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CONTENTS

From the Editors 5

President's Forum 9

Israeli Targeting

A Legal Appraisal..... 15

Major John J. Merriam, U.S. Army, and Michael N. Schmitt

A review of Israel's sometimes controversial positions on targeting law within the law of armed conflict shows that they are generally reasonable and consistent with mainstream contemporary state practice.

The New U.S. Maritime Strategy

Another View from Outside 34

Geoffrey Till

The refreshed "Cooperative Strategy for 21st Century Seapower" raises a number of questions: What is this new "strategy," whom is it for, what has changed, and how will other navies and their nations react?

Connecting the Dots

Capital Ships, the Littoral, Command of the Sea, and the World Order 46

Robert C. Rubel

The geopolitical competitors of the United States are seeking ways to nullify the American capability to influence and intervene that the aircraft carrier confers. Understanding the linkages helps us refine and enhance the debate about what to do.

China's Aircraft Carrier Program

Drivers, Developments, Implications..... 65

Andrew Scobell, Michael McMahon, and Cortez A. Cooper III

China's carrier program will not fundamentally transform the balance of military power in the western Pacific. But it does signal both China's unmistakable intent to project military power beyond the nation's "near seas" and its aspirations to become a global naval power.

A General Review of the History of China's Sea-Power

Theory Development..... 80

Zhang Wei

Translated by Shazeda Ahmed

Chinese sea power, writes an officer of the People's Liberation Army Navy, must have Chinese characteristics and not follow the path that Western powers took to maritime hegemony.

Fernando Oliveira's *Art of War at Sea* (1555)

A Pioneering Treatise on Naval Strategy. 94

Luis Nuno Sardinha Monteiro

Although written more than 450 years ago, *Art of War at Sea* is a treatise that was ahead of its time, establishing in part the basis of modern naval strategy. Yet it has remained in obscurity, as it was never translated from sixteenth-century Portuguese.

Research & Debate

The New Young Turks 108

Commander Benjamin F. Armstrong, U.S. Navy

Book Reviews

Restraint: A New Foundation for U.S. Grand Strategy, by Barry R. Posen

reviewed by David T. Burbach. 115

The Accidental Admiral: A Sailor Takes Command at NATO,

by James G. Stavridis

reviewed by Christopher Nelson. 117

The Battle of the Denmark Strait: A Critical Analysis of the

Bismarck's Singular Triumph, by Robert J. Winklareth

reviewed by Holger H. Herwig 118

Inside Reagan's Navy: The Pentagon Journals, by Chase Untermeyer

reviewed by Carnes Lord 119

21st Century Sims: Innovation, Education, and Leadership for the

Modern Era, edited by Benjamin F. Armstrong

reviewed by Yvonne R. Masakowski 121

No End Save Victory: How FDR Led the Nation into War, by David Kaiser

reviewed by Douglas Peifer 122

Morality and War: Can War Be Just in the Twenty-First Century?,

by David Fisher

reviewed by Joseph M. Hatfield. 124

The Battle for Mozambique: The Frelimo-Renamo Struggle, 1977–1992, by Stephen A. Emerson
 reviewed by Roger H. Ducey 126

Torpedo: Inventing the Military-Industrial Complex in the United States and Great Britain, by Katherine Epstein
 reviewed by John T. Kuehn. 127

21st Century Ellis: Operational Art and Strategic Prophecy for the Modern Era, edited by B. A. Friedman
 reviewed by David C. Fuqea 129

Fighting the Great War at Sea: Strategy, Tactics and Technology, by Norman Friedman
 reviewed by Angus Ross 130

Post-war Japan as a Sea Power: Imperial Legacy, Wartime Experience and the Making of a Navy, by Alessio Patalano
 reviewed by Carlos Rosende and John Bradford. 132

Against the Tide: Rickover’s Leadership Principles and the Rise of the Nuclear Navy, by Dave Oliver
 reviewed by Richard J. Norton. 133

America’s U-boats: Terror Trophies of World War I, by Chris Dubbs
 reviewed by William F. Bundy. 135

Underdogs: The Making of the Modern Marine Corps, by Aaron B. O’Connell
 reviewed by William A. Taylor 137

In My View 141

Reflections on Reading 143

FROM THE EDITORS

Israel and the United States have both been routinely subject to severe international criticism for the conduct of their respective militaries in irregular combat. But the Israeli case is unique in important respects. Israel has had to face foes who not only regularly flout generally accepted laws of war, but do so as part of a larger strategy of political warfare designed to discredit Israel in the eyes of an international public that is already disposed to be hostile to the Jewish state. In “Israeli Targeting: A Legal Appraisal,” Major John J. Merriam, USA, and Michael N. Schmitt provide an assessment of Israeli policy and behavior in relation to the restrictions on targeting embodied in the law of armed conflict. Based on an extensive review of internal Israeli documents and interviews with senior Israeli officials, the authors conclude that the doctrines and practice of Israel’s military track closely with those of the American military and are in fact eminently defensible. Professor Schmitt and Major Merriam are the director and associate director, respectively, of the Stockton Center for the Study of International Law at the Naval War College. (The previously posted electronic version of this article has generated considerable discussion, which can be accessed by searching for “Schmitt Israel Targeting.”)

It is fair to say that serious questioning of the future role of aircraft carriers within the U.S. Navy has increased significantly over the last several years. In “Connecting the Dots: Capital Ships, the Littoral, Command of the Sea, and the World Order,” Robert C. Rubel places these debates within a larger framework by raising the issue of whether the idea of the capital ship itself is not becoming obsolescent in an operational environment increasingly dominated by long-range missiles and precision sensors. Rubel makes the underappreciated point that our habit of speaking of capital-ship-intensive fleets as “blue-water” navies obscures the fact that most capital-ship-centered battles throughout history have in fact occurred in the littorals, and that it is precisely here that the weight of land-based air and missile defenses and sensors tells most heavily against aircraft carriers. Further, he explores the far-reaching implications of capital-ship obsolescence for traditional notions such as command of the sea and protection of the global commons. In all of this, Rubel carries on the fundamental reflections on the nature of contemporary sea power that have appeared over the last decade and beyond in

these pages as well as in the collected volume *Writing to Think: The Intellectual Journey of a Naval Career* (Newport Paper 41). Captain Rubel, USN (Ret.), is the former dean of the Center for Naval Warfare Studies at the Naval War College.

China's ongoing effort to reclaim and fortify islands in the South China Sea raises the most fundamental questions concerning its strategic intentions with respect to its immediate neighbors as well as the global maritime commons. It also provides an important context for understanding the strategic logic behind China's massive buildup of naval and maritime capability in recent years. A conspicuous element of that buildup has been China's acquisition of its first aircraft carrier and its apparent commitment to building at least four additional ships of this class. In "China's Aircraft Carrier Program: Drivers, Developments, Implications," Andrew Scobell, Michael McMahon, and Cortez A. Cooper III assess the motives behind China's acquisition and overhaul of the ex-Soviet vessel *Varyag* (now *Liaoning*) and its eventual decision to commit the nation to a serious program of carrier construction. While intangible motives such as national prestige no doubt have played a role, the authors believe the overriding strategic logic of the People's Liberation Army Navy's (PLAN's) evolution into a blue-water navy has been the decisive factor.

It is well to be reminded that the United States does not have a monopoly on theorizing about sea power. In "A General Review of the History of China's Sea-Power Theory Development," Zhang Wei provides a succinct overview of Chinese views of sea power from their initial encounter with Western navies and naval theorists in the nineteenth century through China's definitive break with its traditional "continentalist" orientation in the 1990s and the rapid expansion of its naval and maritime ambitions and capabilities over the last decade and more. The author of this article, which was originally published in Chinese in July 2012, Senior Captain Zhang Wei, PLAN, is a researcher at the People's Liberation Army Naval Research Institute.

In this connection, it is fitting that this issue concludes with a long-overdue tribute to a man who has a claim to be the author of the first book ever published on naval strategy. In "Fernando Oliveira's *Art of War at Sea* (1555): A Pioneering Treatise on Naval Strategy," Luis Nuno Sardinha Monteiro provides a brief introduction to this forgotten figure whose work had the misfortune of never being translated from his native Portuguese (an English version is currently in preparation). Unlike most military treatises of the early modern centuries, this work rises above the merely tactical and operational levels of naval warfare and sounds a number of surprisingly Mahanian themes. Commander Monteiro is an officer in the Portuguese Navy.

Finally, with this issue, the “editors” of this column are reduced from two to one, with the retirement of Pelham (“Pel”) Boyer after twenty-four years of service as managing editor of the *Naval War College Review*, as well as the Naval War College Press as a whole. Originally a U.S. naval intelligence officer with Russian language expertise, Pel assumed this position with very little prior preparation. He has been very largely responsible for establishing and maintaining the high standards of editorial production and design that have become a hallmark of this journal and of our various book and monograph series. His attention to the many details of his job has been extraordinary, his editorial skill and judgment unflinching, and his dedication to the mission remarkable. Not least, in his personal relationships he has ever been the gentleman. We wish Pel fair winds and following seas.

IF YOU VISIT US

Our editorial offices are now located in Sims Hall, in the Naval War College Coasters Harbor Island complex, on the third floor, west wing (rooms W334, 335, 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 (401-841-2236).



Rear Admiral Howe became the fifty-fifth President of the U.S. Naval War College on 8 July 2014. He is a native of Jacksonville, Florida and was commissioned in 1984 following his graduation from the U.S. Naval Academy.

Howe's operational assignments have included a full range of duties in the Naval Special Warfare and joint Special Operations communities. He commanded Naval Special Warfare Unit 3 in Bahrain, Naval Special Warfare Group 3 in San Diego, and Special Operations Command, Pacific in Hawaii. His service overseas includes multiple deployments to the western Pacific and Southwest Asia and participation in Operations EARNEST WILL, PROVIDE PROMISE, ENDURING FREEDOM, and IRAQI FREEDOM.

His key joint and staff assignments include current operations officer at Special Operations Command, Pacific; Chief Staff Officer, Naval Special Warfare Development Group; Assistant Chief of Staff for Operations, Plans and Policy at Naval Special Warfare Command; Director of Legislative Affairs for U.S. Special Operations Command; and Assistant Commanding Officer, Joint Special Operations Command.

Howe graduated from the Naval Postgraduate School in 1995 with a master of arts in national security affairs (special operations / low-intensity conflict), and from the National War College in 2002 with a master of arts in national security.

PRESIDENT'S FORUM



Professionalism and Leader Development

MY FIRST YEAR as President of the Naval War College has been an incredible experience and a real journey of professional discovery. Besides what I've learned about the inspiring work of the College, I have made two additional, significant discoveries over this first year's journey. These are things I didn't fully appreciate when I assumed this command, but wish I had a long, long time ago.

- The first is that there is an operational imperative—a war-fighting imperative—that we view our Navy as a profession, and ourselves as members of a true naval profession.
- The second is that to successfully execute our Navy missions as effectively as possible, there is nothing more important over the long term than leader development.

In this Forum, I'd like to “unpack” these discoveries, but before I do, two caveats are in order.

First, I hope our readers do not interpret these remarks as preaching from the “Ivory Tower.” I believe the things about which I'm speaking are far from abstract considerations. Quite the contrary, I am convinced there are practical and operational implications to the subjects of professionalism and leader development, and that it is vital to engage in much more explicit discussion of these subjects than has been typical in Navy culture in the past.

Second, this discussion is not about trying to fix a significant problem we have today. It is much more about ensuring we are prepared for the challenges of tomorrow. In the past, our institution and our leaders have been largely successful—in some cases exceedingly successful. Today, however, the world is changing

at an increasing rate, and the “VUCA” acronym accurately captures the environment for which we need to prepare our leaders. The operational environment is volatile, uncertain, complex, and ambiguous and promises to become ever more so in the future. What has proved successful in the past is not going fully to prepare us for the future. This discussion is about moving from good to great, and being ready for the increased challenges we will face in the future.

Professionalism. Let’s return to my first “discovery”: there is an operational imperative—a *war-fighting* imperative—that we view ourselves as members of a profession in a nontrivial sense of the word. It has come as something of a shock to me that I have had this realization so late in my career! But that is precisely what makes me think we owe the Navy and the nation a change in our culture so that the sense of personal identification with the Navy profession is pervasive through the fleet at all levels of rank.

Over the years I’ve read multiple articles in *Joint Force Quarterly* and other military-related periodicals on the subject of professionalism. At the time, much of those discussions didn’t resonate with me. I had been exposed to the concept of the military as a profession in my early years at the U.S. Naval Academy, but, for almost my entire career, to be professional meant looking good in uniform and being technically and tactically competent. When I read the Navy Ethos, the word “professional” was simply an adjective meaning the sailor was squared away and a good operator.

In my current job, I’ve been reexposed to the basic ideas of what it means to be a member of the profession of arms. Here’s what I’ve come to understand. Our Navy has a dual character. On one hand, it is a military department organized as a bureaucracy. The bureaucratic dimension of our organization is unavoidable for any organization of our size and complexity. But on the other, it is an organization dedicated to supporting a military profession. It is this dual nature as both a bureaucracy and a profession that shapes our key challenge as Navy leaders.*

- Bureaucracies originated out of society’s need for efficient, routinized work. The focus on efficiency drives an organization characterized by centralized planning and control, little delegation of discretionary authority, and compliance-based behavior.
- Professions originated out of society’s need for the expert application of specialized knowledge. For professions to provide that expert knowledge most effectively, they need autonomy. That autonomy is based on trust: trust between society and the profession, and trust among the members of the

* A great deal of the language and concepts of this way of thinking is reliant on the Army’s excellent work articulating the profession/bureaucracy tensions in its service. It is clearly articulated and laid out in U.S. Army Dept., *The Army Profession*, ADRP 1 (Washington, D.C.: June 2013), pp. 1–4.

profession. This trust is based on shared values/ethos, and demonstrated actions in accordance with these values/ethos.

The dual character of our Navy is important to understand. The attributes and strengths of both the bureaucracy and the profession are needed to execute the wide variety of functions across the Navy every day, and tension between the two is necessary and natural. As the leaders of the Navy, however, our challenge is to ensure the overarching characteristic of the Navy is—and remains—that of a military profession.* Why? Because a bureaucratic organization will never succeed in combat; only a professional organization can and will.

- The operational environment—on the land, on the sea, or in the air—is violent and complex, dominated by uncertainty and ambiguity.
- Success in this environment requires much more than tactical competence; it requires judicious and decentralized employment of that competence at all levels: tactically, operationally, and strategically.
- And the key enabler of decentralized employment is trust—trust up, down, left, and right within an organization, and trust between the military and the nation it serves.

My colleagues that study organizations have taught me that trust is largely absent from bureaucracies. In fact, such organizations are specifically designed to function in low-trust environments. By contrast, trust is the central characteristic of a professional organization. Trust in a profession is built on each member's core identity being associated with the profession, and each member's actions being guided by an ethic shared across the profession.

It is here, in this difference in the nature of trust in bureaucracies and professions, that I've come to understand the war-fighting relevance of professionalism. I now clearly see the absolute operational imperative to thinking, seeing, being a profession: *only this identity engenders the trust necessary to fight and win in today's operational environment.*

This updated understanding of professionalism has also improved my thinking about ethics. I now see ethics through the lens of professionalism. As members of the maritime profession of arms, our ethic is what guides and steers our actions. That ethic certainly includes laws, regulations, and policies. But those are a mere baseline of legal compliance. Far more important for guiding our discretionary professional judgment are the nonlegal professional expectations established by our Navy culture, its values, and its highest aspirations. Our ethic guides us to act always in a manner that supports the values of the nation we serve, and enhances the trust within the organization, and with our civilian leadership / nation. In a

* Ibid., pp. 1–4.

complex world, our ethic helps us understand not only what we can or what we must do but, more importantly, what we should do.

The tension between our Navy's bureaucratic and professional attributes will grow greater as we move into times of fiscal pressure and away from sustained combat. We have a choice in how we see ourselves, in how we think about ourselves, and as we think about what we're doing from day to day.

As we all attend to our day-to-day assignments, I ask all Navy leaders to make a conscious effort to let the framework of the Navy *as a profession* drive our vision, thinking, and decisions. We'll be a better Navy if we do.

Leader Development. My assignment as President of the Naval War College has afforded me the opportunity to have a wide variety of discussions on the subject of leader development. As a result of those discussions, I've come to understand that our traditional approach to leader development is incomplete and insufficient. In retrospect, I now clearly see that I had on many counts failed in my responsibility to execute the critical role of a leader in leader development. My rather passive approach of simply serving as a role model was good but insufficient. As I argued earlier, the world is changing at an increasing rate, and the operational environment continues to grow more complex. We can't rely only on experience and observation to develop our future leaders. Nor can we rely solely on the schoolhouse, mobile training teams, or General Military Training programs. I have come to believe that the single most effective means of improving leadership across the Navy is "leaders engaging leaders."

Leaders at all levels must be actively involved in development of those in their charge. Preparing them for the challenges of the future is not an ancillary aspect of their "real" job—in some respects it is their most important job. There is no need for one to be a "leadership expert" to move out with leader development efforts. One doesn't need to have all the answers. In many respects, the most important thing we can do to make us all cognizant of our professional identity is simply ensuring that conversation about leadership, ethics, and the naval profession is a routine aspect of our interactions with each other. Explicitly raising such issues in the midst of routine operational activity will have a significant impact on our personnel as they realize it is a shared expectation that professionalism is part of what it is to be a member of our Navy. And no one is in a better position to do so than leaders at all levels. Leaders engaging leaders—this is the key. Making professionalism, leadership, and ethics an integral part of Navy life will do far more to encourage and embed professional identity than any number of PowerPoint presentations by "leadership experts."

So these are two key "discoveries" since reporting to the Naval War College: the operational imperative of seeing ourselves as a profession, and the critical

role of leaders in leader development. As I look to the future, I believe we need to do the following:

- Acknowledge that there is an operational imperative for the Navy to recognize the tension between bureaucracy and profession in our Navy, and deliberately choose to nurture our professional identity.
- Recognize the critical role of “leaders engaging leaders” in our development efforts and recognize that explicit attention to issues of leader development and ethics is a vital and important aspect of leaders’ responsibilities at every level and rank.

P. GARDNER HOWE III

Rear Admiral, U.S. Navy

President, Naval War College

(This “President’s Forum” is derived from a presentation on professionalism and leader development delivered at the Navy Flag Officer and Senior Executive Symposium in April 2015.)

Major Merriam, of the U.S. Army Judge Advocate General's Corps, is associate director of the Stockton Center for the Study of International Law at the Naval War College in Newport, Rhode Island.

Michael N. Schmitt, Charles H. Stockton Professor at the Naval War College, is the director of the Stockton Center. He is also professor of public international law at Exeter University in the United Kingdom and a fellow in the Harvard Law School Program on International Law and Armed Conflict.

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ISRAELI TARGETING

A Legal Appraisal

Major John J. Merriam, U.S. Army, and Michael N. Schmitt

The Israeli-Palestinian conflict is seemingly intractable. It involves contentious issues, such as extended occupation, the status of Jerusalem, a claimed “right of return” for Palestinian refugees, and recognition of a Palestinian state. Episodic hostilities have punctuated the conflict, causing heavy civilian casualties on both sides. The tactics employed have proved highly controversial, with some, such as terrorism and the direct targeting of the Israeli population, self-evidently qualifying as war crimes.

Between June and August 2014, Israel engaged in yet another round of intense hostilities with Palestinian organized armed groups in the Gaza Strip. What began with the kidnapping and murder of three Israeli teenagers quickly escalated into full-scale conflict featuring a rain of rockets from Gaza and Palestinian raids mounted through an extensive tunnel network. The Israeli military response, dubbed Operation PROTECTIVE EDGE (OPE), included an intense air campaign against Hamas and other armed groups and an Israel Defense Forces (IDF) ground incursion that resulted in firefights across the Gaza Strip. After a series of failed cease-fires, a precarious end to hostilities was negotiated, one that presently appears to be holding.

The short but violent conflict was devastating for the civilian population and infrastructure in Gaza. The United Nations Office for the Coordination of Humanitarian Affairs estimates that over two thousand Palestinians, more than half of them civilians, died during the hostilities.¹ Israeli losses exceeded seventy, the bulk of them IDF personnel.² Both sides suffered hundreds of wounded. As is normally the case, the conflict generated widespread criticism of Israel by various prominent nongovernmental organizations (NGOs), including Human Rights

Watch, Amnesty International, and Israeli groups such as B'Tselem.³ Much of the criticism centered on a perception that the Palestinian side suffered disproportionate casualties and damage.

