately with governments. There appeared to be reluctance in the fledgling IONS to move too quickly. Notably, India, the originator of IONS, appeared to adopt a conservative and low-key approach to the future agenda.

Subregional Structures. There are several subregional entities in the IOR that have limited, subregionally based membership; examples are the South Asian Association for Regional Cooperation, the Southern African Development Community, and the Gulf Cooperation Council.⁶⁴ These entities generally do not address security issues and would be unlikely to form the basis for the evolution of IOR-wide maritime security cooperation. The key leaders of each of these subregional groupings could, however, play critical roles in devising a region-wide way ahead.

Moving toward collective maritime security and common maritime security strategies requires active engagement at the highest political levels. In the IOR, India needs to play a key leadership role. However, India appears to be more comfortable in bilateral relationships with the United States and others and appears reluctant to take a collective-security leadership role. Other key regional and subregional states—for example, Australia, South Africa, Saudi Arabia, and Indonesia—have the potential to perform vital leadership roles and need to be engaged. The core leadership of IOR security initiatives needs to come from within the IOR, at least initially.

NEW IOR SECURITY DIALOGUE FORUMS

Forging a way ahead for maritime security in the Indian Ocean region is not going to be easy. Current mechanisms are at best fragmented and incomplete. There may be suspicion toward external powers in some quarters and a lack of willingness to engage with them. Similarly, external powers may well differ among themselves as to what cooperative IOR security arrangements should be supported. The nature of the IOR and the maritime security risks it faces mean that a region-wide entity would need to accommodate both regional and key extraregional countries.

Options that represent the status quo could be attractive to some parties—they could wait and do nothing. Regrettably, this may be the most likely outcome. But waiting until crises emerge offers the lowest likelihood of mitigating the emerging risks. Another and related option would be to continue to rely upon ad hoc “coalitions of the willing” to deal with crises as they arise. This reactive approach has been applied to maritime security challenges to date—for example, antipiracy operations off the Horn of Africa and responses to the Indonesian tsunami and other natural disasters. Like the “do nothing” option, it

gives little hope of dealing effectively with the massive maritime security-related risks anticipated to beset the IOR in the future.

Both options would ensure that the results of attempts to prevent, respond to, and recover from the massive human and environmental tragedies of the kinds forecast would be suboptimal. Responses to crises would remain inadequate due to the lack of mechanisms to coordinate action, including training, collective learning, and the sharing of capabilities. They would also allow some regional states, and extraregional states in certain cases, to abrogate their responsibilities to control effectively the marine areas under their national jurisdiction and to protect their maritime security interests.

Creating an informal IOR dialogue and policy discussion entity (that is, Track 2), similar to CSCAP in concept, would be a good first step. A possible foundation for such an entity, if appropriately supported and resourced, would be the Indian Ocean Research Group (IORG), which has been operating for several years.⁶⁵ The IORG leadership comes primarily from India and Australia, with participants from numerous regional as well as external nations. It brings together academics and former senior officials from a broad range of backgrounds, including security and strategy. The key objective of IORG is “to initiate a policy-oriented dialogue, in the true spirit of partnership, among governments, industries, [nongovernmental organizations] and communities, toward realizing a shared, peaceful, stable and prosperous future for the Indian Ocean region.”⁶⁶ Its published materials suggest it would be well placed to fulfill the need for a Track 2 security-policy forum. The first task of an invigorated IORG could be to develop policy options for progressing maritime-security risk assessment and cooperation.

But as argued above, a Track 1 entity along the lines of ARF but tailored specifically to IOR circumstances—to the region’s unique nature, character, and needs—would appear to be necessary as well. An entirely new entity would appear to offer a greater likelihood of success than an attempt to graft national and regional-security agendas upon the IOR-ARC, which has an unfortunate reputation for impotence. There would be significant benefit in creating a fresh regional-security forum, one that begins with recognition of the massive regional security challenges that lie ahead, without the burdens of association with the past.

Once formed, a new Track 1 body would find a number of steps necessary as matters of urgency and high priority, such as:

- Commissioning a multinational team of “experts” (a research group) to develop proposals for security cooperation in the IOR, with its first priority being maritime security cooperation, perhaps using IORG as the foundation, augmented and resourced as necessary.

- Establishing an “eminent persons group” comprising esteemed elders—“wise men” (and women)—to act as a reference and advisory panel to governments and the proposed research group.

The members of both the research group and the reference panel should include representatives of both IOR and extraregional countries.

The IOR-ARC may be a useful vehicle for initiating these proposals. But who will champion, support, and fund them? One option would be a “pilot” model, a “test” entity for maritime security cooperation dialogue. The aim would be to start small, learn, build trust, engender confidence, and evolve, noting how time pressures mount. Strong and inspirational leadership is needed to get the ball rolling. This could initially come from India and Australia, perhaps to be joined by, say, South Africa, Indonesia, or Saudi Arabia. External countries with significant IOR maritime security interests, like the United States, China, France, and Japan, could be drawn in at an early stage.

There is a compelling, imperative need to develop maritime security cooperation in the Indian Ocean region to address the massive human, economic, environmental, and energy security risks of the future. The maritime domain is where the collective interests and common security concerns of regional and extraregional states converge. Both regional and extraregional countries—those with interests in the Indian Ocean and the capacity to assist—need to be included in security dialogue and cooperative arrangements. Work should commence immediately.

NOTES

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1. See *Indian Navy*, www.indiannavy.nic.in/, for information about IONS, which “provides a regional forum through which the ‘Chiefs-of-Navy’ of all the littoral states of the IOR can periodically meet to constructively engage one another through the creation and promotion of regionally relevant mechanisms, events, and activities.” The inaugural IONS seminar in February 2008 was hosted and chaired by India and comprised representatives from Australia, Brazil, Burma, Djibouti, Egypt, Eritrea, France, Indonesia, Kenya, Kuwait, Madagascar, Malaysia, Maldives, Mauritius, Mozambique, Oman, Qatar, Saudi Arabia, Seychelles, Singapore, South Africa, Sri Lanka, Sudan, Tanzania, Thailand, the UAE, and Yemen. The navies of Egypt, Oman, and Pakistan were also represented at senior levels. Burma and Malaysia did not provide representatives.
2. IONS 2010 comprised senior maritime security officials (navy, coast guard, or maritime police chief) from Australia, Bahrain, Bangladesh, Comoros, Djibouti, Eritrea, France, India, Indonesia, Iran, Kenya, Kuwait, Madagascar, Maldives, Mauritius, Mozambique, Qatar, Saudi Arabia, Seychelles, Singapore, South Africa, Sri Lanka, Sudan, Tanzania, Thailand, the UAE, and Yemen. The navies of Egypt, Oman, and Pakistan were also represented at senior levels. Burma and Malaysia did not provide representatives.

3. Hedley Bull, "Society and Anarchy in International Relations," in *Diplomatic Investigations*, ed. Herbert Butterfield and Martin Wight (London: Allen and Unwin, 1966), pp. 35–60.
4. See Christian Bouchard and William Crumplin, "Neglected No Longer: The Indian Ocean in the Forefront of World Geopolitics and Global Geostrategy," *Journal of the Indian Ocean Region* 6, no. 1 (June 2010), pp. 41–44. A useful analysis of IOR subregional groupings is presented here.
5. U.S. Defense Dept., *United States Unified Commands*, available at www.defenselink.mil/.
6. Ronald E. Ratcliff, "Building Partners' Capacity: The Thousand-Ship Navy," *Naval War College Review* 60, no. 4 (Autumn 2007) p. 49. On jurisdiction and the high seas, see the United Nations Convention on the Law of the Sea 1982, 10 December 1982 (entered into force 16 November 1994), 1833 UNTS 397 [hereafter UNCLOS], introduction, pp. xxiv–xxvi, for a discussion of what constitutes "areas of national jurisdiction" and the "high seas," along with the philosophy behind the rights and obligations of nations therein. Areas of national jurisdiction include territorial seas (article 3), the contiguous zone (article 33), exclusive economic zones (articles 55–57), and the continental shelf (article 76); oceans areas beyond that are high seas.
7. See Lee Cordner, "Maritime Security in the Indian Ocean Region: Compelling and Convergent Agendas," *Australian Journal of Maritime and Ocean Affairs* 2, no. 1 (2010), pp. 16–27.
8. *Ibid.*, pp. 17–19.
9. Intergovernmental Panel on Climate Change [hereafter IPCC], *Climate Change 2007: Synthesis Report* (Geneva: 2007), available at www.ipcc.ch/.
10. *Ibid.*, p. 46.
11. *Ibid.*, p. 52.
12. R. V. Cruz et al., "2007: Asia," in *Climate Change 2007: Impacts, Adaptation and Vulnerability—Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, ed. M. L. Parry et al. (Geneva: 2007), p. 472, available at www.ipcc.ch/.
13. *Ibid.*, p. 471.
14. S. H. Schneider et al., "Assessing Key Vulnerabilities and the Risk from Climate Change," in *Climate Change 2007*, ed. Parry et al., pp. 779–810, available at www.ipcc.ch/.
15. Cruz et al., "2007: Asia," pp. 484–85.
16. IPCC, "Summary for Policymakers," in *Climate Change 2007*, p. 17.
17. See Thean Potgieter and Clive Schofield, "Poverty, Poaching and Pirates: Geopolitical Instability and Maritime Insecurity off the Horn of Africa," *Journal of the Indian Ocean Region* 6, no. 1 (June 2010), pp. 103–105, for a concise assessment of the illegal, unreported, and unregulated fishing implications for Somalia.
18. See Lee Cordner, ed., *Proceedings from Indian Ocean Maritime Security Symposium, 15–17 April 2009* (Wollongong: Australian National Centre for Ocean Resources and Security, Univ. of Wollongong, n.d.), p. 63, available at www.ancors.uow.edu.au/.
19. See Stuart Kaye, "Indian Ocean Maritime Claims," *Journal of the Indian Ocean Region* 6, no. 1 (June 2010), pp. 113–28, for a comprehensive assessment of the status of maritime boundary claims in the Indian Ocean.
20. Commission on the Limits of the Continental Shelf [hereafter CLCS], *Submissions, through the Secretary-General of the United Nations, to the Commission on the Limits of the Continental Shelf, Pursuant to Article 76, Paragraph 8, of the United Nations Convention on the Law of the Sea of 10 December 1982*, available at www.un.org/. There are sixteen submissions to the CLCS with regard to the Indian Ocean, with only Australia's submission established and adopted so far.
21. For a summary of U.S. military support to the 2004 Asian tsunami, see Ralph A. Cossa, "Improving Lives: Military Humanitarian and Assistance Programs," *eJournal USA: Foreign Policy Agenda*, 4 March 2005, www.america.gov/. The Indian Navy also deployed some thirty-two ships, and many other regional and extraregional navies and military forces provided assistance.
22. For world energy demand, U.S. Energy Dept., *International Energy Outlook 2010* (Washington, D.C.: Energy Information Administration, Office of Integrated Analysis and

- Forecasting, July 2010), pp. 9–10, available at www.eia.doe.gov/. For the medium term, International Energy Agency, *World Energy Outlook 2008* (Paris, 2008), p. 39, available at www.worldenergyoutlook.org/. All of the projected increase in world oil demand is from non-OECD countries (over four-fifths from China, India, and the Middle East).
23. U.S. Energy Dept., *International Energy Outlook 2009* (Washington, D.C.: Energy Information Administration, Office of Integrated Analysis and Forecasting, May 2009), pp. 6–8, available at www.eia.doe.gov/.
 24. See Michael T. Klare, *Rising Powers, Shrinking Planet: The New Geopolitics of Energy* (New York: Metropolitan Books, 2008), pp. 14–21.
 25. “The Australian Coal Industry: Coal Exports,” *Australian Coal Association*, www.australiancoal.com.au/. In 2008–2009 Australia maintained its position as the world’s largest coal exporter with exports of 261 million tons, or 28 percent of the world total. South Africa was the world’s fifth-largest exporter of coal.
 26. Christian Bouchard et al., eds., “Editorial Essay: Research Agendas for the Indian Ocean Region,” *Journal of the Indian Ocean Region* 6, no. 1 (June 2010), p. 2.
 27. *Ibid.*
 28. See Manoj Gupta, *Indian Ocean Region: Maritime Regimes for Regional Cooperation* (New York: Springer, 2010), chapter 7, “Intra-Indian Ocean Trade,” pp. 183–202, for a concise synopsis of increasing intra-Indian Ocean maritime trade, and chapter 8, “Shipping and Port State Control in the Indian Ocean,” pp. 203–61, for an analysis of global shipping as it affects the Indian Ocean.
 29. UNCLOS, arts. 94, 100; United Nations Security Council Resolution 1950 (2010), 23 November 2010, available at www.daccess-dds.un.org/.
 30. Information on ReCAAP and the ReCAAP Agreement is available at *ReCAAP Information Sharing Center*, www.recaap.org/. For the Djibouti Code, IMO, “High-Level Meeting in Djibouti Adopts a Code of Conduct to Repress Acts of Piracy and Armed Robbery against Ships,” available at www.imo.org/.
 31. U.S. State Dept., *Country Reports on Terrorism 2009* (Washington, D.C.: Office of the Coordinator for Counterterrorism, August 2010), available at www.state.gov/.
 32. Brahma Chellaney, “India: Regional Security Challenges,” in *Security Politics in Asia and Europe*, Panorama Insights into Asian and European Affairs (Singapore: Konrad-Adenauer-Stiftung, 2010), pp. 166–71.
 33. Paul W. Parfomak and John Frittelli, *Maritime Security: Potential Terrorist Attacks and Protection Priorities*, CRS Report for Congress (Washington, D.C.: Congressional Research Service, 9 January 2007), pp. 1–2. IOR maritime terrorism incidents include the bombings of the USS *Cole* (DDG 67) in 2000 and the French oil tanker *Limburg* in 2002; the Philippine vessel *Superferry 14* was attacked in 2004 in the Pacific Ocean.
 34. Amendments to the Annex to the International Convention for the Safety of Life at Sea (SOLAS), 1974 Contained in Resolutions 1, 2, 6 and 7 of the Conference of Contracting Governments and including the International Ship and Port Facility Security Code, London, 12 December 2002 (entered into force 1 July 2004); Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA 1988), adopted 10 March 1988 (entered into force generally 1 March 1992); Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms located on the Continental Shelf 1988 (1988 SUA Protocol), adopted 10 March 1988 (entered into force generally 1 March 1992); and 2005 Protocol to the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (2005 SUA Protocols) (entered into force generally 28 July 2010).
 35. “The Failed State Index,” *Foreign Policy*, www.foreignpolicy.com/.
 36. Chellaney, “India,” pp. 158–59, for a reference to “an arc of crises stretching from Jordan to Pakistan.” Also, Andrew Gavin Marshall, “Creating an ‘Arc of Crisis’: The Destabilization of the Middle East and Central Asia—the Mumbai Attacks and the ‘Strategy of Tension,’” *Global Research*, 7 December 2008, available at www.globalresearch.ca/, writes of an “Arc of Crisis” “stretching from the Horn of Africa to India.” According to Marshall, “the ‘Arc of Crisis’ describes the ‘nations that stretch across the southern flank

- of the Soviet Union from the Indian subcontinent to Turkey, and southward through the Arabian Peninsula to the Horn of Africa.’ Further, the ‘center of gravity of this arc is Iran.’ In 1978, Zbigniew Brzezinski gave a speech in which he stated, ‘An arc of crisis stretches along the shores of the Indian Ocean, with fragile social and political structures in a region of vital importance to us threatened with fragmentation. The resulting political chaos could well be filled by elements hostile to our values and sympathetic to our adversaries.’”
37. See Dennis Rumley, “The Emergence of Australia’s Arc of Instability,” in *Australia’s Arc of Instability: The Political and Cultural Dynamics of Regional Security*, ed. Dennis Rumley, Vivian Louis Forbes, and Christopher Griffin (Dordrecht: Springer, 2006), pp. 16–18. “Arc of instability” is a term variously used to describe the island chain extending across Australia’s north from Indonesia in the west to the southwestern Pacific.
 38. Chellaney, “India,” pp. 159–60.
 39. Potgieter and Schofield, “Poverty, Poaching and Pirates,” pp. 86–87.
 40. V. K. Shashikumar, “Gaps in Maritime Security—I,” *Indian Defence Review* 24, no. 1 (January–March 2009), 27 November 2010. The 2008 Mumbai terrorist attacks in India obliged governments and analysts to refocus attention upon maritime areas both as potential terrorist targets and as sources from which terrorism can be projected ashore. The pressing need for maritime security cooperation between adjacent littoral states (India and Pakistan) was highlighted in this instance.
 41. See Lee Corder, “Rethinking Maritime Security in the Indian Ocean Region,” *Journal of the Indian Ocean Region* 6, no. 1 (June 2010), pp. 73–74, for a brief analysis of the Indian-Chinese maritime security relationship.
 42. *Ibid.*, p. 74.
 43. *Defending Australia in the Asia Pacific Century: Force 2030*, Defence White Paper 2009 (Canberra: Department of Defence, 2009), p. 34.
 44. For an assessment of specifically naval Chinese involvement in the region, see Daniel J. Kostecka, “Places and Bases: The Chinese Navy’s Emerging Support Network in the Indian Ocean,” *Naval War College Review* 64, no. 1 (Winter 2011), pp. 59–78.
 45. China’s National Defense in 2008, available at China.org.cn.
 46. *Annual Report 2008–09* (New Delhi: Ministry of Defence, n.d.), pp. 8–9, available at www.mod.nic.in/; *Freedom to Use the Seas: India’s Maritime Military Strategy* (New Delhi: Integrated Headquarters Ministry of Defence [Navy], 2007), pp. iii–v, 49, available at www.indiannavy.nic.in/.
 47. Ranjit Rai, “Maritime Security: Indian and American Perspectives” (report, Institute of Peace and Conflict Studies, seminar, 30 April 2009), available at www.ipcs.org/.
 48. Harsh V. Pant, “Indian Ocean: Ruling the Waves,” *International Relations Security Network*, 5 August 2009, www.isn.ethz.ch/.
 49. See Corder, “Rethinking Maritime Security in the Indian Ocean Region,” for elaboration of the compelling need for maritime security cooperation in the Indian Ocean.
 50. International Organization for Standardization, *ISO 31000:2009—Risk Management: Principles and Guidelines* (Geneva: 13 November 2009), available for purchase at www.iso.org/, introduction, p. iv.
 51. See Dennis Rumley and Sanjay Chaturvedi, *Energy Security and the Indian Ocean Region* (New Delhi: South Asian, 2005), pp. 5–27, for an analysis of evolving IOR regionalism.
 52. See Gupta, *Indian Ocean Region*, pp. 95–125, for an analysis of measuring regimes effectiveness, esp. p. 104, table 5.1.
 53. See *ASEAN Regional Forum*, www.aseanregionalforum.org/. The ASEAN Regional Forum (ARF) was established in 1994, with objectives as outlined in the first ARF chairman’s statement (1994): to foster constructive dialogue and consultation on political and security issues of common interest and concern and to make significant contributions to efforts toward confidence building and preventive diplomacy in the Asia-Pacific region. There are currently twenty-seven participants: Australia, Bangladesh, Brunei, Burma, Cambodia, Canada, China, European Union, India, Indonesia, Japan, Democratic People’s Republic of (DPR) Korea, Republic of Korea, Laos, Malaysia, Mongolia, New

- Zealand, Pakistan, Papua New Guinea, Philippines, Russia, Singapore, Sri Lanka, Thailand, Timor-Leste, the United States, and Vietnam.
54. See *APEC: Asia-Pacific Economic Cooperation*, www.apec.org/. APEC involves twenty-one “member economies,” listed as Australia; Brunei Darussalam; Canada; Chile; People’s Republic of China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; the Philippines; Russia; Singapore; Chinese Taipei; Thailand; the United States; and Vietnam.
 55. See *Association of Southeast Asian Nations*, www.aseansec.org/. The ASEAN charter includes the promotion of peace and stability; however, ASEAN has largely avoided difficult security questions and differences between member states.
 56. See *CSCAP: Council for Security Cooperation in the Asia Pacific*, www.cscap.org/. CSCAP “provides an informal mechanism for scholars, officials and others in their private capacities to discuss political and security issues and challenges facing the region. It also provides policy recommendations to various intergovernmental bodies, convenes regional and international meetings and establishes linkages with institutions and organizations in other parts of the world to exchange information, insights and experiences in the area of regional political-security cooperation.” CSCAP has twenty-one full members (Australia, Brunei, Cambodia, Canada, China, Europe, India, Indonesia, Japan, DPR Korea, Korea, Malaysia, Mongolia, New Zealand, Papua New Guinea, Philippines, Russia, Singapore, Thailand, the United States, and Vietnam) and one associate member (Pacific Islands Forum Secretariat).
 57. A useful discussion on the utility of Track 2 diplomacy in the Asia-Pacific is in Desmond Ball, Anthony Milner, and Brendan Taylor, “Track 2 Security Dialogue in the Asia-Pacific: Reflections and Future Directions,” *Asian Security* 2, no. 3 (2006), pp. 174–88. “Track 1 diplomacy” refers to official governmental diplomacy, or a technique of state action whereby communications from one government go directly to the decision-making apparatus of another. Track 1 diplomacy is conducted by official representatives of a state or state-like authority and involves interaction with other states or state-like authorities—heads of state, officials of state departments or ministries of foreign affairs, and other governmental departments and ministries. “Track 2 diplomacy” is a specific kind of informal interaction in which non-officials (academics, retired civil and military officials, public figures, and social activists) engage in dialogue. The informal, unofficial nature of Track 2 diplomacy allows serious, sensitive, even potentially dangerous issues to be discussed in open forums.
 58. See Bouchard et al., eds., “Editorial Essay,” p. 22. See also *Indian Ocean Rim Network*, www.iornet.com/. The IOR-ARC “will facilitate and promote economic cooperation, bringing together representatives of government, business and academia. In a spirit of multilateralism, the Association seeks to build and expand understanding and mutually beneficial cooperation through a consensus-based, evolutionary and non-intrusive approach.” Members are Australia, Bangladesh, India, Indonesia, Iran, Kenya, Madagascar, Malaysia, Mauritius, Mozambique, Oman, Singapore, South Africa, Sri Lanka, Tanzania, Thailand, the UAE, and Yemen. The Seychelles announced its withdrawal from the association in July 2003. China, Egypt, France, Japan, and the United Kingdom are dialogue partners of the IOR-ARC. At present, only the Indian Ocean Tourism Organization has observer status.
 59. Some Middle East states are included, but not Saudi Arabia. The East African participants do not include Sudan, Eritrea, Tanzania, or Somalia. Pakistan and Burma are also not members. China, Egypt, France, Japan, and the United Kingdom are dialogue partners, but the United States and Russia are not.
 60. Mahmoud Assamiee, “IOR-ARC Supported Anti-piracy Center in Yemen,” Yemen News Agency, 27 June 2009, www.sabanews.net/.
 61. “India Seeks Structural Changes in IOR-ARC,” *OneIndia News*, 2008, www.news.oneindia.in/. At the eighth Indian Ocean Rim Association for Regional Cooperation meeting in Iran, the Indian delegate is reported as having stated that in the decade of the IOR-ARC’s existence, not much progress had been made in terms of concrete projects and that the character of the organization

needed to be reviewed. The Indian Minister of State for External Affairs, E. Ahamed, is reported to have declared, "Areas of common interest that bind the (IOR) countries, such as ocean bed exploration, hydrographic survey, disaster management and information sharing, shipping, coastal infrastructure, fisheries, weather forecasting, should be given priority."

62. The Hon. Stephen Smith, Australian Minister for Foreign Affairs and Trade, "Australia Next Vice Chair of the Indian Ocean Rim Association for Regional Cooperation," media release, 7 August 2010, *The Hon. Kevin Rudd MP: Australian Minister for Foreign Affairs*, www.foreignminister.gov.au/.
63. See *All Partners Access Network*, www.community.apan.org/. The Western Pacific Naval Symposium aims to increase naval cooperation in the western Pacific by providing a forum for discussion of maritime issues, both global and regional, and in the process generating a flow of information and opinions between naval professionals, leading to common understanding and possibly agreement. Member nations: Australia, Brunei, Cambodia, Canada, People's Republic of China, France, Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, Papua New Guinea, the Philippines, Russia, Singapore, Thailand, Tonga, the United States, and Vietnam. Observer nations: Bangladesh, Chile, India, Mexico, and Peru.
64. SAARC: *South Asian Association for Regional Cooperation*, www.saarc-sec.org/; *Southern African Development Community*, www.sadc.int/; *The Cooperation Council for the Arab States of the Gulf: Secretariat General*, www.gccsg.org/.
65. IORG, www.iorgroup.org/.
66. Ibid.

WHY OPERATIONS ASSESSMENTS FAIL

It's Not Just the Metrics

Jonathan Schroden

In any military campaign, commanders, politicians, and the general public all desire to know whether the effort is succeeding. For conventional conflicts, well developed theories of war give a good understanding of the objectives to pursue and how to pursue them. These theories also enable the derivation of well defined metrics for progress, such as terrain held, numbers of enemy fighters killed or captured, or amount of enemy equipment and materiel destroyed. In unconventional conflicts the theories of war are more complex, objectives and ways to achieve them are less straightforward, and notions of “winning” and “losing” are more difficult to define. As a result, it is also more difficult to gauge and demonstrate progress in such conflicts. For the specific case of counterinsurgency, however, gauging and demonstrating progress is at least as important as in a conventional war, since the former tends to last longer and therefore requires sustained political and public support to conduct—and such support is often tied to proof of progress. Thus operations assessment, designed to show whether progress is being made, should be a vital part of any unconventional conflict, especially counterinsurgency.