The condemnation was not, however, universal. As the dust settled, military professionals from the United States and several other countries carefully examined Israeli practices. They found much to commend about IDF operations, particularly the extent to which the IDF exercised restraint and the highly precise manner in which it conducted strikes. The U.S. Chairman of the Joint Chiefs of Staff, General Martin Dempsey, noted that Israel “went to extraordinary

If war is politics by other means, then the interpretation of the laws of war will necessarily reflect the political environment in which war is waged.

lengths to limit collateral damage and civilian casualties.”⁴ He praised several IDF techniques that have been the source of controversy in human rights circles, such as

the “knock on the roof” technique employed to warn Palestinian civilians of an impending strike.

Operation PROTECTIVE EDGE invites an examination of one facet of international law as it applies to the conflict—the law of armed conflict (LOAC) and a particular subset thereof known colloquially as “targeting law.” The analysis need not address the righteousness of either side’s cause, because an important, but often misunderstood, feature of international law is a strict separation between the *jus ad bellum*, the law addressing *when* states may resort to force, and the *jus in bello*, which comprises the rules governing *how* hostilities must be conducted.⁵ The latter applies equally to all parties to an armed conflict, irrespective of which is right or wrong in terms of its origins.⁶ In other words, it matters not whether Israel or Hamas (and other Palestinian groups) was the aggressor; both were irrefutably bound to conduct their operations in accordance with the LOAC.

This article examines how the IDF applies the LOAC rules of targeting. Israel has long refrained from revealing many aspects of its targeting processes and precise positions on key aspects of targeting law, out of concern that transparency might be misused to subject Israel to further criticism in international forums. This approach may be changing. In late 2014, the IDF invited this article’s authors, members of the U.S. Naval War College’s Stockton Center for the Study of International Law, to Israel to assess its targeting practices and positions.⁷ Their research comprised a visit to the Gaza Division Headquarters, including an “attack cell,” and an examination of Hamas attack-tunnel infrastructure. Combat footage of Israeli strikes on Hamas rocket sites during OPE was reviewed and extensive interviews with IDF legal advisers and ground and air force commanders at all levels were conducted. The conclusions that follow are offered to elucidate

Israel's approaches to targeting law by examining the synergistic relationship between Israel's unique operational and strategic challenges and its various positions on the LOAC.

STATE POSITIONS ON THE LAW OF ARMED CONFLICT

Before turning to Israeli targeting, it is useful to briefly survey the broad contours of the LOAC. It is a body of law that seeks to maintain a delicate balance between the military imperative of defeating the enemy on the one hand and the humanitarian one of protecting civilians and other "victims of war" on the other.⁸ In the context of targeting, particular principles and rules maintain this balance. Foremost among these is the principle of distinction. Distinction, one of the "cardinal principles contained in the texts constituting the fabric of [the LOAC]," and thus "intransgressible," requires that the parties to a conflict "at all times distinguish between the civilian population and combatants and between civilian objects and military objectives and accordingly shall direct their operations only against military objectives."⁹

Rules derived from this principle prohibit the direct attack of civilians and civilian objects, as well as indiscriminate attacks, such as those launched without regard to whether they will strike combatants or civilians.¹⁰ The rule of proportionality flows from the same animating premise as the principle of distinction. It holds that even an attack properly aimed at military objectives is unlawful if the expected collateral damage to civilians and civilian objects is excessive in relation to the anticipated military advantage to be gained.¹¹ Finally, the LOAC achieves balance by requiring an attacker to take certain "precautions in attack" to minimize civilian harm, including doing everything feasible in the circumstances to verify the target is a military objective and selecting targets, weapons, and tactics that will limit civilian harm so long as they do not involve sacrificing military advantage.¹² There is also a requirement to warn the civilian population of attacks that may affect them when the circumstances so permit.¹³

These principles and rules lie at the heart of targeting law. However, it must be cautioned that targeting is subject to an array of further legal limitations, such as the ban on wanton destruction; the prohibition of unnecessary suffering (which disallows use of weapons that result in unnecessary suffering or superfluous injury to combatants); and the various "special protections" that bar or restrict attacks on specified persons and objects, such as medical, religious, and cultural entities.¹⁴

Most such rules and principles are set forth in treaty law. The primary instrument governing targeting is the 1977 Additional Protocol I (AP I) to the four 1949 Geneva Conventions.¹⁵ Neither the United States nor Israel is party to the protocol, but both recognize that certain aspects of the instrument reflect

customary law norms.¹⁶ Customary norms develop through the nearly universal practice of states engaged in out of a sense of legal obligation.¹⁷ While customary law is sometimes hard to discern since it is not enshrined in treaty text, it is no less the law.

Nonlawyers may find it surprising to learn that states harbor different views on the LOAC. Despite broad consensus regarding most core principles and rules, at a more granular level there is a great deal of room for divergence on the scope and application of the LOAC in actual combat. For instance, distinction requires that attacks be directed only against *military objectives*, but what entities qualify as military objectives? For that matter, what is an *attack* as a matter of law? What measures will satisfy the law requiring an attacker to avoid civilian harm when *feasible*? What is feasible in a given situation? How much certainty is required about the nature of a proposed target before it may be struck?¹⁸ When are warnings required, and how must they be delivered? On these and many other matters, a variety of views—often quite divergent—exist.¹⁹

The positions states take on such issues are not developed in a vacuum; if war is politics by other means, then the interpretation of the laws of war will necessarily reflect the political environment in which war is waged. Indeed, if war “is not the action of a living force upon a lifeless mass . . . but always the collision of two living forces,” the interaction between adversaries in a specific operational and strategic environment is going to affect how it is fought and consequently how a state will view and apply the constraints of the LOAC.²⁰ That is plainly the case with respect to Israel.

ISRAEL’S UNIQUE STRATEGIC AND OPERATIONAL ENVIRONMENT

To understand why Israel adopts particular interpretations of the LOAC and how the nation applies them in practice, one must comprehend the operational and strategic dilemmas it faces. First, it is constrained by geography. Israel is a small country and its enemies—chiefly Hamas in Gaza and Hezbollah in southern Lebanon, but also their state sponsors, including Syria and Iran—are close. Its foes possess arsenals of rockets capable, in the absence of an effective antirocket capability, of striking all of Israel’s major population centers. When rocket attacks are launched, a nationwide network of early warning sensors triggers flight to hardened shelters and, in some cases, widespread evacuation of civilians to less-threatened regions of the country.²¹

Given the long history of warfare between Israel and these nonstate actors, as well as Israel’s relative isolation in international affairs, the Israeli population often perceives itself as “under siege.” This stands in marked contrast to the United States, which operates globally and from a forward presence precisely to ensure

that it can confront threats far from the homeland. Barring a “black swan” event like the 9/11 attacks, the American people have rarely felt personally at risk. For Israel, by contrast, protection of the civilian population is of paramount importance. From the perspective of its adversaries, the Israeli civilian population is consequently a center of gravity against which attacks are routinely launched.²²

Second, unlike the U.S. all-volunteer professional military, the IDF relies on conscription.²³ Most Israeli families have therefore seen loved ones put in harm’s way, whether during a period of open hostilities, when facing the constant threat of terrorism, or simply in the long-simmering and often dangerous environment attendant to the Israeli presence in the West Bank, Gaza, the Golan Heights, or Lebanon. One result is an extreme aversion to casualties coupled with a pervasive fear of IDF soldiers’ being taken prisoner.²⁴ Once more, Israel’s foes have taken notice, repeatedly launching raids to isolate and capture IDF soldiers to leverage them for massive concessions from Israel. In this way, the safety of IDF soldiers represents another center of gravity, and potential vulnerability, exploitable by its enemies. Again, it may be useful to compare the Israeli perception of these matters to that of the United States. Whereas the United States only reluctantly accepted a prisoner exchange of five Taliban fighters for the return of Sergeant Bowe Bergdahl, Israel routinely exchanges hundreds of militants for a single captured IDF soldier.²⁵ In some cases, the exchanges were made simply to regain the remains of fallen Israelis. It is a stark contrast.

Despite these vulnerabilities, Israel benefits from certain factors. By virtue of its interior position, it can quickly mobilize air and ground forces to defeat threats arising on its borders. It does so with a highly advanced military force that generally enjoys overwhelming conventional overmatch, particularly with respect to Hamas. Israel also enjoys the relative luxury of knowing the location of its next battlefield. Unlike the United States, which must constantly prepare for expeditionary warfare around the globe, the IDF recognizes that it will fight in Gaza, southern Lebanon, or the West Bank. This allows it to develop exceptionally precise battlefield and target intelligence—Israeli forces fight on ground that they have physically occupied in the recent past or continue to occupy to this day (the West Bank), and it is ground on which they have fought many times before.

Today, Israel’s adversaries no longer engage solely in irregular warfare. Hezbollah in particular has demonstrated the capacity to fight both conventionally and irregularly in what is now styled “hybrid warfare,” while Hamas is demonstrating a growing tendency in that direction.²⁶ Still, in the face of conventional overmatch and their opponent’s sophisticated understanding of the battlefield, they cannot go toe-to-toe with the IDF. Therefore, they create favorable asymmetries that allow them to exploit Israel’s vulnerabilities and mitigate its advantages; tactics for doing so include fighting from within densely populated urban terrain,

employing human shields, feigning civilian and other protected status to conduct attacks, and using civilian objects like homes, schools, and medical facilities to cache weapons and from which to launch attacks—all violations of the LOAC. In particular, Israel's foes hope to draw the IDF into strikes that cause civilian casualties and destroy civilian infrastructure so as to intensify international pressure on Israel and exacerbate its isolation. The groups also attempt to leverage the aforementioned centers of gravity. As examples, they launch indiscriminate rocket attacks against Israeli civilians using cheap, inaccurate, and widely available rockets and use tunnels and the protection provided by operating from among civilians to get close to IDF positions in the hope of overwhelming or capturing Israeli soldiers.

This operational and strategic environment undergirds the focus and nature of IDF targeting. For instance, the IDF attaches great value to destroying rocket platforms and weapons caches and to locating and destroying tunnels. In the language of the LOAC's rule of proportionality, such targets are viewed as providing a very high "anticipated military advantage." Similarly, the fact that its enemies attempt to frustrate identification by fighting in civilian clothing and from civilian structures can result in the IDF striking what to outside observers appear to be unlawful targets. Also, Israel's deep insight into its likely battlefields—especially in Gaza—may lead it to attempt such attacks with marked confidence in their precision.

These examples illustrate how strategic and operational context affects the manner in which targeting is conducted. As will be discussed, such factors equally influence the value judgments that underlie targeting, especially the exercise of such discretion as the law allows.

LOAC AND TARGETING IN THE IDF

As noted, AP I captures much of the LOAC applicable to the conduct of hostilities. Despite not being a party to the treaty, Israel (and the United States) nonetheless considers many of the specific rules in that instrument to reflect customary international law. Thus, AP I's targeting provisions serve as a logical starting point for examining IDF positions on targeting law.

Military Objectives

Given the principle of distinction's prohibition on directing attacks at other-than-military objectives, it is essential to understand what is, and is not, a lawful military objective. AP I defines military objectives as "those objects which by their nature, location, purpose, or use make an effective contribution to military action and whose total or partial destruction, capture, or neutralization, in the circumstances ruling at the time, offers a definite military advantage."²⁷ Israel accepts this definition as reflecting customary international law.

Simple though it may appear, applying the definition in practice can prove challenging. Of particular significance in the Israeli context is understanding what the terms “use” and “purpose” mean. An otherwise civilian object (like a home, school, medical facility, or factory) becomes a military objective by use whenever it is converted to military ends. When intended to be so converted in the future, it qualifies as a military objective by purpose. Application of this norm can be relatively uncontroversial. For instance, when Hamas uses a school to store rockets or a residence to command and control its fighters, those formerly civilian objects become lawful military objectives subject to attack.

Israeli targeting has nevertheless come under critical scrutiny with regard to its application of the military objective definition. Consider tunnels. Hamas uses purpose-built tunnels for a variety of military ends. Some run under the border to Israel proper and are devoted to launching raids in an effort to overwhelm IDF positions or to capture Israeli soldiers. Others traverse Gaza itself and are used to move fighters and weapons underground and thereby elude detection and attack by air. These tunnels are clearly military objectives; the IDF appropriately targets them on the basis of their nature.

Applying the LOAC to Hamas tunnels that run under the border between Egypt and Gaza proves more complicated. In some cases, the tunnels are sometimes used both to bring rockets and other war material into Gaza and for nonmilitary smuggling purposes. Except for those employed exclusively for transporting military matériel, such tunnels must be treated as “dual use” objects; they may be attacked only when they become military objectives through their use or purpose.

Questions have arisen about cement plants that produce what Israel alleges are specially designed concrete supports, the sole purpose of which is tunnel construction. The IDF has repeatedly struck cement plants in Gaza, leading NGOs to claim that these are unlawful attacks against clearly civilian infrastructure.²⁸ In the view of the authors, if the factories do in fact produce supports used for the tunnels that qualify as military objectives, they unquestionably qualify as a lawful military objective by use since they are producing “war supporting” material.

To take another example, the IDF has repeatedly attacked allegedly “nonmilitary” Hamas government buildings. It insists that it does not target such buildings solely on the basis that they are Hamas government infrastructure. Rather, the IDF avers that in some cases Hamas military leaders inside the buildings were the targets, while in others the buildings themselves had a military use irrespective of any presence therein of Hamas fighters (such as a weapons cache or a command and control facility). Both situations would render an attack on the buildings lawful.

But this does not conclude the legal analysis. When Hamas fighters in a government building are the target of an IDF attack, any damage to the building or nearby buildings, and any harm to civilians, must be included as collateral damage when determining the proportionality of the attack and deciding what precautions must be taken to minimize collateral damage. If the building is itself the target, harm to the building need not be considered in these assessments.

Environment

There is a great deal of debate about protection of the environment in the context of the LOAC. Article 35(3) of AP I prohibits using means and methods of warfare that “are intended, or may be expected, to cause widespread, long-term, and severe damage to the natural environment.” This article protects the environment as such. Article 55(1), on the other hand, prohibits such attacks when those effects would “thereby prejudice the health or survival of the population.” Unlike article 35(3), it is anthropocentric in the sense of protecting the civilian population from negative effects on the environment, rather than the environment itself.

Since Israel is not a party to the protocol, the question arises whether the two articles reflect customary law binding on nonparties. Neither the United States nor Israel believes they do.²⁹ First, both reject the premise that there is any set threshold of environmental harm that would prohibit an attack, such as “widespread, long-term, and severe,” irrespective of any military advantage resulting from the attack. Moreover, Israel apparently rejects the proposition that the environment is to be treated as a civilian object, such that attacks against the environment are prohibited and that environmental harm must be considered in proportionality and precautions-in-attack determinations. Rather, it is of the view that the proportionality rule requires an attacker to refrain from attacks that, by their effects on the environment, would disproportionately harm civilians and civilian objects.

The distinction is important, particularly in the Middle East where oil infrastructure plays such a prominent role and offers both a tempting target and a source of grave potential environmental damage if attacked. One need only consider the Iraqi destruction of Kuwaiti oil wells during the 1991 Gulf war to grasp this point; in a high-intensity conflict in that region of the world, it is reasonable to anticipate such conduct.³⁰ In this respect, the Israeli position differs from that of the United States, which is of the view that the environment is a civilian object, and thus damage to it must be factored into a targeting analysis, even if there is no ensuing harm to other civilian objects or persons.³¹

Persons on the Battlefield

Perhaps no LOAC issue is fraught with more disagreement in the modern age of irregular and hybrid warfare than that of “direct participation in hostilities.”

Generally, persons on the battlefield fall into one of two categories: members of the armed forces or civilians. Members of the armed forces are clearly subject to being attacked at any time, unless they are hors de combat by virtue of wounds, sickness, or having been made prisoner.³² They are targetable on the basis of their status. In contrast, civilians are immune from attack “unless, and for such time as, they directly participate in hostilities.”³³ Those who directly participate may accordingly be targeted on the basis of their conduct rather than their status; civilians may be attacked when they engage in acts that constitute direct participation, and only “for such time as” they so participate. Defining direct participation and determining when that participation begins and ends have been the source of ongoing controversy for years.

Beginning in 2003 and concluding in 2008, the International Committee of the Red Cross (ICRC) undertook a multiyear study culminating in the release

It matters not whether Israel or Hamas (and other Palestinian groups) was the aggressor; both were irrefutably bound to conduct their operations in accordance with the LOAC.

of its *Interpretive Guidance on the Notion of Direct Participation in Hostilities*.³⁴ The ICRC, wrongly in the view of many observers, including the United States, takes a restric-

tive approach to the meaning of “for such time as,” effectively holding that direct participants may only be attacked during a limited window when they deploy for combat, conduct combat, and redeploy; they remain immune from attack at all other times.³⁵ This grants more protection to these fighters than that enjoyed by regular members of the armed forces—an unsatisfactory result.

In an effort to address this concern, the ICRC was willing to differentiate between civilians who fight as members of an “organized armed group” (OAG) and those who do so only sporadically and on a more spontaneous or independent basis.³⁶ According to the ICRC, members of an OAG may be treated as members of the armed forces for targeting purposes (e.g., targetable at any time), but with an important caveat—they must perform a “continuous combat function.”³⁷ Support personnel without duties that directly affect the combat capabilities of one side or the other would not be targetable on the basis of OAG membership. Again, this results in less favorable treatment for uniformed members of the armed forces, since all members except medical and religious personnel are undoubtedly lawful targets on the basis of mere military status.

The IDF, like the United States, accepts the concept of OAGs but rejects the continuous-combat-function limitation.³⁸ Thus, the IDF characterizes members of Hamas’s military wing (the Izz-al-Din al-Qassam Brigades) as members of an OAG rather than as sporadic civilian direct participants. By the Israeli approach, they are targetable at any time, and it is irrelevant whether their duties qualify

as a continuous combat function. The IDF accepts the premise that groups like Hamas can have distinct military and civilian wings. It only targets the former on the basis of an OAG-membership theory and the latter on the basis of direct participation in the hostilities. A Hamas leader who has both civilian and military functions, such as command and control, may be targeted owing to his position in the military wing, notwithstanding the fact that he may also have a role in the civilian government of Gaza.

With respect to individuals who are not OAG members and thus targetable only for such time as they directly participate, both Israel and the United States reject the ICRC's restrictive view of the "for such time" phrase. Their position is that a civilian who regularly participates in hostilities may be attacked throughout the entire period of participation, not just during individual acts. Thus, a civilian who is engaging in repeated acts of participation may be attacked during periods of rest or inactivity between those individual acts. Additionally, both countries take a broader view of conduct that qualifies as direct participation than the ICRC. As an example, Israel and the United States would characterize an individual who makes homemade rockets or improvised explosive devices as directly participating in hostilities; the ICRC labels such activities as indirect participation. Similarly, whereas a Hamas member smuggling weapons into Gaza for general use would not be directly participating by the ICRC restrictive approach, Israel would label such activity direct participation, as would the United States.³⁹

Human Shields

The LOAC clearly forbids the use of human shields.⁴⁰ This has not prevented many states and nonstate actors from regularly using them, since the tactic holds out the prospect of either discouraging an attack by the adversary or mischaracterizing its strike as an intentional attack on protected civilians or as one that violates either the rule of proportionality or the requirement to take precautions in attack. Given the tactics of its enemies and the urban battlefield on which it usually fights, human shielding is particularly problematic for Israel.

The issue of how to treat civilian shields as a matter of the LOAC is hotly contested. Are they to be fully considered as civilians, or are they direct participants who do not factor into the proportionality or precautions-in-attack assessments? There are a variety of positions.

First, one must differentiate between voluntary and involuntary human shields. The former are civilians who choose to place themselves on, in, or near a military objective in the hope that an attack will be deterred. The latter are coerced or forced to serve as shields; they make no voluntary choice.

Israel is of the view that involuntary human shields retain their status as protected civilians. They may not be directly attacked and are factored into proportionality and precautions-in-attack analyses. Since it is often difficult or

impossible to know whether a human shield is there by choice or has been compelled to be present (or prevented from fleeing), Israel presumes a human shield to be involuntary until it has evidence to the contrary. This is an uncontroversial and mainstream position.

When it comes to voluntary human shields, by contrast, there is broad disagreement. The ICRC view is that civilians only lose their protection when they are voluntarily *physically* shielding or blocking a specific military objective, as in obstructing passage over a bridge.⁴¹ Israel takes a different view, one shared by the United States.⁴² It asserts that voluntary human shields are direct participants and in consequence need not be factored into a proportionality or precautions-in-attack assessment as collateral damage, even when shielding against air or artillery attacks. This is vitally important to the conduct of warfare in an urban environment against a foe employing asymmetrical tactics. Otherwise, the adversary could prevent attacks by simply stationing enough voluntary human shields throughout the battlefield near military forces and objectives to render them disproportionate or require, as a matter of law, the adoption of tactics or weapons that will avoid harming them. Of course, policy and operational concerns may drive a decision to take a more restrictive approach.

Placement of Fighters near Civilian Objects

A closely related matter is the more general use of the entirety of the civilian population and infrastructure to shield military operations. Israel confronts this in every battle in Gaza, a densely populated urban environment.⁴³ When Hamas uses civilian objects such as homes or schools as locations from which to launch military operations, they undoubtedly become military objectives through their use. They may be attacked, and no damage to the former civilian object counts as collateral damage.

However, Hamas often makes this more complicated for Israel by converting only a part of a structure to military use; the classic example is a multistory apartment building in which Hamas fighters use only certain floors. Is the entire building thereby transformed into a military objective? Or must damage to areas other than those used for military ends be calculated as collateral damage? If the IDF possesses a precise weapon capable of striking only a part of the structure, must it be used?

The IDF takes the position that, as a matter of law, the building is a single military objective, and therefore damage to other parts of the building need not be considered as collateral damage; the weapons choice issue only comes into play if adjacent buildings will be damaged or when civilians will be harmed in the attack. It must be noted in this regard that as a matter of policy, rather than law, the IDF insists it seeks to limit damage to parts of a structure not being used for military purposes.

This is a defensible view, but one with which one of the authors disagrees. He suggests that if it is feasible to strike only the relevant part of the structure, then damage to the other parts must be considered collateral damage and the proportionality and precautions-in-attack rules apply. Application of this approach hinges on what is feasible, an important term in the LOAC. Article 57(2)(a)(ii) of AP I requires attackers to “take all feasible precautions in the choice of means and methods of attack with a view to avoiding, and in any event minimizing [collateral damage].” “Feasible” has been held by many states to mean “practicable or practically possible, including both military and humanitarian considerations.”⁴⁴

Of course, in many cases, Hamas does not convert nearby structures to military objectives. Rather, it positions its military assets—rocket launchers, for example—in close proximity to civilians and civilian objects such as schools and mosques. These retain their protection from attack and their civilian status, and Israel correctly considers damage to them in the proportionality analysis.

Uncertainty

When trying to distinguish between military objectives and protected civilians and civilian objects, the attacker is often left with some uncertainty over status. AP I, article 50(1), states, “In case of doubt whether a person is a civilian, that person shall be considered to be a civilian.” As to objects, a similar presumption applies in article 52(3), although it is limited to those objects “normally dedicated to civilian purposes.” Israel accepts both presumptions as reflecting customary international law, as does the United States.

This raises the question of how much doubt is required to trigger these presumptions. Although Israel often enjoys highly refined intelligence about targets in Gaza, absolute certainty is rarely present in war, no matter how solid the attacker’s intelligence. But what amount of uncertainty may exist and still make a targeting decision lawful?

It is sometimes asserted that any doubt, even slight doubt, triggers a presumption of civilian status.⁴⁵ This is an unrealistic standard and most states that regularly engage in combat reject it. For instance, the United Kingdom applies the presumption only when “substantial doubt” still remains after consideration of all available intelligence.⁴⁶ The authors take the view that levels of certainty or doubt cannot be realistically quantified in any meaningful way; the targeting decision should rather be considered for its qualities—in particular, the quality of reasonableness.⁴⁷ The IDF concurs, as does the United States.⁴⁸ So too have tribunals agreed when considering whether errant strikes constituted war crimes.⁴⁹

Reasonableness is an admittedly vague standard; what is reasonable to one observer may seem unreasonable to another. The IDF asserts that reasonableness depends on context. The value of the target, whether it is fleeting or persistently

vulnerable, the feasibility of refining the intelligence, and the effect on the wider military situation of delaying a strike to resolve doubt are, among other things, factors in determining reasonableness. While this introduces a degree of discretion into the LOAC, in the authors' view it is unavoidable and, in the final analysis, sensible. Military commanders must exercise judgment and make tough decisions in battle, and they must do so knowing that their decisions will stand up to scrutiny later. Only a reasonableness standard can viably account for these realities.

Proportionality

The rule of proportionality has been discussed above several times in different contexts. Israel accepts the AP I articulation of the rule as customary international law—that is, one may not launch an attack if the expected collateral damage would be excessive in relation to the anticipated military advantage.⁵⁰ Albeit simple and elegant, the rule frequently presents difficulties in application, because it requires a comparison between dissimilar values—avoidance of civilian harm on the one hand and military advantage on the other. Compliance requires military commanders to make value judgments, judgments that cannot be formulated mathematically.

In the conduct of its operations against Hamas, Israel takes as much criticism on proportionality as on any other point of law. During OPE, which lasted fifty days, the IDF reportedly struck over five thousand targets in Gaza, resulting in, as noted, over two thousand Palestinian deaths.⁵¹ While many of these were undoubtedly fighters who would not be factored into a proportionality analysis, the raw numbers still strike many observers as extremely high.

The resulting criticism gains added weight when one considers the fact that the primary threat posed to Israel was rocket attacks, and the IDF employs the Iron Dome antirocket system, which may be the most effective defensive system of its kind in the world. By the conclusion of the war, only a handful of Israeli civilians had been killed by Hamas rockets. Thus, the legal question is whether the very effectiveness of the Iron Dome system should require the IDF to accept less collateral damage from its own attacks. In other words, should Iron Dome's success alter the calculation of the "military advantage" of destroying Hamas rocket launchers and weapons caches?

Every Israeli interlocutor with whom the authors engaged during the project rejected this approach. They make a four-pronged argument that is compelling but potentially controversial. First, they point to the inherent military value of destroying the enemy's primary weapons system. Rockets are deadly and have their own value that remains extant even in the face of a capable defensive system. Second, they argue that it is illogical and unfair to suggest that a state's effectiveness at defending its population from unlawful attacks should be allowed to impair its

ability to take offensive action. By such an approach, if a state determines that the optimal way to eliminate a threat is to go on the offensive, it would have to knowingly subject its population to increased risk by refraining from fielding effective defensive systems. Third, they argue that the rocket threat has a psychological component that is every bit as potent as its physical one; the fact that Iron Dome intercepts 95 percent of incoming rockets does not mean the Israeli population is 95 percent less terrorized by the attacks. Finally, those interviewed insisted that the IDF attacks on rocket launchers were precise; they were unaware of any cases of civilians being killed by IDF attacks on rocket launchers.

The authors have no way of confirming or denying the final argument and will not address it. With respect to the other prongs of the argument, they find them compelling. After all, Sun Tzu exhorts the strategist to “attack the enemy’s

strategy” above all.⁵² Hamas has selected indiscriminate rocket attacks to terrorize the Israeli population as its strategy; a competent Israeli commander is entitled to de-

Operation PROTECTIVE EDGE invites an examination of . . . the law of armed conflict and a particular subset thereof known colloquially as “targeting law.”

feat this strategy. Moreover, while Iron Dome is good, it is not perfect—some rockets get through. Nonetheless, it remains the view of the authors that the effectiveness of Iron Dome must have some limited bearing on the proportionality calculation. It does not render rocket launchers without military value, but it does decrease the value of attacking them—and if that is the case, then the acceptable collateral damage during an attack on them must correspondingly decrease to an extent. This reduction may be minor or even de minimis, but it should be a consideration.

Proportionality valuations come into play in another respect worth noting. The IDF places an extremely high value on preventing the capture of its soldiers, and Hamas endeavors to exploit this using its attack tunnels. In response to frequent abductions over many decades, the IDF reportedly issued what is known as the Hannibal Directive, which allows specific actions in response to the capture of a soldier. Although much of the directive is technical and related to command and control, an important provision apparently authorizes robust measures, including operations that pose a significant risk to the captured soldier himself.⁵³ In other words, the IDF may chance the death of the captive soldier to prevent the abductors from escaping the area and being able to exert *strategic* leverage over Israel by using the prisoner.

The fact that the IDF is willing to risk the death of its soldiers to prevent capture demonstrates the high degree of military advantage it attributes to denying

the enemy the benefits of capture. This advantage must be considered when determining the value during proportionality calculations that should be assigned to targets such as tunnel entrances, cement plants, and other infrastructure that supports Hamas kidnap operations. As that value rises, the IDF may countenance a degree of collateral damage during strikes on these targets that could seem excessive to an outside observer who has not considered the strategic implications of an IDF soldier falling into Hamas hands.

Warnings

Article 57(2)(c) of AP I, which Israel accepts as reflecting customary law, requires an attacker to provide “effective advance warning” of attacks that may harm civilians, “unless circumstances do not permit.” The latter clause recognizes that in many cases the element of surprise is essential to the success of an attack, and thus the warning requirement is by no means absolute. But the IDF goes to extraordinary lengths to provide warnings to civilians whenever it is feasible to do so. The manner in which this is done has, curiously, been a major point of contention.

Israel takes the position that an effective warning is one that is communicated to civilians who may be affected in a manner that permits them to take protective measures, including evacuation when possible. The “effectiveness” of warnings should not be measured by how many civilians actually take advantage of them but rather by whether they received the warnings and had the opportunity to heed them. This is especially important because Israel alleges that Hamas repeatedly instructs civilians to ignore the warnings and often actively prevents them from evacuating a target area.

This practice often places the IDF on the horns of a dilemma. If it warns well in advance of a strike, the warning may actually hamper the ability of civilians to comply because Hamas can mobilize efforts to prevent compliance. Conversely, if the IDF allows only a short time between the warning and the strike, it will be accused of failure to provide an effective warning.

The methods by which some warnings are delivered have also proved controversial. This is particularly so with the knock-on-the-roof technique.⁵⁴ The technique involves striking a target with a small submunition that detonates a minute or more before the actual destructive attack. The noise and concussion from the submunition are intended to frighten civilians into leaving the target, which is then clear to be attacked by a regular bomb or missile. In many cases, the IDF places an unmanned aerial vehicle over the target and physically counts the civilians leaving the target area before launching the destructive strike. Human rights groups are outraged by this technique, insisting that the risk to civilians is increased and that they are unlawfully terrorized.

The authors' view is that the IDF's measures to warn civilians are incredibly robust and represent a laudable effort to save lives. As the previous discussion of the law makes clear, warnings are only required when circumstances permit. Many military commanders would find it easy to decide that warnings are counterproductive, because, of course, Hamas fighters can also elude attack. While the knock on the roof may be a frightening way to deliver a warning, it is a creative, effective, and lawful means of limiting harm to civilians.

Israel's positions on targeting law are consistent with mainstream contemporary state practice. While some of them may be controversial, they are generally reasonable and in great part closely aligned with those of the United States. In the few cases where Israeli practice or positions diverge from those of the United States (or the authors), they nonetheless remain within the bounds of the broader contours of the LOAC. Differences can usually be attributed to the unique operational and strategic context in which Israel finds itself. Of particular note in this regard are the perception that the Israeli population is constantly at risk of attack and the understanding that IDF soldiers represent irresistible targets for abduction by its adversaries.

Like the United States, or any other country for that matter, Israel cannot make legal judgments in a vacuum. Rather, it must apply the law to the conflict in which it finds itself. The nature of that conflict affects the value judgments military commanders make, as well as the manner in which a state interprets its legal obligations. War and the law governing it are contextual. The Israeli case provides further evidence to support this seemingly self-evident proposition.

NOTES

- The views expressed in this article are those of the authors in their personal capacity.
1. Office for the Coordination of Humanitarian Affairs, *Occupied Palestinian Territory, Gaza Emergency Situation Report* (4 September 2014), www.ochaopt.org/ [hereafter Occupied Palestinian Territory]. Various Israeli estimates were lower overall and included a greater percentage of Palestinian fighters; Meir Amit Intelligence and Terrorism Information Center, *Additional Findings in the Examination of the Names of Palestinians Killed in Operation Protective Edge: Part Eight* (29 December 2014), www.terrorism-info.org.il/.
 2. Occupied Palestinian Territory.
 3. Examples of such criticism abound. See, e.g., Amnesty International, *Nothing Is Immune: Israel's Destruction of Landmark Buildings in Gaza* (9 December 2014), www.amnesty.org/; Amnesty International, *Families under the Rubble: Israeli Attacks on Inhabited Homes* (5 November 2014), www.amnesty.org/; Human Rights Watch, *Israel: In-Depth Look at Gaza School Attacks* (11 September 2014), www.hrw.org/; Physicians for Human Rights–Israel, *Gaza, 2014: Findings of an Independent Medical Fact-Finding Mission* (2014), gazahealthattack.files.wordpress.com/; Human Rights Watch, *White Flag Deaths:*

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4. Voice of America, *US Military Chief Backs Israel on Gaza Tactics* (7 November 2014), www.voanews.com/.
 5. U.S. Navy Dept., *Commander's Handbook on the Law of Naval Operations*, NWP 1-14M, MCWP 5-12.1, COMDTPUB P5800.7A (Washington, D.C.: July 2007) [hereafter *Commander's Handbook*], paras. 5.1.1–5.1.3.
 6. On the principle of equality of belligerents under the LOAC, see Yoram Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict*, 2nd ed. (New York: Cambridge Univ. Press, 2010), p. 3.
 7. The full report, which examines the issues from a distinctly legal perspective, is at Michael N. Schmitt and John Merriam, “The Tyranny of Context: Israeli Targeting Practice in Legal Perspective,” *University of Pennsylvania Journal of International Law* 37 (forthcoming 2015).
 8. Dinstein, *Conduct of Hostilities*, p. 4; see generally Michael N. Schmitt, “Military Necessity and Humanity in International Humanitarian Law: Preserving the Delicate Balance,” *Virginia Journal of International Law* 50 (2010), p. 795.
 9. Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts art. 48, 8 June 1977, 1125 U.N.T.S. 3 [hereafter AP I]; *Commander's Handbook*, para. 5.3.2. For “cardinal principles” and “intransgressible,” *Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons*, 1996 I.C.J. 226, 257 (July 8).
 10. AP I, arts. 51, 52; *Commander's Handbook*, para. 8.3.
 11. AP I, arts. 51(5)(b), 57(2)(a)(iii), 57(2)(b); *Commander's Handbook*, para. 5.3.3.
 12. The required precautions in attack are outlined fully in AP I, art. 57; *Commander's Handbook*, para. 8.1.
 13. AP I, art. 57(2)(c); *Commander's Handbook*, para. 8.9.2.
 14. Special protections are extended by a variety of treaty instruments. For example, medical personnel, facilities, and units are protected by AP I, arts. 12, 15, 21–24, as well as Geneva Conventions I and II. Cultural and religious objects are protected by AP I, art. 53, and the Convention for the Protection of Cultural Property in the Event of Armed Conflict, 14 May 1954, 249 U.N.T.S. 240. This list is not exhaustive. See also *Commander's Handbook*, chap. 8 generally. For wanton destruction, Regulations Respecting the Laws and Customs of War on Land, annexed to Convention No. IV art. 23(g), 18 October 1907, 36 Stat. 2227 [hereafter *Hague Regulations*]; Geneva Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field art. 50, 12 August 1949, 6 U.S.T. 3114, 75 U.N.T.S. 31; Geneva Convention (II) for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea art. 51, 12 August 1949, 6 U.S.T. 3217, 75 U.N.T.S. 85; Geneva Convention (IV) Relative to the Protection of Civilian Persons in Time of War art. 147, 12 August 1949, 6 U.S.T. 3516, 75 U.N.T.S. 287; *Commander's Handbook*, para. 6.2.6.4.2. For unnecessary suffering or superfluous injury to combatants, *Hague Regulations*, art. 23(e); AP I, art. 35(2); *Commander's Handbook*, para. 5.3.4.
 15. See AP I, endnote 9.
 16. See, e.g., Michael J. Matheson, “Remarks in Session One: The United States Position on the Relation of Customary International Law to the 1977 Protocols Additional to the 1949 Geneva Conventions,” *American University Journal of International Law and Policy* 2 (1987), p. 419.
 17. Statute of the International Court of Justice art. 38(1)(b), 26 June 1945, 59 Stat. 1055, 33 U.N.T.S. 993. In the *North Sea Continental Shelf Cases* (F.R.G. v. Den.; F.R.G. v. Neth.), 1969 I.C.J. 3, 44 (February 20), the International Court of Justice explained the requirement of *opinio juris*: “Not only must the acts concerned amount to a settled practice, but they must also be such . . . as to be evidence of a belief that this practice is rendered obligatory by the existence of a rule of law requiring it.”

18. For a discussion of certainty in targeting, see generally John Merriam, "Affirmative Target Identification: Operationalizing the Principle of Distinction for U.S. Warfighters," *Virginia Journal of International Law* 56 (forthcoming 2015).
19. On targeting law, see generally Michael N. Schmitt and Eric Widmar, "'On Target': Precision and Balance in the Contemporary Law of Targeting," *Journal of National Security Law and Policy* 7 (2014), pp. 379–409.
20. For quotation, Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, N.J.: Princeton Univ. Press, 1984), p. 77.
21. Israel's Civil Defense Law of 1951 requires all homes to include bomb shelters and mandates the construction of public shelters as well; Civil Defense Law, 5711-1951, 5 LSI 72 (5711-1950/51) (Isr.). See also the Israeli Home Front Command's public information website, which details the requirements for shelter construction; www.oref.org.il/10625-en/Pakar.aspx. Evacuations to safer areas of the country have been ordered in many Israeli conflicts; see, e.g., Amos Harel, "IDF Preparing for Mass Evacuations in Case of Hezbollah Missile Strike," *Haaretz*, 20 May 2010, www.haaretz.com/.
22. JINSA-Commissioned Gaza Conflict Task Force, *2014 Gaza War Assessment: The New Face of Conflict* (Washington, D.C.: Jewish Institute for National Security Affairs, March 2015) [hereafter Gaza War Assessment], p. 19, www.jinsa.org/.
23. Defence Service Law, 5746-1986, 40 LSI 112 (5746-1985/86, as amended) (Isr.), available at www.israelawresourcecenter.org/. Article 1 defines the military age as eighteen, and article 13 authorizes the IDF to call conscripts to service.
24. Yagil Levy, "The Paradox of Recruitment," *Defence Studies* 14, no. 2 (2014), p. 226; Daniel Byman, *A High Price* (New York: Oxford Univ. Press, 2011), p. 364.
25. *Statement on the Transfer of Detainees before the House Armed Services Committee, Delivered by Secretary of Defense Chuck Hagel*, 11 June 2014, docs.house.gov/; Ronen Bergman, "Gilad Shalit and the Rising Price of an Israeli Life," *New York Times Magazine*, 9 November 2011.
26. Frank G. Hoffman, "Hybrid Warfare and Challenges," *Joint Force Quarterly*, no. 52 (1st Quarter 2009), p. 35. Hezbollah has been singled out as particularly adept at hybrid warfare; *ibid.*, p. 37. See also Andrew Exum, *Hizballah at War: A Military Assessment*, Policy Focus 63 (Washington, D.C.: Washington Institute for Near East Policy, December 2006), p. 8.
27. AP I, art. 52(2). See also Commander's Handbook, para. 8.2.
28. Human Rights Watch, *"I Lost Everything": Israel's Unlawful Destruction of Property during Operation Cast Lead* (New York: May 2010), p. 59, available at www.hrw.org/.
29. On the U.S. position, see Commander's Handbook, para. 8.4.
30. On the illegality of such attacks, see "U.S. Department of Defense Report to Congress on the Conduct of the Persian Gulf War: Appendix on the Role of the Law of War," *International Legal Materials* 31, no. 3 (May 1992), pp. 636–37.
31. Commander's Handbook, para. 8.4.
32. AP I, art. 41(2); Commander's Handbook, para. 8.2.3.
33. AP I, art. 51(3); Commander's Handbook, para. 8.2.4.
34. Nils Melzer, *Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law* (Geneva: International Committee of the Red Cross, 2009) [hereafter ICRC Interpretive Guidance].
35. *Ibid.*, p. 65.
36. *Ibid.*, pp. 31–32.
37. *Ibid.*, pp. 33–35.
38. On the U.S. approach, see Commander's Handbook, para. 8.2.2.
39. On the ICRC approach, see ICRC Interpretive Guidance, p. 54.
40. AP I, art. 51(7); Commander's Handbook, para. 8.3.2. See generally Michael N. Schmitt, "Human Shields and International Humanitarian Law," *Columbia Journal of Transnational Law* 47 (2009), p. 292.