For the current conflict in Afghanistan, assessments of progress have been highly criticized. Early in the war, efforts to measure and demonstrate progress were relatively immature, as evidenced by the “initial assessment” prepared by

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General Stanley McChrystal soon after he took command of the International Security Assistance Force (ISAF) in 2009:

ISAF must develop effective assessment architectures . . . to measure the effects of the strategy, assess progress toward key objectives, and make necessary adjustments.

ISAF must identify and refine appropriate indicators to assess progress, clarifying the difference between operational measures of effectiveness critical to practitioners on the ground and strategic measures more appropriate to national capitals.¹

The fact that General McChrystal did not find such processes and products in place when he took command in 2009 implies that we were poorly assessing progress eight years into the war. In part because there was no single effective campaign assessment at that time, many groups then took it upon themselves to create one. At a recent NATO conference an attendee-generated list showed over twenty different campaign-level operations assessments being prepared by various organizations for Afghanistan.² Clearly, the importance of assessing progress in the campaign has been realized, and considerable effort has been exerted to improve our assessment capabilities. However, criticisms of our ability to measure and demonstrate progress in a clear, credible, and transparent manner have only increased. The reasons for these criticisms vary considerably, from confusion in planning to shortfalls in availability of data or in doctrine, to flaws of current processes and products.³ By far the most popular criticism, however, is that we do not have the right *metrics* for Afghanistan. Many papers have been published on this subject, and in 2010 I was invited to no fewer than three conferences, each convened to generate a better list of metrics for Afghanistan.⁴ Even the former head of the ISAF Afghan Assessments Group (AAG) is on record as saying, “Our metrics suck.”⁵

Given these efforts, it seems clear that what should be a vital part of the campaign in Afghanistan is not going well. But if the problem were simply one of finding the right metrics, it seems likely the solution would have been found by now, especially since similar criticisms were levied during the war in Iraq.⁶ Based on my five years of personal experience with operations assessments in Iraq, in Afghanistan, and at several commands (e.g., U.S. Central Command), I submit that the problem goes beyond the wrong metrics and that more fundamental problems with operations assessment exist—for Afghanistan, for Iraq, and in general. As I will show, operations assessments suffer from a number of serious issues that feed upon and reinforce each other. The resulting “failure cycle” is the reason why the theoretical utility of operations assessment is rarely realized in practice, and for the specific case of Afghanistan it is a large contributor to our inability to measure or demonstrate progress.

DEFINITION, PURPOSE, AND THEORETICAL UTILITY OF OPERATIONS ASSESSMENT

Before launching into a critique, it is worth reviewing the doctrinal definition, the purpose, and the theoretical utility of operations assessment. In terms of definition, Joint Publications (JPs) 3-0 (*Joint Operations*) and 5-0 (*Joint Operation*

Planning) define operations assessment as “a process that measures progress of the joint force toward mission accomplishment”;⁷ the U.S. Army’s Field Manual (FM) 5-0, *Operations Process*, says it is “the continuous monitoring and evaluation of the current situation, particularly the enemy, and progress of an operation.”⁸ The Army’s counterinsurgency manual (FM 3-24) defines operations assessment as “the continuous monitoring and evaluation of the current situation and progress of an operation.”⁹

These definitions highlight the main purpose in conducting operations assessment, which is to measure the progress of an operation toward accomplishing its mission. But these documents elaborate in a variety of ways:

- [JPs 3-0 and 5-0] Commanders adjust operations based on their assessments to ensure that military objectives are met and the military end state is achieved. The assessment process is continuous and directly tied to the commander’s decisions. Assessment actions and measures help commanders adjust operations and resources as required, determine when to execute “branches and sequels” [optional or successive operations envisioned in a plan of action], and make other critical decisions to ensure current and future operations remain aligned with the mission and military end state.¹⁰
- [FM 5-0] Assessment involves deliberately comparing forecasted outcomes with actual events to determine the overall effectiveness of force employment. Assessment helps the commander determine progress toward attaining the desired end state, achieving objectives, and performing tasks. It also involves continuously monitoring and evaluating the operational environment to determine what changes might affect the conduct of operations.¹¹
- [FM 3-24] Effective assessment is necessary for commanders to recognize changing conditions and determine their meaning. It is crucial to successful campaign adaptation and innovation by commanders. Assessment is a learning activity and a critical aspect of [campaign] design. This learning leads to redesign. Therefore, [campaign] design can be viewed as a perpetual design–learn [assess]–redesign activity.¹²

From these and other documents on the subject one can compile a set of points describing possible theoretical purposes for, and utilities of, operations assessment. These include informing commanders’ decision making (e.g., on resource allocation); completing the planning or design cycle (i.e., “observe-plan-execute-assess,” or “design-learn-redesign”); recognizing changing conditions in the environment; stimulating and informing adaptation and innovation; reducing uncertainty and bounding risk; showing causal linkages between actions and the achievement of objectives; documenting the commander’s decision-making process; and evaluating performance of subordinate units. While these items are not all-inclusive, the list certainly comprises actions that

most commanders would find useful. The question is: How well do operations assessments perform these functions in practice? In my experience with assessments for Iraq and Afghanistan, and in the experience of several objective observers for Afghanistan, the answer is *not very well*.¹³

REASONS OPERATIONS ASSESSMENTS FAIL

There are many reasons why operations assessments fail, by which I mean that in practice they do not realize the theoretical utilities listed above. I will focus on a few key reasons, chosen because they are particularly important and because they result in a cascading chain of issues that reduce the effectiveness of operations assessments and ensure the propagation of these issues into the future.

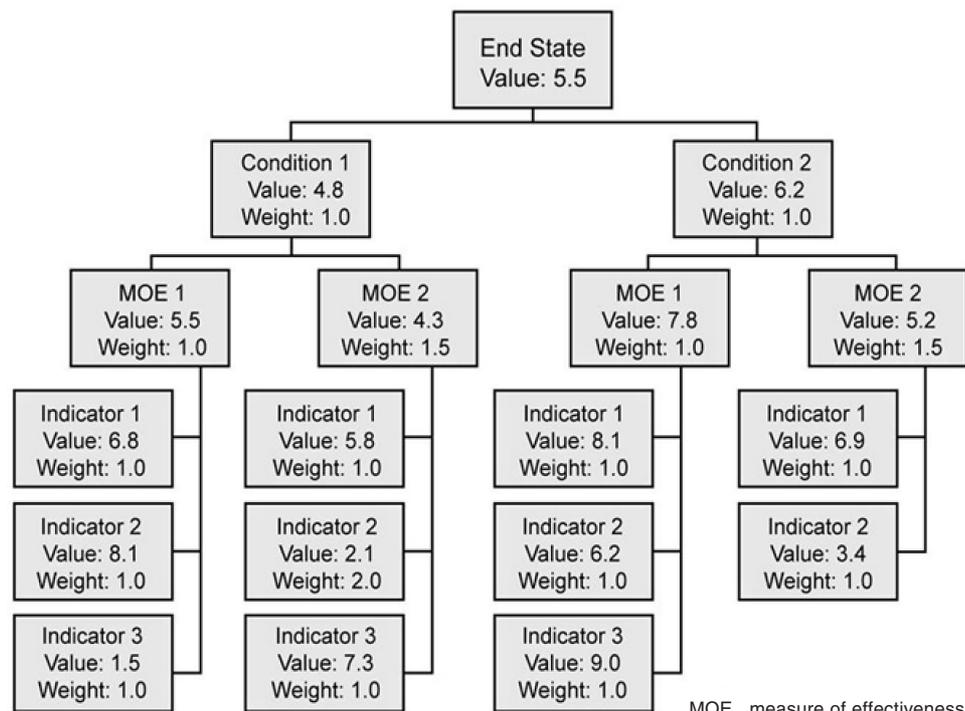
Doctrinal Deficiencies

One reason operations assessments fall short is that there are deficiencies, contradictions, and confusion in the doctrine that is supposed to guide their conduct. For joint military operations, the first stop for doctrine is the joint publications, especially JPs 3-0 and 5-0. Unfortunately, when it comes to operations assessment, these publications are notably vague. While they do offer guidance on the purpose of conducting assessments, they mainly focus on making clear the distinctions between “measures of effectiveness” (MoEs) and “measures of performance” (MoPs). Nowhere do they discuss in detail *how* to do operations assessment. Thus, to a practitioner they provide little more than a beginner’s lesson in vocabulary.

The doctrine issued by individual services is another source of guidance. Field Manual 5-0 provides more detail on how to do assessment, and much of its guidance is useful and sound from a practitioner’s viewpoint. However, its guidance also contains many contradictions that detract from its overall utility. Examples include:

- FM 5-0 says detailed analysis is to be avoided, that “committing valuable time and energy to developing excessive and time-consuming assessment schemes squanders resources better devoted to other operations process activities.”¹⁴ However, it says later that “establishing cause and effect is sometimes difficult, but crucial to effective assessment. Commanders and staffs are well advised to devote the time, effort, and energy needed to properly uncover connections between causes and effects.”¹⁵ While the latter may seem straightforward, in practice it is typically very time-consuming.
- It stresses the need to incorporate quantitative and qualitative indicators in the assessment, observing that “the appropriate balance depends on the situation—particularly the nature of the operation and available resources for assessment—but rarely lies at the ends of the scale.”¹⁶ However, in the

FIGURE 1
SAMPLE ASSESSMENT FRAMEWORK



FM 5-0, app. H.

manual's appendix H, which explains how to develop a formal assessment plan, the sole assessment framework presented is strictly quantitative (figure 1).

- It describes the framework in figure 1 as “a hierarchy used in formal assessments that numerically describes progress toward achieving desired conditions.” It recommends such an assessment be combined with “expert opinions of members of the staff, subordinate commanders, and other partners. In this way, the commander receives both a mathematically rigorous analysis as well as expert opinions.”¹⁷ While this may seem true on its face, the sample framework is actually not mathematically (or even logically) rigorous. It involves weight-averaging numbers with different units, thereby comparing “apples and oranges.” Also, the weights used in the framework are entirely subjective (and likely arbitrary), thereby undermining its “mathematical rigor.” Finally, the framework implies a model of warfare in which all actions are independent and so can (along with their effects) be counted, added, and averaged together. This is highly unlikely to be true in a military campaign.

These contradictions regarding the importance of analysis and intellectual rigor and the balance between quantitative and qualitative information are just a few of the confusing aspects of Field Manual 5-0 that reduce its usefulness to practitioners of operations assessment.

For counterinsurgency, FM 3-24 has only three pages on how to conduct assessments. While one of them gives a useful set of example indicators, nowhere does the manual discuss how to structure an assessment framework or product, how to collect and analyze data, etc.—which is odd, given that it stresses the critical role that assessments play in design, adaptation, and redesign. Overall, it provides little in the way of value to practitioners of operations assessment.

Some might reply that doctrine exists to provide broad guidance and that we should not expect it to provide detailed instructions on how to conduct operations assessment. Instead, some suggest, practitioners should look to “best practices” guides, such as one produced by the Center for Army Lessons Learned.¹⁸ However, even that handbook has its deficiencies: it simply rehashes much of FM 5-0, its descriptions of the roles of military echelons are unrealistic, it contains few helpful examples of assessment products, and it argues throughout that the U.S. Agency for International Development’s Tactical Conflict Assessment and Planning Framework model should be the foundation of stability operations assessment without justifying why or explaining how a tactical model could be used to assess progress at the operational level. Thus even our assessment handbooks provide little value to practitioners.¹⁹

In addition, there is confusion in our doctrine as to whether the principles of “effects-based operations” (EBO) still apply. General James N. Mattis, then Commander, U.S. Joint Forces Command, instructed his organization in 2008 that the terms and concepts associated with EBO were to be stricken from joint doctrine, training, and education.²⁰ Yet it remains unclear whether EBO should continue to be used, and one study of Afghanistan concluded that “EBO and EBA [effects-based assessment] are alive and well.”²¹ This is true in my experience also, and it is perhaps not surprising, since Joint Publications 3-0 and 5-0 have not been fully updated since General Mattis’s memorandum. While the Army’s FM 5-0 was published afterward, it still contains references to effects, and its sample assessment framework simply replaces “desired effects” with “desired conditions” (figure 1).²² Thus even our planning doctrine is confusing and deficient. In any case, even if planners do not use EBO, practitioners of operations assessment often still use an effects-based approach, because it is all they can find in doctrine (figure 1). In these cases, it is prudent to ask whether one should expect an effects-based assessment to succeed, since these efforts amount to “cherry-picking” aspects of coherent doctrinal processes. Indeed, I have yet to see this approach succeed in practice.

Lack of Training for Practitioners

Another reason operations assessments fail is that those who produce them are not adequately trained. In my experience, two types of people get tasked to conduct operations assessment: staff officers who, regardless of their skill sets, have been placed in assessments billets (many of them former pilots, for some reason); and “ORSAs” (individuals formally trained in operations research and systems analysis). Neither of these groups receives any specific training on how to conduct operations assessment—they are typically left to decipher doctrine on their own or to hunt for assessment products created by others that they can copy.²³

Given the deficiencies and confusion that exist in doctrine, it is not surprising that many practitioners fail in their attempts to devise useful assessment processes from scratch. Those who find fully formed assessment products from another command will usually fail, because the products they copy are typically derivations of the framework in figure 1, which suffers from the drawbacks identified earlier. Anyone who has attended conferences on operations assessment can attest that the approaches presented tend to use that structure, with the same weighted-average “roll-ups” of metrics into the same “stoplight chart” (i.e., red/yellow/green coding) products. In the absence of sound doctrine and training, we have left practitioners either to flounder on their own or to steal flawed products from others, both of which are recipes for failure.

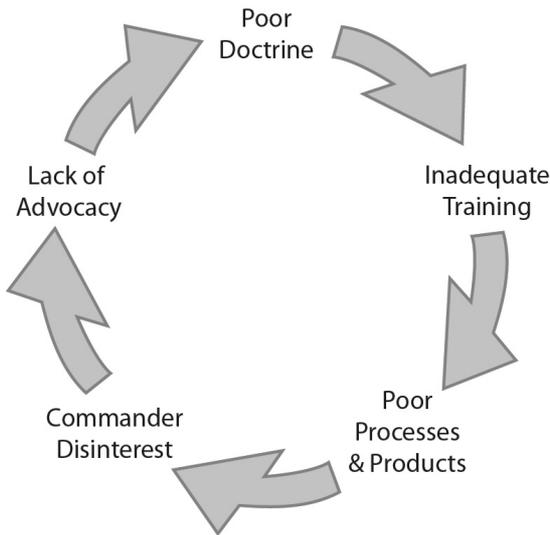
Expectations of Audiences

Operations assessments also fail because in practice they rarely live up to the expectations of commanders. More specifically, though commanders establish assessment cells because they desire to reap the theoretical benefits of operations assessment identified earlier, practitioners of assessment are set up for failure by doctrinal and training shortcomings; the results tend to be processes and products that do not deliver the theoretical utilities that commanders expect. When commanders realize this, they stop paying attention to assessments, which leads to the slow death of the latter. A related issue is that commanders who do not see the theoretical promise of operations assessment translated into practical utility do not go on to be advocates for the process. This indifference to assessment allows poor doctrine and practices to persist, since if commanders lose interest in assessment while in command, they certainly will not care about assessment thereafter.

BREAKING THE FAILURE CYCLE

If we now look more broadly at the reasons operations assessments fail, it is clear they are not isolated and independent; rather, they are linked together in what I

FIGURE 2
FAILURE CYCLE FOR OPERATIONS ASSESMENT



call a “failure cycle.” This cycle, which is depicted in figure 2, runs as follows: poor and confusing doctrine leads (in part) to inadequate (or no) training of assessment practitioners, which leads to poor assessment processes and products, which leads to commanders who are uninterested in assessment, which leads to a lack of advocacy for fixing assessment, which leads to a perpetuation of poor doctrine—and the cycle continues.

How can the failure cycle for operations assessment best be broken? In principle, one could start at any point in the cycle, but in practice certain spots would be easier or more logical than others.

Gaining an Advocate. While on their face other aspects of the failure cycle may seem more important, the lack of advocacy within the Department of Defense (and other departments) for operations assessment is in fact the most crucial problem, for several reasons. First, without an advocate to highlight to the department that its current doctrine and processes are inadequate, there will be no impetus for change. It is too easy to republish or slightly tweak current doctrine rather than to rethink completely the way in which operations assessments are designed and implemented—and in the quasi-post-EBO environment in which plans are currently being written and assessed, a complete rethinking is required. Second, without an advocate there is no center of gravity around which to accumulate knowledge and thus there will never be an established cadre of experts in operations assessment. Instead, we will continue to cannibalize other military occupational specialties, most notably the ORSA pool, to conduct assessments. Thus, the first step in breaking the failure cycle is to gain a high-level advocate for operations assessment within the Defense Department.

Improving Doctrine. Once an advocate is gained and the argument can be made at the right levels that our doctrine needs to be dramatically improved, the first issue to be addressed will be whether “effects-based operations” is still an operative planning process for the U.S. military. This is a larger issue than assessment, but the way in which planning is conducted directly impacts the way in which assessments are conducted. If the U.S. military decides to keep EBO, perhaps simply adding more detail to Joint Publications 3-0 and 5-0 (and Field Manual 3-24) and fixing the contradictions in FM 5-0 will suffice. What seems more

likely is that some new planning construct would come to the fore in such a discussion and that as a result we would need to revisit fundamentally the purpose and design of operations assessment. Regardless, those who are responsible for improving this doctrine need to understand that assessing the progress of military operations (especially counterinsurgencies) is difficult and that therefore doctrine needs to provide much more detail on *how* to do it.

Improving Training. Improving doctrine, though necessary, will not in itself improve the ability of practitioners to conduct assessments, for two reasons. First, there is currently no “training pipeline” for practitioners of assessment, so even when doctrine is fixed, practitioners in the field will still flounder. Second, there is no dedicated cadre of experts in the practice of operations assessment, so even if a training program is designed, those who go through it will inevitably revert to their primary military occupational specialties and their knowledge and experience will be lost. This second reason creates two further issues: there will be a lack of feedback from the field to the schoolhouse, so the development of better assessment techniques will stagnate; and there will be no pipeline of advocates for assessment to replace the initial advocate called for above. Thus, improving training for operations assessment relies on three factors: improvement of doctrine, a formal course of instruction, and establishment by the personnel-management community of a military occupational specialty for operations assessment.

The latter deserves further elaboration. There is a popular belief that ORSAs are trained to conduct operations assessment, when in fact they are not. I believe this stems from a broader confusion of the terms “operations assessment” and “analysis” (or “operations research”). A practical way of differentiating the two might be to say that operations assessment focuses on measuring the progress of an operation, while operations analysis focuses on optimizing the performance of units and individuals (i.e., the organization) conducting the operation. These are distinct activities. Accordingly, we should stop presuming that people trained in operations analysis are somehow experts in operations assessment. Additionally, we should realize that by tasking ORSAs with operations assessment we are unconsciously sacrificing our capability to conduct operations *analysis* (i.e., to optimize our performance). Hence my assertion that what is required is both a formal course of instruction for operations assessment *and* a dedicated military occupational specialty in it.

Improving Processes and Products. It would be easier to design better assessment processes and products were doctrinal and training issues resolved, but in the interim there are steps that can be taken. To begin, practitioners of operations assessment should abandon the sample framework in FM 5-0 (figure 1). As discussed above, it does not balance qualitative and quantitative information as

doctrine (and common sense) dictates, nor is it “mathematically rigorous.” Adequate arguments in support of this notion have been made, and I will not rehash them here.²⁴ Instead, I will highlight three key shifts in thinking that, if implemented in the field, would go a long way toward improving our current attempts at assessment.

First, it is absolutely necessary to balance quantitative and qualitative information. While it is easier to work with numbers and their extensive use tends to enhance the appearance of objectivity and robustness of assessment (if only through a facade of rigor), from a practical viewpoint it is silly to expect that one can measure the progress of a military operation through quantitative means alone. Thus, instead of eschewing qualitative information as “unreliable” or “too subjective,” we should embrace both qualitative and quantitative sources, so long as the information is useful in addressing progress toward mission accomplishment.

The second shift in thinking is to move away from slide shows and stoplight charts as the products of operations assessment. A recommendation made elsewhere that practitioners move toward narrative formats for their products is solid and should be accepted.²⁵ Again, from a practical viewpoint, it is naïve to think that something as simple as a colored map or a series of red, yellow, and green circles can convincingly communicate progress in something as complex as warfare. Such presentations inevitably engender questions from the audience that require further explanation; arguments that they can stand on their own are contrary to empirical observation. While narratives can be more time-consuming both to write and to read, for assessment they have a number of advantages: they allow variations and nuances across the area of operations to be captured and appreciated; they remind people of the context and complexity of the operation; they force assessors to think through issues and ensure that their assessment is based on rigorous thought; and they are the only way to ensure that a proper balance is struck between quantitative and qualitative information, analysis and judgment, and empirical and anecdotal evidence.²⁶

The third shift in thinking is to realize that to assess progress in a modern military operation properly, it is necessary to gather, analyze, and fuse information on the activities of enemy (“red”), civilian (“white”), and friendly (“blue”) forces.²⁷ Our military is not well suited to doing this. Currently, intelligence organizations focus on information pertaining to the enemy and to a lesser extent on civilian activities, and the good ones perform some fusion of the two.²⁸ As highlighted above, operations analysts typically gather and analyze information about blue forces. However, there is no entity that currently specializes in fusing and analyzing information across the red, white, and blue spectrum. This is an area in which future operations assessment cells could look to specialize.

Currently, though, what one finds in a place like Afghanistan is a cadre of people gathering and analyzing information on the enemy, a much smaller group focused on civilians, and hardly anyone gathering and analyzing material on blue-force activities (largely because the bulk of ORSAs are manning assessments cells). This absence of blue-force data collection and analysis and of red/white/blue fusion severely constrains our ability to link blue-force actions with changes observed in the environment. These are serious problems that have not yet been widely appreciated as primary reasons why assessments for Afghanistan are failing. Recognition would go far toward improving current assessments and would induce a further realization that more emphasis needs to be placed on data collection, management, and analysis resources across the red/white/blue spectrum for future military operations.

Increasing the Interest of Commanders. If the above issues were worked out, the indifference of commanders as part of the failure cycle would likely fix itself, since many of the theoretical promises of assessment would be realized in fact. However, two additional steps could be taken to ensure that once commanders become interested in assessments they stay interested.²⁹ The first is to include in the training that commanders receive at least a cursory discussion of operations assessments, their purpose and utility and how they can be effective tools for measuring and communicating progress (this would be useful for planners to hear as well). This discussion should be facilitated by someone with experience with assessments in the field. Second, commanders should be instructed as to the importance of their own involvement in the assessment process, since if a commander does not back the process the staff will quickly stop supporting it. Additionally, commanders can use the process as a means of articulating and periodically adjusting their guidance to the staff regarding broader intent, priorities, and focus of effort.

TIME FOR A RESET

The problems with operations assessment run much deeper than simply having poor metrics. There is an entire failure cycle at work, and until its associated issues are rectified the theoretical promises of operations assessment will continue to go unrealized. To recap, these issues are identifying an advocate for assessments, fixing our planning and assessment doctrine, creating a military occupational specialty and formal course of instruction for operations assessment, and shifting our thinking away from strictly quantitative and picture-based assessment products toward balanced, comprehensive, analytic narratives. Until and unless these issues are addressed, my overarching recommendation is to *stop doing operations assessments altogether*. The bulk of current assessment

products and processes for Afghanistan, for example, do as much harm as good. As has been argued, they consistently undermine the transparency and credibility of military judgment, because they themselves are neither transparent nor credible.³⁰ Additionally, current efforts on generating better metrics are simply tweaking the margins of a much larger problem. Until the failure cycle is completely and comprehensively fixed, we should stop pretending that assessments are playing a useful role and acknowledge the opportunity cost of using untrained staff officers and specialists in operations research and systems analysis to conduct them. Overall, we would be better served to take a “time-out” on assessments, fix the failure cycle, and come back with an improved approach. Continuing on our current circular path will simply ensure that progress in the next war will be as difficult to measure as progress in our current wars.