41. ICRC Interpretive Guidance, p. 56.
42. Commander's Handbook, para. 8.3.2.
43. See, e.g., "UNRWA Condemns Placement of Rockets, for a Second Time, in One of Its Schools," *UNRWA: United Nations Relief and Works Agency*, 22 July 2014, www.unrwa.org/; and Gaza War Assessment, pp. 18–20.
44. Yves Sandoz, Christophe Swinarski, and Bruno Zimmermann, eds., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949* (Leiden, Neth.: Martinus Nijhoff, for the International Committee of the Red Cross, 1987), para. 2198.
45. *Ibid.*, para. 2195.
46. Declaration (h) made by the United Kingdom at the time of ratification of Additional Protocol I, 20 January 1998, et seq., available at www.icrc.org/applic/ihl/ihl.nsf/vwTreatiesByCountry.xsp.
47. See Merriam, "Affirmative Target Identification."
48. Commander's Handbook, para. 8.2.2.
49. For example, the highly influential "Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign against the Federal Republic of Yugoslavia," *United Nations: International Criminal Tribunal for the Former Yugoslavia*, n.d., para. 50, www.icty.org/, comments favorably on the reasonable-commander standard; see also *Prosecutor v. Galic*, Case No. IT-98-29-T, Judgment, paras. 51, 55 (International Criminal Tribunal for the former Yugoslavia, 5 December 2003), holding the commander to a reasonableness standard.
50. AP I, arts. 51(5)(b), 57(2)(a)(iii); Commander's Handbook, para. 5.3.3.
51. "Occupied Palestinian Territory: Gaza Emergency, Situation Report (as of 28 August 2014, 08:00 hrs)," *United Nations Office for the Coordination of Humanitarian Affairs: Occupied Palestinian Territory*, www.ochaopt.org/.
52. Sun Tzu, *The Art of War*, trans. Samuel Griffith (New York: Oxford Univ. Press, 1988), p. 77.
53. Ruth Margolit, "Hadar Goldin and the Hannibal Directive," *New Yorker*, 6 August 2014.
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THE NEW U.S. MARITIME STRATEGY

Another View from Outside

Geoffrey Till

A Cooperative Strategy for 21st Century Seapower: Forward, Engaged, Ready” (CS21R) appeared in March 2015.¹ It aims to “refresh” the strategy with the same primary title that first appeared back in 2007 and that has to a significant extent guided U.S. maritime policy over the past eight years.² Navies both reflect and help shape the international context. They matter. So, when the world’s most powerful navy looks at its strategy and decides on a change, the rest of the world should pay attention, since the change will reveal at least some of America’s strategic preoccupations and help set the agenda, for a few years at least, for diplomats and other navies around the world. Most especially this will of course apply in regions as maritime as the Asia-Pacific. How navies or nations react will depend first on what they think has changed and why, and, second, on who and where they are.

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A number of questions immediately arise: What is this new “strategy,” whom is it for, and what’s changed? The first of these is relatively simple to answer. It’s what most people would call a statement of doctrine, something intended to provide guidance for those serving in today’s U.S. Navy, especially its planners. Unlike grand statements of strategy as produced by the likes of Carl von Clausewitz, Alfred Thayer Mahan, and Sir Julian Corbett, doctrine is evanescent; it is a menu for today and so constantly needs to be assessed and adapted in the light of experience and changing

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circumstances. CS21R identifies some of these changes (such as fiscal constraint and the rise of China) and, rightly, the need for a “refresh”; these things indeed need thinking about.

The second question—Whom is it for?—is more complicated. The fact that CS21R has been issued as a public document shows that it is not just an exercise in raising the level of strategic thought within the Navy, entirely laudable though that aspiration would be.³ The drafters of CS21R may have wished to target the audience in their three maritime services, but they knew there were other very important domestic audiences too—the rest of the Department of Defense, the administration, Congress, defense literati, the public, to name just a few. Translating CS21R into several languages reflected assumptions that it would also be widely read around the world. All these different audiences, with their diverse interests (and their likely tendency to fasten on those parts of the document that support conclusions they already have!), had to be catered for to some extent. The difficulty is that what is said to appeal to one audience will worry another. Accordingly, balances had to be struck, words chosen with care. That’s because, in essence, CS21R is for nearly everyone, whatever its drafters may have intended.

But one thing that all these diverse audiences have in common is wanting to know the answer to the final question—What’s changed? How different is the “refreshed” version from the original? The answer most of them will come to is “quite a lot.” For a start, it’s much longer, it looks different, and so far, the video isn’t as good. CS21R comprises two opening review sections—of the world and of what the U.S. maritime services need to do. This merges into a complex discussion of their seven missions and five functions (see the figure).

The main focus for discussion in this strategy is the functions rather than the missions. The missions presumably are thought to flow naturally out of the review, conducted in Sections I and II, of the international context and how, broadly, the United States feels it needs to respond. There’s plenty of evidence to be found in those sections for all of these missions, but they’re not much specifically discussed, and neither,

really, is how the functions will support them.⁴ Instead, the emphasis is on the five functions themselves. It’s these that will therefore command attention. The final section of CS21R shows how the necessary capabilities will be grown.

There is now much less direct emphasis than there was

Seven missions

- Defend the homeland
- Deter conflict
- Respond to crises
- Defeat aggression
- Protect the maritime commons
- Strengthen partnerships
- Provide humanitarian assistance and disaster response

... and five functions

- * All-domain access
- * Deterrence
- * Sea control
- * Power projection
- * Maritime security

in 2007 on the role of the U.S. maritime forces in contributing to the defense of the global sea-based trading system. That aspiration is still there of course, being implicit in the continuing accents on working with allies and partners in a “global network of navies” to secure international stability and maritime security and on the continued American determination to safeguard the freedom of navigation on which Washington thinks the system depends. This reduced emphasis on the systemic justification for U.S. seapower doubtless reflects the fact that in the 2007 version of the strategy, it did not go down well in Congress—which ultimately pays the Navy’s bills. There are already signs that CS21R will do better in this respect.⁵

Instead, readers will find and many will welcome a more muscular emphasis on the defense of U.S. national interests at sea.⁶ “Defending our Nation,” said the first iteration of the fact sheet that accompanied the strategy, “and winning its wars is the core task of the U.S. Navy and U.S. Marine Corps.”⁷ On the face of it, there is nothing very remarkable in this. Most of the world’s navies, when push comes to shove, would say the same thing, but many of them would adulterate the message a little by giving greater prominence to the task of *preventing* wars rather than just winning them. Of course, the strategy’s writers will argue that preventing wars is implicit in the notion of defending national interests and ensuring stability; also conventional “deterrence” is specifically identified, as the second of both the seven missions of the sea services and their five essential supporting functions.

The notion that ensuring stability prevents wars runs like a leitmotiv throughout the glittering but intricate missions/functions structure of CS21R’s Section III but is not specifically articulated and could, given the limited coverage of the nature of the missions, easily be missed by foreign observers less well attuned to American ways of thinking about maritime strategy. There is moreover just one paragraph on conventional deterrence in a section that has twenty-six others. Each function is justified by being shown to support several of the missions identified earlier of the U.S. Navy; in every case “defending the homeland” comes first. This is clearly nation-centric rather than system-centric.

Several additional aspects of the refreshed strategy seem at first glance to point in the same more muscular direction. First “humanitarian assistance and disaster response” (HADR) is now relegated from being one of the six main functions of the U.S. Navy to being a subset of the capacity to project power ashore. This task had been given a new and special prominence in the original 2007 version of the strategy and of course has been practiced extensively over the past eight years, most recently in dealing with Typhoon Haiyun in the Philippines. No doubt the Navy will continue to perform this function as it always has, but HADR’s conceptual downgrading will nonetheless seem significant to outsiders. This may

particularly apply in the Asia-Pacific, where many of these disasters take place and where the HADR task is now given much conceptual prominence.⁸

The increased muscularity of the new version of the strategy comes out in other ways too. Oddly, there seems to be less opportunity to talk of the soft-power advantages of naval diplomacy, an infinitely flexible means of winning friends and influencing people. Again, in some quarters, the first version of the strategy was criticized for not being a “strategy” in the sense that it neither delved into “ends, ways, and means” nor offered much in the way of specific guidance to force planners on future acquisitions.⁹ It simply identified the “ends.” If this criticism was just (and by no means had everyone thought it was), then the deficiency has been corrected this time.¹⁰ The concluding Section IV is all about force design and building the future force, with explicit targets for the future fleet (Coast Guard, Navy, and amphibious) clearly identified. It shows how the necessary technological capacities and human skills have to be grown and developed to deliver the capabilities needed for the five functions listed earlier.¹¹ It’s all very logical, businesslike, and “back to basics.” It identifies what it thinks is necessary. The implication is clear—so now give us the resources!¹²

The same sense of a shift toward war-fighting and hard-power thinking emerges in the appearance of a new major function of maritime power, that of assuring “all domain access,” which now comes first in the list of the U.S. Navy’s maritime functions and therefore inevitably looks as though it is the most important. In the consultation exercise that accompanied the “refresh” process, many objected to the focus on this as the primary (or at least first-mentioned) function of the Navy on the basis that this was not a function but more a precondition for both sea control and maritime power projection ashore. Perhaps the desire to focus on the potentially transformational impact of challenges in the domains of cyberspace and the electromagnetic spectrum meant that assuring access needed to be treated as a function on its own rather than subsumed, with much less fanfare, within those two historic functions of seapower.

Of course, this emphasis on all-domain access makes perfect sense within the Beltway. It has the advantage that by referring to the undoubted, and potentially critical, rise of sea-denial capabilities around the world, it reinforces the importance and the urgency of supporting the Navy’s budget and plans for future acquisitions. This is particularly important for the defense of the research and development budget, given its importance in delivering the kind of capabilities needed to offset the very possibly very grave consequences of significantly greater challenges to assured access in the future. Moreover, it links up nicely with the Joint Operational Access Concept released by the Joint Chiefs of Staff in 2013 and the recasting of the Air-Sea Battle into the Joint Concept for Access and Maneuver in the Global Commons. Elevating all-domain access therefore ticks all

the right Washington boxes, not least that of “jointery” (what Americans might call “jointness”) in general and of bringing the Army on board in particular. It also efficiently deals with the complaints sometimes made of the 2007 version of the Cooperative Strategy—that it didn’t seem quite to fit in with other official formulations of U.S. strategy of the time. Now it clearly does.

If the budget, joint concepts, and mismatched statements were indeed amid the reasons why all-domain access was given such preeminence, then it takes us back to the special and probably unavoidable problem that American strategy makers have—namely, identifying their critical target audience. When it comes to strategy making, Washington, with its plethora of government institutions and thrusting think tanks, still has the aura of imperial Rome. Defense literati within the capital talk to each other, but the rest of the world listens in, or tries to. Two thousand years ago, the barbarians of the outer world could only marvel at the exciting and fast-moving intricacies of imperial policy making while barely comprehending its nuances. The barbarians could easily oversimplify and misunderstand what was really going on. The same applies now. The prospect and the dangers of this will need careful handling.

For this reason, all-domain access could all too easily be seen as a response to the purported antiaccess/area-denial concepts of the Chinese. This would worry, for example, many (but admittedly not all) of America’s allies and partners in the Asia-Pacific region. Here, as remarked earlier, much depends on who they are and where they are. Take, for instance, the Chinese themselves. Their naval expansion, the new strategy pointedly says, “presents both opportunities and challenges.” What will they make of the new strategy now for the first time made officially available to them in Mandarin? Will they see it as a challenge or an invitation to cooperate in defense of a rules-based order? Most likely, they will turn the issue around, seeing this new doctrine as presenting *them* with both “opportunities” and “challenges.” Soft-liners will go for the opportunities, looking for invitations to cooperate equitably in defense of an acceptable rules-based order; hard-liners will see it as a straight conceptual challenge and a warning.

To an increasing extent, of course, the Chinese have a developing problem with the rise in the hitherto modest sea-denial capabilities of their immediate neighbors and so a professional interest in “all-domain access with Chinese characteristics,” but for the moment their preoccupation is still largely with the security of their near seas. Most of the People’s Liberation Army Navy seems much more likely to see this new stress as something to be circumvented. It, and some local bystanders too, will interpret the emphasis on all-domain access as contributing to a slow, dangerous, and unnecessary American drift into a more adversarial relationship with China and maybe respond accordingly.

How navies react to the stress on all-domain access depends, as has been said earlier, on where and who they are and on their immediate strategic preoccupations. Many of them will modestly stand back from it, focusing instead on the less technologically demanding task of defending their own waters. They will follow the examples of Japan, Vietnam, and other countries in Southeast Asia concentrating on building up their own sea-denial capabilities. If so, the kind of all-domain-access capabilities aspired to in CS21R will tend to be regarded more as ones to be outflanked and offset rather than ones to be contributed to, even if the putative adversary is not in many cases the United States. A few more-capable navies, however, are also interested in developing the capabilities for all-domain access if of a more modest sort. This would mean taking all-domain access as something of an agenda. Most navies will want to do both, as far as their resources allow—securing sufficient access for themselves and denying it to others—just as they always have. Where they wish to strike the balance between these two and their general attitude to this part of CS21R will reflect their unique circumstances.

Such diversity of international reaction reminds us that the *effect* of strategy lies very much in the eye of the beholder. How effective a strategy is at securing the ends its framers have in mind depends very much on how people perceive and react to it. The stress on all-domain access is a clear risk from this point of view. A bad Chinese reaction to the new strategy could well increase the hesitations in other regional countries about cooperating with the United States, especially if they already have doubts of their own about U.S. intentions or reliability. In this all-too-likely scenario, the stress on all-domain access cuts right across CS21R's "foundational principle" about the need to cooperate with navies. To avert this, a careful and sensitive international strategic communications campaign will need to follow the appearance of the refreshed strategy.

This brings us to the third but probably most important concern about the creation of all-domain access as what at least looks like the primary function of the U.S. Navy. It seems to have pushed out the opportunity evident in earlier drafts of the refreshed strategy to redefine and reemphasize "forward naval presence" as a means of shaping the strategic environment, winning friends, and influencing people. Of course, this criticism—if that is what it is—is not completely fair since the importance of U.S. forward naval presence is identified as one of two foundational principles in CS21R.¹³ Section II is in fact entitled "Forward Presence and Partnership" and sits, just as it should in the strategy, after a review of the international context and before addressing the missions and functions of the U.S. Navy that flow from it. Despite this, the forward-presence box has *not* been fully ticked, because apart from the comparatively short introductory paragraph of Section II, there is no sustained discussion of the advantages of forward naval presence and

absolutely no attempt to identify it as a good thing, not just for the United States, but for the world community generally. Instead, we read a series of regional reviews, starting with the Indo-Asia-Pacific, which identify the proposed force levels needed to deliver the required forward presence region by region, ending up with the Arctic and Antarctic.¹⁴ Several of these regional reviews conclude with a brief paragraph outlining what that resultant forward naval presence is supposed to deliver, but these ideas are nowhere woven together into a kind of sustained defense of the aspiration for a forward naval presence as a whole.

At a time of fiscal constraint when it is becoming harder to balance resources against commitments and when the military-technical, political, and legal challenges to a forward naval presence are clearly growing, this failure to take the bull by the horns and address the issue directly will strike many as unfortunate. It could play into the hands of domestic skeptics inclined to doubt the importance of forward presence, especially if the attempted defense of the capability seems likely to be expensive, fiscally and programmatically. At the same time, the absence of a justification for forward presence runs the risk of further antagonizing neutral or suspicious international opinion apt to think the worst of American intentions, since the determination to maintain a forward naval presence *could* simply be interpreted as illustrative of aggressive intent.

A few years ago, for instance, Major General Luo Yuan spoke for more than just PLA hard-liners when he said that “the so-called forward presence means that the United States can send its gunboats to every corner of the world. . . . This way, the United States can even claim the Yellow Sea and the South China Sea is covered within its security boundary.”¹⁵ He and others pointed out that in the aftermath of the sinking of ROKS *Cheonan*, were USS *George Washington* to have sailed into the Yellow Sea, its aircraft would have been capable of reaching Beijing. If to this particular concern is added a general strategic culture deeply affected by the country’s historical exposure to threats from the sea and by the disastrous consequences for China of a failure to deter naval activities of this sort, Chinese sensitivity to the unauthorized presence and activity of foreign navies in “Chinese waters” is understandable. The point is that other countries, not the least India, Thailand, Malaysia, and Indonesia, share to some extent such hesitations about the unauthorized forward presence of (other) great-power naval forces.¹⁶

Since a forward U.S. naval presence is *not* in fact regarded by a sizable chunk of international opinion as a universal good to be welcomed, the failure to discuss and justify it in a doctrinal statement that will be avidly studied around the world seems a lost opportunity. Hitherto, the principle has largely been defended negatively by freedom-of-navigation exercises and repeated recourse to Western interpretations of the law of the sea. To win support, it is not enough to say merely that something is legal; it needs also to be shown to be “right.” The case

for forward presence needs to be made positively. Sadly, the new strategy does not explicitly do that. This failure, together with the emphasis on the function of all-domain access, will reinforce the perception, and not just among the paranoid, that the U.S. Navy is only interested in maintaining a forward naval presence as a precondition for its capacity to threaten countries. This is, of course, part of it, but there is so much more to tell.

Paradoxically the case would be relatively easy to make. Much of the illustrative material used to explain the ideas in CS21R indeed could be rebranded into a justification for forward presence. For instance, a forward naval presence, even off unwelcoming shores, provides 24/7 general assurance for all legitimate sea users. It facilitates maritime domain awareness, which is a universal good in that it increases the effectiveness of the international response to all forms of criminal activity at sea that threaten everybody, directly or indirectly. Forward presence also supports rapid and effective responses to natural disasters. In contested areas a forward naval presence can serve as a calming mechanism. More generally, a forward naval presence is part and parcel of naval diplomacy, allowing events to be monitored, relationships developed over time, and stability defended. The bones of a persuasive argument are easily discernible.

At the moment, most countries accept, albeit with a shade of reluctance in some quarters, that, in Kishore Mahbubani's words,

the real reason why most international waterways remain safe and open—and thereby facilitate the huge explosion of global trade we have seen—is that the American Navy acts as the guarantor of last resort to keep them open. Without the global presence of the US Navy, our world order would be less orderly.¹⁷

For this reason too, the notion of a global maritime partnership, outlined in the first version of the strategy, positively extended the concept to the world's other navies by providing an opportunity for them to join the U.S. Navy "on the beat"; the idea was generally welcomed around the world, since it addressed problems held in common, such as the threat of piracy, drug smuggling, international terrorism, human trafficking, and catastrophic natural disasters. Any of these could directly threaten sea-based trade and other legitimate forms of sea use and indirectly jeopardize the local stability afloat and ashore on which that trade depends. Hence nations participated in a multitude of cooperative multinational naval activities designed to curb these shared problems, to build up local capacities to handle them in the future, and where necessary to engage in security-sector reform. More discussion of this would have helped sustain the general argument for a forward presence and so added to the international appeal of CS21R.

The fact that the strategy has been issued in a number of different languages, including Mandarin, shows that its authors are well aware of the importance of its international appeal, not least because of the expanding need for the Navy

to operate alongside those of its allies and partners. Because so much emphasis remains in the document on the essential role of America's allies and partners as a means of narrowing the gap between what must be done by the United States alone and what *can* be, the response of regional countries to this new strategy will be key to its success over the next decade. It is worth repeating the point that the relative absence of discussion on the advantages of naval diplomacy in winning friends and influencing people seems a pity.

The reactions of those different navies and the countries and regions they defend will of course vary, in accordance with their strategic situations. Countries like Japan and the Philippines, wary of China's rising power, will probably broadly welcome the new emphasis on the all-domain-access function and the apparent reinforcement of the "rebalance" suggested by the special prominence given to the "Indo-Asia-Pacific" region. Both of these indicate the U.S. determination to stay in the western Pacific despite China's "counter-interventionary" strategies, and that resolve would seem to underline for Japan and the Philippines the U.S. security guarantee.

But even in those two countries there will probably be a small constituency of opinion that will worry that the new muscularity of CS21R will be found provocative in Beijing and so will worsen the atmosphere. It would be surprising if Beijing in general and the People's Liberation Army Navy in particular did *not* find aspects of the new strategy provocative, at least in public. China has after all for the first time been identified as a security concern, and all-domain access certainly looks like a response to the antiaccess/area-denial strategies with which the Chinese have been associated.

Countries with currently better relations with China, such as Thailand, Malaysia, and Indonesia, may share these concerns about what some critics will undoubtedly consider the offensive tone of the new strategy; they may also be encouraged in this response by the reduced emphasis apparently given to the general maritime security concerns that tend to be higher in their national defense priorities. Illegal fishing, human and drug trafficking, and other forms of criminal activity at sea are actually their most immediate concerns. U.S. support of efforts against crime (especially in the shape of U.S. Coast Guard activity) is of course frequently referenced in the early part of the strategy, but explicit coverage of the role is less than it was in the 2007 strategy, because Section III is about *national* security rather than the American contribution to the defense of the system. Maritime security is indeed "a promising area for expanded cooperation with our allies and partners," and so the less-explicit emphasis on it given in the new version of the strategy means there is less to offset its putative muscularity.¹⁸ How other navies respond to the whole package will doubtless reflect how they perceive this shift in its balance.

The same pattern of response will probably be replicated in other parts of the world too. Countries with concerns about an overmighty neighbor, such as Iran or a newly truculent Russia, and in need of reassurance will welcome the American emphasis on maintaining a forward presence for the same reasons as Japan and the Philippines, moderated only by concerns about the relative priority apparently accorded their respective regions when compared with the Indo-Asia-Pacific. Whether it is intended or not, describing American interests in geographic regions sequentially looks like a priority list, and Europeans will note without surprise that they have slipped to position three behind Asia and the Middle East. Africans come next, then neighbors of the United States in the Western Hemisphere. That the region closest to the United States and central to its homeland security comes just fifth in the list suggests that it is not in fact a priority list; nonetheless, that is how it will be seen.