NOTES

1. Stanley McChrystal, letter to Secretary of Defense, “COMISAF’s Initial Assessment,” 30 August 2009, unclassified redaction, available at media.washingtonpost.com/.
2. NATO Allied Information Sharing Strategy Support to ISAF Population Metrics and Data Conference, Joint Forces Command, Brunssum, the Netherlands, September 2010.
3. For planning, see Jonathan Schroden, “Fixing Assessments in Afghanistan,” February 2010, available to U.S. government entities upon request; for data, *ibid.*, and Ann Marlowe, “Fighting a Smarter War in Afghanistan,” *Wall Street Journal*, 20 December 2009; for doctrine, William Gregor, “Military Planning Systems and Stability Operations,” *Prism* 1 (June 2010), pp. 99–114, and Ben Connable, *An Alternative to Effects-Based Campaign Assessment in Afghanistan* (Santa Monica, Calif.: RAND, forthcoming); for processes and products, Stephen Downes-Martin, “Assessments Process for RC(SW)” (draft, Center on Irregular Warfare and Armed Groups, Naval War College, Newport, R.I., 24 May 2010), and Schroden, “Fixing Assessments in Afghanistan.”
4. For papers, see, for example: David Kilcullen, “Measuring Progress in Afghanistan,” in *Counterinsurgency* (New York: Oxford Univ. Press, 2010), pp. 51–83; Michael O’Hanlon and Hassina Sherjan, *Toughing It Out in Afghanistan* (Washington, D.C.: Brookings Institution, 2010), pp. 79–88; John Agoglia, Michael Dziedzic, and Barbara Sotirin, *Measuring Progress in Conflict Environments: A Metrics Framework* (Washington, D.C.: Endowment of the U.S. Institute of Peace, 2010); Jason Campbell, Michael O’Hanlon, and Jeremy Shapiro, “How to Measure the War,” *Policy Review*, no. 157 (October/November 2009), pp. 15–30; Andrew Exum, Nathaniel Fick, Ahmed Humayun, and David Kilcullen, *Triage: The Next Twelve Months in Afghanistan and Pakistan* (Washington, D.C.: Center for a New American Security, 2009), pp. 23–26; Jonathan Schroden, “Measures for Security in a Counterinsurgency,” *Journal of Strategic Studies* 32 (2009), pp. 715–44; Anthony Cordesman, *The Uncertain “Metrics” of Afghanistan (and Iraq)* (Washington, D.C.: Center for Strategic and International Studies, 18 May 2007), available at www.csis.org/; James Clancy and Chuck Crossett, “Measuring Effectiveness in Irregular Warfare,” *U.S. Army War College Quarterly* 37 (Summer 2007), pp. 88–100; Austin Long, *On “Other War”: Lessons from Five Decades of RAND Counterinsurgency Research* (Santa Monica, Calif.: RAND, 2006), pp. 39–40.
5. Joseph Soeters, “Measuring the Immeasurable? The Effects-Based Approach in Comprehensive Peace Operations” (draft revision of a paper presented at the Tenth European

- Research Group on Military and Society Conference, Stockholm, Sweden, 23 June 2009).
6. Jason Campbell and Michael O'Hanlon, "Measuring Progress in Iraq," *Wall Street Journal*, 13 July 2007; Frederick W. Kagan, "Measuring Success," *Armed Forces Journal* (January 2006); Andrew Krepinevich, "How to Win in Iraq," *Foreign Affairs* (September/October 2005); Michael P. Noonan, "Iraq and the 'Metrics' System," *Foreign Policy Research Institute E-Notes* (September 2007).
 7. U.S. Joint Staff, *Joint Operations*, Joint Publication [hereafter JP] 3-0 (Washington, D.C.: 22 March 2010, incorporating change 2) [hereafter JP 3-0], p. IV-30, available at www.dtic.mil/; and *Joint Operation Planning*, JP 5-0 (Washington, D.C.: 26 December 2006) [hereafter JP 5-0], p. III-57, available at www.dtic.mil/.
 8. U.S. Army Dept., *The Operations Process*, Field Manual [hereafter FM] 5-0 (Washington, D.C.: 26 March 2010) [hereafter FM 5-0], p. 6-1. (Also issued by Headquarters, U.S. Marine Corps, as Marine Corps Warfare Publication [MCWP] 3-33.5.)
 9. U.S. Army Dept., *Counterinsurgency*, FM 3-24 (15 December 2006) [hereafter FM 3-24], p. 4-6, available at www.fas.org/.
 10. JP 3-0, p. IV-30; JP 5-0, p. III-57.
 11. FM 5-0, p. 6-1.
 12. FM 3-24, p. 4-6.
 13. Downes-Martin, "Assessments Process for RC(SW)"; Connable, *Alternative to Effects-Based Campaign Assessment in Afghanistan*.
 14. FM 5-0, p. 6-1.
 15. *Ibid.*, pp. 6-6 to 6-7.
 16. *Ibid.*, p. 6-7.
 17. *Ibid.*, p. H-5.
 18. *Assessment and Measures of Effectiveness in Stability Ops*, CALL Handbook 10-41 (Fort Leavenworth, Kans.: Center for Army Lessons Learned, 2010).
 19. *Ibid.*, pp. 12, 19–21.
 20. James N. Mattis, "Assessment of Effects Based Operations" (memorandum, U.S. Joint Forces Command, Norfolk, Va., 14 August 2008), available at smallwarsjournal.com/.
 21. Connable, *Alternative to Effects-Based Campaign Assessment in Afghanistan*, p. 37.
 22. FM 5-0, p. H-2. Instead of deriving desired effects (DEs) from a plan's objectives and then writing MoEs to measure the achievement of the DEs, FM 5-0 suggests that a commander broadly describe an operation's end state in the commander's intent. Desired conditions are then derived from the intent (end state) and are measured using MoEs. While the language is slightly different, the end result is much the same.
 23. As evidence of this, at the U.S. Naval Postgraduate School, in Monterey, California, the curriculum for operations analysis consists of advanced math, modeling and simulation, and programming courses. It does not contain any courses on campaign assessment. See "Academic Catalog," *Naval Postgraduate School*, www.nps.edu/.
 24. Downes-Martin, "Assessments Process for RC(SW)"; Connable, *Alternative to Effects-Based Campaign Assessment in Afghanistan*.
 25. Connable, *Alternative to Effects-Based Campaign Assessment in Afghanistan*. His arguments concerning the pitfalls of these approaches are spot-on. Note that by "narrative," neither Connable nor I mean "written opinion" but rather something akin to a research paper (or in Connable's terms, a fully sourced intelligence product). In this format, an argument of progress or regression is put forth in the context of the objectives being assessed, using pertinent facts and figures as support for the argument.
 26. A (lengthy) example of this approach can be found in Morgan L. Courtney, *In the Balance: Measuring Progress in Afghanistan* (Washington, D.C.: Center for Strategic and International Studies, 2005). Additionally, the ISAF AAG has begun using a narrative format for its quarterly assessments (though these remain classified).
 27. This is perhaps more true in a counterinsurgency, but given the prevalence of the media and the growing likelihood of military conflicts playing out in or near areas of significant civilian populations, information from all three sources will be increasingly important in conventional wars as well.

28. Michael Flynn, Matt Pottinger, and Paul Batchelor, *Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan* (Washington, D.C.: Center for a New American Security, 2010).
29. Of course, if these steps are taken but the rest of this paper's recommendations are not, these actions will only inflate expectations and make this problem worse.
30. Downes-Martin, "Assessments Process for RC(SW)"; Connable, *Alternative to Effects-Based Campaign Assessment in Afghanistan*.

OPERATIONS ASSESSMENT IN AFGHANISTAN IS BROKEN

What Is to Be Done?

Stephen Downes-Martin

In the absence of a credible numbers-based theory of counterinsurgency there can be no objective, numbers-based assessment for Operation ENDURING FREEDOM. The U.S. military nonetheless has attempted to conduct a numbers-based assessment process. Thus, when a new commander and staff take over duties as a regional command in Afghanistan, they inherit an operations assessment process riddled with highly visible flaws that emanate from the improper use of numbers and flawed logic. While no assessment process can be perfect or free of any criticism, the flaws the author observed during a six-week stint in-country are sufficiently egregious that they seriously reduce the value those

Dr. Stephen Downes-Martin, research professor at the Naval War College, has over thirty years of experience in developing and applying war gaming, game theory, decision analysis, and systems thinking to tactical, operational, and strategic decision support. He has a PhD in physics from King's College, University of London, was a military intelligence officer in the British Army, and is now a U.S. citizen. The commander of I Marine Expeditionary Force (Forward) invited him to be his assessments adviser for the spring of 2010, during which time he worked with, observed, and interviewed officers, senior noncommissioned officers, and civilians at a variety of assessments-related staffs at regional commands, provincial reconstruction teams, the International Security Assistance Force Headquarters, and the International Security Assistance Force Joint Command Headquarters. This article is a product of that work and of discussions with officers and analysts during the year since his visit.

assessments provide to commanders' decision support. In addition, the visibility of these flaws means that military assessments, and by association the military commanders, are rightfully distrusted by higher civilian authority and by other organizations within the theater. It is therefore imperative that incoming commanders and staffs taking over responsibilities for regional commands address these flaws to improve decision making and to earn the trust of higher civilian authority and organizations with whom they have to work.

Staffs and commanders in Afghanistan created operations assessment processes under extraordinarily difficult circumstances while fighting, and it is extraordinary how well they have done given those

circumstances. Nevertheless, it is necessary to identify and fix the flaws in the present operations assessment process to strengthen decision support and the validity of the assessments, without apportioning blame or criticism. In this article I avoid identifying individuals or organizations as much as possible in discussing flaws in the assessments processes that I have observed. Instead, I address the proliferation of “junk arithmetic” and flawed logic within the currently used assessment processes and discuss why regional commanders and their staffs should care about these problems, by describing the damage to commanders’ credibility and decision support created by flawed processes. Finally, I propose an approach to operations assessment that regional commanders can immediately put into place. I do not discuss or comment on strategy, operations, or the broader arguments concerning counterinsurgency versus counterterrorism. I focus solely on the operations assessment process.

Dr. Jonathan Schroden convincingly argues (in an accompanying article) concerning operations assessment that “there is an entire failure cycle at work, and until its associated issues are rectified, the theoretical promises of operations assessment will continue to go unrealized.” Regional commanders do not have to wait for higher command to deal with these key issues, nor should they; they have the authority and capability to deal with them within their own regional commands. The assessment approach I propose in this article meshes with the requests for information from higher command and fits within the operational planning process of the regional command. It uses military and civilian professional judgment applied to the appropriate combination of objective and subjective data, backed up with valid arithmetic and sound logic.

WHAT IS OPERATIONS ASSESSMENT?

Joint doctrine describes assessment as “a process that measures progress of the joint force toward mission accomplishment.”¹ Joint doctrine also makes clear that simply measuring progress is insufficient, that the assessment process must “help commanders adjust operations and resources as required, determine when to execute branches and sequels, and make other critical decisions to ensure current and future operations remain aligned with the mission and military end state.”²

Implications of the Doctrinal Definition of Operations Assessment

How exactly does one measure progress toward accomplishing a mission? Unless one has already accomplished the mission, mission accomplishment or failure will occur in the future, but one does assessment in the *present*, using present and past information. Therefore, by definition, operations assessment is an attempt to forecast future success based on current and past experience.³ It attempts

to provide insight into how well the command is achieving its operational objectives (occurring in the future) using information from the environment (describing the present and the past). Assessment should include a measure of the gap between the current situation and the future desired end state, the rate of closure (or widening) of that gap and a forecast of its future rate of closure (or widening), and an assessment of the risk to the endurance of the end state after the achievement of objectives and termination of military action.

Therefore, in order to provide decision support to the commander within the guidelines laid down by joint doctrine, operations assessment must answer what I call “the assessment question,” which in general has the form: “What is the likelihood of, and what are the risks to, the conditions for the specified end states occurring or remaining stable if military operations are terminated on the specified date?”

In the context of Afghanistan, I propose that the assessment process at the regional command level must answer the more specific question: “What is the likelihood of, and what are the risks to, the conditions for the specified end states occurring or remaining stable if the region transitions from coalition forces to full Government of the Islamic Republic of Afghanistan (GIROA) control on the specified date?”⁴

If the operations assessment cell answers this question, the commander and staff will be in a better position to report progress toward the objective, identify risks to achieving the objective, and propose reallocation of resources to minimize or mitigate the risks.⁵ Assessing any individual line of operation or objective is a matter of answering the assessment question in the context of the likelihood that the end states specified for the objectives remain stable after transition and what the risks are to those end states should transition occur.⁶ In my opinion, lines of operation or objectives in Afghanistan are only of interest to the extent that they enable a transition of power to GIROA by the specified date with the specified end states remaining stable.

Forecasting has a long and dubious history, full of pseudoscience, junk arithmetic, and flawed logic, practiced by witches and listened to by kings.⁷ Forecasting should be done using a combination of subjective professional judgment, objective logic, (social) science, and mathematics.⁸ However, for many people the differences between pseudoscience and real science are hard to spot. Furthermore, approaches that are valid in one context can become invalid in others, even if the differences in the contexts are not obvious. So although most officers would subscribe to the notion of using valid logic, mathematics, and science (everyone believes that they themselves are rational and logical), it is difficult for those not explicitly educated and trained in science, analysis, and critical

thinking to identify whether an approach is logically or scientifically valid. This difficulty is the root cause of many of the flaws I have observed in operations assessment as practiced in Afghanistan.⁹

Requirements for Operations Assessment

I claim that four primary requirements must be met if an operations assessment process is to provide good decision support to a regional commander.

Assessments at the different levels of warfare (tactical, operational, strategic) and across the instruments of national power must be linked. Linkage “up” the levels of warfare means that the assessments for all districts in a region should play major parts in the regional assessment and that the assessments for all regions should play major parts in the national assessment. There will be emergent effects at each level that are not described by combining the assessments from lower levels, but any assessment should provide logical reasons for them, based on the inputs. Linkage “across” the instruments of national power provides an integrated assessment combining the separate diplomatic, information, military, and economics assessments from civilian and military branches of the involved coalition governments.

Metrics and operational end states must be logically connected. There must be a logical connection between the processed metrics data and a forecast of the endurance of the end states if transition were to occur—that is, credible and logical reasons *why* the (qualitative and quantitative) values of the metrics forecast the stability (or instability) of the end states, should transition occur. Satisfying this requirement provides a mechanism for addressing the risks to the end states, which is critical to supporting the commander’s decisions about the allocations of resources needed to deal with those risks. In addition, this requirement helps determine what metrics are required.

The appropriate metrics must be identified and the data to process them collected. There are three possible failure modes here: collecting irrelevant metrics, not collecting necessary metrics, and not knowing which of the previous two failures are present.

The metrics data must be processed using valid logic, arithmetic, and science. In the absence of an objective, numeric theory of counterinsurgency, it is especially necessary that assessment staffs creatively apply subjective, professional judgment to the objective and subjective metric data in order to answer the assessment question.¹⁰ It is critical that such creativity not violate established rules of logic, mathematics, or science, lest staffs generate unidentified errors when making an assessment and damage any decision that uses the assessment.

I argue that the military assessments I have observed in Afghanistan clearly do not satisfy these four requirements.

FLAWS IN ASSESSMENT AS CURRENTLY PRACTICED

I have identified by direct observation six major flaws to credible and quality operations assessments. These render assessments unfit for providing decision support to the commander, thereby casting doubt on the credibility of the assessments and upon the credibility of the commands and commanders that use them.

Overoptimism

An officer must be prepared and able to wear two very different hats. One of these is the “planner and analyst” hat worn when, among other occasions, doing assessments. The other is the “leader” hat, worn when leading subordinates in the execution of plans. The first requires a pessimist mind-set (“the glass is half-empty”) and focuses on critical thinking and the application of logic to identifying and overcoming what can go wrong, in order to identify and mitigate risk and, in turn, to ensure mission success. The second requires an optimist mind-set (“the glass is half-full”) and a focus on inspiring subordinates, politicians, and civilians to achieve objectives despite the risks.¹¹ The two mind-sets (pessimism and optimism) are very different, but the former is critical to assessment, for the following reasons.

Operations assessment requires analysis using logic and elements of the scientific method. A critical component of the scientific method is the concept of “falsifiability”—that a hypothesis must be capable of being disproved in order to be worthwhile. One does not prove some hypothesis to be true; instead the best one can do is fail to disprove it.¹² Similarly, in applying evidential reasoning to distinguish between alternative explanations using “analysis of competing hypotheses,” one does not compare the strengths of supporting evidence for various alternatives; instead one compares the weaknesses of evidence against them.¹³ Underlying these concepts is the fact that knowledge is contingent.¹⁴ These notions are counterintuitive, but they are well established, and they underlie the last three hundred years of successful Western science and the last 2,400 years of Western philosophical and logical thought.¹⁵

Officers who wear their leader hats when analyzing or assessing risk producing poor analyses or assessments, and officers who wear their analyst hats while leading place execution at risk. In addition an officer must be very careful if deliberately deciding to wear a “glass half-full” hat when reporting an assessment, whether up the chain of command (including to higher civilian authority) or to external organizations, such as the media. The risk here is inappropriate optimism.

In addition to the necessary critical attitude for assessment, an officer who is required to bring creative subjective assessment to bear must be capable of applying inductive logic, which requires a divergent mind-set capable of

recognizing patterns from partial information. The danger here is that humanity has evolved mostly to err on the side of false positives when looking for patterns (“better safe than sorry”), which in the case of a naturally positive attitude will lead to claiming optimistic patterns in the data.

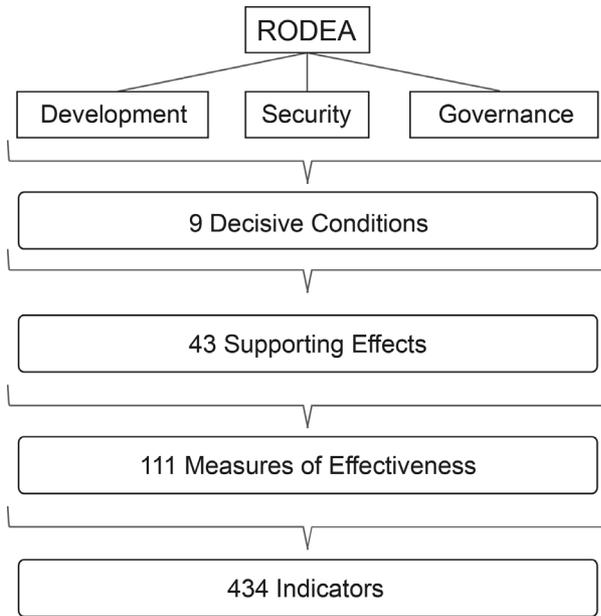
Although military commanders and their staffs work hard at avoiding over-optimism, they tend to bring their leadership (“we can do it”/“glass half-full”) characteristics to bear during analysis and assessment, and there is an institutional drive to produce “good-news stories.” This latter drive is partially in response to the “bad-news stories” reported in the press, and partially in response to the imperative to show progress in time to serve the ends of various political timetables. It is extremely difficult, to the point of impossibility, for an individual to achieve the correct positive and negative balance, but an organization can, and it best achieves this balance by deliberately setting up an adversarial process, using devil’s advocacy. The goal of this process is to identify and examine all the ways in which things can go wrong, in order to institutionalize the critical “glass half-empty” attitude and ensure that the natural desire for good news to pass on up the chain of command does not dominate assessment or reporting.

Metrics Collection

I have observed two major types of metrics collection problems. The first problem, promiscuous metrics collection, breaks down into two parts, self-inflicted and inflicted from above. Some assessments cells and teams told me they collect as much information and as many metrics as they can think of, “just in case.” In these cases, the stated goal was to be able to “change what we analyze as objectives or requests for information change without having to change what we are collecting.” This results in a high likelihood that many of the collected metrics are not relevant to the situation being assessed.

In addition, the International Security Assistance Force (ISAF), the ISAF Joint Command (IJC), and some regional commands have issued “fragmentary orders” (FRAGOs, or FRAGORDs), requiring the collection of large numbers of numeric metrics (see, for example, the Regional Operational Design Effects Assessment [RODEA] structure used for a while by Regional Command [South], described in figure 1).¹⁶ It is beyond the capacity of most forces in the field to collect on the large numbers of demanded metrics and produce a credible product. Frequent attempts by subject-matter experts to reduce the number of metrics by brainstorming are unlikely to help, for two reasons. First, there is no guarantee that the original lists of metrics contained all those required, so any reduced list may miss necessary ones; second, it was mostly brainstorming in the absence of an analytic framework that gave rise to the problem of metrics

FIGURE 1
REGIONAL OPERATIONAL DESIGN EFFECTS ASSESSMENT (RODEA) STRUCTURE



“bloat” in the first place. Trying to correct a problem by doing the same thing that created it is unlikely to succeed.

The second problem, blinkered metrics collection, attempts to avoid the first problem but introduces worse consequences. Some assessments cells told me that they try to identify up front which metrics are hard or impossible to collect, and then set these aside. The problem is that there is no analysis as to whether these ignored metrics should be collected, and therefore there is a risk that critical metrics will be neither collected nor considered. What is worse, commanders are not informed that the assessment is ignor-

ing metrics whose importance has not been determined. This jeopardizes the accuracy of the assessment and hides from the commander and from later assessors the original decision to ignore hard- or impossible-to-collect metrics. Since the assessment may very well be poor, the credibility of the commander is ultimately placed at risk.

Junk Arithmetic

Using arithmetic on numeric metrics is optional, but the rules of arithmetic are *not* optional.¹⁷ The following examples of junk arithmetic I encountered suffice to demonstrate the broader problem.

Many of the assessments processes I observed in-theater take qualitative and quantitative data, rank order them, and average the rank-order numbers. For example, in the RODEA process, assessors coded answers to questions on a point scale of one through five, similar to the “rating definition levels” used by ISAF and IJC. These codes are not ratio-scale numbers, and therefore, by the laws of arithmetic, functions such as “averaging” cannot be performed on them—it would be meaningless.¹⁸ To put this into a familiar context, officer pay grades are rank ordered by “O number”—that is, pay grades O-1 (second lieutenant) through O-10 (four-star general). But no one believes that a brigadier general (O-7) is the same as a major (O-4) paired with a captain (O-3) just because four

plus three is seven.¹⁹ Averaging ordinal numbers, such as rank orders, within an assessment process is just as nonsensical, and this kind of obvious error subjects the credibility of the assessment, and the command promoting it, to justifiable suspicion.

Values for many metrics are obtained using polls. In Afghanistan, these polls have claimed margins of error of approximately plus or minus 3 percent for nationwide surveys, 5 percent for regions, and 10 percent for districts.²⁰ Given a plus-or-minus 10 percent margin of error, a district metric would have to change by approximately 20 percent before one could claim a trend. When a change is less than approximately double the margin of error, the soundest conclusion that can be drawn is “We do not know whether there has been a change or not.” Unfortunately in most assessments I observed in-theater these margins of error were ignored, and in a significant number of instances officers claimed unjustified trends on small changes of data. An “assessments dashboard” I observed did not even have a symbol for “trend unknown,” just check-boxes for “trend improving,” “static,” and “declining”; it was impossible to report that it was not known whether there even *was* a trend. When I asked about this, the officer in charge replied, “The military does not like to admit we do not know, so we report one of the dashboard options and then caveat the report.” To report “We know that this measure is not changing” is obviously not the same as to report “We do not know if this measure is changing”; the two situations have very different implications for the commander’s decision making. It is doubtful whether anyone remembers caveats after a trend report has been delivered.

Another observed example of junk arithmetic (this time leading to an overly optimistic claim) was an Afghan National Police assessment claiming that the organization was “nearly 100 percent filled.” Examination of the underlying data showed that patrolmen were overmanned while officers and noncommissioned officers were undermanned, by significant amounts. Whether or not the assessment reported the underlying data along with the conclusion, the fact remains that “nearly 100 percent filled” simply did not faithfully summarize the situation in this case. The “nearly 100 percent filled” summary had been derived by applying junk arithmetic to the underlying data, and all too often the underlying data that would reveal the true situation do not make it into the reports.

The use of *any* arithmetic on numeric metrics in counterinsurgency is subject to suspicion, the more so when one attempts to roll up the numbers into some grand score of how well we are doing. Even in a country as stable as the United States, with all the economic data and information one could conceivably ask for and no one trying to kill you as you ask for it, we still do not have credible economic forecast models that can avoid near-catastrophic economic meltdowns.

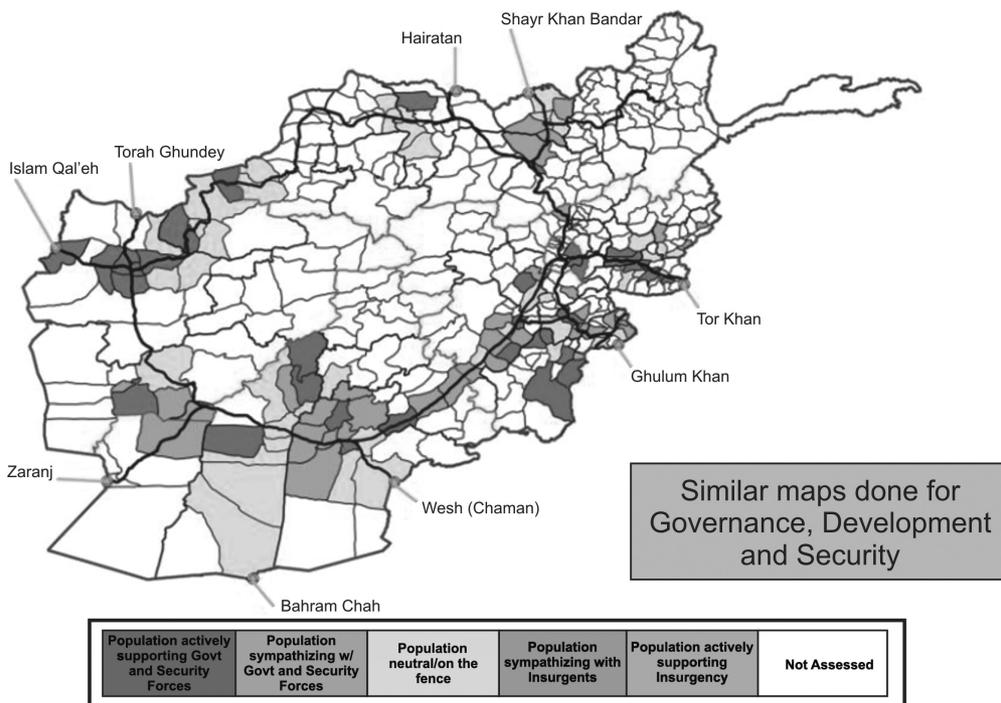
Where then is the credible numbers-based model for governance, development, and security in Afghanistan during an insurgency? Certainly, a professional, subjective, qualitative assessment of progress will make use of certain numbers, but not by running arithmetic functions over them.