Finally, reactions to the new strategy will also reflect different constituencies within countries as well as their positions in various geographic regions. Professional opinion in the world's other navies will probably neither be surprised nor in many cases much dismayed at much in this strategy. A great deal of academic and professional attention has been paid to the rise around the world of military-technical constraints on naval maneuver near to land and its portentous implications for the future utility of naval power;¹⁹ there has been a natural and parallel rise in blue-water aspirations and capabilities, not least in the Asia-Pacific.²⁰ Navies with such aspirations (or that privately assume they might have such aspirations one day) will want to maintain access too. Accordingly, the U.S. Navy's explicit determination to maintain access and forward presence, and through this the whole gamut of the traditional naval capabilities that flow from sea control, will seem to other navies both natural and right—although in some cases, their professional sympathy for the Navy's determination to maintain the strategic value of seapower in general may be kept decently private, if only because of the concerns of their political masters. Navies that know they will always be limited in their aspirations to negative sea-denial strategies, in contrast, will naturally be much less sympathetic professionally to the main thrust of the strategy.

The variation and complexity of the international response to CS21R and its importance as a means of winning friends and influencing people suggest that the U.S. maritime services will need to devote significant effort to their strategic communications plan. The problem is that the necessary audiences are varied, and to allay their different and often competing concerns and to build up the required support, the messaging will need to be tailored to particular audiences. This will require considerable skill and effort.

How the U.S. sea services communicate CS21R may generate the same difficulties the Obama administration faced when launching its pivot/rebalance

toward Asia. This occasioned huge, almost unending, debate about what it all meant, with different countries wanting to hear different things and major definitional problems for the administration. While no one would argue against serious reflection on strategic matters as a means of enhancing the quality of thought, there is a pragmatic argument against making its conclusions too public, especially when addressed to multiple audiences. Rather than announce with fanfare such statements of general policy purposes, perhaps one should just get on and do them! After all, what a policy means is usually best clarified by what the policy maker does. But this, in the immediate aftermath of the delivery of one of the world's most interesting doctrinal statements on twenty-first-century seapower for years, is probably best left to another article and another time.

NOTES

- The subtitle is a reference to the author's earlier "A Cooperative Strategy for 21st Century Seapower: A View from Outside," which appeared in these pages in the Spring 2008 issue (pages 25–38).
1. J. F. Dunford, J. W. Greenert, and P. F. Zukunft, "A Cooperative Strategy for 21st Century Seapower: Forward, Engaged, Ready" [hereafter CS21R], March 2015, available at www.navy.mil/.
 2. J. T. Conway, G. Roughead, and T. W. Allen, "A Cooperative Strategy for 21st Century Seapower," October 2007, available at www.navy.mil/; repr. *Naval War College Review* 61, no. 1 (Winter 2008), pp. 7–19.
 3. Peter D. Haynes, *Toward a New Maritime Strategy: American Naval Thinking in the Post-Cold War Era* (Annapolis, Md.: Naval Institute Press, 2015), pp. 250–51.
 4. Seth Cropsey, "The New Naval Strategy: A Mixed Bag," *Blog, Weekly Standard*, 23 March 2015, www.weeklystandard.com/blogs/.
 5. Haynes, *Toward a New Maritime Strategy*, pp. 236–38; Sam LaGrone, "Rep. Forbes: New U.S. Maritime Strategy Revision 'Light Years Ahead' of 2007 Original," *USNI News*, 30 March 2015.
 6. Bryan McGrath and Brian Clark, "The New Maritime Strategy: It's Tricky to Balance Ends, Ways, and Means," *War on the Rocks*, 16 March 2015, warontherocks.com/.
 7. Interestingly, this language is no longer in the revised fact sheet accessible at www.navy.mil/local/maritime/150227-CS21RFactSheetREVISED.pdf.
 8. In Southeast Asia, for instance, ASEAN and several of its individual members, most notably Singapore, are in the process of establishing new cooperative arrangements to deal with the apparently ever-increasing incidence of disasters in that region.
 9. Seth Cropsey, "Control of the Seas: A Strategy to Meet the Challenges to the U.S. Navy," *Weekly Standard*, 27 January 2014.
 10. See Haynes, *Toward a New Maritime Strategy*, p. 233.
 11. In this list, sea control and power projection are for some reason run together, giving the impression that there are only four functions.
 12. Mark Seip and Alex Clayton, "Congress Must Match the Money to the Navy's Strategy," *Defense One*, 20 March 2015, www.defenseone.com/.
 13. The other foundational principle is that "naval forces are stronger when we operate jointly and together with allies and partners" (CS21R, page 2). Arguing this and developing the follow-on notion of a "global maritime partnership" were seen as the major thrust of the original strategy. Now it seems to be regarded as a working assumption and, as such, much less discussed.

14. "Indo-Asia-Pacific" is an interesting new term clearly compromising between the old "Asia-Pacific" and the new challenger, the "Indo-Pacific" region, favored by the Indians and the Australians.
15. Luo Yuan, "PLA General: US Engaging in Gunboat Diplomacy," *People's Daily*, 12 August 2010.
16. For a discussion of India in historical terms at least, see Raghavendra Mishra, "Revisiting the 1971 'USS Enterprise Incident': Rhetoric, Reality and Pointers for the Contemporary Era," *Journal of Defence Studies* 9, no. 2 (April–June 2015), pp. 49–80.
17. Kishore Mahbubani, *The New Asian Hemisphere: The Irresistible Shift of Global Power to the East* (New York: PublicAffairs, 2009), p. 105.
18. For the quote, CS21R, p. 26.
19. For an example of this see Hugh White, *The China Choice: Why We Should Share Power* (Oxford, U.K.: Oxford Univ. Press, 2013). For his views on the impact of increased strength on sea denial, see White, "The Maritime Balance in Asia in the Asia Century," in *The Changing Maritime Scene in Asia: Collisions Ahead?*, ed. Geoffrey Till (London: Macmillan/Palgrave, forthcoming 2015).
20. China is only the most obvious of countries going this way. See U.S. Navy Office of Naval Intelligence, *The PLA Navy: New Capabilities and Missions for the 21st Century* (Washington, D.C.: 2015), available at www.oni.navy.mil/.

CONNECTING THE DOTS

Capital Ships, the Littoral, Command of the Sea, and the World Order

Robert C. Rubel

An announcement in 2013 by then–Secretary of Defense Chuck Hagel that the Navy might reduce its aircraft carrier fleet from eleven to eight was an indication not only of harsh budget realities but also of changed operational circumstances at sea.¹ In World War II, the aircraft carrier displaced the big-gun battleship as the capital ship. The United States subsequently used its fleet of aircraft carriers to exercise the command of the sea that it had won in the war to secure the peace. It stationed them around the periphery of Eurasia, initially to support a grand strategy of containing the Soviet Union and then, after the Soviet collapse,

to maintain general strategic stability. This use of aircraft carriers has lasted almost seventy years, a period in which naval technology has evolved significantly, and much of that new technology could pose a credible threat to the aircraft carrier. Absent actual fighting or a direct challenge to American command of the sea, it is hard to know when the nuclear-powered aircraft carrier might pass into obsolescence. What happens in that case? This is not simply a technical naval question; the capital ship, currently in the form of the nuclear-powered aircraft carrier (CVN), has constituted an important feature of the global geopolitical terrain since at least the Napoleonic Wars. It is part of a global political and economic ecology, and it is therefore reasonable to think that any changes in its status

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will have ripple effects in that ecology. In this article we will explore that ecology and speculate on how it might change if the capital ship, as a key naval function, capability, and concept, passes from the scene.

When the aircraft carrier displaced the battleship as the key type of capital ship, the transition, for all its tactical and operational impact, did not alter the fundamental character of naval warfare. Decisive offensive power remained concentrated in a relatively small number of large, expensive combatants. It is not clear that a large warship of new design is waiting in the wings to replace the aircraft carrier if indeed it becomes obsolescent. One possibility is that naval offensive power will reside in various types of missiles that could be widely distributed among a variety of vessels.² In fact, this process has been under way for some time in the form of Tomahawk land-attack missiles loaded on destroyers, cruisers, and submarines. If “missilization” is carried to its logical conclusion, displacing the carrier and its air wing as the principal offensive power of the fleet, the nature of naval warfare could change, and that change could have ripple effects in the global geopolitical ecology, one that has been, to this point, generally favorable to American interests.

This article will not attempt to pass judgment on whether the aircraft carrier and its embarked tactical air wing are in fact headed for obsolescence, although there exists just such a debate in the current literature.³ To be clear, and as will be discussed later, the U.S. Navy might elect to keep some aircraft carriers in commission even if only in support roles. Also, care must be taken to distinguish between the “capital ship” as a particular physical object and “capital ship” as a warfare function. Later, for illustrative purposes, we will explore a world in which the capital-ship function has been made obsolete by new kinds of weapons and sensors, whether or not aircraft carriers remain in the inventory.

COMMAND OF THE SEA AND CAPITAL SHIPS

From the galleasses of the Christian armada that prevailed at Lepanto in 1571 to the *Gerald Ford*-class CVN of today, there has been an intrinsic relationship between capital ships and command of the sea. Command of the sea, rightly understood, is simply the strength relationship between two contending navies.⁴ The one that is sufficiently stronger than the other enjoys freedom of action, including the ability to move its nation’s army by sea, disperse to protect its commerce, and come to the aid of allies. Such command was traditionally achieved by winning a decisive sea battle, and the arbiter of such battles since Lepanto has generally been the capital ship—the largest and strongest ship type afloat, capable of defeating lesser types. Since 1945 the United States has, by virtue of its eradication of the Imperial Japanese Navy in World War II and thereafter in the absence of a serious Soviet challenge, enjoyed virtually uncontested command of the sea.

The U.S. Navy's dominance has been so complete that some writers question whether the concept has relevance anymore.⁵ However, a pair of analysts who traced the history of the concept from the late fifteenth century through the late twentieth argue that a particular dimension of command of the sea is operative especially in times of dominance—the leading nation's ability to use command of the sea to enforce the rules of the international order according to its interests.⁶ Throughout this period, this dimension included the ability to regulate commerce but also to project power ashore. A dominant capital-ship fleet either dispersed to support such operations or lurked in the background, dissuading by its existence any potential challenger from even trying to build a competitive fleet.

In the post-World War II era, the U.S. Navy's fleet of aircraft carriers has been employed in this way. In roles ranging from stopgap application of airpower against an invading North Korean army in 1950 through support of special forces in the opening moves of Operation ENDURING FREEDOM in 2001, to most recently air strikes to limit the advance of Islamic State forces, the Navy's carriers have been dispersed around the periphery of Eurasia as a ready tool for the president. In a 1954 U.S. Naval Institute *Proceedings* article, Samuel Huntington summed up the Navy's postwar situation: "Its purpose now is not to acquire command of the sea but rather to utilize its command of the sea to achieve supremacy on land. More specifically, it is to apply naval power to that decisive strip of littoral encircling the Eurasian continent."⁷ The key to the utility of the aircraft carrier in these roles has been its ability to project power deep inland, taking up station wherever the situation demanded. The pattern of aircraft-carrier utilization, combined with deployments and movements to assure allies or deter potential aggressors, clearly indicates these ships have been dispersed around the world to exercise American command of the sea.

ANTI-CAPITAL SHIP TECHNOLOGY

Since the latter part of the nineteenth century, a series of technological developments have challenged the dominance of capital ships. The "automotive" (i.e., self-propelled) torpedo, the aircraft, the submarine, and the missile have all presented potentially disruptive challenges. To date, however, the capital ship in its various forms has survived and retained its utility for seizing, maintaining, and exercising command of the sea. In World War II, despite some submarine successes against them, both Japanese and American capital ships, mainly carriers, used speed, maneuver, and offensive reach to neutralize or at least contain threats. Beyond those at sea, threats emanating from land have always constituted a mortal danger to capital ships. Admiral Horatio Nelson is supposed to have said "a ship's a fool to fight a fort," referring to the high volume and accuracy of fire that can be produced by a fort in comparison with what can be generated by a

ship. A number of destroyers, cruisers, and even battleships have suffered damage in duels with shore batteries. In the Pacific War, American carriers before 1944 were careful to remain out of range of Japanese air bases except for covert dashes into such zones for hit-and-run raids.

The post-World War II world has seen the development of nuclear submarines, long-range shore-based bombers carrying antiship cruise missiles, and, most recently, land-based intermediate-range ballistic missiles with antiship seekers.⁸ Yet in the absence of a shooting war involving these weapons, the aircraft carrier has been able to exercise its command-of-the-sea function virtually unmolested. A close call occurred in the eastern Mediterranean in 1973 when U.S. and Soviet fleets intermingled during the Yom Kippur War. The Soviet fleet was well armed with antiship missiles, and a few nuclear submarines were present.⁹ The author was a junior attack aviator on board USS *Independence* (CV 62) in that crisis and can attest to the precarious situation of the U.S. carriers. While defensive systems such as Aegis and directed energy have since been developed, the threats have become more challenging. The danger is that the net outcome of an offense-versus-defense battle cannot be truly known short of actual fighting. Thus the ability of aircraft carriers, as capital ships, to carry out the command-of-the-sea mission is increasingly being placed in question.

THE LITTORAL

Many writers and theorists have divided the seas into two parts, the open ocean and the littoral. Conventional lay wisdom on naval matters links large ships with the “blue water” of the high seas and smaller craft with the “green water” of the littoral. In fact, most major naval battles have taken place within the littoral or at least in the vicinity of land features. Large ships, capital ships not excepted, are designed to *cross* oceans and to carry a lot of payload; their purpose is not to “hang out” in midocean. It is instructive to examine three tacit operational rules for capital-ship fleets that have remained valid since the seventeenth century:

- Keep the fleet concentrated.
- Do not become decisively engaged with land forces unless decisively superior (a more general rewording of Admiral Nelson’s “A ship’s a fool to fight a fort”).
- Do not sacrifice the mobility of the fleet by tying it to a geographic feature.¹⁰

These rules can be broken if conditions are right, but in the presence of a significant opposing force ignoring them has been a recipe for losing ships. We can skip over the first rule for the purposes of this article and focus on the second two. The second rule reflects, as generally noted, the ability of land-based forces to generate a higher rate of fire—or aircraft sorties—per unit time than can ships;

a land adversary is also less likely, on a force-wide basis, to suffer disabling damage per hit.

The third rule has to do with detectability. A widely maneuvering fleet is harder to find and target than one that is forced to remain in the vicinity of an island or other geographic feature. The distance the littoral effectively extends seaward can be thought of as the distance out to which these two latter rules retain their salience. New weapons and new modes of search and surveillance have extended this effective distance considerably in several regions of the world. Given the strategic mission of exercising command of the sea through power projection ashore, it really is not useful to talk about U.S. aircraft carrier operations outside the littoral—anywhere. Where no threats are manifest, carriers disregard the rules with impunity, operating as airfields at sea.¹¹ Palpable threat levels force their consideration.

Where the relationship of high sea to the littoral comes into practical effect is in the design of fleet defensive systems. A carrier strike group (CSG) employs a layered defense scheme in which fighter aircraft establish an outer ring, reaching perhaps out to three hundred miles. Inside this fighter-engagement zone, Aegis destroyers and cruisers employ surface-to-air missiles for area defense. Finally, the innermost zone consists of various point-defense systems on each ship. This three-layer scheme is best thought of as a strainer, not a shield. The outer layers are not likely to destroy all inbound aircraft or missiles in saturation raids. They are supposed to reduce the number of “leakers” to a number that can be managed by point-defense systems. To function effectively, the scheme requires distance, ideally hundreds of miles. A preferred operational case against a land-based threat would be an “approach battle,” in which the CSG launches long-range air and missile strikes to disable enemy defenses before they can be brought to bear effectively on the group. By the time the group enters the littoral, the threat level would be reduced to the point that the two fleet-employment rules could at least be bent, if not broken. But political circumstances, such as those encountered in the eastern Mediterranean in 1973, and long-range shore systems, such as anti-ship ballistic missiles, not to mention cruise missile-armed submarines, force the CSG out of its preferred mode and make the consequences of breaking the rules severe.

The difficult logic of littoral warfare prompted Rear Admiral Yedidia Ya'ari of the Israel Navy to write twenty years ago, “I argue that when warships designed for the high seas enter the confined waters of the littoral arena, the fundamental relationships of maneuverability and firepower are upset,” and “The surface ships now in commission were designed with the open ocean and distant defensive perimeters in mind; to keep deploying them to a playing field where, under the most optimistic assumptions, their survival requires as a normal operating mode

the highest level of *everything, all the time*, is unhealthy and unrealistic in the long run.”¹²

The objective here is not to advance an argument against aircraft carriers; it is to illuminate the relationship among American command of the sea, aircraft carriers as the capital ships that are collectively the instrumentality for its exercise, a favorable world order based on that command, and the nature of the littoral. These factors are inextricably intertwined, and changes to one inevitably affect the others.

CONCENTRATION OF RESOURCES AND RISK

If kinetic threats to the aircraft carrier are latent, the budgetary threat is all too real. USS *Gerald Ford* (CVN 78) will cost around thirteen billion dollars. That figure is for the ship alone; the air wing would add another five to six billion.¹³ Moreover, the carrier aviation “enterprise” absorbs a significant plurality of U.S. Navy resources, including personnel and infrastructure. Beyond the absolute numbers, this investment represents an enormous concentration of assets and therefore risk. However, it has always been this way with capital ships; they require concentration both in investment and, when there is a contending navy, in employment. If, through their construction and use, command of the sea is seized, maintained, and exercised, adequate return on investment is realized.

Assuming that Secretary Hagel was correct and the CVN force will be reduced below eleven, the Navy faces two strategic problems that involve the connection between capital ships and command of the sea. The first is one of simple numbers. If the exercise of command is strictly associated with capital ships, what number of CVNs is the minimum needed? Finding the answer requires assessment of which regions require such exercise and which do not. After the Cold War, the U.S. Navy all but abandoned carrier deployments from Norway’s North Cape all the way to the strait of Bab el Mandeb, because there was no further need for the exercise of command in those waters. As the global system evolves both politically and economically, the need to exercise command may shrink even more—or it may expand because of Chinese or Russian adventurism. In the case of contraction, it may be the case that the CVNs can be retained in home waters, whereby the justification for investment would decline even further. But even in the expansion case the ability to increase the number of CVNs may simply evaporate as their cost escalates and defense budgets contract.¹⁴

The other issue is whether the CVN itself is able to continue as a capital ship. Can it operate at an acceptable degree of risk in waters it needs to enter to carry out its power-projection function? And indeed, can manned tactical aircraft continue to be viable weapons-delivery vehicles in the face of modern air defenses? Again, these questions have been addressed elsewhere, and it is not within the

scope of this article to argue the matter either way. However, we will make the assumption that sufficient uncertainty exists to warrant thinking about what American naval posture might be like if the answer, with respect both to carriers and to their manned aircraft, is judged at some point to be no.

In a more general and abstract sense, there is the question whether concentration in any form is a good idea in an age of cyberspace, ubiquitous sensing, machine intelligence, precision missiles, and, of course, nuclear weapons. Early in the nuclear age the Navy developed highly dispersed tactical formations and spread out its home ports so that one nuclear bomb could not destroy too much. Over the decades of the 1950s, '60s, and '70s, U.S. Sixth Fleet conducted a series of experiments to determine whether dispersed formations, emission control, and deceptive maneuvers could be effective in protecting the aircraft carrier from air and submarine attack. Progressive tactical development over this span of time produced an array of methods and equipment that appeared to be effective, at least for a given number of hours or days.¹⁵ Nevertheless, combat power was still concentrated in the carrier, and losing the carrier, through equipment failure or bad luck, put the fleet substantially out of business. Today, arguments for dispersal rotate around the networking capability of forces and the range of weapons. That is, given a battle-force network and long-range weapons, ships can be physically dispersed but operate as if they were in close formation. However, this disposition does not change the basic fact that most offensive power is concentrated in the carrier. Investment bankers urge diversified portfolios. Concentration of combat capability, like concentration of investment, may constitute strategic vulnerability, if, in the naval case, it has not already done so. But concentration does produce various efficiencies in both investment and the application of force, so the incentives to concentrate will always be there.

BREAKING THE LINK BETWEEN COMMAND OF THE SEA AND CAPITAL SHIPS

Command of the sea as an operative basis for naval decision making has been around, whether the term has been explicitly used or not, since at least the Peloponnesian War, when the land power Sparta based its strategies on the presumption of Athenian predominance at sea. It predates the development of the capital ship, perhaps offering a basis for delinking the two concepts. Could command be maintained and exercised with a distributed force of smaller ships? Capital ships arose to meet the needs of gun and, later, aircraft technology, both of which required progressively larger hulls and physical concentration to be effective against “symmetric” forces—that is, adversaries armed essentially like oneself. It is not clear that missile, mine, or other unmanned technologies require concentration; they may in fact require the opposite—that is, distribution—to be

effective. As a result, distribution of power brings into question the whole idea of command of the sea as traditionally conceived.