Simplistic Color Coding

Senior commanders’ time is a precious and nonrenewable resource; staffs rightfully guard it jealously. The most common approach in-theater to providing senior commanders with the conclusions of assessments is to produce a color-coded map, each district shown in one of five colors indicating the level of success there (see figure 2; the actual colors are displayed in the Web version of this article).²¹ But as has been pointed out and persuasively argued to a working group of senior officers, including generals, at IJC, “The color-coded map dilutes transparency and accuracy and offers a simplistic and misleading representation of the battle space.”²²

I have observed that most senior commanders demand narrative explanations from subordinates during briefings and forward narrative assessments up the chain. However, staffs do not usually collect, document, or store these

**FIGURE 2
EXAMPLE OVERALL DISTRICT ASSESSMENTS, COLOR CODED BY LEVEL OF SUCCESS**



ISAF Joint Command Metrics Workshop, Washington, D.C., 17–18 March 2010, unclassified handout.

narratives in a database form suitable for later analysis. Since these senior commanders apparently believe it is necessary to spend time on narratives, it is necessary to find a way to present them with pertinent narratives in the first place within their time constraints. Claiming that color-coded maps serve the purpose is disingenuous. Any changes in color to a district or province will immediately require a narrative explanation; any nonchange in color will also require an explanation of why, despite effort, the situation has not improved. In either case, it is important in the narrative to answer the questions the briefer knows the commander is going to ask.

In addition, a color-coded map hides information. The single color coding represents an average (not a summary) of a large number of underlying factors, most of which it is nonsensical to average. An average can quite possibly stay the same as some factors improve and others degrade; the color tells us nothing useful about this situation, so one must add narrative explanations. Since smart staffs often provide such narratives anyway, the color-coded map becomes pointless at best and a misleading time waster at worst.

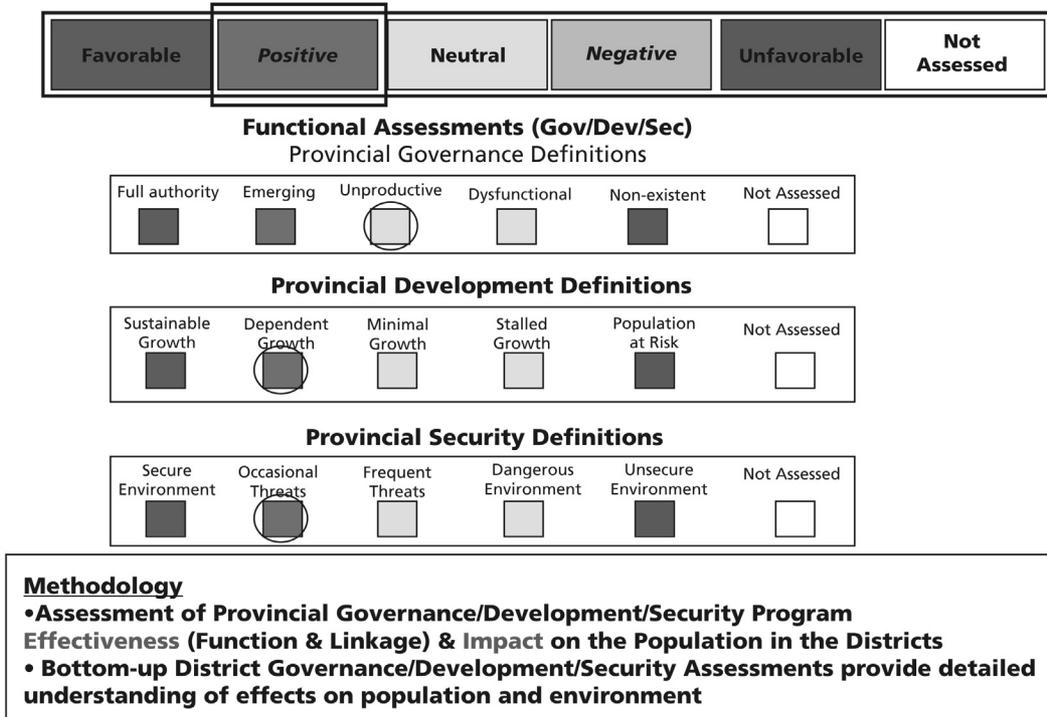
Logic Failures

Even if valid success/fail statistics exist at the district level, validated and documented methods of “rolling them up” into a forecast of success or failure at the regional or national level do not exist. Nor are there any past data on which to base methods for such roll-ups.

No Compelling Combination of Assessments. Furthermore, validated and documented models of how to combine assessments across the instruments of national power (diplomatic/political, information, military, and economic) do not exist. There is no credible model for how to combine the assessments of objectives within the lines of operation (governance, development, and security) into a final assessment. Regional commands appear to be “color averaging” when attempting to combine assessments from separate lines of operation. The regional commands present separate colors for their respective regions for security, governance, and development, then provide an overall assessment color that happens to be the average point on the color-bar chart of the three lines of operation (see figure 3; the actual colors are displayed in the Web version of this article).²³ This is not coincidence; I have observed regional command briefers struggle to explain in operational terms why they had given a particular color to an overall assessment.

The combined coding scale for assessing a district or region (see figures 2 and 4—again, shown in color in the Web version) is drawn directly from the population component of what is known as a “systems thinking” model of counterinsurgency in Afghanistan.²⁴ In that model, each box contains the part of the

FIGURE 3
EXAMPLE COLOR-CODED PROVINCIAL ASSESSMENT

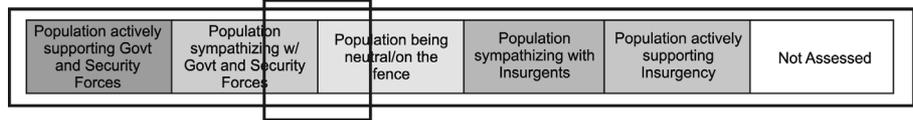


This example combines the colors of the assessments of the three lines of operation.
ISAF Joint Command Metrics Workshop.

population described by that box. The model spreads the population across all five boxes. It is incorrect, however, to interpret each box as a position on a scale that describes *the whole population*; the color scale used by coalition forces, as shown in figures 2 and 4, is an incorrect oversimplification of the original model and cannot describe the majority of popular-support situations.

For example, this representation cannot handle a polarized society where, say, 50 percent actively support the government and security forces and 50 percent the insurgency. One solution proposed by a staff in-theater was to assess a polarized example as being neutral, “on the fence.” But clearly a fractured polarized society is not the same as a neutral society, and this staff was also unable to explain how it would represent and assess a population equally distributed along the support dimension (i.e., with 20 percent of the population in each of the five boxes). This simplistic color-bar approach also cannot handle other very likely distributions of support (with different percentages of the population distributed across all support-level boxes). I observed some regional commands spreading their assessments across two contiguous boxes (as in figure 4); unfortunately, this extension does not solve the problem.

FIGURE 4
AN OVERLAPPED ASSESSMENT EXAMPLE



Combined assessment of population support places the entire population into one of five levels of support for GIROA and security forces or the insurgency, or into an overlap between two contiguous levels.

No Compelling Connection among Objectives, Metrics, and Assessment. All military forces are employed for reasons—in order to achieve end states laid out in the commander’s objectives—and progress is measured against those end states. Therefore, the commander’s objectives must determine the metrics used.

I have heard no compelling arguments as to why staffs collected certain metrics and not others. For example, a staff at one command claimed it had carried out a rigorous process but was unable to describe or document what that process was, who executed it, and why their predecessors had selected those specific metrics. Staff members at another command claimed to have decided on its metrics “from a book or paper, added some from Iraq, and then added a few of our own.” Another command has had metrics pushed on it multiple times by various academics, think tanks, and civilian agencies and has been obliged to take these seriously, since their authors have political influence.

Since lines of operation, taken alone and out of context, are broad, any conceivable metric is plausible. For example, during an IJC Metrics Evaluation Meeting held in Washington, D.C., on 17–18 March 2010, one participant claimed that “child mortality” was an appropriate metric under “Development.” Asked to explain how this metric supported counterinsurgency, the participant replied simply, “Afghan families care about their children.” Unless on such occasions military commanders want to argue in public that they do not care about the lives of Afghan infants (or whatever other such topics are under discussion) or are willing to collect on and measure any metric proposed by whoever happens to be in the room, they had better have clear, cogent reasons for how the metrics they are using are tied to their objectives, and therefore why other metrics are *not* being collected by their commands.²⁵ Unfortunately, most commands do not appear to have clear connections between their objectives and the metrics they are collecting;²⁶ and at this conference no sound answer was forthcoming from the officers present as to how infant mortality was *or was not* tied to their counterinsurgency objectives.

Staffs that are unable to justify the metrics they are collecting cannot justify *not* collecting others foisted on them by an entire cottage industry of academics, think tanks, newspaper columnists, retired officers, politicians, and

congressional staffers, or by history books about Iraq, or even brainstorm “by whoever is in the room at the time.” I observed a staff at higher command attempting to reconcile at least four collections of metrics to see which ones were duplicates and which were new, instead of determining what metrics they should be collecting, based on the objectives.

No Compelling Connection between Assessment and End State. For operations in Afghanistan, the end state is, loosely speaking, a region (or district, or the entire country) that is suitable for transition to full GIRoA control, where “suitable” means there is some, good chance that the GIRoA will be able to keep it stable and secure. However, unless we have a credible theory that links the level of active support for the insurgency to the likelihood of GIRoA successfully running an area, we have no connection between the rolled-up color-coded assessment and the desired end state. Therefore, the assessment does not provide senior leaders tasked with judging the suitability of a region or district for transition with a credible assessment of its suitability. What it does provide to those decision makers is information from which to argue either way, depending on political convenience.

Higher-Command Demands for Objective Assessments

ISAF and IJC (supported by higher civilian authority) demand a “set of indicators that complements the commander’s qualitative assessment of the environment.”²⁷ Unfortunately, in practice, “indicators” are all too often interpreted as being “quantitative” (or “numeric”) and thus “objective,” whereas the “commander’s qualitative assessment” is seen as “subjective.” An example is a report from one provincial reconstruction team that referred to “overreliance on qualitative and subjective assessments” as a challenge.²⁸

An objective numeric assessment for Afghanistan requires a credible numbers-based theory of counterinsurgency that is applicable to Afghanistan—a way of computing from the metrics the probability that if we transitioned an area to GIRoA the desired end states would endure.²⁹ For such a theory to be credible, one must be able to apply it to past insurgencies with known metrics and with known outcomes; at the very least, one would want such data to construct a model. However, although there have been hundreds of counterinsurgency wars in the past century, comprehensive data on the operational environments and how they changed over time have been kept for only a small number of them;³⁰ we do not have enough data for credible success/failure statistics. Some would argue that the data we have from the approximately four hundred districts in Afghanistan could provide a numbers-based statistical analysis; the problem is we do not have success/fail outcomes for any of these—the war is not over yet.³¹ Therefore, we have no outcome data for Afghanistan. Although statistical

models are applicable at the tactical level (we have large amounts of data concerning tactical/small-unit engagements), they are not applicable to assessing success or failure at the operational or strategic level (since we do not have statistically valid sample sizes).

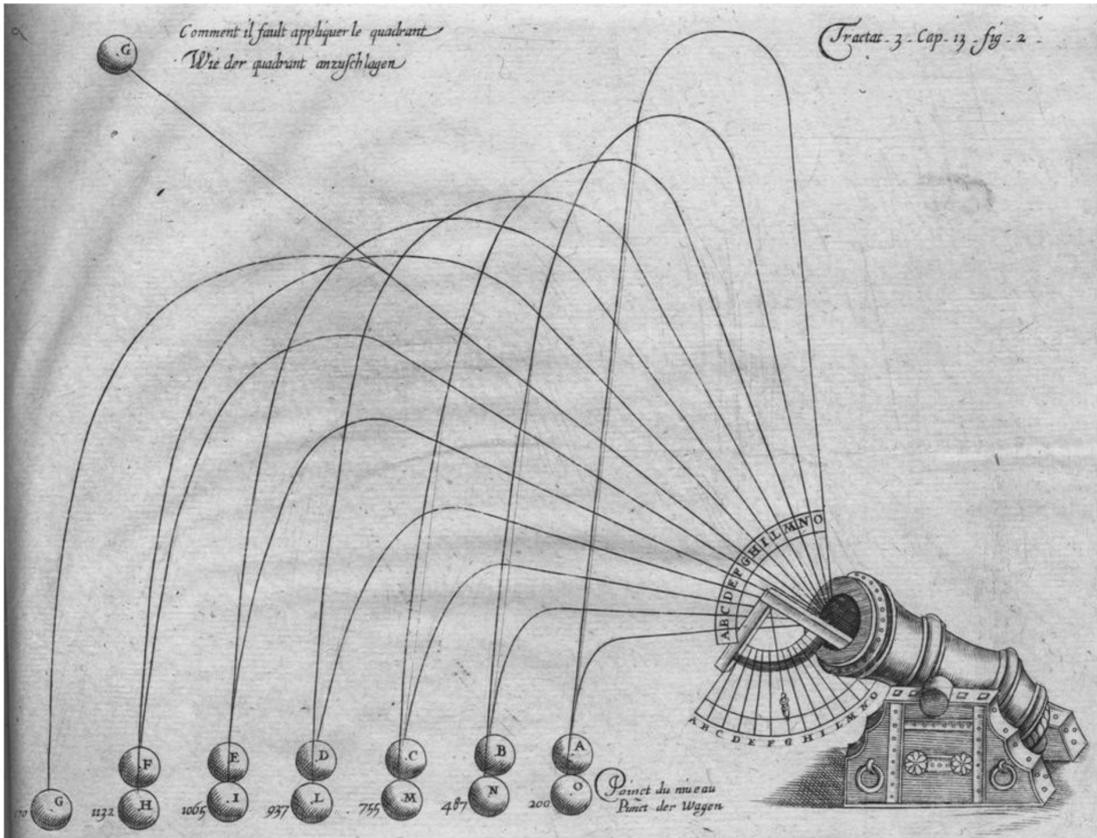
Consider the assessment problem faced by Robert Norton, an artilleryman of the seventeenth century (see figure 5). Despite Norton's skill at mathematics and his recognition that mathematics was important to the artilleryman, he did not have an objective numbers-based theory of external ballistics—Newton had yet to develop his theory of gravity and equations of motion. Norton could collect all the numeric data he liked concerning the present (for example, muzzle velocity, weight of ball, amount of powder, and angle of elevation), but without a numbers-based theory of ballistics he had to apply subjective professional judgment to those objective and subjective numbers to assess where a shot would fall in the future. In fact, the subjective judgment of artillerymen in pre-Newtonian days was superior to the many “objective” but wrong numbers-based assessments published during those times.³²

In the absence of a credible numbers-based theory of counterinsurgency in Afghanistan, there is no objective, numbers-based assessment for military operations there. *Pretending otherwise gives the illusion of precision without the reality of accuracy.*

For tactical and small-unit actions, performance directly generates predictable effects using Newtonian physics (ballistics, logistic flows, time and distance calculations, etc.) and the statistics of millenniums of documented lessons learned from small-unit engagements. Furthermore, the time lag between performance and effect is short, seconds to days. One can use measures of performance as proxies for measures of effect and rapidly check for the necessity of changes of plan, since valid numeric theories of physics and valid statistical theories of small-unit tactics exist. However, there are no valid numeric theories for dealing with operational and strategic levels of counterinsurgency; one must build logical connections between current actions and future effects on the objective and then generate the required metrics from the connections. *The obsession with objective assessments is tactical thinking applied to strategic problems.*

Although purely objective (and numbers-based) predictive theories of the physical world are possible, the likelihood that the same will become true for operational- and strategic-level complex social interactions—such as insurgency and counterinsurgency, terrorism and counterterrorism, and warfare—in time to be useful in Afghanistan is extremely small. Therefore, operational/strategic counterinsurgency assessment in Afghanistan must be subjective, based on senior leaders' subjective professional judgment of pertinent qualitative and quantitative data.³³ Even if all relevant data were available and all of

FIGURE 5



Artillery illustrations published before the existence of a numbers-based physics of gravity show impossible exterior ballistic trajectories. Artillerymen had to assess fall of shot subjectively, on the basis of objective measurements.

Norton, *Gunner*. See note 32.

them accurate, numeric, and objective, assessing what they mean for success is still a professional military subjective judgment call, since there is no credible, objective numbers-based theory of counterinsurgency.

DISTRUST GENERATED BY POOR ASSESSMENT PRACTICE

The military's focus on good-news stories, obviously flawed arithmetic and logic, and lack of transparency causes the press to distrust military statements. It then looks for and writes about what appear to be contradictions between military statements and reality; higher civilian authority then demands explanations from ISAF commanders. Both higher civilian authority and IJC accordingly demand "objective assessments using metrics to complement the commander's subjective in-the-field assessment" and then push metrics systems down the chain for collection. The message is clear: *they do not trust military commanders' assessments*. A reaction I observed was a demand from higher command to the relevant regional

command to provide good-news stories to counter media claims of military failure. This makes the military look defensive, makes the distrust worse, and spreads the distrust to the domestic population, upon whose political support for the mission the military relies for funding.

In my opinion, the number of metrics demanded overwhelms the collection capacity of regional commands' partner civilian organizations and major supporting commands. Furthermore, neither those organizations nor supporting commands appear to trust the value of collecting on those metrics or of assessments done using them. For example I was openly told by a head of planning in one civilian two-star-equivalent organization that in response to his regional command's request for assessment metrics he makes up what he does not have and does not check the quality of what he does have. An additional reason given me for not taking metrics seriously was the absence of feedback from requesting organizations. Another example is the attitude one colonel encountered when he asked troops in the field whether they "collected all the requested metrics or made stuff up"; the response was foot-shuffling and "Is this a trick question, sir?" Additionally, civilian partner organizations have expressed annoyance and suspicion of the military when the military lines of operation overlap civilian ones (such as governance and development).

WHAT IS TO BE DONE?

A regional commander and staff must separate the task of responding to higher commanders' requests for information to feed their assessment processes from the task of assessing the regional command's own progress with its own operational war-fighting objectives, to provide its own assessors time for the latter.

The pathologies inherent in higher command's assessment processes, specifically the enormous numbers of metrics demanded, mean that the regional command staff members responsible for responding to requests for information from higher command should not be the same people who must assess the regional command's progress with its own operational objectives. Otherwise there will never be time to do the latter, because the former inevitably comes first. If the same people have to do both tasks, the commander must set a maximum percentage of time they are to spend responding to requests for information from higher command in order to ensure they have time to produce adequate assessments for the regional commander.

Regional commands must decide what metrics are required to support assessment of their operational objectives. As we have seen, at the tactical level Newtonian physics and the statistics of millennia of small-unit engagements provide a model for generating metrics and using those metrics to assess effects. At the operational level, there is no established numeric model for translating

performance into effect, and as argued, no credible numeric model is forthcoming. The regional command must build a qualitative understanding of the interacting elements of the operational environment in order to understand that environment, identify relevant assessment metrics, and erect a defense against externally imposed, plausible, but irrelevant metrics.³⁴ Build the model by analyzing commander's intent during the mission-analysis phase—that is, answer the question, “Why are the objectives important in the context of the objectives and associated desired end states?”—and collect the answers in concise narrative form. (If they cannot be expressed in clear English, slide-show bullets, “Pentagonese,” and cartoons just hide that fact.) The narrative generates metrics —“things we want more of and things we want less of”—with explanation, and clusters these into topics of interest. The narrative is the summary of subject-matter experts' opinions on how the environment works, within the context of the objectives, end states, ways, and means. The logic within the narrative provides a qualitative understanding of what is likely to happen as regional command actions alter the qualitative and quantitative values of the metrics. The assessment team then uses professional subjective judgment and the logic within the narratives to assess the implications of the collected metric information against the assessment question we have already postulated.

Identify Operational/Strategic Objectives and End States from the Relevant Operation Orders, FRAGOs, or Other Planning Documents. If the objectives are at the operational/tactical, or lower, level of war, use lines of operation instead of objectives. For each objective, identify the end states; if these are not explicitly available in the planning documents, analyze the documents for implied end states. Identify explicit and implicit “critical requirements” and “in order to” statements attached to the objectives in the planning documents; these are the critical requirements for success.

Write the “Assessment Question.” For operations in Afghanistan this will likely be of the form given above: “What is the likelihood of, and what are the risks to, the conditions for the specified end states occurring or remaining stable if the region transitions from coalition force control to GIRoA?”

Analyze Commander's Intent. For each critical requirement, ask the question, “Why is this important to coalition forces, to the insurgents, to the population, to GIRoA, to our partners, to our governments?”³⁵ There will likely be more than one answer, but restrict yourself to the important answers; they help identify strengths, weaknesses, and vulnerabilities for friends, enemies, and other stakeholders in the context of the specific objective. For each answer, in turn, ask the same question—“Why is this important?”—and continue until you can make a logical and clear link to the end state. Write a narrative expressing the chain of

links between the objective and the end state. There will be a temptation when analyzing intent to focus on “what we want to happen.” However, the real question is, “Why is this important?”—and so it is also necessary to consider what we *do not* want to happen. In addition, one should consider the most dangerous and the most likely actions or reactions of the stakeholders, including the “upsides” of any “downside,” and the downsides of any upside.³⁶

Use a variety of sources to generate the answers and to build the narrative, including planning documents, conversations and interviews with colleagues, internal advisers, external subject-matter experts and organizations, literature and databases, and your own professional military knowledge. Although regional command staffs are the experts in military matters, they are not the experts in politics, economics, social information, or infrastructure and must seek external assistance for these areas.³⁷

Note that the analyses of intent of the various objectives will overlap each other. This is expected, since multiple objectives apply to the same area of operations and support the same set of end states. Overlap in the analysis of intent represents the linkages between the objectives. However, one should write each narrative as though the reader were going to read only that one—introduce the overlaps but focus on the core objective (or line of operation).

Identify Topics and Metrics. For each narrative, identify the actors and their actions, as well as their strengths, weaknesses, and vulnerabilities implied in the narratives. Pay attention to “who is doing what to whom” and to “who wants, or does not want, what”—that is, to the verbs and nouns (hence the emphasis on declarative English). From these factors derive your topics.³⁸

Analysis of commander’s intent explains why these topics are important and guides collectors in the field. Analysis of the narratives concerning the topics will provide the specific metrics. For example, a critical capability for a governance-related objective might be “tax base of the GIRoA,” resulting in a “tax base” topic. Metrics might be “tax revenues,” “tax revenues skimmed,” “taxes avoided,” etc., to give the required picture of the “tax base” topic. Just as commander’s intent is part of military operational art, the selection of metrics to cover topics is also a matter of art guided by analysis of commander’s intent.

Each narrative for an objective may contain more than one discussion linking the objective to the end state. It may be useful to prioritize them within each narrative, thus prioritizing the topics and metrics, in order to discard less important topics and metrics if their numbers grow too large. Important topics may include some that are risky to collect (for example, likelihood of casualties suffered during collection), expensive to collect (because, for example, they require resources not currently allocated), or impossible to collect (inherently unknowable). Identify

these and inform leadership: uncollected pertinent metrics introduce risk to the quality of the assessment and hence to the credibility of the command and of the commander. “Unknowables” aside, it is up to the leadership to decide whether to accept the risk of an incomplete assessment by ignoring topics and metrics or to accept the risk of collecting on them.³⁹

Provide Guidance to Collectors. Provide collectors the topics (not the full collection of metrics) and the intent behind them (the analysis of commander’s intent); do not ask for numeric metrics;⁴⁰ ask for patrol reports, with whatever numbers and narrative they can provide about the topics. This approach avoids overburdening troops or other collectors in the field by pushing initiative down to the lowest possible level, and it allows collectors in the field latitude to interpret what they should collect and can deliver within the context of local conditions and commander’s guidance.

Make the Assessment. Argue the case both for (optimistic) and against (pessimistic) a successful outcome, and then make a final judgment based on the two cases. As would be done in legal proceedings, provide, along with the final judgment and the reasons for it, both “for” (optimistic) and “against” (pessimistic) arguments and all the evidence. If the resources are available, have separate teams do the optimistic and pessimistic assessments and argue their respective cases to a senior assessor for final assessment. Otherwise, do the pessimistic assessment first.

Gather all the evidence that supports the negative answer to the assessment question—that is, that the likelihood of success is low and the risks are high. Using professional military judgment, pessimistically assess the risk to different areas of the commander’s intent were the district to transition from coalition force to full GIRoA control on some specified date. Make as persuasive a professional argument as possible for a pessimistic answer; record it, along with the evidence. Be rigorous and ruthless when doing the pessimistic assessment; any squeamishness here will result in challenges to the final assessment in (probably) an embarrassing arena.

Then gather all the evidence that supports a *positive* answer to the assessment question—that the likelihood of success is high and the risks low. Again, using professional military judgment, assess the risk to different areas of the commander’s intent, but this time optimistically, were the district to transition from coalition force to full GIRoA control on some specified date. Again, make as persuasive a professional argument as possible, recording the evidence along with the optimistic assessment.

Finally, examine the two cases, their arguments and their evidence, and decide on an overall assessment of likelihood and risks. Pay particular attention to

pessimistic items that overwhelm positive ones and to positive items that fix negative ones. Record the final assessment and the reasons for it. When one produces good “for and against” arguments before making a final case, not only is the quality of the assessment improved but opposition to the assessment is more likely to focus on the interpretation of evidence and not the integrity or competence of the assessors.

The flaws in the operations assessment processes I observed in-theater clearly produce untrustworthy decision support; they are so manifest that commanders place their own credibility at risk when they support the resulting assessments. Regional commanders have the authority and means to fix operations assessment within their commands. However, doing so requires institutionalizing a rigorous process and separating it from the task of responding to higher-command requests for information. If the regional commander decides that this separation is unacceptable or does not have the time or staff resources to implement it, an alternative is to base the regional command’s operations assessment entirely on its commander’s subjective professional judgment combined with that of the region’s civilian provincial reconstruction team and of other regional stakeholders. The continued use of junk arithmetic and flawed logic robs decision makers of the most essential requirements that assessment is supposed to supply—sound, verifiable, and accurate information upon which to make life-and-death decisions.

NOTES

I thank the personnel of I Marine Expeditionary Force (Forward) for their friendship and assistance while I was with them in Afghanistan. They are truly ferocious fighters and courteous colleagues. I am grateful to Ben Connable, Jonathan Schroden, Peter Perla, other colleagues in the field too numerous to mention, and the faculty and staff at the Naval War College for their support and criticism.

1. U.S. Joint Staff, *Joint Operations*, Joint Publication [hereafter JP] 3-0 (17 September 2006, incorporating change 2, 22 March 2010), p. IV-30, available at www.dtic.mil/; U.S. Joint Staff, *Joint Operation Planning*, JP 5-0 (26 December 2006), p. III-57, available at www.dtic.mil/; U.S. Army Dept., *Counterinsurgency*, Field Manual [hereafter FM] 3-24 (Washington, D.C.: 15 December 2006), para. 5-90, describes assessment in similar terms; available at www.fas.org/ (FM 3-24 is also issued by Headquarters, U.S. Marine Corps, as Marine Corps Warfare Publication [MCWP] 3-33.5).
2. JP 3-0, p. IV-31.
3. Although “forecast” and “predict” are often used interchangeably, I use “forecast” as a broad description of a likely future rather than a precise “prediction” of exactly what will happen.
4. Note that one can replace “region” with “district” or “Afghanistan,” depending on the level of the assessment. The commander’s plan should specify the end states and will probably include items dealing with security, stability, economic development, governance, al-Qa’ida, etc. Also, the “specified date” can

- be any date that is useful, either in the future or the present. See JP 3-0, sec. IV, for a broad discussion of end states and objectives.
5. It is worth noting what the assessment cell's task is *not*. The assessment cell does not decide how to achieve the operational objectives or what to do to achieve the conditions for success. Those are planning functions. The assessment cell's mission is to assess how well the executed plan is achieving the end states that the objectives are supposed to enable and the risks to that achievement.
 6. The three lines of operation for coalition forces in Afghanistan are "governance," "economic development," and "security." Developing the Afghan National Police or army is a separate topic, and I do not deal with it in this article. See FM 3-24, chap. 5, for a broad discussion of the "Logical Lines of Operation" during counterinsurgency operations.
 7. Belief in pseudoscience and conspiracy theories and inability to use valid reasoning are disturbingly frequent in the American population—see "Science and Technology: Public Attitudes and Public Understanding," *National Science Foundation: Science and Engineering Indicators 2002*, www.nsf.gov/, esp. "How Widespread Is Belief in Pseudoscience?" It would be unwise to assume that excellence in leadership is incompatible with these kinds of thinking failure. Such thinking failures are not a cause for concern when those involved are facing familiar operational and strategic situations of the kind they have successfully dealt with in the past. However, experience with past operational (or strategic) situations is only as relevant to the current situation as the past and current situations are similar.
 8. See J. Scott Armstrong, *Principles of Forecasting: A Handbook for Researchers and Practitioners* (New York: Springer, 2001), for a good overall introduction to forecasting. See also *Forecasting Principles: Evidence-Based Forecasting*, www.forecastingprinciples.com/.
 9. I have also observed these flaws throughout both the U.S. Department of Defense and civilian commercial organizations—as would be expected, since the root causes are present throughout the Defense Department and civilian worlds.
 10. FM 3-24 is the closest the U.S. military has to a theory of counterinsurgency; however, it does not even come close to providing a numbers-based theory, and no one pretends that it does so.
 11. I use the broader, explanatory form of pessimism and optimism concerning value judgments on the agreed facts, rather than the dispositional form, concerning one's confidence in the success of an endeavor—hence the traditional "glass half-empty versus glass half-full" value judgment rather than any implication as to the effects of the glass's state of emptiness on the success of an endeavor.
 12. See, for example, Karl R. Popper, *The Logic of Scientific Discovery* (New York: Basic Books, 1959), and *Stanford Encyclopedia of Philosophy*, s.v. "Karl Popper," plato.stanford.edu/.
 13. See Richards J. Heuer, *Psychology of Intelligence Analysis* (Washington, D.C.: Center for the Study of Intelligence, Central Intelligence Agency), chap. 8, available at <https://www.cia.gov/>. Note that the very public arguments criticizing analysis of competing hypotheses (ACH) deal mostly with failures to execute the method properly or with the difficulties of executing the method. See Tim van Gelder, "Hypothesis Testing: What's Wrong with ACH?," *Tim van Gelder: Bringing Visual Clarity to Complex Issues*, timvangelder.com/, and "How Not to Free Your Mind," *The Interpreter: Lowy Institute for International Policy*, www.lowyinterpreter.org/. Both these criticisms hold for any valid analysis method, and the idea that the validity of a method depends on the ease of its use is ludicrous.
 14. See, for example, *Stanford Encyclopedia of Philosophy*, s.vv. "Naturalized Epistemology" and "Underdetermination of Scientific Theory."
 15. The use of negative words such as "fail," "disprove," and "weakness" may be problematic to some people's professional ethos. However, the rules of logic are not optional, the value of the scientific approach is proven, and one ignores either at one's peril.
 16. Maj. Jonathan Roginski (10th Mountain Division) informs me that "under the guidance of William Upshur and David Kilcullen the Afghanistan Assessment Group of Regional Command (South) replaced RODEA"

- in September 2010 “with a system of 17 indicators—informing 11 metrics—describing the environment and critical conditions specific to southern Afghanistan in the spring and summer of 2011, narrowing the process to only that which is central to the environment and the mission.”
17. The rules of arithmetic—including the fact that adding or averaging rank orders is nonsense—were established over two millennia ago by, among others, Pythagoras and are taught in every elementary school worldwide.
 18. The attempt to get around this by scoring metrics using Likert-like items (for example, the five-point rating definition level) fails, since with every point defined by a text description the numbers associated with each text item are rank-ordered ordinals that, by the rules of arithmetic, cannot be averaged (or have any other arithmetic function used on them).
 19. It may be that in certain instances one can replace a brigadier general by a major paired with a captain, but I suggest that in these cases one has other problems that are beyond the scope of the assessments process.
 20. These margins of error appear to be those that would be computed from the population sizes if there were no corruption, fraud, or intimidation involved in the data collection. Therefore, these margins of error are at best the minimum error, and in my opinion it is highly probable that they are much greater within the context of Afghanistan.
 21. “IJC Metrics Assessment” (IJC briefing to the ISAF Joint Command Metrics Workshop, Washington, D.C., 17–18 March 2010), slide 15. Note that, in addition to the five colors, “white” indicates “not assessed.”
 22. By Ben Connable, at discussions held 5 May 2010. See also Ben Connable, “Afghanistan Assessments and Metrics: Trip Report Analysis and Recommendations for ISAF and ISAF Joint Command” (document MG 1086, RAND Corp., 2011).
 23. “IJC Metrics Assessment,” slide 29.
 24. See PA Consulting Group, *Dynamic Planning for COIN in Afghanistan* (London: 2009), available at msnbcmedia.msn.com/.
 25. They may very well be important or even vital to *other* commands or government agencies, but unless they are tied to *this* command’s objectives, they are not important to *it*.
 26. Other than the promiscuous approach of “This metric appears to have *something* to do with the objective, so therefore we must collect on it.”
 27. IJC guidance to the ISAF Joint Command Metrics Workshop.
 28. Coffey International Development, “Introduction to the Helmand Monitoring & Evaluation Programme,” Helmand Provincial Reconstruction Team, Afghanistan, October 2010.
 29. In scientific parlance, a “theory” is not an unproved speculation but a hypothesis (or a system of hypotheses) that has been so verified through testing that to deny it contingent upon acceptance would be perverse, where a “hypothesis” is an untested (but testable) proposal for how some part of the world might work.
 30. Dr. Jonathan Schroden, in personal conversation, 4 January 2011.
 31. For the figure of four hundred districts, see *Statoids*, s.v. “Districts of Afghanistan,” www.statoids.com/. For outcomes, Dr. Jonathan Schroden points out (note 30) that one could look to some of the districts in Kabul Province to see what “success” looks like—though he counterargues as well that Kabul is a specialized case, given how urban it is compared to the rest of Afghanistan.
 32. See, for example, the trajectory illustrations in Robert Norton, *The Gunner* (n.p.: Humphrey Robinson, 1628), and in Diego Ufano, *Artillerie* (1621), information on both available at www.biografiasyvidas.com/, www.mpiwg-berlin.mpg.de/, and www.uh.edu/engines/nortontrajectories.jpg (full URL addresses are provided in the Web version of this article). It was not until over half a century later, in 1687, that Isaac Newton provided an objective numbers-based theory of ballistics in his *Principia*.
 33. A combination of diplomatic/political, informational/ideological, military, and economic leadership and expertise must be involved.
 34. “A comprehensive systems perspective considers the interaction between the individual

elements of a system and across multiple systems (political, military, economic, social, informational, infrastructure, and others)”; JP 5-0, p. III-22. “Joint planners analyze the operational environment in terms of six interrelated operational variables: political, military, economic, social, information, and infrastructure”; U.S. Army Dept., *Operations*, FM 3-0 (Washington, D.C.: February 2008), p. 1-5, available at downloads.army.mil/.

35. This does not “second-guess the commander”; it is a drilling-down into the details of the commander’s intent, placing them within the context of the environment and using the commander’s objectives and staff planning documents as the primary inputs. It states what it is about the environment that is critical for a valid assessment; it covers political, military, economic, social, informational/ideological, and infrastructural issues, identifying the relevant stakeholders (own forces, coalition forces, friendly forces, enemy forces, the local population, etc.). It is analogous to the “intelligence preparation of the operational environment” carried out during mission planning.
36. For example, the downside of damaging Taliban finances by poppy eradication might be an upsurge in murder and intimidation by the Taliban to make up for its inability to buy labor from the local population. The upside of Taliban murder and intimidation, in turn, might be an opportunity for the coalition to engage in information operations.
37. Since for most topics there is a surplus of subject-matter experts, grouped into several “schools of thought” that often contradict each other, the choice of which “school” to incorporate into assessments amounts to a command decision. The difficulty is to balance subject-matter experts whose views match the regional commander’s or who are “popular” with those holding opposing or unpopular views. See Philip Tetlock, *Expert Political Judgment* (Princeton, N.J.: Princeton Univ. Press, 2005), for an analysis of how the popularity of an expert is a poor measure of the quality of that expert’s forecasts.
38. For the purposes of this article, “topic” refers to a broad subject (for example, education), and “metric” refers to an item of data (qualitative or quantitative) whose collection tells us something about that broad subject (for example, the number of schools).
39. The latter may require reallocation of resources and perhaps adjustment of the plan.
40. An officer briefing several multistar generals in May 2010 told them there were seven schools in the area. However, another credible source had previously stated that there were three, although no one mentioned that figure at the briefing. It was only afterward that the discrepancy was tracked down: there were three “brick” schools and four “tent” schools. Asking for the “number of schools” will produce a number, but if the quantity of metrics demanded is too high (which it currently is), amplifying and useful narrative will not result. Asking instead for the topic—“Describe the state of schools in your area”—and explaining in terms of the commander’s intent why we are asking is much more likely to generate useful information.

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DEWEY AT MANILA BAY

Lessons in Operational Art and Operational Leadership from America's First Fleet Admiral

Commander Derek B. Granger, U.S. Navy

On the night of 30 April 1898, the six-ship U.S. Asiatic Squadron, commanded by Commodore George Dewey, steamed into Manila Bay in the Spanish Philippines to do battle with the Spanish South Pacific Squadron. In less than seven hours Dewey sank or captured the entire Spanish fleet and silenced Manila's shore batteries, all while suffering just eight wounded and without the loss of a single American life.¹ Dewey's success in a distant bay most Americans could not have pointed to on a map transformed the United States into a colonial power, causing Europe to take note.² An editorial in a German newspaper observed that Dewey's victory marked "a new epoch in history, not only for the United States but likewise for Europe."³

In light of the dramatic change to the world political landscape brought by Manila Bay, it is notable how little attention Dewey's exploits receive today from students of naval history. Perhaps the passage of 113 years since Dewey's victory has led historians to conclude that his accomplishments, though impressive for their day, are irrelevant to students of operational art marked now by satellite surveillance and cruise missiles. If that is the case, however, why should service colleges pay attention to the accomplishments of Napoleon Bonaparte, Ferdinand Foch, or Raymond Spruance? Are not their achievements little more than historical curiosities in an age of globalism, stealth technology, and smart weapons?

Worse, it would seem, Dewey—like most of his contemporaries (and many naval leaders who followed him over the next half-century)—subscribed to another historical curiosity, the Mahanian theory of engaging and decisively defeating the enemy battle fleet. His victory at Manila, in fact, was arguably a prime example of Mahanian warfare. The subsequent discrediting of Mahanian tactics

has rendered Dewey irrelevant to many students of modern naval warfare. Furthermore, Dewey's action against the Spanish at Manila Bay involved only six fighting ships and so hardly represents the operational level of war at all using more recent yardsticks. When compared to the forces commanded by Nimitz and Spruance at Midway, Dewey's was little more than a tactical detachment. In this view, Dewey's accomplishments are worthy of study only inasmuch as they demonstrate his thorough mastery of Mahanian tactics. Referring to the American victories at Manila Bay and Santiago, Cuba, during the Spanish-American War, historian Ronald Andidora submits that the "small size of these engagements and the disproportionate material advantage enjoyed by the Americans in each of them rendered their instructional value almost nil."⁴

But in fact the basic tenets of operational leadership and operational art are timeless. Napoleon, Foch, and Spruance—and Mahan too—are indeed worthy of study by today's students of warfare, and so is Dewey. Dewey's operational leadership and his practice of operational art are relevant to twenty-first-century practitioners of the operational level of war. In making this argument, this article details how America's first "Admiral of the Navy"—in effect, its first fleet admiral—won the battle of Manila Bay before the first round was fired, by carefully incorporating into his campaign planning the operational functions of intelligence, command and control, logistics, and protection so as to mitigate adverse circumstances related to the operational factors of time, space, and force.

PREPARATIONS FOR WAR

At 5:41 AM on 1 May 1898, sixty-year-old Commodore George Dewey cemented his place in history books with his famous command to the captain of his flagship, the protected cruiser USS *Olympia* (C-6): "You may fire when you are ready, Gridley."⁵ Over the next seven hours, the American line of battle made five firing runs past the numerically superior Spanish squadron, commanded by Rear Admiral Patricio Montojo and riding at anchor in Manila Bay beneath the cover of heavy shore-based batteries. Suffering 381 dead and the destruction of most of his fleet, Montojo had little choice but to surrender to Dewey's virtually undamaged force, handing America what amounted to total victory.⁶ While the events of 1 May 1898 were unquestionably decisive, the American victory had been for all practical purposes assured before Dewey and his squadron steamed into Manila Bay. As Dewey observed shortly after his victory, "This battle was won in Hong Kong Harbor."⁷

Early that year, on 3 January, with the specter of war with Spain over alleged Spanish atrocities in Cuba looming, Commodore Dewey had assumed command of the Asiatic Squadron in a ceremony on board *Olympia* at Nagasaki, Japan. While the six-ship squadron under Dewey's command was small compared

to the fleets later amassed during World War II, it was a sizable and formidable naval force for the day, especially for a U.S. Navy that was only now expanding following a considerable downsizing in the decades following the Civil War.⁸ Dewey, after the required diplomatic proprieties with his Japanese hosts, ordered his squadron on 11 February to make for Hong Kong, having received no direction from higher authority to do so but realizing that it would put his force in the most advantageous position from which to mount an offensive against the Spanish fleet.⁹ Upon the squadron's arrival at Hong Kong on 17 February, he was greeted with news of the sinking of the USS *Maine* only two days prior in Havana Harbor, nearly halfway around the world. In the relative safety of Hong Kong's neutral harbor, Dewey wasted no time preparing for war with a fading but still dangerous colonial power.

First and foremost, Dewey was facing enormous logistical challenges associated with the operational factor of *space*. Various plans for war with Spain drafted in the 1890s called for the U.S. Asiatic Squadron to seek out and destroy the Spanish navy in the Spanish Philippines.¹⁰ Adopting these general plans, Dewey realized his force would be operating more than seven thousand miles from his nearest base, which meant it would take nearly two months to transport coal, ammunition, and reserves into the theater. He also realized that a formal declaration of war by the United States would render neutral ports, including Hong Kong and all ports in Japan, off-limits in accordance with international law, increasing his logistical concerns by compressing the operational factor of *time*. Dewey had to make all preparations he could while in Hong Kong, a task complicated by the fact that his every move was readily observable to the civilian vessels and foreign warships plying the harbor.¹¹

Of equal concern to Dewey was that the Spanish navy would be fighting in its own waters and within easy range of numerous, heavily fortified Spanish bases. In contrast, shortly after his appointment to the Asiatic Squadron, Dewey became painfully aware of the inadequacy of U.S. intelligence on the region when his request for information about the Philippines was answered with a sorely outdated 1876 report from the Office of Naval Intelligence.¹² The Office of Naval Intelligence was certainly not alone in being unprepared for war in the Philippines. Prior to the sinking of *Maine*, even President William McKinley confessed, "I could not have told where those darned islands were within 2,000 miles."¹³

Dewey's challenges in the operational factors of space and time were exacerbated by yet others concerning the factor of *force*. Many historians have argued that Dewey commanded a fleet that was, in nearly every aspect, vastly superior to Montojo's. Dewey's autobiography acknowledges that he perceived a distinct advantage in armament over his Spanish adversaries, mounting as he did fifty-three "large guns" (above four inches) to thirty-one for the Spanish.¹⁴ A critical

deficiency faced by Dewey, however, was in the quantity of vessels available. Although Dewey's force of six combatants was slightly less than Montojo's seven, the Spanish had more than twenty-five small gunboats that could mount a serious threat if brought into action.¹⁵ Furthermore, rumors circulated in Hong Kong regarding the impregnability of Spanish shore defenses at Manila, a formidable arsenal of more than 225 guns, many of heavy caliber.¹⁶ In all, prospects for victory looked grim for Dewey's Asiatic Squadron; the exclusive Hong Kong Club offered heavy betting odds against the Americans.¹⁷ Only days before war was formally declared, British officers of the Royal Navy entertained their American guests with a sort of farewell party. When it concluded, a British officer commented, "What a very fine set of fellows. But unhappily, we shall never see them again."¹⁸

DEWEY'S GROWTH INTO AN OPERATIONAL LEADER

The manner in which Dewey proceeded in preparing for battle despite poor odds and considerable difficulties attests to his qualities and effectiveness as an operational leader. Milan Vego, a modern scholar of the history and practice of operational art, contends, "The principal requirements for a successful operational leader are high intellect, strong personality, courage, boldness, and will to act, combined with extensive professional knowledge and experience."¹⁹ All of these traits, as well as others, applied in various degrees to Dewey. His boldness and experience, however, were the primary influences on his planning and execution at Manila Bay.

By the time he was appointed to command of the Asiatic Squadron, Dewey was already renowned for his boldness. When his prestigious appointment produced outspoken criticism by some who favored other officers, Secretary of the Navy Theodore Roosevelt was undeterred. Addressing a protesting delegation of California congressmen, Roosevelt declared, "Gentlemen, I can't agree with you. We have looked up his record. We have looked him straight in the eyes. He is a fighter. We'll not change now."²⁰

Dewey's boldness had emerged from experience. Within three years of his graduation from the U.S. Naval Academy in 1858, Dewey was assigned to the side-wheel steam frigate USS *Mississippi*. When the American Civil War broke out, *Mississippi* was assigned to the West Gulf Blockading Squadron, commanded by David Glasgow Farragut. Dewey's first engagement was Farragut's attack on New Orleans, just one of several successful and high-profile endeavors that were to distinguish Farragut as an aggressive and bold commander. Though not assigned to Farragut's flagship, USS *Hartford*, Dewey was able to observe Farragut's leadership style closely and quickly became a "disciple." One of Farragut's tactics, employed to considerable effectiveness at New Orleans, was to pass heavily fortified shore

positions at night. This experience would prove pivotal to Dewey at Manila Bay.

Following the capture of New Orleans, Dewey learned from Farragut another lasting lesson, this time on initiative. After weeks of trying, a Confederate gunboat slipped passed the Union blockade, prompting Farragut to assemble his commanding officers and others on board *Hartford*. Dewey, by then *Mississippi*'s executive officer, attended. After all the officers were seated, Farragut demanded an explanation of how the gunboat had snuck by. A junior officer from another ship, who had been officer of the deck the night the incident occurred, spoke out, admitting, "I could have rammed her, sir, only I was awaiting orders." Farragut, visibly disgusted, replied quietly, "Young man, you had the opportunity to make a great name for yourself in your profession, but you missed it. I doubt that you will get another."²¹ Dewey would not miss his own opportunity when the time came.

Some two years after his success at New Orleans, Farragut led a similarly bold attack on Mobile, Alabama. As Farragut's ships proceeded up the channel between Forts Gaines and Morgan, USS *Tecumseh* hit a mine (referred to during that period as a "torpedo") and sank almost immediately. Behind *Tecumseh*, USS *Brooklyn* stopped in the channel and backed its engines, prompting Farragut to yell down from his position in the rigging of *Hartford*, "What's the trouble?" When the reply from *Brooklyn* came back, "Torpedoes!" Farragut abruptly and famously issued what would become his signature command: "Damn the torpedoes! Go ahead!"²² Although Dewey was not present at the battle of Mobile Bay, there is no doubt he was deeply impressed by reports of Farragut's intrepidity in the face of the enemy.

In his autobiography Dewey admitted, "Farragut has always been my ideal of the naval officer: urbane, decisive, indomitable. Whenever I have been in a difficult situation, or in the midst of such confusion of details that the simple and right thing to do seemed hazy, I have often asked myself, 'What would Farragut do?' In the course of the preparations for Manila Bay I often asked myself this question."²³ Unsurprisingly, his response would be very Farragut-like.

DEWEY'S CAMPAIGN PLAN

Having distinguished himself as a bold leader during his Civil War service, Dewey would now distinguish himself as a well prepared commander. His preparations for war with Spain commenced even before he arrived in Nagasaki to take command of the Asiatic Squadron. Receiving notification of his pending appointment while serving as the president of the Board of Inspection and Survey in Washington, Dewey immediately and exhaustively studied charts on the Far East, placing particular emphasis on the Philippines.²⁴ Keenly attuned to the challenges of sustainment inherent in operating so far from his closest base, he

undertook an investigation into the readiness of the ships assigned to his prospective squadron.

His findings were disturbing: not one ship had even a full peacetime allowance for ammunition and powder, let alone a wartime allowance.²⁵ Upon being informed by the Department of the Navy that merchant steamers would not transport ammunition, due to safety concerns, Dewey worked with Roosevelt to have additional ammunition shipped via the USS *Concord*, outfitting at Mare Island, near Oakland, California, for service with the Asiatic Squadron.²⁶ Demonstrating exceptional foresight and resourcefulness, he stopped by Mare Island on his journey west, calling on the commanding officer of *Concord* to persuade him to minimize all supplies save his squadron's badly needed ammunition, maximizing every inch of storage capacity for that purpose.²⁷ Additionally, Dewey recommended revising *Concord's* track across the Pacific to include a brief stop for coal in Hawaii, allowing the ship to make it to Japan, where additional stores could be easily procured.²⁸ Realizing that *Concord* was too small to carry more than half the required ammunition, Dewey arranged for the sloop of war USS *Mohican* to transport the balance. The speed in which these logistical arrangements were made was critical: *Mohican* arrived in Hong Kong only forty-eight hours before Dewey took his squadron to sea en route to Manila Bay.²⁹

Dewey's other chief logistical concern while at Hong Kong was coal. Dewey was well aware that with the news of *Maine's* sinking at Havana, war with Spain was imminent. Faced with the inevitable prospect of then being directed by the British authorities to depart Hong Kong and having no American bases available, Dewey undertook discreet negotiations to purchase merchant colliers to provide floating support. Obtaining Secretary of the Navy John Davis Long's approval, Dewey purchased the British merchant ships *Nanshan* and *Zafiro* and obtained the revenue cutter McCulloch. Dewey, however, disobeyed Long's orders to arm these newly acquired auxiliaries, choosing instead, rather ingeniously, to register them as American merchants cleared for Guam, in 1898 an exceedingly remote island that Dewey regarded as an "almost mythical country."³⁰ Additionally, he elected to hire the British crews and leave them intact, augmenting them with only small contingents of U.S. Navy personnel. His efforts ensured that these vital support vessels would not be ordered to leave the safety of Hong Kong upon the official declaration of war, as well as their freedom to resupply in Japanese and Chinese ports.³¹

Another critical consideration for Dewey was the operational movement of his forces. With fully half of his ships then considerable distances from Hong Kong (USS *Petrel* was in the Bering Sea on fishery-protection service), Dewey had to assemble them rapidly for redistribution of ammunition, bunkering, tactical planning, dry docking for structural repairs, repainting of ships (grey, from peacetime white), and the countless other preparations required for battle.³²

Effective use of transoceanic telegraph cables brought about the expeditious arrival of all his warships at Hong Kong, though USS *Baltimore* arrived from Honolulu only on 22 April, two days before the governor of neutral Hong Kong requested the withdrawal of all American ships.³³

Even while collecting his force in Hong Kong, Dewey had embarked on an intelligence campaign to assist him in devising his plans for war. On 23 April, Dewey sent a coded cablegram to O. F. Williams, the U.S. consul at Manila, requesting information on Manila's defenses, the presence of mines, and Spanish fleet movements.³⁴ Despite a very real threat to his safety from the Spanish authorities, Williams responded with a report of the mounting of six new, heavy guns at Corregidor, the laying of mines in Manila Bay, the disposition of Spanish surface forces, and efforts to fortify land positions.³⁵ Furthermore, Williams relayed rumors from the streets of Manila detailing the organization of a coalition European naval force being sent to defeat the Americans.³⁶ Dewey also used his own officers to gather intelligence, sending them ashore in Hong Kong disguised as tourists or businessmen to obtain information from steamers arriving from the Philippines. Through this method, Dewey heard of a policy requiring ships entering the Corregidor channel to use Spanish pilots because of heavy mining.³⁷ Having acquired knowledge of the currents and water depths in Subic and Manila Bays, Dewey deduced that extensive mining of the channels into either port would be problematic for the Spanish and that the countless reports of mines were nothing more than a ruse to deter attack.³⁸ Through his deliberate analysis of the information collected through this combination of highly resourceful, if amateur, intelligence-gathering methods, Dewey obtained a surprisingly accurate picture of what awaited him in Manila. In a cable to Secretary Long sent on 31 March, fully a month before the battle of Manila Bay, Dewey outlined with remarkable precision the Spanish naval and land forces at Manila, concluding with confidence that he could take Manila in a single day.³⁹

Enabled by his productive intelligence campaign, Dewey now set out to finalize his battle plans. According to modern U.S. joint doctrine, the preparation of battle plans is one of several tasks encompassed by the command-and-control function, along with communicating the status of information, assessing the situation, and commanding subordinate forces. If Dewey had learned boldness during the Civil War, his planning was deliberate, thorough, and cautious. Somewhat surprisingly, his planning process was very much a collaborative affair, drawing extensively from the inputs of his subordinate commanders. "Day after day, he summoned his captains to discuss all the possibilities and eventualities of a conflict with the enemy. He gave them an opportunity to say when, where, and how the battle should be fought. From junior to senior he called upon them to express their opinions freely. If any man had a novel idea, it was

given careful consideration.”⁴⁰ In assessing Dewey’s command and control practices, an officer serving under Dewey in the Philippines observed that Dewey “had the respect and confidence of every officer and man who served under him.” He added, “Prior to leaving Hong Kong, every contingency which might arise was considered and studied, and plans made to meet each one, so that when the time actually came to engage the enemy’s fleet, we had a prearranged plan which fitted the case perfectly.”⁴¹

Despite the absence of an official proclamation of war by the United States, the governor of Hong Kong sent word to Dewey on 24 April that British neutrality necessitated the departure of all American ships within twenty-four hours. Dewey did not bother to wait for the full twenty-four hours to elapse, for by that time he had essentially completed combat preparations and the bold plan that would be executed to near perfection less than a week later.