As long as naval power was defined in terms of fleets of capital ships, admirals shaped their strategies on the basis of how they viewed their strength relative to that of their enemies. Weaker navies, feeling they would meet defeat in a pitched naval battle, tried at times to compensate for their deficiencies in capital ships through the use of distributed small forces to interdict commerce or achieve some form or degree of denial using raiders, flotillas of small combatants, or mines against the stronger navy. However, the stronger force, enjoying command, was at liberty to blockade and to conduct amphibious operations directly against the flanks of the enemy or somewhere that mattered on the periphery. Using capital-ship power to provide security for such operations has been normal practice, because it has been effective.

But in today's emerging operational environment it is not clear that using capital ships to cover an amphibious landing would be either tactically effective or strategically wise. An enemy possessing an array of modern missile, cyber, and unmanned forces might plausibly achieve disabling hits on several capital ships. If it did, the task force commander would have a difficult decision between proceeding with reduced security and abandoning the operation. A real-world example is the Falklands War of 1982. What if the Argentines had put one of the British carriers out of action? The British commander later admitted that such a loss would have caused him to cancel the landing of troops.¹⁶

The point is that emerging technology appears to give a decisive edge to the tactical offense at sea—that is, to reinforce the historically normal state of affairs.¹⁷ In the early years of the Pacific War, aircraft carriers took advantage of this condition by attempting to strike effectively first, the paradigm being the battle of Midway.¹⁸ The logic of striking effectively first extends to projecting power against the shore. One of the criteria for success in the Sixth Fleet experiments on deception and dispersal was whether carriers remained untargeted long enough to get in disabling first strikes against enemy airfields.¹⁹ The presumption was that the resulting impairment of enemy strike operations would be sufficient to reduce the threat to levels manageable by battle group defenses. If initial strikes cannot be sufficiently disabling, or if the enemy's offensive power (missiles, say) is dispersed and hidden, the logic of striking effectively first evaporates, negating the true value of a capital ship. The capital-ship group or fleet is thus forced to break the second fleet-employment rule—"Do not become decisively engaged with land forces unless decisively superior"—and losses can be expected. The question then becomes whether the operation is worth the loss of one or more capital ships. Unless the warfare is nuclear or an existential issue is otherwise at stake, the trade-off is not likely to be advantageous.²⁰

Capital ships generally should be hazarded only when the potential strategic gain—command of the sea, national survival, or some other vital interest worth such risk—is at stake. That said, the U.S. Navy in 1942 twice risked its few available aircraft carriers in the defense of the beachhead at Guadalcanal, and it suffered losses in the process. However, it did so in the knowledge that within a year *Essex*-class carriers would start coming off the shipways in numbers. Moreover, the U.S. carriers were risked only when Japanese carriers were involved. Would the carriers have been placed in jeopardy had the Japanese dispatched a large flotilla of submarines and destroyers? The point is that it may not be worthwhile to employ capital ships even when command of the sea is at risk, as they could be lost without prospect of meaningful gain.

On the flip side, could distributed and possibly dispersed missile-centric forces perform the capital-ship function, at least the traditional one of seizing command of the sea against a similar force? We will explore this question more shortly, but it appears that distributed, missile-centric warfare obliges navies, the stronger as well as the weaker, to act as if they did not have command. Thus it is hard to see how the concept of command of the sea could be delinked from the function of the capital ship.

A POST-CAPITAL SHIP WORLD

What might happen in a future operational environment in which the seas, or at least the significant portions of them, become too dangerous for capital ships?²¹ To envision such a world, we must understand what strategic functions would be lost. To do that, in turn, we must first recognize that there has been a shift in the global geopolitical ecology, a shift that has been generated in part by the displacement of the dreadnought by the aircraft carrier and that, reciprocally, has transformed the function of the capital ship. Prior to 1945, the strategic function of the capital ship was to seize command of the sea by destroying the opposing fleet. After 1945, following Samuel Huntington's logic, the carrier's strategic function became projecting power ashore. When Huntington wrote, land-attack cruise missiles were barely embryonic; carrier-based tactical airpower was the principal weapon of the U.S. Navy, functioning either independently or in support of Marines or other land forces. The carrier's ability to take station in the near littoral (that is, close to shore) and function there as an airfield at sea was its key strategic capability.²² Over the years, Tomahawk cruise missiles have taken over much of tactical airpower's deep interdiction and raiding portfolio, but the airfield-at-sea function remains the carrier's irreplaceable core capability. This capability has made virtually the whole Eurasian littoral accessible by American power, in whatever form, hard or soft. Loss of the airfield-at-sea capability removes from the table certain forms of power projection in certain areas.

Command of the sea confers on its possessor, specifically the United States, three key strategic benefits: sanctuary for the nation's war economy, credible and useful contact with allies, and strategic options in terms of lines of operation. In addition to breaking, potentially, the sea links with allies, loss of the modern capital-ship function would narrow the range of strategic options available to the United States. This restriction would have implications and effects not just in war but for the dynamics of peacetime competition. Loss of American ability to intervene in certain areas in certain ways would provide potentially hostile actors freedom of action locally or regionally that they do not now enjoy. (What, for instance, would now be the situation in Iraq if carrier aircraft had not conducted interdiction strikes against Islamic State forces in 2014–15?) Such freedom of action would increase the chances that the current world order, turbulent as it is, would deteriorate even more, trending toward worsened anarchy, the rise of hostile regional hegemonies or trade blocs, or other geopolitical pathologies.

If the disputes spawned or exacerbated by this set of adverse trends were to erupt into war, especially one with a significant naval component, what would that war look like? Let us assume that the U.S. Navy, as well as virtually all others, will have recognized the shift in conditions and restructured accordingly, distributing offensive power among submarines, unmanned systems, and smaller surface combatants. The advantage would still lie with coastal powers that could build strong antiaccess/area-denial (A2/AD) systems, but the U.S. Navy would be more able and willing, owing to the higher risk tolerance of its new force structure, than it might be now to send forces into contested waters, and some A2/AD systems, such as the antiship ballistic missile, might become obsolete. While China, for example, might be more able than today to prevent the insertion and support of U.S. ground forces in-theater, the United States would be more able to prevent Chinese deployment of ground forces into Taiwan or elsewhere. The East Asian littoral could become a kind of naval no-man's-land, a zone in which only the most stealthy sea-denial forces would be able to operate. Similar situations might arise in the Persian Gulf and the eastern Mediterranean.

Would command of the sea have any meaning in those conditions? Certain traditional elements of command would indeed evaporate in some way. Navies—such as they would be—would operate dispersed not only tactically but also, perhaps, at the operational and strategic levels, depending on what an opponent did. Dispersal to avoid being found is an old tactic, but flotillas of smaller ships might need to be brought together if the enemy forces concentrated. (The German U-boat wolf-pack tactic was, in this sense, the logical response to Allied convoys.) But in this potential world, one could never be sure where the enemy might show up, especially one whose offensive power was contained on board submarines. Strategic dispersal as a benefit of command of the sea thus becomes

problematic: How does one know when one has command? More than likely, a prolonged and dispersed attrition fight would be required, during which the risks of moving ground forces by sea might be unacceptable. At what point would a supreme commander feel comfortable in dispatching an invasion force?

One possible tenet of future naval warfare (if it is not already true) would be that if a vessel or force can be found and identified, it can, and most likely will, be hit. On this basis the naval war becomes a fight for information superiority. In the 1942 carrier battles, finding first meant striking first, which tended to put a quick end to each battle, since offensive power was concentrated in a few carrier decks. In the future, victories would be tactical and incremental, because offensive power would be distributed and hidden. Information superiority would thus be episodic and require constant effort, the balance perhaps swinging daily. The oceans would thus become an arena for one big, long, sea-denial fight.

An aspect of command of the sea that would be problematic on both sides of the equation would be sea commerce. Whereas German U-boats and American submarines in World War II could prey on shipping with confidence that hitting what they were shooting at would hurt the enemy, today no such confidence is possible, because of the convoluted web of ownership of ships and cargoes. Moreover, oil changes hands on the spot market while it is at sea on tankers, and the container shipping system has assumed a hub-and-spoke structure in which the bulk of containers carry subcomponents for products.²³ All this means that in the current shipping regime seizing or sinking merchant vessels may hurt oneself and one's allies as easily as the enemy, regardless of the flag of a ship attacked. In fact, perhaps the only viable form of physical sea-commerce interdiction would be a close blockade based on a form of unrestricted submarine warfare or mining. However, whether or not commerce interdiction will be feasible in such a world, command of the sea would not be an issue either way. The old Mahanian prescription of driving the enemy's flag from the sea except as a fugitive appears to be increasingly irrelevant; ships of all types would either be fugitives or be left unmolested, whichever "side" they were on. It is possible to envision some kind of "limited" naval war in which each side hunts the other's naval units but by tacit mutual agreement allows commercial traffic to continue.²⁴

At this point it would appear that doing away with the capital ship does not simply break the link between the two concepts but invalidates the concept of command of the sea. But to penetrate to the most central issue, does asymmetry in strength continue to matter? If naval strength is a function of how much you can build and how well you can use it, logic says that a weaker party would seek to avoid a pitched fight at sea. Yet the dynamics of naval warfare in a non-capital ship environment may allow weaker powers to challenge the stronger in ways not possible when capital ships were dominant. Even in a capital-ship regime,

there are operational options for a weaker navy, including maintaining a fleet-in-being, raiding commerce, and mounting local denial and disruption operations. This last option might be expanded beyond the local context as missile ranges increase, nuclear submarines proliferate, and missiles, mines, and unmanned systems begin to be hidden on merchant vessels or sown from submarines or aircraft. Such a dynamic can really be only about disruption, but that might be enough—for both the weaker and stronger power. What would be gone is the freedom of action that command of the sea traditionally provided.

However, a complicating (or perhaps mitigating) factor in this scenario is the issue of sanctuary. None of the three operational options just mentioned for a weaker navy are viable without some sort of sanctuary, be it a secure base of operations (either defended or hidden) or covertness in deployment, approach, and attack. In the emerging naval warfare environment such sanctuary is increasingly problematic, especially secure basing. Submarines armed with land-attack cruise missiles or land-based ballistic missiles of sufficient range could neutralize or disrupt almost any naval base, not to mention logistics ships. Even underground submarine shelters are not immune.

Forces that are significantly weaker than their opponents frequently resort to the disruptive form of warfare, normally manifested on land as guerrilla warfare.²⁵ Three factors must exist if disruptive warfare (which is usually prolonged and cumulative) is to be viable: sanctuary, a sustainable tactical mechanism, and strategic resilience—that is, the ability to keep going despite losses and without clear evidence of progress toward victory. In the Battle of the Atlantic of World War II the German submarine force came close to achieving all three; the Allies finally tilted the balance of victory in their own favor by making the U-boat tactical mechanism unsustainable. They did so by adopting the convoy, forcing the U-boats to go to where the escorts were, and inflicting enough attrition to prevent the German navy from keeping enough boats at sea to generate the level of merchant sinkings needed to ruin the British war economy.

In the future, non-capital ship naval warfare might evolve to the point that both sides operate as if they were the weaker and both adopt disruptive warfare. The fight would be very much a distributed, tactical, cat-and-mouse game characterized by incremental attrition, one in which neither side has a clear idea of which way the balance is tilting. Of course, no such form of warfare would exist without a cyber dimension or, at least on the U.S. side, long-range bombers being brought into play. These latter elements would likely spawn, sooner or later, conventionally armed ballistic-missile salvos. Whether or when mushroom clouds would appear is not knowable, but this extended warfare dynamic might make their appearance more likely.

In fact, nuclear weapons represent yet another issue that could decisively affect the future naval warfare environment. Beyond their direct effects on a naval operation, the issue of whether a war at sea might precipitate an intercontinental nuclear exchange is increasingly relevant as nuclear weapons and long-range ballistic-missile technology proliferate. This is not the place for an in-depth analysis of the question, but we must at least consider whether a naval war devoid of capital ships, a war that is likely to be more prolonged and cumulative than in the past, would be more likely or less to be consummated without the use of nuclear weapons. War games at the Naval War College in Newport, Rhode Island, during the late 1970s and early 1980s indicated, contrary to the existing opinion of the time, that a conventional war with the Soviet Union, even with a robust naval component, would not necessarily escalate into a nuclear exchange.²⁶ At the time, the Soviet Union had little in the way of capital ships in its navy, but the U.S. Navy, of course, was flush with aircraft carriers, a number of which were lost in the games until the American players got savvy about using them. The only speculation that can be made at this point is that in a “new age” naval war (by definition, one between major powers) that dragged on for a considerable time—like, say, the Battle of the Atlantic—there would be more opportunity for escalation to occur, but it would not be a foregone conclusion.

What does appear to be the case is that in such a world the United States would have a much harder time even than it does now providing support and security for an ordered global system. Prevention of the emergence of a Eurasian hegemon might have to be based on a threat of bombardment, nuclear or conventional. Limited wars on the periphery would be more risky, especially if a competing naval power—a resurgent Russia, for example—objected. Commerce might continue, but if it did, systemic disorder or bloc building on the Eurasian or African continent might promote retrenchment of national business interests and produce a massive global economic downturn.

CHOICES

The vision that has been presented—one of increased global turbulence and perhaps prolonged and indecisive missile raids, commerce warfare, and slow-motion escalation—is not very encouraging, but it would seem to follow from the loss of the strategic airfield-at-sea function and the logic of distributed naval missile warfare. The thought experiment we have just conducted examines the edges of the envelope and does not presume to be predictive. Nonetheless, in a scenario like the one at which we have looked in which capital ships become obsolete, what options does the United States have?

Go “All In” to Keep the Capital-Ship Function Viable. To maintain the capital-ship function, the United States would invest as necessary to keep the CVN viable as a floating airfield. Directed-energy weapons, radio-frequency obscurants, better electronic warfare, and a host of other things might add up to an acceptable level of protection. Additionally, improvements to tactical aircraft survivability or a shift to unmanned aviation would be required. However, all will be an expensive proposition, even if it works, and could well curtail other programs and so mean a significantly smaller fleet. That might in turn require the Navy to change its forward-presence strategy, perhaps to something approaching a “surge” posture.

Create a “Bimodal” Fleet. Embedded in the development of the 2007 national maritime strategy was a bimodal fleet concept created by Captain Wayne Hughes, U.S. Navy (Ret.), of the Naval Postgraduate School, in Monterey, California.²⁷ In his vision the Navy, acknowledging the increasing threat to carriers, creates regional flotillas that conduct routine “presence” cruises and in war attempt to create safe operating space in the littoral into which the carriers can subsequently move. The carriers themselves, while they might still conduct peacetime presence and low-threat operations, in the event of war would seek refuge in the open ocean, perhaps providing distant support for regional flotillas, until enemy A2/AD capabilities had been sufficiently neutralized. The Navy might well have to reduce the number of carriers to afford this option, taking them off center stage as the key presence platform.

Preemptive Transformation. Here the Navy would either mothball its carriers or maintain only a few as support vessels, as was done with the *Iowa*-class battleships. Its key striking power would reside in large numbers of missiles housed in a wide variety of numerous platforms. The Navy would compensate for the loss of the airfield-at-sea function as best it could with unmanned systems and long-range land-based aircraft. Depending on budgets, the Navy might be able to support a larger fleet (in fact, that would be a necessary element of this option) and thus in some ways enhance its forward-presence posture. The risk would be that without mobile tactical airpower from the sea, that presence might not be as effective.

Debates on the future of the aircraft carrier tend to focus on technical and tactical issues and thereby to beg a number of important strategic questions. This article has attempted to connect some strategic dots: the capital-ship function, command of the sea, the littoral, and the world order. Doing so illuminates the true relevance of the aircraft carrier, creating a basis for devising and judging options in case the carrier becomes obsolescent. One set of options has been presented, but many more perspectives are possible. While carrier obsolescence

is not a foregone conclusion, it is clear that the geopolitical competitors of the United States are seeking ways to nullify the American capability to influence and intervene that the carrier confers. Understanding the linkages helps us refine and enhance the debate about what to do.

We cannot simply wish away the problem of potential obsolescence or argue by assertion. If emergent antiaccess/area-denial technology does not do the trick, escalating construction costs coupled with shrinking defense budgets might. We have to recognize that the aircraft carrier is not just another warship or defense program. It is the current capital ship and as such has an intimate relationship with the modern geopolitical terrain—we might even consider the CVN a geopolitical terrain feature in itself. It is intimately connected also with the world order that the United States has expended so much blood, effort, and taxpayer money to create and that has been so congenial to American values and interests. The various sides in the current debate, both “pro-carrier” and “con,” should take this factor into account.

NOTES

1. Announcement quoted in “Fox News Politics,” 31 July 2013, www.foxnews.com/.
2. In this article, “distributed” denotes the division of offensive power among a number of ships, whereas “dispersed” refers to physical separation of ships. Tactical dispersion involves either spreading out a mutually supporting formation over a large area or abandoning mutual support to enhance maneuver and the covertness of individual vessels. Dispersion at the strategic level involves splitting the fleet into a number of smaller formations that can be dispatched to different areas of the world.
3. Articles that address this issue include Cdr. Phillip E. Pournelle, USN, “The Rise of the Missile Carriers,” U.S. Naval Institute *Proceedings* (May 2013), and Capt. Henry J. Hendrix, USN, *At What Cost a Carrier?*, Disruptive Defense Papers (Washington, D.C.: Center for a New American Security, 11 March 2013). See also George Friedman and Meredith Friedman, *The Future of War: Power, Technology and American Dominance in the 21st Century* (New York: St. Martin’s / Griffin, 1998). The Friedmans develop the concept of weapon system “senility,” in which the cost of system defense becomes higher than the value of the system’s offensive mission capability (see esp. chap. 8, “The Aircraft Carrier as Midwife,” pp. 180–94).
4. See Robert C. Rubel, “Command of the Sea: An Old Concept Resurfaces in a New Form,” *Naval War College Review* 65 no. 4 (Autumn 2012), pp. 21–33.
5. See, for example, Capt. R. B. Watts, “The End of Sea Power,” U.S. Naval Institute *Proceedings* 135/9/1279 (September 2009), pp. 40–44.
6. George Modelski and William Thompson, *Seapower in Global Politics 1494–1993* (Seattle: Univ. of Washington Press, 1988), pp. 16–17.
7. Samuel P. Huntington, “National Policy and the Transoceanic Navy,” U.S. Naval Institute *Proceedings* 80, no. 5 (May 1954), pp. 490–91.
8. For an entertaining look at Soviet naval aviation and its approach to anticarrier warfare, see Maksim Y. Tokarev, “Kamikazes: The Soviet Legacy,” *Naval War College Review* 67, no. 1 (Winter 2014), pp. 61–84.
9. See Lyle J. Goldstein and Yuri M. 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.