Having closely studied China, Dewey correctly surmised that so loosely organized a nation as it then was would be unable to enforce neutrality laws. That consideration prompted him to steam his squadron from Hong Kong to Mirs Bay, an anchorage in Chinese territory thirty miles from Hong Kong.⁴² There he meticulously oversaw final preparations, including such details as jettisoning decorative woodwork from all of his ships to reduce the threat of splinters and fire and draping chains over the sides of the ships to serve, to some degree, as armor.⁴³ Additionally, he relentlessly drilled his forces in critical skills like target practice and damage control, as well as in skills less likely to be needed, like hand-to-hand combat.

In the midst of all of the activity, on the morning of 27 April, a small tug entered Mirs Bay to deliver an urgent cablegram from Secretary Long: “War has commenced between the United States and Spain. Proceed at once to Philippine Islands. Commence operations, particularly against the Spanish fleet. You must capture vessels or destroy. Use utmost endeavors.”⁴⁴ At once, Dewey summoned all commanding officers for a final meeting on board *Olympia* to discuss the latest intelligence on Manila and Subic Bays and promulgate what would now be called his “commander’s guidance.” Less than three hours after receiving Secretary Long’s cable, the Asiatic Squadron steamed from Mirs Bay to seek out the Spanish fleet some six hundred miles away. Dewey had little chance of achieving the element of surprise, however, as the Spanish consul at Hong Kong informed Montojo by cable that “the enemy’s squadron sailed at 2 PM from the Bay of Mirs, and according to reliable accounts they sailed for Subic Bay to destroy our squadron and then will go to Manila.”⁴⁵ That is precisely what Dewey did, arriving first at Subic and dispatching two vessels to reconnoiter for the Spanish fleet before continuing on to Manila Bay, reaching it in the early morning of 1 May 1898.

Mahanian doctrine presumably led Dewey to consider the Spanish fleet as the enemy center of gravity. While he was confident that his own squadron's morale, training readiness, and superior projectile weight would give him a decided advantage over the Spanish fleet, he had serious concerns regarding the heavy shore batteries overlooking the approaches to Manila Bay. Dewey observed in his autobiography, "If the guns commanding the entrance were well served, there was danger of damage to my squadron before it engaged the enemy's squadron."⁴⁶ Through his experience at the Board of Inspection and Survey and his study of Mahanian doctrine, he was fully aware of the effectiveness of modern guns when fired from a stationary position and of the legitimacy of Mahan's maxim that one shore-based gun was the equal of four guns of similar caliber afloat.⁴⁷ Accordingly, his plan focused heavily on operational protection and passive defensive measures intended to neutralize this critical Spanish strength. First, Dewey decided to enter Manila Bay through Boca Grande, the wider of the two entrances, to maximize the separation between his squadron and the batteries.⁴⁸ Second, Dewey planned to complicate targeting by entering the bay at night, with all navigation lights extinguished.⁴⁹ As a result, despite Montojo's excellent intelligence on the movement of the American squadron and the advantageous positions of his powerful shore batteries, the Spanish failed to engage the U.S. ships until they were very nearly inside Manila Bay, even then firing only a couple of rounds, with no effect. The Americans returned fire with a few rounds of their own, but Dewey had made it clear to his commanding officers that the squadron would not stop to fight it out with the shore batteries but would remain focused on the objective—the Spanish fleet.⁵⁰ Safely past the shore batteries and seeing no threat of the rumored Spanish mines, the American squadron had now only to wait for the sun and seek out and destroy the Spanish fleet, a task that it carried out with little difficulty and no loss of American life.

DEWEY USHERS IN AMERICAN IMPERIALISM

When the Spanish-American War began, the strategic American objective was to liberate Cuba from alleged Spanish atrocities, not to gain colonial possessions.⁵¹ That objective decisively shifted three days after the defeat of the Spanish Pacific fleet, when Dewey cabled to Secretary Long, "We control bay completely and can take city at any time, but have not sufficient men to hold."⁵² The prospect of seizing territory had not been seriously considered by the McKinley administration, but Dewey's cable prompted the mobilization of additional forces to do just that. Two significant challenges faced Dewey. First, the Filipinos were mounting an insurgency against the Spanish forces occupying the countryside around Manila. Second, ships of the powerful German navy were conspicuously patrolling the waters adjacent to Manila Bay, threatening to claim the Philippines for their nation.⁵³

Almost immediately following Montojo's defeat, Spanish general Don Basilio, realizing the hopelessness of his situation, had communicated through intermediaries his willingness to surrender his thirty-one thousand troops to Dewey's squadron.⁵⁴ Dewey was unwilling to accept the offer, fearful that his lack of sufficient occupation forces would prompt looting and widespread bloodshed of Spaniards at the hands of the Filipino insurgents. Accordingly, he waited for American expeditionary troops under the command of Major General Wesley Merritt, U.S. Army, to arrive.

Even as Dewey was declining the offer of Spanish surrender, exiled Filipino leader Emilio Aguinaldo arrived in Manila Bay seeking to create a native, independent government under American advisers.⁵⁵ Realizing that the growing number of native insurgents could be of assistance in pushing the Spanish forces from their garrison into the city of Manila, Dewey assisted Aguinaldo by allowing the insurgents the use of captured Spanish guns and ammunition; he was careful, however, not to forge an alliance that might imply recognition of a Filipino state.⁵⁶ Unhindered by Dewey, a band of a thousand Filipino insurgents drove the nearly thirteen thousand Spaniards from their garrison on 29 May, forcing their withdrawal to Manila. Emboldened by his success, Aguinaldo now proclaimed establishment of the "First Republic of the Philippines," with himself as dictator. Dewey, despite his delicate and conditional support of Aguinaldo, faced a major problem: three separate authorities were now attempting to exercise rule over the Philippines.⁵⁷

When Merritt arrived with 8,500 troops in early August, Dewey continued his negotiations for a Spanish surrender. He eventually obtained an agreement with Don Basilio's successor, General Firmin Jaudenes, that Spanish forces would surrender, provided they faced an American assault—Jaudenes's "honor demanded that." As Dewey later recalled, "So I had to fire, to kill a few people."⁵⁸ The agreement thus made, Dewey and Merritt carried out what amounted to a staged joint attack from land and sea on 10 August, prompting a swift Spanish surrender. With the Spaniards out of the power struggle, the Americans would shift their focus to Aguinaldo and embark on a counterinsurgency campaign that would ultimately prove lengthy, costly, and bloody. Recognizing that a counterinsurgency campaign required professional diplomacy as well as military might, Dewey wrote his friend, Senator Redfield Proctor of Vermont, "This appears to me an occasion for the triumph of statesmanship rather than of arms."⁵⁹

To prevent the Germans from clawing their way into the power vacuum, Dewey established a naval blockade of Manila Bay. Despite initially having far fewer ships than the Germans would ultimately operate in the region, the Americans enforced the blockade with an aggressiveness that prompted cooperation from most foreign naval vessels. Numerous situations developed between

American and German warships that risked open conflict, but Dewey repeatedly distinguished himself as a highly effective diplomat, balancing resolve with delicacy, projecting strength without heavy-handedness.⁶⁰

If Dewey's skillful diplomacy with the Japanese, Germans, Spaniards, British, and Filipinos is somewhat surprising in view of his reputation for boldness, so too was his perception of the importance of what are now known as "information operations" during an age that gave rise to muckraking and "yellow journalism." John Barrett, a newspaper correspondent who was embarked on board *Olympia* from May 1898 to March 1899, later described Dewey as lenient in his press censorship, adding that nobody "could rival the Admiral in quick perception of what was permissible news and what was not, together with the rare faculty of showing the correspondent with unflinching urbanity why this or that sentence should be changed or omitted."⁶¹ An example of his keen awareness of the value of public perception occurred during preparations for the joint staged attack on Manila. After reviewing a proposed release that referred to the pending "bombardment" of the city, Dewey recommended instead the phrase "reduce the defenses of the city." He explained, "It is necessary for us to remember that we are making history. If we left in words which implied no respect for noncombatants, women and children and property, we would be censured for it by the future historian."⁶²

DEWEY'S RELEVANCE IN THE TWENTY-FIRST CENTURY

The term "operational art"—the theory and practice of preparing for and conducting military operations on land, at sea, and in the air—was coined by the Russians in the 1920s, more than two decades after Dewey's victory at Manila Bay.⁶³ Nonetheless, there is little argument that Dewey essentially practiced operational art in the design of his campaign plan in the western Pacific. What makes Dewey's success relevant today is not his textbook use of Mahanian tactics but his careful and deliberate crafting of a battle plan that mitigated sizable deficiencies in the operational factors of space, force, and time. Several recent conflicts have shown that Dewey's approach remains prudent.

Take, for example, Dewey's resourcefulness in combating his logistical difficulties and lack of cargo-lift capacity. Faced with similar problems preparing for the Falklands War of 1982, the British did exactly as Dewey did, chartering containerships, commercial tankers, and cruise liners to transport cargo, fuel, and troops eight thousand miles from the United Kingdom to the Falklands theater.⁶⁴ Furthermore, the British decision to leave behind wheeled vehicles to maximize loading space for tracked vehicles echoes of Dewey's efforts to sacrifice less critical supplies for vital ammunition on board *Concord*.⁶⁵

Vego observes, “Intelligence should provide the operational commander timely, accurate, and relevant information about the enemy forces’ order of battle . . . and capabilities, and the enemy’s critical strengths and weaknesses.”⁶⁶ Dewey’s energetic “intelligence preparation of the battlefield,” though he had practically no professional intelligence resources, paved the way for his success. Of particular importance was Dewey’s careful consideration of rumors of mines, and his ultimate (and correct) dismissal of them as a ruse. The failure to ascertain enemy capabilities accurately, despite vastly superior intelligence capabilities than Dewey enjoyed, has proved disastrous to many modern commanders. Dewey, dissecting the Spanish disinformation campaign and comprehensively war-gaming every potential Spanish course of action, avoided falling into the trap of postponing his attack due to overestimating the strength of his enemy. In essence, Dewey knew his enemy and knew when to press the issue to preclude the Spaniards from reinforcing or further constructing shore defenses.

A 13 August 2010 *New York Times* article observed, “Mastery of battlefield tactics and a knack for leadership are only prerequisites. Generals and other top officers are now expected to be city managers, cultural ambassadors, public relations whizzes and politicians as they deal with multiple missions and constituencies in the war zone, in allied capitals—and at home.”⁶⁷ Dewey, it appears, was ahead of his time. His astute media awareness, coupled with the delicacy with which he handled myriad political and cultural sensitivities, should serve as an example for modern-day military leaders facing an increasingly complex security environment in an age of globalism.

Perhaps most important, modern students should seriously question Andidora’s assertion that Dewey’s material advantages in age and capability of his ships somehow guaranteed success at Manila Bay. History is rife with examples of superior forces falling to inferior ones. The American Revolutionary War, the Japanese invasion of Malaya in 1941, and Midway in 1942 were all “underdog” victories. Advantages in the operational factor of force have often been offset by the hubris of reliance on sheer numbers or technology rather than careful and deliberate planning to identify and exploit weaknesses. Vego argues, “Experience shows that no new technologies, no matter how advanced, can replace operational art,” adding that “the excessive focus on tactics of platforms and weapons/sensors reduces all fighting to simple targeting and shooting.”⁶⁸ Dewey’s careful application of operational art despite material advantages over his adversaries ensured that his forces remained focused on the enemy’s center of gravity while offsetting Spanish critical strengths.

Finally, Dewey’s performance as an operational leader is worthy of careful consideration. The 2010 U.S. Joint Forces Command *Joint Operating Environment*

observes, “Those commanders who have listened and absorbed what their subordinates had to say were those who recognized what was actually happening in combat, because they had acculturated themselves to learning from the experiences of others.”⁶⁹ Dewey’s collaborative approach to planning for war, an approach that drew heavily from the inputs of his subordinates, supports this observation. A collective MIT, Carnegie Mellon, and Union College research effort yielded a 2010 report that concluded, among other things, “In groups where one person dominated, the group was less collectively intelligent than in groups where the conversational turns were more evenly distributed.”⁷⁰ Arguably, Dewey’s willingness to *participate in*, rather than dominate, planning, notwithstanding his positional authority and bold predisposition, was the critical enabler of his success. With the adoption of the 2007 *Cooperative Strategy for 21st Century Seapower* and its underlying emphasis on international partnership and shared responsibility, that quality is becoming increasingly important.

There can be no mistaking that experience matters in the development of our military leaders. Dewey’s experience, particularly his participation in the American Civil War, provided him with real-world tactical expertise as well as a highly successful role model to emulate. The forging of similar leaders in that way in today’s Navy is problematic due to the dearth of naval conflicts since the conclusion of World War II. This reality underscores the importance of “providing the education so that future leaders can understand the political, strategic, historical, and cultural framework of a more complex world, as well as possess a thorough grounding in the nature of war, past, present, and future.”⁷¹ Accordingly, future leaders in the U.S. Navy must continue studying historical applications of operational art. In doing so, they would be wise not to overlook Dewey.

NOTES

1. David Traxel, *1898: The Birth of the American Century* (New York: Knopf, 1998), p. 137.
2. Craig L. Symonds, *Decision at Sea: Five Naval Battles That Shaped American History* (New York: Oxford Univ. Press, 2005), p. 143.
3. *Ibid.*, p. 192.
4. Ronald Andidora, *Iron Admirals: Naval Leadership in the Twentieth Century* (Westport, Conn.: Greenwood, 2000), p. 9.
5. Laurin Hall Healy and Luis Kutner, *The Admiral* (Chicago: Ziff-Davis, 1944), p. 181.
6. H. W. Wilson, *The Downfall of Spain: Naval History of the Spanish-American War* (London: Sampson Low, Marston, 1900), p. 141.
7. John Barrett, “Admiral George Dewey,” *Harper’s New Monthly Magazine* 99 (June–November 1899), p. 801.
8. Lisle A. Rose, *Power at Sea: The Age of Navalism 1890–1918* (Columbia: Univ. of Missouri Press, 2007), p. 16.
9. George Dewey, *Autobiography of George Dewey: Admiral of the Navy* (New York: Scribner’s, 1913), p. 178. Dewey’s account is disputed by William Braisted, who suggests

- Dewey did not assemble his squadron in Hong Kong until directed to by Roosevelt on 25 February 1898; William Reynolds Braisted, *The United States Navy in the Pacific, 1897–1909* (Austin: Univ. of Texas Press, 1959), p. 23.
10. Symonds, *Decision at Sea*, p. 160, refers to the drafting in 1895 of plans for war with Spain by students at the Naval War College, in Newport, R.I., calling for the U.S. Asiatic Squadron to attack the Philippines. Braisted cites subsequent plans drafted in 1896 by Lt. William W. Kimball calling for the establishment of a base of supply at Manila in the event of war with Spain; Braisted, *United States Navy in the Pacific*, pp. 21–22. Despite the existence of general war plans for the U.S. Navy action in the Philippines, it remained Dewey's responsibility to devise and implement specific details associated with operations and logistics.
 11. Symonds, *Decision at Sea*, p. 163.
 12. Dewey, *Autobiography*, p. 175.
 13. Symonds, *Decision at Sea*, p. 184.
 14. Dewey, *Autobiography*, p. 203.
 15. *Ibid.*
 16. Symonds, *Decision at Sea*, p. 168; Dewey, *Autobiography*, pp. 187, 192.
 17. Dewey, *Autobiography*, p. 192.
 18. Healy and Kutner, *Admiral*, p. 166; Dewey, *Autobiography*, p. 192.
 19. Milan Vego, *Joint Operational Warfare: Theory and Practice* (Newport, R.I.: Naval War College, 2007), p. X-13.
 20. Healy and Kutner, *Admiral*, p. 140.
 21. *Ibid.*, p. 68.
 22. S. S. Robison, *A History of Naval Tactics from 1530 to 1930: The Evolution of Tactical Maxims* (Annapolis, Md.: U.S. Naval Institute, 1942), p. 651.
 23. Dewey, *Autobiography*, p. 50.
 24. Nathan Sargent, *Admiral Dewey and the Manila Campaign* (Washington, D.C.: Naval Historical Foundation, 1947), p. 4.
 25. Dewey, *Autobiography*, p. 170.
 26. Sargent, *Admiral Dewey and the Manila Campaign*, p. 5; Dewey, *Autobiography*, p. 170.
 27. Healy and Kutner, *Admiral*, p. 140; Dewey, *Autobiography*, p. 171.
 28. Healy and Kutner, *Admiral*, p. 140.
 29. Dewey, *Autobiography*, p. 171.
 30. *Ibid.*, p. 191; Symonds, *Decision at Sea*, p. 162.
 31. Dewey, *Autobiography*, p. 192.
 32. Wilson, *Downfall of Spain*, p. 121.
 33. *Ibid.*, p. 122.
 34. Dewey, *Autobiography*, p. 180.
 35. Sargent, *Admiral Dewey and the Manila Campaign*, p. 14.
 36. Dewey, *Autobiography*, p. 187.
 37. Sargent, *Admiral Dewey and the Manila Campaign*, p. 15.
 38. David F. Trask, *The War with Spain in 1898* (New York: Macmillan, 1981), pp. 98–99; Healy and Kutner, *Admiral*, p. 157; Dewey, *Autobiography*, p. 199.
 39. Healy and Kutner, *Admiral*, p. 157.
 40. Barrett, "Admiral George Dewey," p. 801.
 41. Healy and Kutner, *Admiral*, p. 171.
 42. Dewey, *Autobiography*, p. 190.
 43. Symonds, *Decision at Sea*, p. 165. The four "protected cruisers" in the force were armored only to the extent of protection of their machinery spaces from plunging fire.
 44. Sargent, *Admiral Dewey and the Manila Campaign*, p. 22.
 45. Healy and Kutner, *Admiral*, p. 175.
 46. Dewey, *Autobiography*, p. 208.
 47. Healy and Kutner, *Admiral*, p. 171; Trask, *War with Spain in 1898*, p. 101.
 48. Symonds, *Decision at Sea*, p. 146.
 49. Dewey, *Autobiography*, p. 207.
 50. Symonds, *Decision at Sea*, p. 146.
 51. Trask, *War with Spain in 1898*, p. 95.
 52. Healy and Kutner, *Admiral*, p. 195.
 53. Germany posed a problem not just in the Philippines following Dewey's victory but also to U.S. interests in the Samoan Islands. Braisted provides a brief overview of the acrimony between the United States and Germany over Pacific interests in *United States Navy in the Pacific*, pp. 57–63.

54. Dewey, *Autobiography*, p. 273.
55. Healy and Kutner, *Admiral*, p. 222.
56. Dewey, *Autobiography*, p. 247.
57. Symonds, *Decision at Sea*, p. 186.
58. Traxel, 1898, p. 224; Dewey, *Autobiography*, p. 275.
59. Healy and Kutner, *Admiral*, p. 239. The Philippine insurrection that followed Dewey's victory is beyond the scope of this article. However, it is noteworthy that Dewey advocated a liberal policy with the native Filipinos that would increase their privileges and capacity for self-government. Dewey strongly urged a diplomatic solution to the insurgency rather than a military one. This opinion stood in stark contrast with that of Maj. Gen. E. S. Otis, the commanding U.S. Army general, who advocated subduing the Philippine Islands with twenty-five thousand troops and a military government. Recent events have shown the merits of Dewey's position and the limits of Otis's. For a more detailed discussion see Braisted's *United States Navy in the Pacific*, pp. 64–75.
60. Healy and Kutner, *Admiral*, pp. 207–209; Braisted, *United States Navy in the Pacific*, p. 37.
61. Barrett, "Admiral George Dewey," p. 806.
62. Healy and Kutner, *Admiral*, p. 231.
63. Vego, *Joint Operational Warfare*, p. I-5.
64. Julian Thompson, *The Lifeblood of War: Logistics in Armed Conflicts* (London: Brassey's, 1991), p. 257.
65. *Ibid.*, p. 253.
66. Vego, *Joint Operational Warfare*, p. VIII-28.
67. Thom Shanker, "Win Wars? Today's Generals Must Also Politick and Do P.R.," *New York Times*, 13 August 2010.
68. Vego, *Joint Operational Warfare*, pp. xvii–xviii.
69. U.S. Joint Forces Command, *The Joint Operating Environment 2010* (Suffolk, Va.: 28 February 2010), p. 72, available at www.jfcom.mil/.
70. "Collective Intelligence: Number of Women in Groups Linked to Effectiveness in Solving Difficult Problems," *Science Daily*, 30 September 2010.
71. U.S. Joint Forces Command, *Joint Operating Environment 2010*, p. 70.

REVIEW ESSAY

RISING CHINA'S FORGOTTEN FATHER

Charles Horner

Taylor, Jay. *The Generalissimo: Chiang Kai-shek and the Struggle for Modern China*. Boston: Harvard Univ. Press, 2011. 736pp. \$35

Jay Taylor's masterful biography of Chiang Kai-shek (1887–1975), first published in 2009, is now available in paperback, with a new postscript that assesses documentation unavailable when Taylor completed his manuscript in 2008. However, nothing that has appeared since then dilutes Taylor's original, powerful reassessment of Chiang's appropriate place in twentieth-century history.

Over the decades Chiang Kai-shek had become a textbook example of politically corrupted writing of biography and history. After the so-called "loss of China" in 1949, Chiang's well documented failings were conscripted to camouflage the many failings of American policy makers. Later, during the Vietnam War, the fate of the anti-Communist cause in China as led by Chiang Kai-shek became a metaphor for those who argued against American involvement. Thus a large and consequential figure was rendered irrelevant and a statesman of considerable acumen and foresight was unceremoniously dumped into History's dustbin.

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Still, Chiang's dominance of China's politics from 1925 to 1949 did indeed end in his defeat in China's civil war and his subsequent flight to the island of Taiwan. What more do we need to know than this? Why accompany Jay Taylor on his long march through mountains of documentation and read the hefty book that resulted from it?

The appearance of *The Generalissimo* is for students of modern China another important milestone in an ongoing and thorough reevaluation of the achievements of “Republican China” (that is, the period between the collapse of the last dynasty in 1912 and the founding of the People’s Republic of China in 1949). A generation ago we were taught to regard this era as nothing but an exercise in futility, a series of false starts, an opera buffa, albeit with a cast of millions in misery. It was but an interlude on the way to the People’s Republic, the best and final form of Modern China, which, presumably, would last forever. Over the past thirty years, however, as China has been remade and has reopened itself to the world, many scholars have come to see the years of 1913 through the 1930s as a fertile seedtime, with advances in politics, commerce, and culture that prefigure not only today’s China but also Hong Kong, Singapore, and Taiwan.

Yet Taylor’s magisterial book stands on its own as a well lighted pathway into China’s modern history, illuminating the connections between China’s own violent and tumultuous situation and a larger world assaulted by murderous ideologies. As Taylor explicates Chiang’s complicated view of these things, we see the eclectic confusion that is the modern Chinese mind, and we are witnesses to China’s still ongoing struggle to somehow marry its inherited tradition to the needs of contemporary life. Chiang Kai-shek was, at one and the same time, deeply Confucian, piously Christian, and thoroughly committed to China’s modernization. His political creed derived from Sun Yat-sen’s (1866–1925) “Three Principles,” a racially based Han nationalism; a one-party and elite-managed constitutionalism; and a vague amalgam of both state socialism and state capitalism that was meant to avoid any virulent variant of either.

Chiang’s life and times also remind us that China was not, and still is not, isolated from world events. As a military cadet in Japan when China’s final dynasty, the Qing, was collapsing, Chiang saw in Japan what his mentor Sun Yat-sen had seen—a model and a potential ally. Frustrated by the West’s dismissal of China’s claims after World War I and staggered by the seeming collapse of Western civilization in Europe, Sun then led his part of the republican movement into a close alliance with the new Soviet Union—the “First United Front” with the Communists. Chiang followed him there, but as Sun’s successor and as a partial unifier of the country. He then turned on the Communists, but later agreed, under duress, to a “Second United Front” with them.

Meanwhile, looking for other ways to counter the military pressure from Japan in the 1930s and 1940s, Chiang skillfully played a very weak diplomatic hand, maneuvering among the Soviet Union, Britain, and the United States. He did this not only to build a powerful anti-Japan coalition but also to persuade the allies to pursue a grand strategy against Japan that would work to his political advantage in the postwar era. This is an underappreciated aspect of China’s

twentieth-century experience; it reminds us of the emphasis that traditional Chinese statecraft has long placed on appearing strong when it is actually weak. Chiang's performance on the world stage was at one with that of his longtime friend and rival Zhou Enlai, who, in negotiating in the 1970s on behalf of the China that Mao Zedong (1893–1976) had ruined, nonetheless always managed to convey the impression that he was speaking for a great power. Finally, as much as Chiang himself was a master operator within the Chinese political system, he and his formidable wife Song Meiling (1898–2003)—Madame Chiang Kai-shek—together were a powerful force for decades within the very different American political system.

Taylor deftly succeeds in tying all these threads together into a highly readable and cogently presented story. As he helps the reader to understand, the strands of the tale cannot be untangled, and so our own understanding of the history of this maddening era is abetted by watching Chiang himself think it through. In this, Chiang's daily diaries (kept 1918–72), which have gradually been made public, are a great resource. Taylor knows how to properly exploit them by weighing them against a trove of other contemporaneous documentation.

Taylor's work is also a major advance in that it pays close attention to what happened after Chiang repaired to Taiwan and implemented economic and social reforms there. Through Taylor's convincing account of those years it becomes apparent that the "Rise of Taiwan" prefigures the "Rise of China." In China, after the destructive decades of Mao Zedong's ascendancy, Beijing has been tracing the design for "Modern China" that Taiwan first drew, and as Beijing moves out into the world economy, it relies substantially on Taiwan's capital and managerial expertise. Chiang Kai-shek's son, Chiang Ching-kuo (1910–88), carried out the political reforms that will also be the template for China's political modernization. In 1987, he ended his father's regime of martial law, and today Taiwan's competitive multiparty electoral democracy is admired throughout the Chinese world.

If the Chiang family's vision of economics and politics is indeed increasingly influential in China, Chiang Kai-shek's once-far-fetched project of reestablishing his sway in China now seems less fanciful. Still, Chiang (and his Republic of China) and Mao (and his People's Republic of China), no matter their mortal rivalry, were as one in their support of a "One China" that includes Taiwan. Today, Taiwan's democratic institutions mean that unification requires the assent of Taiwan's people. This constrains both those within Chiang's Kuomintang (Nationalist) Party who still seek unification and China's Communist Party, which would like to fashion yet another Communist-Nationalist rapprochement, a "Third United Front," that would mimic the previous two. But unlike those two "fronts," mere "nationalism" will not now suffice. Just as the economic systems

of Taiwan and China have begun to converge on Taiwan's model, the political systems will also have to converge on Taiwan's success as a democracy. It is in this way that Taiwan may yet in the end come to the rescue of the mainland.

BOOK REVIEWS

NOT JUST A BRITISH POINT OF VIEW

Rodger, N. A. M. *Essays in Naval History, from Medieval to Modern*. Variorum Collected Studies Series. Surrey, U.K., and Burlington, Vt.: Ashgate, 2009. 346pp. \$135.90

N. A. M. Rodger is well known around the world as Britain's foremost naval historian and the author of the three-volume *A Naval History of Britain*, currently in progress. He is an author whose writing is always a pleasure to read, and a volume of his collected essays is a welcome addition to the literature. Like other such collections, these essays were previously published in either specialist academic journals, other volumes, or other languages. They range in date of original publication from 1988 to 2004 and provide a range of themes that expand in detail upon aspects that Rodger has also simultaneously been dealing with in his multivolume history in a more summary manner. Thus it is of particular value to have these pieces brought together where they can be easily found, even though some specialists may have already read them. However, the highly worthy object of bringing such essays together in a single volume has been largely thwarted by the publisher, whose insistence on selling the books in this series at such high prices has made it impractical for most interested

readers to buy them. The publisher's practice of maintaining the original typography and page numbering is also disputable. This reviewer certainly prefers the alternative of revised essays, newly set in a consistent typeface to create an even more cohesive and useful work. To his credit, however, Rodger has made brief additional comments on many of the pieces in light of more recent scholarship; also, this volume includes a general index.

Like the author's multivolume history, the seventeen essays collected here all reflect the laudable view that naval history is not a backwater of specialist interest but rather a central theme in general history, both British and global. The works cover a selection of interesting topics that range over ten centuries of naval history. While written from a consciously British point of view, they are founded in a much broader context. As the author writes in his preface, "I do not consider that naval history can ever be written from a narrowly national standpoint. The sea links different nations, in peace and war, and there can be no true naval history which is

not informed by international comparisons, and based on the sources from all relevant countries and languages.” True to his word, Nicholas Rodger has produced essays here that fully reflect that view, the hallmark of the effectiveness and originality of his work.

Among the several important and broad-ranging essays are “The New Atlantic: Naval Warfare in the Sixteenth Century”; “Form and Function in European Navies, 1660–1815”; and “Navies and the Enlightenment”—broad overviews of the changing nature of warfare at sea and the differing types of navies that characterized those periods. Rodger’s essays “Cnut’s Geld and the Size of Danish Ships,” “The Military Revolution at Sea,” and “The Development of Broadside Gunnery, 1450–1650” show consideration of specific general issues. “Weather, Geography and Naval Power in the Age of Sail” should be basic reading for everyone approaching the age of fighting sail for the first time.

Other selections deal with interpretations of specific aspects of British history, such as “The Naval Service of the Cinque Ports,” “Queen Elizabeth and the Myth of Sea-Power in English History,” and “Mutiny or Subversion? Spithead and the Nore.” A number of such essays neatly summarize the state of knowledge on topics that deserve much greater, in-depth research, and analysis than they have received. Among these are two essays on naval medicine in the light of broader medical development, one on naval chaplains, and another on the broad development of naval education. To these Rodger has added his own detailed research contribution to a neglected topic—a statistical analysis of commissioned officers’ careers between

1660 and 1815. Previously published in an electronic journal, having this article readily available in print is most welcome, despite the absence of some of the original graphs.

All in all, this book is recommended to every naval historian. While the price is sadly far beyond reason for individuals, librarians should make a point of acquiring it for their permanent collections.

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Dietl, Wilhelm. *Schattenarmeen: Die Geheimdienste der islamischen Welt (Shadow Armies: The Secret Services of the Islamic World)*. St. Pölten: Residenz Verlag, 2010. 300pp. \$31.90

This is a timely book, given the current revolutions unfolding across the Middle East and North Africa, where local intelligence and security services have been a major focus of public anger, fear, and resentment. Across the region, in regimes of all ideological stripes, the secret police agency (the dreaded *mukhabarat*) has long served as a pillar. These services have a well deserved reputation for brutality, sometimes even effectiveness, yet their murky operations have long remained shrouded in whispered myth. The fall of the secret police services, especially in Egypt, where the pervasive *mukhabarat* had long been the stoutest defender of the Mubarak regime, has begun to open the door on what the spies have been up to.

Dietl, who promises to reveal secrets about what has really been going on, has the right credentials to do so, knowing both the region and the world of espionage; yet he himself is the subject of

much speculation and controversy. For years before his cover was blown in 2005, Wilhelm Dietl reported on events from across the Islamic world for quality European media outlets. It was then revealed that he was an operative for the German Federal Intelligence Service (the BND), which has long had a strong presence in the Middle East. Most controversially, Dietl had spied on fellow journalists for the BND, a revelation that tarred his reputation and caused a major political scandal in Germany. This book (unable to find a publisher in Germany, it was instead put out by a small Austrian firm) may be seen as an effort at redemption.

Certainly the expected spy stories are here in abundance, presented against the background of a “new Cold War” between the West and the Islamic world. *Schattenarmee* begins with a long and detailed chapter on the nefarious activities of revolutionary Iran’s clandestine dirty work, going back to 1979. This is a nasty saga that includes details about assassinations by Tehran’s spies of dissidents abroad, in a long list of countries. It is fitting that Dietl devotes so many pages to Iran’s intelligence services, since they have been active in Germany for many years, including involvement in high-profile killings of dissidents.

There are similar but shorter chapters on bad behavior by Syria and Libya, both of which have employed their spies to kill and intimidate enemies abroad. The chapter on Egypt is unsatisfactorily thin, given the importance of the *mukhabarat* in the now-fallen regime, and the discussion of Saudi Arabia is equally perfunctory. Particularly unsatisfying is Dietl’s presentation of Iraqi activities before 2003; Saddam’s

secret services enjoyed an evil reputation across the region for repression at home and dirty work abroad, yet one finds only a general discussion of the role of the intelligence and security services in Saddam’s complex and sordid regime. Considering the avalanche of materials now available on the Iraqi *mukhabarat*, thanks in no small part to U.S. government efforts to declassify and release thousands of pages of captured files, this omission is troubling and perhaps revealing.

Dietl’s presentation of terrorist groups, with an analysis of secret alliances with intelligence services across the region, is an amalgam of assertions and speculation—little of it new. Asking important questions about the exact role of Islamic secret agencies behind such groups as Hizballah and Hamas (which too few Western journalists have been willing to do) is to be encouraged, but the information offered here lacks specificity and, above all, sourcing.

Throughout, it is impossible to tell from where Dietl gets his information. He talks about “insider sources” yet provides no footnotes, even to anonymous sources. Given the controversial nature of many of his assertions, this does not pass journalistic, much less academic, muster. The short bibliography of “recommended literature” is a pedestrian collection of secondary sources (none in local languages), some of dubious reliability, that would be known to any student of the topic.

The omission of any discussion of Algeria is especially curious, since that unfortunate country has experienced the worst jihad-inspired insurgency of any Islamic state in recent memory. It has been a bloody conflict, killing some 200,000 Algerians since 1992, and it is

still in progress. Considering that Algerian intelligence has been exceptionally successful at fighting terrorists, employing clandestine methods that are brutal and nefarious even by regional standards, the absence of any analysis of Algeria cannot be explained.

In the end, *Schattenarmeen* is really a collection of spy stories, many of them of questionable provenance, and lacks much overarching analysis. The stories are entertaining and, based on this reviewer's experiences, essentially true; however, they are not a serious treatment of an important subject. Instead, Dietl has added to the unfortunate genre of terrorism books, marred by unattributed revelations, inadequate analysis, and overheated rhetoric. The major role played by Middle Eastern intelligence agencies in security matters and nearly all regional politics is poorly understood in the West and demands detailed analysis. This is not the book to fill that need.

JOHN R. SCHINDLER
Naval War College



Mueller, John. *Atomic Obsession: Nuclear Alarmism from Hiroshima to Al Qaeda*. Oxford, U.K.: Oxford Univ. Press, 2011. 319pp. \$27.95

John Mueller has written an extensive body of work on national security issues, work that runs counter to the conventional wisdom. *Atomic Obsession*, a broad examination of the limited role nuclear weapons have played in history, examines the prospects for a terrorist's acquisition and use of a nuclear device. Mueller argues that the expense of these nuclear arsenals (perhaps as high as ten trillion dollars over the course of the

entire Cold War, by one estimate) was not worth it. He contends that the memory of World War II, great-power "contentment," and fear of conventional escalation were enough to prevent the Cold War from going hot. He cites historian Adam Ulam as stating that Stalin "had great respect for the United States' vast economic and hence military potential, quite apart from the bomb."

On the specter of proliferation, Mueller points out that decades of predictions of an imminent cascade of new members in the nuclear club have not been borne out, that warnings by Herman Kahn that Japan would "unequivocally" have an arsenal by 1980 (and similar predictions concerning a unified Germany) have not come to pass. Mueller documents what he says is a sixty-year history of nuclear alarmism, arguing that this is the light in which we should view current concern about proliferation.

The most engaging aspect of this important book is its section on nuclear terrorism. Mueller, to my mind, demolishes the casually constructed conventional fears on the subject. Even rogue regimes are highly unlikely to transfer one of these expensive (and laboriously acquired) weapons even to a trusted independent group, because of the potential for extreme danger to the state. Al-Qa'ida, the "chief demon group" in this regard, is trusted by no one; its "explicit enemies group includes not only Christians and Jews, but all Middle Eastern regimes."

Mueller documents how remarkably difficult nuclear weapons are to steal and use. Not even all weapons designers are familiar with modern security safeguards, such as conventional explosives within a nuclear weapon that render the

weapon useless if precise operating procedures are not followed. Regarding concern over terrorists building their own bombs, it is very hard to steal fissile material, and the work of constructing a bomb is “difficult, dangerous, and extremely exacting.” A great deal of complex experimentation, experimentation beyond the capabilities of substate groups, would be required.

Mueller points to a raft of alarming but mistaken predictions about the likelihood of a terrorist group using a nuclear weapon. For example, John Negroponte, as UN ambassador (2001–2004), suggested that there was a “high probability” that al-Qa‘ida would attempt to use a nuclear weapon on the United States within two years—an ominous warning offered in 2003.

Those concerned by the threat of nuclear terrorism against the United States are likely to find *Atomic Obsession* a well argued, engagingly written, thought-provoking, and ultimately reassuring work.

ANDREW L. STIGLER
Naval War College



West, Bing. *The Wrong War: Grit, Strategy, and the Way Out of Afghanistan*. New York: Random House, 2011. 336pp. \$28

“We have fought the wrong war with the wrong strategy”—so ends Bing West’s *The Wrong War*. West, a former assistant secretary of defense and Marine officer with combat experience in Vietnam, is an award-winning author whose books have appeared on the *New York Times* best-seller list and the Commandant of the Marine Corps’s reading list. His latest work is an engrossing

compilation of tactical vignettes, cataloging changes to the strategic and operational-level approaches of two administrations and six theater-level commanders, over the ten-year history of Operation ENDURING FREEDOM. West’s concluding view on the key to exiting Afghanistan, though perhaps an oversimplification of the challenge, is nonetheless a valid consideration for a potentially long-term military commitment in Afghanistan.

The strength of West’s work is in his vivid descriptions of operations undertaken by coalition and special operations forces (SOF) in Kunar and Helmand Provinces. The author’s credibility and ability to connect with war fighters provide him intimate access to small-unit leaders, resulting in narratives of tactical-level successes that ultimately evolved into strategic-level failures. West also describes the complexities of the regional, tribal, and national-level political influences in Afghanistan, the latter best illustrated by operations in Nuristan Province forced upon the coalition by President Hamid Karzai. There are also numerous examples of what West describes as the “culture of entitlement,” whereby Afghan leaders gain the benefits of coalition-provided security and development projects while seemingly providing—at best—only neutrality in return. West’s portrayals of the war fighters’ courage and heartbreak are well supported by a number of revealing photographs. His method of numbering the photos for specific reference in the text is particularly effective. Aside from some minor editorial errors, this work is remarkably detailed yet still easy to follow, despite the change over time in local leadership, unit rotation, and the periodic

renaming of forward operating bases and combat outposts.

The proposed way out of Afghanistan is offered in rather abrupt fashion in the final chapter of the book. West's examples and repeated references to Vietnam-era Combined Action Platoons and his comparisons of them to effective SOF-led forces in Helmand are indeed well founded. However, as painstakingly as he describes the regionally compartmentalized long-term failure of small units in one region, caution is warranted in prescribing one district's successful approach as a theater-wide solution. Furthermore, while West identifies the challenges, his solution does not address the broader problems of the narcotics trade, district-level corruption, and the synchronization of incentives-based development programs—all of which must be addressed while simultaneously balancing an "exit" strategy with mid to long-term advisory force structures. Also noticeably absent is the inclusion of a chapter on the P2K (Paktia/Paktika/Khowst) region and the Haqqani network insurgent group.

The Wrong War will undoubtedly be a popular read among junior leaders and war fighters, as well as the general readership, and it should be considered for battalion-level reading lists and pre-deployment cultural-awareness training. Nevertheless, and while the lessons of Kunar and Helmand are certainly relevant and West's advisory-team structure is well considered, policy makers and strategists will find the book lacking sufficient depth in addressing the broader-based challenges for a long-term, comprehensive solution.

LT. COL. JEFFREY J. WINTERS, U.S. ARMY
Naval War College



Evans, Thomas W. *The Education of Ronald Reagan: The General Electric Years and the Untold Story of His Conversion to Conservatism*. New York: Columbia Univ. Press, 2006. 302pp. \$20

Thomas Evans is the first author to examine comprehensively Ronald Reagan's eight years (1954–62) as host of the television show *General Electric Theater* and then as a traveling spokesman for General Electric. Evans has deepened our understanding of how a devoted "New Dealer" became not only a champion of Barry Goldwater but then displaced him as the patron saint of American conservatism. Evans's fine book examines a critical period in Reagan's life during which his skills as a public figure blossomed. Reagan was one of our most ideological presidents, yet at the same time he considered himself a master of the art of negotiation and frequently compromised with political opponents in Sacramento and Washington. As Reagan developed his negotiating skills as president of the Screen Actors Guild (1947–52), he saw the other side of midcentury American labor strife, from the perspective of management, during his time with GE. General Electric was a formidable and respected union adversary in terms of countering big labor's demands; the company poured considerable resources into "educating" its workers to reject union radicalism. GE's management was also ahead of its time in communicating directly with its labor force, over the heads of the union leadership—a tactic Reagan employed to great effect in the White House when Congress stood in his way.

At the same time, Reagan also learned to "work a room"—meeting GE

employees and hearing their complaints about intrusive government and high taxes. Though he had spent years in the film industry, this contact with lower- and middle-class Americans rubbed off some of the Hollywood veneer and had the added benefit of teaching him what worked and what didn't in trying to appeal to the "common man." By 1980, millions of these "common men" would become known as "Reagan Democrats." Yet perhaps most importantly, it was during his employment with GE that Reagan robustly embraced a political ideology of free markets, limited government, and anticommunism. Evans believes that Reagan's GE experience was his "apprenticeship for public life" and his "postgraduate education in political science." The author argues that GE's vice president, Lemuel Boulware (who directed the aforementioned campaign against the union bosses of the era), was Reagan's mentor in his conservative apprenticeship. By 1964 Ronald Reagan had publicly come out of his New Deal closet (he voted in 1960 as a "Democrat for Nixon"), but neither he nor the company was anxious to publicize the impact of his GE years on his conversion.

This work has all the flair of a government report on agriculture subsidies, and the author occasionally overstates the impact of Reagan's GE experience (according to Evans, it was when the seeds for the Iran-Contra scandal and Reagan's Strategic Defense Initiative were planted). Nonetheless, Thomas Evans's book is the best kind of history and biography, in that it explores a facet of a statesman's life that tends to be overlooked, especially, in this instance, by historians and political

scientists with tin ears for the world of business.

STEPHEN F. KNOTT
Naval War College



Beevor, Antony. *D-Day: The Battle for Normandy*. New York: Viking Penguin, 2009. 591pp. \$32.95

The 6 June 1944 Normandy invasion has received ample research over the years, with works by such noted historians as Cornelius Ryan, Stephen E. Ambrose, and Max Hastings. Known as Operation OVERLORD, it was by all accounts a pivotal event of the war in Europe. Hindsight clearly shows that ending Hitler's control of Europe required the Allies to meet the Wehrmacht in the field in mainland Europe.

So what can another book add to the canon on Normandy? Antony Beevor's meticulously written and researched *D-Day: The Battle for Normandy* might at first blush appear to be simply another treatise on the famed battle. Yet anyone who believes this to be so without reading it will miss out on sweeping narrative and credible research.

Beevor minces no words in telling the story of this grand operation, the epitome of Allied wartime cooperation and a daunting plan to develop and execute. There is no shortage of controversies and points of debate, which Beevor meticulously brings out again and again. A fellow countryman, General Sir Bernard Montgomery, his famous ego well documented, comes in for pointed criticism for decisions and actions he made throughout the battle. In fact, both Allied and German military leaders face

Beevor's scrutiny. The Americans, fixated on securing a port facility for logistical support, learned the hard way that the entrenched German garrison in Brest could hold out for a very long time. Despite a highly sophisticated air-ground coordination and the commitment of VIII Corps, the Americans had to pay dearly to pry Brest from resolute and determined German defenders—blood spilled for a port that in the end was never used.

Beevor is a well known historian of twentieth-century combat, one who knows his topic, capably weaves the broad sweep of the Normandy campaign into a compelling account, and provides the broader context, bringing in aspects of the battle that until recently have received short shrift. For example, he presents an excellent account of the battles fought by the Polish 1st Armored Division. Also, he shows the critical role of the 20 July assassination attempt against Hitler in how the German leadership responded to the relentless Allied onslaught. The subsequent hunt for conspirators wreaked havoc with the German military's ability to wage a cohesive and effective defense and helped set up the eventual Allied breakout and defeat of the Wehrmacht in France by the end of the summer.

Without a doubt, the battle for France in 1944 saw some of the most ferocious and savage fighting to take place in the European theater. There was the unremitting fight by Montgomery to take Caen, which was won at great cost—Allied bombing during Operation GOODWOOD ultimately reduced the town to rubble. Seeing Caen as pivotal to the security of the beachhead, D-Day planners expected to have it in Allied

hands by the end of 6 June, but it did not fall until mid-July. Beevor makes the case that British sluggishness allowed a vast portion of the German army to escape the Falaise Pocket—German soldiers who would live to fight the Allies another day.

A constant thread throughout his book is the high cost paid by French citizens for the liberation of their land. Nearly twenty thousand French civilians died during the liberation of Normandy, in addition to the estimated fifteen thousand killed and nineteen thousand injured during the preliminary bombing.

CDR. DAVID L. TESKA, U.S. COAST GUARD RESERVE
San Diego, California



Fukuyama, Francis. *The Origins of Political Order: From Prehuman Times to the French Revolution*. New York: Farrar, Straus, Giroux, 2011. 585pp. \$35

Two decades ago scholars, government policy makers, and military cold warriors struggled to decipher the meaning of the sudden and drastic change happening in the Soviet bloc. Francis Fukuyama now offers a provocative approach to this puzzle, which has been widely debated and perhaps misunderstood ever since. He cautiously asked in *The End of History and the Last Man* (1992) “whether, at the end of the twentieth century, it makes sense for us once again to speak of a coherent and directional History of mankind that will eventually lead the greater part of humanity to liberal democracy.” Fukuyama went on to theorize that the fall of communism represented a great step forward in mankind's struggle for

“recognition” and higher standards of government legitimacy. Fingers quickly pointed to continual conflicts in Africa and the Middle East as proof that such idealistic notions had little value. Released in the midst of the Arab Spring, however, this new book, the first of two volumes analyzing the origins of political order, offers a timely presentation of Fukuyama’s ideas on political development.

It is a work of comparative political philosophy wrapped around a political-military world history, from prehistory through the eve of the French and American Revolutions. As these events marked the beginning of a rapid increase in the speed of political development, Fukuyama pauses here until the second volume. He begins with a biological and anthropological premise that humans naturally form societal relationships based on kinship. Kinship-based societal rule has, in turn, provided a barrier to three key areas of political development: the state, rule of law, and accountable government. The struggle to move from patrimonial systems of government to modern liberal democracy is the framework for Fukuyama’s history. Liberal development, as Fukuyama describes it, follows many different paths in different regions and cultures, not a single, linear progression.

Readers may be surprised by a nearly complete absence of Greek and Roman political history. Instead, the author describes paradoxes in Chinese, Indian, and Ottoman development. Each of these regions experienced bureaucratic “state building,” with the potential to escape the bonds of kinship-based rule, but each ultimately underwent

“political decay,” preventing the transition to liberal democracy. He contrasts these with European political development, which, while unique, was not predestined to occur before that of the rest of the world.

Perhaps the most interesting features of this work revolve around early achievements in state building that failed to secure lasting holds on their respective societies. He describes, for example, how though the Chinese dynasties of Qin (221–207 BC) and Han (206 BC to AD 220) embraced a centralized state, meritocratic promotion, and an effective civilian-led military, the rule of law never emerged and accountability remained subject to dynastic interpretation. In India, the Brahmins used religion to create something akin to the rule of law as well as an impartial standard of accountability for rulers, but they were unable to form lasting state institutions to enforce these trends.

As the American demand for the military to add “state building” to its list of core competencies increases, officers will find Fukuyama’s observations on political origins valuable reminders of the lasting effects of patrimonialism in current conflict areas. While we ponder the next phase of political development from Tunisia to Bahrain to Afghanistan and hope for the emergence of liberal democracy, we should heed Fukuyama’s caution, “Tribalism in its various forms remains a default form of political organization, even after a modern state has been created.” Perhaps this also explains the lasting problem of interservice rivalry as well!