10. This is the author's synthesis of the literature.
11. See Robert C. Rubel, "The Future of Aircraft Carriers," *Naval War College Review* 64, no. 4 (Autumn 2011), pp. 13–27. Aircraft carriers have performed a number of different roles and functions, that of an airfield at sea being one of them. Such a role is very different from that of a raider or of a traditional fleet-versus-fleet "capital ship," the part they played in the six carrier battles of World War II in the Pacific. Functioning as an airfield at sea, the carrier supports a land fight with continuous sorties and must accordingly stay within a relatively constrained area, where it can tolerate very little threat.
12. Rear Adm. Yedidia Ya'ari, Israel Navy, "The Littoral Arena," *Naval War College Review* 48, no. 2 (Spring 1995), pp. 7–21; repr. *Naval War College Review* 67, no. 3 (Summer 2014), quotes on pp. 82, 87 (repr.) [emphasis original].
13. Author's estimate, arrived at by adding openly available unit-cost information for the F-35C, F-18E/F/G, E-2D, and H-60.
14. There has been a debate since at least the 1970s on the relative merits of small and large aircraft carriers. Despite arguments by a number of different writers and analysts, the Navy has remained committed to the large nuclear carrier. It is beyond the scope of this article to incorporate the permutations that would have to be considered if a fleet of small carriers (perhaps of a vertical/short-takeoff-and-landing design) either replaced or augmented the current CVN fleet. However, for a taste of the debate, see Mark A. Randol and Wallace J. Thies, "The Opportunity Costs of Large-Deck Carriers: Naval Strategy for the 1990s and Beyond," *Naval War College Review* 43, no. 3 (Summer 1990), pp. 9–31.
15. Robert G. Angevine, "Hiding in Plain Sight: The U.S. Navy and Dispersed Operations under EMCON, 1956–1972," *Naval War College Review* 64, no. 2 (Spring 2011), pp. 79–95.
16. Adm. Sandy Woodward, with Patrick Robinson, *One Hundred Days: The Memoirs of the Falklands Battle Group Commander* (Annapolis, Md.: Naval Institute Press, 1997), p. 5.
17. Wayne Hughes, *Fleet Tactics: Theory and Practice* (Annapolis, Md.: Naval Institute Press, 1986), p. 25. To be clear, tactical offense is the actual use of a weapon against a ship. Tactical defense is the attempt to destroy or somehow evade the weapon. Tactical offense could be a method used in conjunction with operational-level defense.
18. At Midway, code breaking allowed U.S. forces to predict where the Japanese carriers would show up on the morning of 4 June 1942. This warning resulted in tactical sightings and a first strike by the American task force that disabled three of the four Japanese carriers. The remaining Japanese carrier, *Hiryu*, was able to launch a strike before being sunk; this strike succeeded in disabling the U.S. carrier *Yorktown*, which eventually fell prey to a Japanese submarine. It was the ability to achieve an effective first strike that determined the outcome of the battle.
19. Angevine, "Hiding in Plain Sight," pp. 83–84.
20. See Robert C. Rubel, "Deconstructing Nimitz's Principle of Calculated Risk," *Naval War College Review* 68, no. 1 (Winter 2015), pp. 31–45.
21. See Robert C. Rubel, "Talking about Sea Control," *Naval War College Review* 63, no. 4 (Autumn 2010), pp. 38–47.
22. "Close" is a variable term, depending on wind conditions, the range and load of aircraft, required response times, and a host of other factors. However, as a general rule of thumb, "close" would be something between fifty and a hundred miles from the beach.
23. Stephen M. Carmel, "Globalization, Security, and Economic Wellbeing" (address to the 20th International Seapower Symposium, Naval War College, Newport, R.I., 19 October 2011), available at www.maersklinelimited.com/. An adapted text appeared, under the same title, in *Naval War College Review* 66, no. 1 (Winter 2013), pp. 41–55.
24. Robert C. Rubel, *Navies and Economic Prosperity*, Corbett Centre Paper 11 (London: King's College London, October 2012), available at www.kcl.ac.uk/.
25. See Robert C. Rubel, "The Forms of Warfare: Integrating Ethos and Warfighting," in *Writing to Think: The Intellectual Journey of a Naval Career*, Newport Paper 41 (Newport, R.I.: Naval War College Press, 2014).

26. Bud Hay and Bob Gile, *Global War Game: The First Five Years*, Newport Paper 4 (Newport, R.I.: Naval War College Press, 1993), pp. 17–18.
27. Capt. Wayne P. Hughes, Jr., USN (Ret.), “A Bimodal Force for the National Maritime Strategy,” *Naval War College Review* 60, no. 2 (Spring 2007), pp. 29–47. The 2007 strategy is J. T. Conway, G. Roughead, and T. W. Allen, “A Cooperative Strategy for 21st Century Seapower,” 17 October 2007, available at www.navy.mil/; repr. *Naval War College Review* 61, no. 1 (Winter 2008), pp. 7–19.

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CHINA'S AIRCRAFT CARRIER PROGRAM

Drivers, Developments, Implications

Andrew Scobell, Michael McMahon, and Cortez A. Cooper III

One of the most eye-catching episodes in China's defense buildup was the 25 September 2012 commissioning of Beijing's first aircraft carrier. The sixty-five-thousand-ton *Liaoning* was launched with much fanfare, presided over by the president of the People's Republic of China (PRC), then Hu Jintao, as well as by the vice president and Hu's political successor, Xi Jinping. The commissioning of *Liaoning* underscored both the remarkable advances in the PRC's shipbuilding in recent decades and the significant limitations that remain. The vessel immediately became the largest in the People's Liberation Army Navy (PLAN). Originally launched in 1988 for the Soviet navy, the carrier, at that point known as *Varyag* and lying incomplete in a Ukrainian yard, had been purchased by a Chinese shell company in 1998 and towed to China three years later. The vessel was fully refurbished in a Chinese shipyard, and an extensive array of systems was installed. *Liaoning* is considered a medium-sized carrier that can accommodate a combination of approximately thirty-six fixed-wing and rotary-wing aircraft, with a crew of at least one thousand.

One Chinese security analyst proclaimed the eventual relaunch was on a par in "strategic significance" (*zhanlue yiyi*) with China's earlier acquisition of the "two bombs [nuclear and hydrogen] and one satellite" (*liang dan, yi xing*), in the sense that the commissioning of *Liaoning* signaled China's entry into an exclusive club of great powers. But other naval analysts sought to downplay the event. Retired PLAN admiral Yin Zhuo stressed that the commissioning of the *Liaoning* was only a first step: China, he observed, was very much a "rookie" (*xinshou*) at operating this highly "complex technical system," while "other countries" (i.e., the United States) had more than a century of experience.¹ No matter how modest the beginnings, however, there are strong indications that China has ambitious

plans: *Liaoning* is likely to be the first of as many as five carriers that the PLAN intends to put into service in the coming years.

Some observers discern the emergence of a naval arms race in the Asia-Pacific.² But however military trends in the region are best characterized, it is clear that countries such as China and India are energetically expanding their navies. Without a doubt, carrier expansion in the early twenty-first century will be concentrated in Asia. Beijing and New Delhi each appear committed to commissioning multiple aircraft carriers in the near future. In addition to China and India, Japan commissioned a helicopter-carrying destroyer capable of being reconfigured to handle short-takeoff-and-vertical-landing aircraft. No decision, by Beijing or any other capital, to pursue such an involved program can be taken lightly, because it requires a massive commitment of resources and extended time horizons. An aircraft carrier is an expensive and complex system of systems. Carrier programs require sustained effort, substantial funding streams, and considerable technical and professional competence. Carriers are a luxury few countries can afford. Even fewer countries have the shipyards, engineering expertise, and associated infrastructure to build these vessels.

It is ironic that the country that has done more than any other to move aircraft carriers closer to obsolescence through advances in military technology has invested in its own aircraft carrier program. The People's Liberation Army (PLA), for example, has acquired highly accurate antiship ballistic missiles—"carrier killers." What is driving China's carrier ambitions, and what is the likely future trajectory of its carrier program? What new operational capabilities does a carrier provide the PLAN? How does the arrival of China's carrier affect the security situation in the Asia-Pacific? What are the implications of Chinese aircraft carriers for the United States?

We examine first the drivers, the operational capabilities, and then we consider the future trajectory of China's carrier program. Last, we evaluate the implications of the carrier program for the balance of maritime power in the western Pacific and beyond.

DRIVERS OVER THE DECADES

China's entry into the exclusive aircraft-carrier club played out over several decades in a slow-motion series of low-key and secretive developments, in a pattern that prompts a range of competing explanations about the drivers of the initiative.

The earliest explanation posited for driving China's maritime ambitions was that of bureaucratic interests. These interests were initially identified with the South China Sea and have been advanced collectively as the key driver for the PRC's aircraft carrier program.³ The emergence of an actual program suggested the growing influence of the PLAN in the armed forces. The navy's second-rate

status within the PLA was and is changing. Since 2004, for example, the commander of Beijing's navy has had a seat on the Central Military Commission (CMC)—the apex of military power in the PRC, a body roughly equivalent to the U.S. Joint Chiefs of Staff. Nevertheless, and while the maritime service has enjoyed an unprecedented rate of modernization in recent decades, the dominant service in the PLA continues to be the ground force.⁴ Moreover, as will be seen, the program's key champion appears to have been an individual rather than a bureaucracy.

A second explanation is that the PRC's carrier program is driven primarily by nationalism.⁵ Clearly China's carrier program has strong public support; there is considerable pride in the country's first aircraft carrier. A wave of aircraft carrier euphoria—or a “*Hangmu* style” craze—swept the country as people imitated the pose of two flight-deck crewmen shown in a publicity photo guiding a J-15 fighter as it made a historic shipboard landing on *Liaoning* in November 2012. Most Chinese would agree with Major General Zhang Shiping's insistence that “for China to become a major world power without an aircraft carrier is completely unthinkable.” The general, an Academy of Military Sciences researcher, insisted that “acquiring a carrier was an historical necessity” for China.⁶

Possession of multiple carriers epitomizes the overwhelming naval dominance of the United States, and their lack emphasizes the continued weakness of China's navy. One of the most jarring moments for China in post-Cold War East Asia occurred when in early 1996 the United States dispatched two aircraft-carrier strike groups in response to Chinese saber rattling in the Taiwan Strait. For Beijing, the act harked back to the nineteenth century, when China had been bullied first by Western powers and then by Japan and forced to sign “unequal treaties” trampling on national sovereignty and to concede territory. For the Chinese, U.S. aircraft carrier dominance represents a latter-day variant of gunboat diplomacy and underscores that China, despite greatly increased military might, continues to be inferior, impotent in the face of overwhelming U.S. naval power.

A third possible driver of China's carrier program is an evolving overarching strategic logic or coherent maritime strategy.⁷ According to this interpretation, the PRC is pursuing a grand strategic vision—widely attributed to Admiral Liu Huaqing (1916–2011) and first set out in the early 1980s—by which the PLAN would gradually extend its reach outward into the Pacific Ocean in a phased expansion of Chinese seapower. In the first phase, by 2000, the PLAN was to extend its area of operations in the “near seas” (the South China Sea, East China Sea, and Yellow Sea) out as far as the so-called First Island Chain—the Kuril Islands, Japan, the Ryukyus, Taiwan, the Philippines, Borneo, and Natuna Besar. In the second phase, by 2020, the PLAN aimed to project its operational reach out to the so-called Second Island Chain—the Bonins, the Marianas, and the Carolines.

In the third phase, by 2050, China would become a global seapower, and its navy would hence operate on a par with the U.S. Navy. In fact, the PLAN's activities and power-projection efforts have so far kept pace with this timeline.

This road map for the development of China's seapower grew in significance as China's economy underwent rapid growth and its seaborne trade experienced major expansion during the 1980s and 1990s. China's maritime strategy gained greater traction in the twenty-first century as the PRC perceived itself as being under growing threat from the United States. Particularly since the terrorist attacks of 11 September 2001, Beijing has viewed Washington's behavior around its periphery as aimed at containing or encircling the PRC.⁸ From the Chinese perspective, the United States has become increasingly assertive in the near seas, especially in the South China Sea.

We suggest that an evolving overarching strategic logic has propelled the PRC's carrier program inexorably forward. This analysis of the historical record suggests that while nationalism was certainly an important contextual factor and lobbying by PLAN leaders was significant in keeping the idea of a carrier program alive, ultimately the decisive driver was strategic logic and operational importance. Indeed, the program's lengthy gestation and its repeated failure early on to gain traction are attributable to the absence of a strategic imperative until quite recently. The emergence of this strategic imperative and the operational demands for a carrier in the twenty-first century correspond to the emergence of PLA and PLAN thinking and planning beyond a Taiwan scenario.⁹

GENESIS OF CHINA'S CARRIER PROGRAM

China's carrier program has evolved remarkably over five decades. In the span of forty years the program was transformed from one man's elusive dream in 1970 to the acquisition and refurbishment of a Soviet-era carrier to the actual commissioning of an aircraft carrier in 2012.

The 1970s: One Man's Dream

China's aircraft carrier program languished for many years, for lack of a strategic imperative. But the idea of an aircraft carrier never died completely, because of the persistence of a key PLAN leader, Liu Huaqing, who gradually rose to the highest post in the military hierarchy, assuming the vice-chairmanship of the CMC in 1989. The origins of the PLAN's aircraft carrier program are intimately intertwined with the career of this prominent military figure. Justifiably considered the most important and certainly the most dogged champion of the program, Liu is often dubbed the "father of China's aircraft carrier," as well as "China's Mahan."¹⁰ Irrespective of these labels, Liu certainly qualifies as the most influential military figure in post-Mao Zedong, reform-era China. Significantly,

Liu was the last uniformed member of the all-powerful Chinese Communist Party's Politburo Standing Committee, a seat he relinquished in 1997.

According to his memoirs, as early as 1970 Liu floated to his military superiors a proposal that China begin preparations to acquire an aircraft carrier. His suggestion does not appear to have received any support within the PLA hierarchy.¹¹ This is hardly surprising, since the PRC had nothing remotely resembling a blue-water navy in the 1970s; its main threat at the time was overland invasion or attack by the Soviet army, an attack that could come anywhere along the several-thousand-mile and very exposed common land border. Neither does the most logical maritime scenario—an attack on or invasion of Taiwan—appear to have received any serious attention at the time. Thus, there was no compelling strategic or operational rationale for the development of a PLAN carrier program in the 1970s, and nationalism did not even come into play.

The 1980s: A Vision

In the decade following Mao Zedong's death, the idea of an aircraft carrier seemed a more plausible, if still remote, possibility. While the PRC's primary military threat remained land-centric—the Soviet army—the “reform and opening” policy of Deng Xiaoping significantly altered its national security calculus and defense priorities. As the PRC embraced foreign investment and expanded international trade, Beijing began to attach much greater weight to maritime matters. PRC leaders had to be concerned not only with the security of their land borders but also with coastal waters and beyond—that is, both the “near shore” or littoral (*jinan*) and the “near seas” (*jinhai*).¹² Moreover, territorial claims in the South China Sea and the unresolved matter of Taiwan provided added impetus for modernizing the PLAN. In the mid-1980s, the PLA shifted its preparations from imminent all-out global conflagration likely involving nuclear and conventional conflict between China and one of the superpowers to limited, localized, conventional war-fighting scenarios.

The geostrategic reorientation and doctrinal transformation produced a new strategic logic that was more conducive to the idea of aircraft carriers. Liu recalls in his memoirs that in November 1986 he chaired a seminar comprising military and civilian leaders and experts: “Many comrades expressed the view that from the standpoint of our strategic mission of safeguarding the country's maritime interests, including the recovery of the Nansha [Islands], and the reunification of Taiwan, the navy should develop aircraft carriers. My own thinking was consistent with this view.”¹³

The purchase in 1985 of the decommissioned Australian navy carrier *Melbourne* by a PRC company, ostensibly for scrap, signaled Beijing's growing

interest in a carrier program. The vessel was reportedly scrutinized by Chinese engineers and naval architects, and the flight deck was kept intact when the rest of the ship was scrapped. In 1982, upon being promoted to commander of the PLAN, Liu commissioned a research institute in Shanghai to conduct a study on the feasibility of carriers. Three years later Liu directed the Guangzhou Naval Academy to initiate a training course for aircraft carrier commanders.¹⁴

1990s: A Serious Debate

By the mid-1990s, maritime challenges had moved to the front and center of Beijing's national security concerns. The Soviet breakup had created three new neighbors in Central Asia, but Beijing moved swiftly and deftly to recognize these states, resolve territorial disputes, and demilitarize border areas. It could then focus greater attention on the security of coastal regions and on unresolved maritime territorial disputes. The increasing importance of the near seas and China's growing dependence on the sea lines of communication (SLOCs) radiating out beyond the First Island Chain were highlighted by tensions in the South China Sea (in 1995), a crisis in the Taiwan Strait (1995–96), and by China's becoming (in 1993) a net importer of petroleum, most of it by sea from the Middle East and Africa.

Within a three-year span, Chinese entities bought three Soviet-era aircraft carriers: *Minsk* and *Varyag* (both in 1998) and *Kiev* (in May 2000). These buys represented a sizable expenditure—reportedly totaling some U.S.\$33.4 million—and thus a degree of high-level coordination. Moreover, the circumstances surrounding these purchases were suspicious, in terms of their announced purposes. For example, the buyer of *Varyag*, the Chong Lot Tourist and Amusement Agency, reportedly had several retired PLAN officers on its board of directors. The supposed intent of the company was to turn *Varyag* into a floating casino in the gambling mecca of Macau, but the waters around the former Portuguese colony are too shallow to accommodate the vessel, and no application for a gambling permit appears to have been filed. When in early 2002 *Varyag* arrived in China, it docked well away from Macau, in the northern port of Dalian.

This flurry of activity suggests that Beijing was engaged in a major debate about the viability of acquiring an aircraft carrier. The option being most seriously considered was to complete a carrier indigenously on one of the hulls purchased overseas, rather than buying a completely fitted, foreign-made carrier. During the mid-1990s Chinese entities reportedly made a considerable effort to acquire blueprints for an aircraft carrier from a Spanish shipbuilder that was constructing one for the Royal Thai Navy, showing far less interest in placing such an order themselves.¹⁵ By the end of the decade, CMC chair Jiang Zemin had reportedly given the PLAN the green light to commence work on designing a carrier.¹⁶

2000s: A Decision Is Made

With the dawn of a new century, the maritime domain loomed ever larger for Beijing in strategic significance. The result, according to an authoritative overview of PLAN history, was a “paradigmatic change” (*zhuanxing*) in naval thinking from the near seas to the “far seas” (*yuanhai*).¹⁷ PRC aircraft and surface and subsurface vessels routinely found themselves operating in the same vicinity as U.S. platforms, often at very close quarters. These encounters prompted a growing number of incidents. Of particular note was an April 2001 episode in which a PLAN J-8 fighter collided with a U.S. Navy EP-3 surveillance aircraft some seventy-five nautical miles south of Hainan Island. To Beijing, the event signaled a growing, perceived threat of U.S. strategic encirclement and the emergence of the near seas as a hot zone of U.S.-Chinese contestation.

The decision to go ahead with the construction of an aircraft carrier was reportedly made by the CMC in 2004 or 2005;¹⁸ the decision was almost certainly made in conjunction with CMC chairman Hu Jintao’s December 2004 announcement of revised military strategic guidelines (*junshi zhanlue fangzhen*) for the PLA. These guidelines function as a “rolling national military strategy” that provides the key guidance and direction for planning and force development.¹⁹ Addressing the CMC on 24 December 2004, Hu outlined what became known as the “New Historic Missions,” representing an important modification of strategic guidelines issued in 1993. Two of the broad-brush missions he sketched for the PLA were protecting China’s “national interests” and safeguarding “world peace.”²⁰ The former mission has since been defined ever more expansively to include China’s maritime territorial claims inside the First Island Chain and its “overseas interests” well beyond. The latter mission provides the rationale for a greater global role for the PLAN in a broad spectrum of activities, including patrolling the SLOCs and contributing to international humanitarian assistance and disaster relief.²¹ Reportedly, Hu subsequently endorsed the concept of “far sea operations” (*yuanhai zuozhan*). Together these developments put in place the strategic and doctrinal logic for naval force modernization in general and for, by extension, the acquisition of several aircraft carriers.

Extensive work was under way throughout the middle of the first decade of the twenty-first century in a Dalian shipyard to complete *Varyag* as an operational aircraft carrier. But no official public statement was forthcoming; the PRC was equipping a major naval surface combatant but keeping mum about the matter. Noteworthy was the absence of any mention of the PLAN’s carrier project in China’s defense white papers of 2004, 2006, 2008, and 2010. However, in 2006 and 2007 several senior military officials did publicly comment that the PRC had decided to develop an aircraft carrier program, with the goal of indigenously

building them. Finally, in March 2009, the PRC minister of national defense, General Liang Guanglie, declared that the PLAN was preparing to build its own aircraft carriers.²²

2010s: Commissioning a Carrier

In the second decade of the century tensions emerged with the United States and China's neighbors in the near seas that seemed only to underscore the growing importance of seapower to the PRC. In 2010 China accused the United States of meddling in the South China Sea and then heatedly protested a planned U.S.–South Korean joint military exercise scheduled for the Yellow Sea. Tensions also rose in the East China Sea over the disputed Diaoyu/Senkaku Islands. Beijing claims a two-hundred-mile exclusive economic zone in all these areas and insists that other countries cannot operate military vessels or aircraft there without its prior approval. In November 2013, China announced the creation of an air-defense identification zone in the East China Sea. China also, looking beyond its immediate maritime vicinity to the Indian Ocean, took note of developments in India's aircraft carrier program. In 2009 New Delhi had laid the keel of INS *Vikrant* and proceeded with indigenous construction of carriers capable, like *Varyag*, of operating high-performance tactical aircraft using a short-takeoff-but-arrested-recovery (STOBAR) design.

The evolution of a strategic logic became more apparent: an aircraft carrier was needed to cope with the PRC's expanding array of maritime interests. It was against this backdrop that *Varyag* underwent its first sea trial in August 2011. The vessel cruised the Bohai Gulf and Yellow Sea for four days before returning to port. Further sea trials followed. In late September 2012 ex-*Varyag* was officially commissioned as *Liaoning*. The ship was ceremonially christened by Hu Jintao barely two months before he stepped down as chair of the CMC. As a result, Hu will go down in history as the leader responsible for China's first operational aircraft carrier, even though experts contend that the carrier will not become fully employable for several more years.