MAJ. MATT VAN HOOK, U.S. AIR FORCE
Air Force Academy



Kurtzman, Joel. *Common Purpose: How Great Leaders Get Organizations to Achieve the Extraordinary*. San Francisco: Jossey-Bass, 2010. 212pp. \$27.95

In his latest book, Joel Kurtzman draws on his experience as editor, reporter, and columnist for the *New York Times*, editor in chief of the *Harvard Business Review*, founder of the magazine *Strategy + Business*, columnist for *Fortune* and *Chief Executive Magazine*, and adviser to the World Economic Forum (Davos), the Wharton School's SEI Center, and MIT's *Sloan Management Review*. He attempts to capture the essence of what it takes to be an effective organizational leader in today's world, and the term he uses for this is the title of the book, *Common Purpose*.

Kurtzman starts out with the conundrum that leaders of organizations face today: How do you move from traditional hierarchical organizations to flatter, sensing organizations that are responsive enough to react quickly and appropriately to new information, threats, and opportunities? How do you encourage prudent risk taking while empowering people at all levels to make decisions that benefit the organization without losing focus on the vision and mission or squandering time and resources on efforts that do not contribute to desired long-term goals and objectives? In other words, how do you align effort from top to bottom without traditional bureaucratic approval procedures that waste time and effort? Kurtzman cites as extreme negative examples the FBI just prior to the attacks of September 11 and the Enron Corporation. In the first example he demonstrates the danger of not

empowering people at lower levels to act when they become aware of information, and in the second he shows what can happen when people are empowered to act but get carried away with short-term goals without considering the effect over the long term.

In later chapters Kurtzman identifies ingredients of leadership that produce an atmosphere of shared, common purpose in high-performing organizations. He points to many examples, leaders like Gordon Bethune at Continental Airlines, Steve Wynn at Wynn Resorts, and Shivan Subramaniam at FM Global (an insurance company in Rhode Island that has been in business since 1835). He discusses the importance of values that are demonstrated, not just preached, by the entire leadership team, serving as examples for everyone in the organization. He points out that the best organizations have leaders who acknowledge and incentivize the flow of new ideas from all levels of the company, not just from the top. He speaks about the importance of trust within organizations and identifies ways in which trust can be developed and strengthened despite tough economic times in which massive layoffs have diminished the loyalty of employees toward organizations.

Finally, Kurtzman believes in the power of positive thinking and the importance of the leader performing the roles of coach and mentor. Citing the research of Richard Boyatzis of Case Western Reserve University, he maintains that the best leaders create supportive environments that are enjoyable to work in, an effort that pays off in increased retention and even increased willingness of employees to take prudent risks to produce better outcomes. Kurtzman believes that the mutuality of interests

among employees and the organization is one of the most important aspects of achieving a state in which everyone is working together, with a common purpose. He also provides some useful insight for older leaders working with an emergent Generations X and Y workforce.

This is a well written book that offers some time-tested and proven ideas to new leaders and serves as a good reminder to seasoned leaders, who may have gotten into bad habits.

ROGER H. DUCEY
Naval War College



Aurelius, Marcus. Translated by C. Scot Hicks and David V. Hicks. *The Emperor's Handbook: A New Translation of the Meditations*. New York: Simon & Schuster, 2002. 150pp. \$22

Whether or not the first-century Roman emperor Marcus Aurelius ever intended his personal musings to be shared with anyone, his *Meditations* has been translated and published numerous times over the centuries. Writing at the end of long days campaigning against Rome's enemies, Aurelius sought to capture his personal thoughts on the best way to approach the many challenges presented by life, not only as a military leader and emperor of Rome but also as a father and a man. His thoughts are presented within the framework of the Stoic philosophy, one of the prevailing schools of thought in the first-century Roman world. *The Emperor's Handbook* is Scot and David Hicks's translation of this great philosophical work. Does it offer anything to the reader that other translations do not? The short answer is yes.

For ease of reading alone *The Emperor's Handbook* soars above both previous and more recent editions of *Meditations*. The prose is rendered in modern American English—clearly delivered and designed to present Marcus Aurelius to a contemporary audience. Short sidebar quotes presented every two or three pages allow skimming through the book while still capturing the enduring wisdom it contains; even the most casual readers can become acquainted with Aurelius's thoughts in a very short time simply by reading them. What they would miss, however, is the extensive notes that support much of the text and contribute to the book's strength. For those interested in pursuing further study on either the *Meditations* or the Stoic philosophy of which it is a part, the translators list plenty of additional reference material in their short introduction. There is a short index.

Scot and David Hicks believe that anyone can benefit from reading Marcus Aurelius's thoughts. Many previous editions of his *Meditations* are specifically geared toward military leaders or to leaders in business or government. However, these translators have aimed their work at a much wider audience. The back flap of the book states Aurelius's wisdom "speaks to the soul of anyone who has ever exercised authority or faced adversity or believed in a better day." That means almost all of us, and if this book can spark interest in readers who might not otherwise have turned toward the Stoic mind-set or these particular precepts, it can only be considered a success. *The Emperor's Handbook* is recommended highly for anyone—whether student of philosophy, person in authority, or someone

who, as the authors say, believes in a better day.

The last sidebar, presented on page 144, asks, “Are my guiding principles healthy and robust? On this hangs everything.” *The Emperor’s Handbook*

delivers possibly the most robust translation yet of this great philosophical work.

JEFF SHAW
Naval War College

IN MY VIEW

ASYMMETRIC WARFARE AT SEA

Sir:

I was pleased to see Thomas Mahnken's piece on asymmetric warfare and the battles off Guadalcanal ["Asymmetric Warfare at Sea: The Naval Battles off Guadalcanal, 1942–1943" in the Winter 2011 issue of the *Naval War College Review*, pp. 95–121]. Dr. Mahnken makes a number of worthwhile points, and his conclusions about the importance of integrating technology with tactics and operational concepts are well founded; these are very important and valuable lessons.

The article could have been considerably strengthened by more effective use of primary-source material or more recent secondary sources. Although Dr. Mahnken's conclusions are generally sound, the Navy's preparations for night combat prior to the battles of Guadalcanal are far more sophisticated than is generally believed, and the reasons for failure correspondingly more complicated. In order to understand adequately the lessons of Guadalcanal, it is necessary to examine these preparations in more detail.

As Dr. Mahnken points out, the Navy prepared for a campaign in the Pacific that would culminate in a decisive daylight fleet action. However, the Navy also recognized the potential of night torpedo attacks and, rather than shying away from such actions, actively practiced them. The "Night Search and Attack," an established tactic of using destroyers to seek out and attack enemy formations at night with guns and torpedoes, dates back at least to 1921.¹ The records associated with the development of these tactics illustrate that while the main fleet, and particularly the battle line, was instructed to avoid night action, light forces were encouraged to seek it out.

Through much of the interwar period, night search-and-attack procedures were relatively unsophisticated. Destroyers often attacked individually or in small groups; coordinated action proved to be difficult.² Continued practice paid dividends, however, and by 1937 a new set of procedures had begun to

emerge. Fleet Problem XVIII of that year saw a series of well-coordinated and successful attacks; the doctrine employed in those exercises was refined and integrated into a new and more thorough set of doctrinal publications describing the procedures for night search and attack.³

By the eve of war, the Navy had a set of procedures that rivaled that of the Japanese in terms of complexity and sophistication. New formations had been introduced, the “Vee” and the “Wedge,” for the cooperation of cruisers and destroyers at night. Both of these formations placed cruisers in the van; their firepower would be employed to penetrate an enemy screen. The destroyers behind them, arranged in three parallel columns, would charge through the gap and attack the enemy ships at the center of the formation with gunfire and torpedoes.⁴ Neither of these formations was linear; like the Japanese, the U.S. Navy recognized the limitations of long linear columns at night.

Why then were these procedures not employed off Guadalcanal? Admiral Nimitz asked as much in his comments on the battle of 12–13 November 1942.⁵ They were part of the existing doctrine, yet none of the task force commanders off Guadalcanal used them. It is impossible to understand fully the Navy’s failures without answering this question.

In order to do so, we must first examine the process for developing task force doctrine in 1942. The Navy had developed sophisticated plans and procedures for large battles, termed “Major Tactics” in the doctrinal publications of the time. It left “Minor Tactics” in the hands of individual task force commanders. They were expected to develop specific tactics for their forces, corresponding to their capabilities and the likely enemy forces they would encounter.⁶

This is exactly what happened off Guadalcanal. The linear formation with destroyers attached closely to the van and rear of the cruiser line was the brainchild of Admiral Scott, who employed it successfully at the battle of Cape Esperance. Scott departed from existing doctrine primarily because of the risks of friendly fire.⁷ Fratricide had been a repeated problem in prewar exercises and had been narrowly avoided in the battle of Savo Island. Unfortunately, the linear formation did not succeed in this regard, and it was quickly—and appropriately—discarded after the Naval Battle of Guadalcanal.⁸

Absorbing lessons from earlier actions, Admiral Kinkaid developed a plan prior to the battle of Tassafaronga specifying that his destroyers were to operate out ahead of the cruisers in a separate formation and use radar to get into torpedo-firing position.⁹ It fell to Admiral Wright to execute Kinkaid’s plan, and although it did not go well, he stuck with the concept of not employing a single column and sent his van destroyers out ahead.

The approach of relying on task force commanders to develop specific doctrines and procedures explains many of the issues encountered in the battles off

Guadalcanal. In most battles, the ships were thrown into battle without adequate time to develop plans or doctrines. These forces were “scratch teams,” hastily cobbled together to repulse Japanese advances. They lacked cohesion and were unable to train together for significant periods of time. The critical failure was not a lack of sophisticated procedures or doctrine but rather a breakdown of peacetime organizational structure under the pressures of a two-front war, which disrupted unit cohesion.¹⁰

However, Scott’s departure from existing doctrine also illustrates why the Navy was able to adapt so quickly to new procedures, like the successful approaches of Admiral Merrill and Commander Burke. As unit cohesion increased and greater time was provided for training formations as a unit before battle, the flexible nature of doctrinal development combined with the initiative of individual task force commanders to allow the best procedures to come to the fore. Similar flexibility led to the rapid introduction and adoption of vastly improved procedures for the integration of radar into tactical doctrine, in the form of new gunnery procedures and the CIC.

What Merrill and Burke recognized, and potentially Kinkaid before them, was that destroyers could use modern radars to approach torpedo-firing position and, if they held fire with their guns, devastate enemy formations before their presence was discovered. The major doctrinal change was waiting to open fire with guns until the torpedoes had found their mark. This was not practiced before the war, because in prewar exercises the destroyers’ torpedo targets were the heavy ships at the center of enemy formations. To get to them, the destroyers would have to use their guns to penetrate the enemy screen; there was no way for them to conceal their approach.¹¹ But this assumption did not hold in the Solomons in 1943, and tactics appropriately changed.

Dr. Mahnken has correctly recognized the flexibility inherent in the Navy’s doctrinal approach, but it deserves more attention, particularly for the part it played not only in the victories of 1943 but also in the failures of 1942. The two are inexorably linked. Without the ability to allow task force commanders to develop their own doctrines, accounting for their forces and individual circumstances, the Navy would not have been able to leverage its technological advantages as quickly as it did. However, this very same flexibility forced on individual commanders a reliance that they were unprepared to meet under the pressures of a global war in late 1942. This factor, more than any other, is to blame for the failures off Guadalcanal.¹²

The implications of this are very important and go beyond how best to integrate technology, tactics, and force structure. The solution the Navy introduced is worth describing. While still encouraging flexibility and individual initiative, the Pacific Fleet developed in 1943 a more detailed doctrinal manual that

outlined the best approaches for combat with small units, as well as large ones. This was *Pacific Fleet Tactical Orders and Doctrine U.S. Pacific Fleet*, or PAC 10, of June 1943. It provided a “playbook” that would allow commanders who lacked the time or ability to develop their own procedures to employ set plans for battle. This approach was adopted by the entire Navy with the publication of *Current Tactical Orders and Doctrine, U.S. Fleet*, USF 10A, in February 1944. With these documents the wartime Navy discovered a harmonious balance of flexibility and standardization that allowed success in the Pacific War.¹³

TRENT HONE

NOTES TO MR. HONE'S LETTER

1. *Instructions, Destroyer Squadrons, U.S. Atlantic Fleet*, 21 November 1921, entry 337, box 107, record group 38, National Archives [hereafter: RG38, NA].
2. “F.T.P. 88, Destroyer Tactical Instructions, United States Navy, 1929,” USN Technical Publications, pp. 61–71, entry 336A, box 37, sec. V, RG38, NA; “United States Fleet Problem XIII, 1932, Report of the Commander-in-Chief United States Fleet,” Adm. Frank H. Schofield, p. 11, roll 14, target 1, Fleet Problem XIII, CINCUS Report, 23 May 1932, RG38, NA.
3. “Light Forces, White Fleet, Operation Plan No. 6-37,” 1 April 1937, roll 22, target 2, Fleet Problem XVIII, US Fleet, White, and Black Statements of the Problem, with Estimates of the Situation, Plans, Orders, Instructions, and Organization, RG38, NA; “Night Search and Attack Operations, Destroyer Tactical Bulletin No. 5-38,” Commander Destroyers Battle Force, 1938, entry 336A, box 129, RG38, NA; “Night Search and Attack, DTP 2-40,” Commander Destroyers Battle Force, 1940, entry 336A, box 130, RG38, NA; “Light Forces in Night Search and Attack,” Commander-in-Chief, United States Pacific Fleet, W. S. Pye, 24 December 1941, Naval Historical Center, World War Two Command File, box 250.
4. “Light Forces in Night Search and Attack,” Commander-in-Chief, United States Pacific Fleet, W. S. Pye, 24 December 1941.
5. “Preliminary Report of Action, 12–13 November 1942,” p. 8, Commander-in-Chief, U.S. Pacific Fleet, 28 December 1942, World War Two Action and Operational Reports, box 19, RG38, NA.
6. See Trent Hone, “‘Give Them Hell!’ The US Navy’s Night Combat Doctrine and the Campaign for Guadalcanal,” *War in History* 13, no. 2 (April 2006), pp. 171–99.
7. “Report of Night Action 11–12 October 1942,” p. 2, 22 October 1942, World War Two Action and Operational Reports, box 17, RG38, NA.
8. See Hone, “‘Give Them Hell!’”
9. “Operation Plan No. 1-42,” Commander Task Force Sixty-Seven, 27 November 1942.
10. See Hone, “‘Give Them Hell!’”
11. *Ibid.*
12. *Ibid.*
13. See Trent Hone, “U.S. Navy Surface Battle Doctrine and Victory in the Pacific,” *Naval War College Review* 62, no. 1 (Winter 2009), pp. 67–105.

CAPTAINS OF THE SOUL

Sir:

In his article “Captains of the Soul: Stoic Philosophy and the Western Profession of Arms in the Twenty-First Century” [*Naval War College Review*, Winter 2011, pp. 31–58], Dr. Michael Evans, in what might be regarded as overkill, cites the Old Testament, the Alcoholics Anonymous “Serenity Prayer,” the TV series *Star Trek*, Latin quotes, the poems “Invictus” and “Ulysses,” and other poetry and poets and novels and novelists, Albert Einstein, the pleasure-loving, self-indulgent Winston Churchill, ancient Greek philosophers, and many other persons and sources, so numerous it would be tedious to list them by name, on behalf of the contention that modern Western professional military officers could use Stoic philosophy to deal with “an asymmetric enemy who abides by a different set of cultural rules,” i.e., the Muslims in counterinsurgency operations in Iraq and Afghanistan. Current behavioral values, Evans claims, place Westerners at a disadvantage when fighting followers of Islam, who follow cultural imperatives based on a strict code of honor.

But Evans, in spite of all his sundry citations, fails to provide even one example of how on the field of battle in counterinsurgency warfare, or in trying to win the hearts and minds of contested populations, the unreformed, unreconstructed honor code of Islam (which, for example, to protect family honor requires the male relatives of a woman who has been raped through no fault of her own to murder her, and which requires that Muslim girls in a burning building must remain inside and die if they are not properly attired to go outside) places Muslims at an advantage and Western militaries and Western democracies at a disadvantage in asymmetric warfare. Evans says an erosion of public honor in Western term societies has impacted upon “the Western military’s professional ethics and its institutional notions of duty and sacrifice” [page 33]. But he cites no example of how this has manifested itself in the actual conduct of counterinsurgency by Western professional military officers in Iraq and Afghanistan. The only military problem that Evans describes in his article proposing the adoption of Stoic philosophy by Western professional military officers is that of neuropsychiatric disorders among 20% of U.S. service members—not just officers—who have returned from Iraq and Afghanistan. Evans doesn’t disclose what part of that 20% affected are officers and what percent of all officers are affected.

Evans has not demonstrated how these “invisible wounds of war,” post-traumatic stress disorders (PTSD), and depression, which are the result of having served in Iraq and Afghanistan, have been the actual causes of specific disadvantages U.S. forces have experienced during the conduct of operations in those

two countries. Let's keep in mind that the "post" in post-traumatic stress disorder means "after," "subsequent," "later."

Evans admits that there are "fundamental gaps" regarding the causality of military mental-health problems. Yet he cites the opinions of an American brigadier general, who is not an expert in psychology, and a military philosopher, who is also no expert in psychology, that Stoic characteristics could be of value in combating combat stress—not post-traumatic stress disorder and depression. These unsubstantiated opinions don't support Evans's contention about the adoption of Stoic philosophy by military officers. He doesn't even show that stress in combat is always necessarily dysfunctional and counterproductive.

In closing, I would like to point to an observation by the ancient Athenian orator and statesman Pericles in his funeral oration over the Athenians killed fighting Sparta in the Peloponnesian War. Although the Spartans may not have had an intricately developed system of Stoic philosophy, they were certainly stoical in how they lived. "Unlike the Spartans, we do not harden ourselves with a stern and harsh discipline beginning in childhood. On the contrary, we live as we please and take a pleasurable exercise whenever it suits us to do so." Yet this difference in lifestyles did not seem to put the Athenians at a disadvantage when facing the Spartans in battle.

JOSEPH FORBES

OF SPECIAL INTEREST

CIVIL WAR MANUSCRIPTS IN THE NAVAL WAR COLLEGE'S NAVAL HISTORICAL COLLECTION

The Civil War began on 12 April 1861, when Confederate troops fired on Fort Sumter in the harbor of Charleston, South Carolina. This was the start of four years of warfare on land and at sea. The Naval Historical Collection contains letters, journals, and accounts of Union sailors and soldiers who participated in battles or were on blockade duty in Southern waters. As this year marks the sesquicentennial anniversary of the beginning of the war, these manuscripts deserve recognition.

Timothy Murphy, a blacksmith from New Bedford, Massachusetts, joined a Massachusetts regiment in 1864 and then transferred to the U.S. Navy. His collection consists of letters to his wife written in 1864 and 1865. In them he describes camp and shipboard life, the battle of Mobile Bay, his concern for his family and friends back home, and his hope of receiving the bounty offered at recruitment. He also comments on the many deserters from his unit. John Seacote's letters to his father date from 1864 and 1865, when he served in USS *Savannah* and USS *Chenango* as a member of the New Hampshire infantry. Seacote writes about his duties on board ship, his illnesses, his need for money, and the prospective bounty. Admiral David Farragut wrote to his wife on 31 July 1864, several days before the battle of Mobile Bay. He confessed that he did not know when he was going to attack, as he was waiting for troops to arrive, but had faith in God and the outcome. Earlier, on 1 May 1862, he had sent a letter to General Benjamin F. Butler congratulating him on the capture of the city of New Orleans. He hoped that the army would "hold the city without further difficulty." Lieutenant Commander Stephen B. Luce was in USS *Pontiac* on 1 March 1865 when he wrote to Commander George S. Blake regarding the deplorable conditions in the South near the war's end. Luce found it sad that "families . . . have been reduced in one day from affluence to begging."

The Union navy maintained a strong blockade of Southern ports with the intention of preventing supplies from Europe reaching the military and the civilian population. Noteworthy among the Union captains was Commander John B. Marchand of USS *James Adger* in the South Atlantic Blockading Squadron

and stationed off Charleston, South Carolina. He also served in the Western Gulf Blockading Squadron off Mobile, Alabama, and Galveston, Texas, 1862–64. His holograph diaries document the weather and the daily tedium of blockade duty. Despite the best efforts of the ships of the squadron, foreign goods and supplies got through. But patrolling was not always in vain, as a 1 August 1864 list of prizes indicates. James Curran was second assistant engineer in USS *Unadilla* during the final months of the war. His log records the visit of President Abraham Lincoln to Richmond on 5 April, General Lee's surrender, Lincoln's assassination, and mop-up blockade duty on the Chickahominy River.

While men were in battle at sea or on the rivers of the Confederacy, women faced their own hardships. Maria McGregor Campbell Smith of Richmond, Virginia, sought to escape the war in 1864 by traveling north to relatives in Cooperstown, New York. Her husband, Charles, was assistant surgeon general of the Confederate armies. Maria left home by wagon with her two children, knowing that she faced possible capture when she crossed Yankee lines. After she arrived in the North, she wrote an account of her travels that can be found in the Roy Campbell Smith Papers.

For information on the Naval Historical Collection and its holdings, contact the archivist, Dr. Evelyn M. Cherpak, at evelyn.cherpak@usnwc.edu or (401) 841-2435.

CALL FOR CONTRIBUTORS

A three-volume book set, *China and International Security: History, Strategy, and 21st Century Policy*, is in preparation. Its purpose is to provide in-depth views of China and its national security environment, including historical (volume 1) and domestic-cultural (volume 2) contexts as well as contemporary (volume 3) security issues. The set seeks cogent analyses of China's security strategies, regionally and internationally, as well as detailed examinations of the Communist Party of China and the People's Liberation Army and their roles in China's national security, in particular. Academics, researchers, and practitioners (civilian and military) are all invited to submit original, unpublished one-page proposals (for chapters of from five to seven thousand words) along with brief biographies (including full contact information) for consideration. First-draft deadline is 1 January 2012. Contact Donovan C. Chau, PhD, dchau@csusb.edu, Department of Political Science and MA Program in National Security Studies, California State University, San Bernardino.

REFLECTIONS ON READING

Professor John E. Jackson is the Naval War College's Manager for the CNO's Navy Professional Reading Program.

Yesterday, December 7, 1941—a date which will live in infamy—the United States of America was suddenly and deliberately attacked. . . .

FRANKLIN DELANO ROOSEVELT

This December will mark the seventieth anniversary of the attacks on American forces at Pearl Harbor and elsewhere on the Hawaiian island of Oahu, attacks that suddenly thrust the United States into the Second World War. President Roosevelt was correct when he stated that the date would “live in infamy”; few dates in American history evoke such memories and such passion. U.S. veterans of World War II, once numbering over sixteen million men and women, are dying at a rate of more than a thousand a day and now number only about 2.5 million. Accordingly, it is becoming more difficult to hear at first hand about their triumphs and tragedies, but thankfully, many outstanding books document how the nation was saved by the selfless efforts of what is often called “the greatest generation.” A number of titles in the Navy Professional Reading Program discuss World War II in general and the Pacific War in particular.

The *New York Times* calls Ronald H. Spector’s *Eagle against the Sun: The American War with Japan* “the best one-volume history of that complex conflict. . . . No other presents as balanced a view or provides such terse and searching analyses not only of the great battles but of half-forgotten aspects, such as the impact of blacks and female participants on the services.” Spector skillfully relates the major events of the forty-four-month-long war, from the surprise attack that shattered the quiet of a Sunday morning on a peaceful tropical island to the searing flash of the atomic bombs that provided the necessary shock to move the Japanese militarists to surrender. He writes at some length about the contributions of intelligence analysts and code breakers to many operational successes. He also details the remarkable achievements of American submarines against enemy shipping—achievements that came at a tremendous cost in the lives of American

submariners, nearly 22 percent of whom, he reports, never returned from patrol, the highest casualty rate of any U.S. service in the war.

James D. Hornfischer's *The Last Stand of the Tin Can Sailors* is an acclaimed best seller that recounts what has been called one of the most lopsided victories in the history of naval warfare. The American Library Association notes,

This piece of World War II naval history reads like a particularly good novel. It is an account of the October 1944 battle off Samar, in which a force of American destroyers and escort carriers drove off a Japanese fleet at least 10 times its strength. Hornfischer focuses on the men of the escort carrier unit (call sign) Taffy 3, who fought, flew, and fired to nearly the last shell in a battle that at least one commander commenced by saying, "Survival cannot be expected." Readable from beginning to end, this popular history magnificently brings to life men and times that may seem almost as remote as Trafalgar to many in the early twenty-first century. Of special interest are its account of the process that turned civilians into sailors, and its carrying forward of those sailors' stories to the handful of aging survivors still gathering in commemoration today.

While emeritus professor George Baer recently retired from the Naval War College faculty after thirty years of distinguished service, the fruits of his scholarship continue to enrich the readers of his award-winning book *One Hundred Years of Sea Power: The U.S. Navy, 1890–1990*. He addresses the factors leading up to Pearl Harbor, the conduct of the war, and the ways in which the lessons of World War II influenced the U.S. Navy into the last decade of the twentieth century. Rutgers University faculty member Edward Rhodes writes,

This is clearly one of the two or three most important works in American naval history published in the last decade; it has the potential to become a classic in the field. Well researched and carefully nuanced, it provides a distinctive perspective on the evolving historical relationship between national interest and national politics on the one hand and naval power on the other. Not only is this a significant contribution to scholarship—one that will critically influence how historians and political scientists think about American naval power—it is an enormously readable work. Baer writes beautifully, and he has organized his material effectively. The book is fully accessible to anyone interested in naval history.

Taken individually or as a "literary trifecta," these books provide enlightening insights into the state of America's navy before Pearl Harbor, how the service expanded exponentially to meet the demands of a two-ocean war, and how the courage and heroism of individual sailors carried the day in the most trying of circumstances. These are great lessons to recall as we approach the anniversary of Pearl Harbor and as we consider the future role of the U.S. Navy.