THE TRAJECTORY: A HYBRID NAVY

In the interim, the next three to five years, *Liaoning* will primarily serve as a training platform, operating mostly within the First and Second Island Chains. Most PLAN ships have three-digit Arabic hull numbers; *Liaoning's* two-digit number, 16, indicates its official rating as a training vessel.

While China now has a carrier with a sea-based tactical aviation capability, time will be needed for its air wing to become operationally competent and for the ship itself to conduct proficiency training with destroyers, frigates, and submarines (as *Liaoning* did in December 2013 for the first time, in the South China

Sea). Perhaps the most useful benchmark for the operational readiness of *Liaoning* is the level of training, equipment, and organization of its aviation component. Properly configuring *Liaoning* for carrier-group operations will take time, but establishing the naval aviation component—fully functioning squadrons of carrier-based aircraft—is likely to take much longer. Since its commissioning, most of *Liaoning's* at-sea time has been devoted to certification of shipboard air-operations systems and to initial pilot training, using experienced pilots and test aircraft. But China will not achieve a true aircraft-carrier capability until the two elements—an organized and trained air component and a fully tested, fleet-configured carrier—have been coupled. The passing of various signposts may be evident on this path as they occur, one being the establishment of a tactical aviation air wing. Incorporation of fully trained and organized, mission-capable, fleet tactical air wings is not likely until 2018 or later.

Furthermore, to gauge the timeline for the commissioning of China's second carrier—expected to be indigenously designed and built—it makes sense to monitor the development of air component training and organization and also full production of the J-15 aircraft, and perhaps as well the development of the J-31, potentially China's future, fifth-generation, sea-based tactical aircraft. Of course, these timelines will run concurrently with the design of any indigenous aircraft carrier. The challenge of balancing these two processes may explain the seeming deliberateness of the PLAN's pace in designing and commencing construction of its next aircraft carrier.

Moreover, additional aircraft carriers, almost certainly in the cards, will probably come online gradually, over the course of the next two decades. The longer a new, indigenously designed carrier is delayed, the more likely the design will be to adopt a large-deck format and increased capabilities. Such a platform could accommodate fifth-generation aircraft and incorporate leading technology, electronics, and design features. Also, the most modern computer-assisted-design tools, construction practices, and facilities that China's shipbuilding industry has to offer would be available for the project. The large scope of the design work involved in the conversion (i.e., from the original Soviet "aircraft-carrying cruiser" configuration) of *Liaoning* at the Dalian shipyard is likely to provide a "walking start" for a more modern carrier.

The PLAN does not appear to be building a future force that has aircraft carriers at its core. Such a goal would require a complete order-of-battle overhaul. There may have been a Chinese realization that the role of carrier-based aviation would be limited in any potential large-scale conflict with the United States. Instead, current doctrine and naval modernization suggest that while the PLAN is aiming for at least three additional carriers, they would be focused on power

projection—inside the island chains but also in the Indian Ocean, as well as distant areas where overseas interests in resources are strong, such as Africa and Latin America.²³ Nevertheless, as Yin Zhuo observes, the introduction, for whatever purpose, of carriers demands a major change in PLAN thinking and requires in the near term a modified “grouping format” of escort vessels with *Liaoning* at the center.²⁴ In short, China’s navy appears to have adopted a hybrid approach encompassing both carrier and surface-action groups for mission-specific operations and the projection of influence.

In addition, such an approach comports with political and fiscal realities. Aircraft carriers are extremely expensive. Whether the hull is acquired from abroad or built indigenously does not necessarily make much difference in overall cost; both options are expensive, and follow-on carriers may not be appreciably cheaper if they are of different designs or possess different subsystems. Moreover, while the PLAN has increased its power and influence vis-à-vis the other services in the past decade or so, the ground force remains, as noted, the dominant service and enjoys the preponderance of political clout. The navy must compete with the People’s Liberation Army Air Force, which has greater representation on the CMC—an unprecedented two seats are held by air force generals.²⁵ While the defense budget has been growing in double digits annually, overall military spending is carefully monitored, and continued increases presume further economic growth. In short, the size of the defense budget and constraints on funds allocated for PLAN acquisitions are limited.

The Operational Demands on Carriers

China’s growing oceanic interests expand the operational demands on the PLAN, from defending disputed maritime claims to protecting China’s fishing and merchant fleets.²⁶ The aircraft carrier can provide much-needed air protection for the surface ships and submarines operating several hundred miles out. The most obvious region for such operations would be in the southern portions of the South China Sea, some nine hundred miles from Hainan Island—well beyond the routine patrol range of PLAN land-based aircraft. Indeed, it is in this area that Liu Huaqing reportedly felt an aircraft carrier would prove its worth.²⁷

The most pressing operational logic for aircraft carriers relates to the value they add in wartime. PLA analysts who studied the Royal Navy’s performance in the Falklands/Malvinas War of 1982 concluded that aircraft carriers played a key role in the British victory over Argentina.²⁸ Today, carriers offer the PLAN extended blue-water capability—to the Second Island Chain and beyond—and an improved capacity for antisubmarine warfare (ASW) and airborne early warning (AEW). The ASW and AEW missions require multiple carriers; however, even one fully capable aircraft carrier could represent the PLA’s first steps toward

extended air (i.e., offensive) and air-defense cover for regional contingencies and an incremental extension of the air-defense umbrella in tandem with advanced escort combatants. For the present, ASW and AEW vulnerabilities remain too great to allow *Liaoning* to be successfully employed in high-intensity maritime combat; its size and configuration preclude the launch of the larger aircraft that would perform these missions. In short, as we have seen, there are limitations to what *Liaoning* can do, especially with such limited operational experience.

What difference would one or two aircraft carriers make in a contingency inside the First Island Chain? In a South China Sea clash, *Liaoning* would provide extra airpower projection against opposing combatants, especially in the southernmost reaches of that body of water; it would also present adversaries with a “nice, big target.” One carrier or even two would offer little in an East China Sea battle. As for a Taiwan contingency, carrier air would not contribute much in the fight itself, although it might have utility as a diversion in more easily protected zones away from Taiwan and Japan. Moreover, the use of an aircraft carrier would severely complicate the PLA’s current doctrinal approach—missile-centric fire-power strike and counterintervention operations, supported by advanced information warfare. This would be especially true in a Taiwan contingency.

The choice to retain the original, Soviet-era STOBAR design suggests that *Liaoning*’s missions will be more limited than those of U.S. aircraft carriers. A “ski jump” bow and the absence to date of catapults restrict the size and weight of an aircraft that can take off from the deck (and accordingly the payload and amount of fuel it can carry). Thus the onboard air wing will focus on air defense, protecting the carrier and escort vessels at sea. Finally, *Liaoning* is conventionally powered, which limits its range and necessitates regular refueling.

Noncombat Operations

Additional demands are represented by the contributions an aircraft carrier will be expected to make to peacetime operations. Indeed, this noncombat dimension has received considerable attention in recent years in China. Moreover, the PLA neither has recent war-fighting experience nor anticipates significant combat operations in the near future. Thus *Liaoning* and any subsequent aircraft carriers can expect considerable noncombat operational employment. Since at least 2008 China’s armed forces have emphasized military operations other than war (MOOTW) as a doctrinal component. While MOOTW “with Chinese characteristics” has a significant domestic dimension, this body of doctrine also includes substantial maritime and overseas elements, and the PLAN appears poised to play a central role in it. Its MOOTW missions could include “flat deck” (i.e., large air-capable ship) operations in support of SLOC protection, humanitarian assistance, and disaster relief. China became acutely aware of the usefulness of

aircraft carriers during the U.S. Navy's response to the Southeast Asian tsunami in 2004. Furthermore, recent PLA experiences with noncombatant evacuations in such places as Libya have highlighted the value of air and naval assets.

In peacetime, a carrier provides a high-profile presence wherever it steams. It can symbolize power and commitment without necessarily raising alarm. But the challenge for China in the not-too-distant future will be how to operate a carrier close to home without being perceived as threatening by its neighbors. A carrier is much more likely to be warmly welcomed outside the First and Second Island Chains than within them. If the challenges of the vast distances involved in far-seas operations can be met, a Chinese carrier off the coast of Africa or Latin America would be a strong symbol of national pride and could also serve as a goodwill ambassador, whether visiting ports or patrolling the global commons.

Program Prospects and Implications

China's carrier program was powered to ultimate realization by an overarching strategic logic and still-evolving national maritime strategy. While nationalism and bureaucratic interests have played—and will continue to play—important roles in the trajectory of the program, the push for a Chinese carrier could neither have been sustained across many decades nor have ultimately triumphed without the impetus of a larger strategic rationale and the emergence of a coherent maritime strategy. The program's lengthy gestation and repeated failure to gain traction are attributable to the absence of a strategic imperative before the end of the Cold War. This growing strategic logic and the emerging operational demands for a carrier in the twenty-first century correspond to an extension of PLA thinking beyond a Taiwan Strait scenario. When the PRC's military was narrowly focused on operations against Taiwan, an aircraft carrier did not make much sense. But its operational value is more evident in other scenarios, including protection of the South China Sea and beyond the First Island Chain. Moreover, strategic and operational value increases as the PLAN expands its horizons beyond the First and Second Island Chains.

More than two years after its commissioning, *Liaoning* is far from fully operational. It is still without a fighter wing, although numerous practice takeoffs and landings have occurred. It functions essentially as a training vessel and has yet to venture outside the First Island Chain. Nevertheless, in China the carrier has captured the imagination of leaders and ordinary people who have come to view a PLAN aircraft carrier as the ultimate symbol of full-blown Chinese military power. A carrier signals China's desire for global power projection—or at least extended offshore reach.

While the PLAN is still years away from being able to project and sustain significant naval power—let alone in the form of an aircraft carrier—out of area (i.e.,

beyond the island chains), Beijing is intent on becoming able to play a greater role in patrolling SLOCs farther afield. Given China's dependence on imported energy and the importance it attaches to energy security, a logical priority location for increased PLAN operational activity will be in the Indian Ocean. Although China has increased the number of overland routes for oil and gas (witness the construction of pipelines in recent years from Central Asia, Russia, and Myanmar), the PRC remains reliant on seaborne energy, especially petroleum from fields in Africa and the Middle East.

Liaoning is a visible symbol of China's growing naval prowess wherever it steams and is useful in noncombat missions. But in an era of precision-guided munitions and enhanced over-the-horizon surveillance and reconnaissance, in wartime *Liaoning* becomes vulnerable, a sitting (or more accurately, floating) duck, especially in any conflict involving a highly capable adversary.

China's carrier program in and of itself, therefore, does not merit alarm by the Pentagon. It does not fundamentally transform the balance of military power in the western Pacific. One or two PLAN aircraft carriers will not be especially useful in the East China or South China Sea. Of course, carriers will extend the range of Chinese airpower, and their presence will further complicate an already complex maritime operating environment in the near seas. This prospect does signal both China's unmistakable intent to project military power beyond the First Island Chain and its aspirations to become a global naval powerhouse. And yet by the time—decades hence—that China does possess multiple large aircraft carriers and has become adept at operating them, the carrier itself may have become almost irrelevant in the conduct of naval warfare.²⁹

Perhaps the greatest impact for the U.S. military of one or more Chinese carriers will be more perceptual than operational.³⁰ Indeed, the United States and other countries in the Asia-Pacific have yet to come fully to grips psychologically with the arrival of a new, increasingly capable, and active blue-water navy in the region.

NOTES

1. Cited in *Jiefangjunbao* [Liberation Army Daily], 26 September 2012, p. 2.
2. Geoffrey Till observes that Asia's "navies are modernizing at an unprecedented extent" and suggests that the region may be experiencing a "slow motion" arms race. See his *Asia's Naval Expansion: An Arms Race in the Making?* (London: International Institute for Strategic Studies, 2012), pp. 35, 241.
3. John W. Garver, "China's Push through the South China Sea: The Interaction of Bureaucratic and National Interests," *China Quarterly*, no. 132 (December 1992); Ian Storey and You Ji, "China's Aircraft Carrier Ambitions: Seeking Truth from Rumors," *Naval War College Review* 57, no. 1 (Winter 2004), pp. 77–93.

4. See Andrew Scobell and Andrew J. Nathan, "China's Overstretched Military," *Washington Quarterly* 35, no. 4 (Fall 2012), pp. 135–48.
5. For the clearest articulation of this interpretation, see Robert S. Ross, "China's Naval Nationalism: Sources, Prospects, and the U.S. Response," *International Security* 34, no. 2 (Fall 2009), pp. 46–81. According to Ross, Beijing's national security needs do not justify carriers. Ross dismisses the possibility of a strategic rationale and appears to argue that all PRC aircraft-carrier proponents are rabid nationalists. See the critique by Michael A. Glosny and Phillip C. Saunders, "Correspondence: Debating China's Naval Nationalism," *International Security* 35, no. 2 (Fall 2010), pp. 161–69.
6. Zhang Shiping, *Zhongguo Haiquan* [China's Sea Power] (Beijing: Renmin Ribao Chubanshe, 2009), p. 2.
7. Bernard D. Cole, *The Great Wall at Sea: China's Navy in the Twenty-First Century*, 2nd ed. (Annapolis, Md.: Naval Institute Press, 2010); Andrew S. Erickson, Abraham N. Denmark, and Gabriel Collins, "Beijing's 'Starter Carrier' and Future Steps: Alternatives and Implications," *Naval War College Review* 65, no. 1 (Winter 2012), pp. 15–54.
8. See, for example, Andrew J. Nathan and Andrew Scobell, "How China Views America: The Sum of Beijing's Fears," *Foreign Affairs* 91, no. 5 (September/October 2012), pp. 32–47.
9. Roy Kamphausen, David Lai, and Andrew Scobell, eds., *Beyond the Strait: PLA Missions Other than Taiwan* (Carlisle Barracks, Pa.: U.S. Army War College Strategic Studies Institute, 2009).
10. See, for example, Bai Ma, "Zhanwang Zhongguo haijun de hangmu shidai" [The Prospects for China's Navy in the Era of Aircraft Carriers], *Jianchuanzhishi* [Naval and Merchant Ships] (March 2011), p. 18.
11. Liu Huaqing, *Liu Huaqing Huiyilu* [Memoirs of Liu Huaqing] (Beijing: Jiefangjun Chubanshe, 2004), p. 477.
12. Tang Fuquan and Han Yi, "Renmin haijun yanzhe dang zhiyin de chuanxiang polang qianjin" [People's Navy Advances along the Course Set by (the) Party] *Zhongguo Junshi Kexue* [China Military Science], no. 4 (2009), pp. 13–14.
13. Liu Huaqing, *Liu Huaqing Huiyilu*, p. 478.
14. Storey and You Ji, "China's Aircraft Carrier Ambitions," pp. 78–79.
15. *Ibid.*, pp. 81–84.
16. Cole, *Great Wall at Sea*, p. 88.
17. Tang Fuquan and Han Yi, "People's Navy Advances along the Course Set by [the] Party," p. 14.
18. Author interviews with civilian and military analysts in China indicate that a decision was made in this time frame.
19. David M. Finkelstein, "China's National Military Strategy: An Overview of the Military's Strategic Guidelines," in *Right Sizing the PLA: Exploring the Contours of China's Military*, ed. Roy Kamphausen and Andrew Scobell (Carlisle Barracks, Pa.: U.S. Army War College Strategic Studies Institute, 2007), pp. 69–140.
20. The two others are protecting the "ruling position" of the Chinese Communist Party and guaranteeing "national development." The text of Hu Jintao's speech has not been made public but has been widely cited. For a concise overview, see Daniel Hartnett, "China Military and Security Activities Abroad," *Hearings before the U.S.-China Economic and Security Review Commission*, 111 Cong., 1st sess., 4 March 2009 (Washington, D.C.: U.S. Government Printing Office, April 2009), pp. 45–55. See also Andrew Scobell, "Discourse in 3-D: The PLA's Evolving Doctrine, Circa 2009," in *The PLA at Home and Abroad: Assessing the Operational Capabilities of China's Military*, ed. Roy Kamphausen, David Lai, and Andrew Scobell (Carlisle Barracks, Pa.: U.S. Army War College Strategic Studies Institute, 2010), pp. 100–101.
21. See, for example, Andrew Scobell and Gregory Stevenson, "The PLA (Re-)Discovers Nontraditional Security," in *Not Congruent but Quite Complementary: U.S. and Chinese Approaches to Nontraditional Security*, ed. Lyle J. Goldstein, China Maritime Study 9 (Newport, R.I.: Naval War College Press, July 2012).
22. Cole, *Great Wall at Sea*, pp. 88–90.
23. "At least three carriers" is a RAND estimate. See also Richard D. Fisher, Jr., "Dalian Official Says Chinese Planning Four Aircraft Carriers," *Jane's Defense Weekly*, 21 January 2014.

24. Cited in *Jiefangjunbao*, 26 September 2012, p. 2.
25. See James Mulvenon, "The New Central Military Commission," *China Leadership Monitor*, no. 40 (January 2013), pp. 1–10. Gen. Xu Qiliang, one of two uniformed CMC vice-chairs, and Gen. Ma Xiaotian, the air force commander, were selected at the Eighteenth Party Congress in November 2012.
26. See, for example, Tang Fuquan and Han Yi, "People's Navy Advances along the Course Set by [the] Party," p. 14.
27. Storey and You Ji, "China's Aircraft Carrier Ambitions," p. 86.
28. Christopher D. Yung, "Sinica Rules the Waves? The People's Liberation Army Navy's Power Projection and Anti-access / Area Denial Lessons from the Falklands/Malvinas Conflict," in *Chinese Lessons from Other Peoples' Wars*, ed. Andrew Scobell, David Lai, and Roy Kamphausen (Carlisle Barracks, Pa.: U.S. Army War College Strategic Studies Institute, 2011), pp. 88, 93.
29. For this argument from a U.S. perspective, see, e.g., Robert C. Rubel, "The Future of Aircraft Carriers," *Naval War College Review* 64, no. 4 (Autumn 2011), pp. 13–27.
30. Many Chinese analysts have noted this vulnerability. In 2011, Adm. Robert Willard told the press that as commander of U.S. Pacific Command he was "not concerned" about the prospect of dealing with the operational challenges of China's first aircraft carrier. Nevertheless, he observed that the psychological impact on the region of this development would be "significant." Viola Gienger and Tony Capaccio, "China's Carrier Poses Mostly Symbolic Threat, U.S. Admiral Says," *Bloomberg News*, 12 April 2011.

A GENERAL REVIEW OF THE HISTORY OF CHINA'S SEA-POWER THEORY DEVELOPMENT

Zhang Wei [张炜]

Translated by Shazeda Ahmed

*The Naval War College's China Maritime Studies Institute (CMSI) uses primary and secondary Chinese-language sources to produce original scholarly research that enables current and future leaders to understand better the complexities of contemporary China's maritime rise. The below translation offers non-Chinese readers at least a sense of what can be gained by considering Chinese texts in the original. Zhang Wei's article, originally published in the journal *Frontiers (Xueshu Qianyan)* in July 2012, is a historiographical survey of the critical Western and Chinese texts and thinkers who have shaped the concept of sea power in China. It gives insight into the richness of the Chinese discourse about sea power. Of particular note is the fact that as Chinese strategists engage in this discourse, they no longer question the utility of sea power; even the country's most ardent land-power advocates recognize the strategic and economic importance of the sea. On the contrary, the primary question now concerns the form and character Chinese sea power should take. The CMSI hopes this translated article (in which the endnote citations are original) will inform and strengthen the debate in the West about this critical question.*

At the end of the nineteenth century and beginning of the twentieth, the American Alfred Thayer Mahan produced the three volumes of *The Influence of Sea Power upon History* and, later, *Naval Strategy*. At one time, sea-power theory was popular in Western countries. In particular, it became an important theory in support of America's rise. China is a traditionally continental state. The recognition of sea power within academic and political circles has long wavered between contradiction, hesitation, dispute, and even rejection. However, with

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the deepening of China's reform and opening up (*gaige kaifang*), the ocean's strategic position has risen. It is inevitable that we reexamine, and extract things of value from, this theory that has had such tremendous impact on the rise and fall of great powers.

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HISTORY'S CALL: THE RISE OF RESEARCH ON CONTEMPORARY CHINESE SEA POWER

After the First and Second Opium Wars, there arose in China a Self-Strengthening Movement centered on the military. At one point China prioritized the establishment of a Beiyang Fleet. In 1885, while stationed in Germany, the Qing diplomat Li Fengbao translated *New Ideas on Naval Warfare*.^{*} This was the first appearance of the concept of sea power in Chinese translation. In 1890, when Mahan's first work on sea power was published, it was quickly translated into German, French, Russian, and Japanese, among other languages. Kaiser Wilhelm II and the Japanese emperor valued and adopted this theory, which directly influenced the two countries' naval development and their respective rises. But in 1900 the Japanese translation of "Theory of the Elements of Seapower" was published in Shanghai's *East Asia Times*. This was the first time Chinese readers encountered Mahan's classic theory of the "six elements" of sea power. It was, of course, associated with China's defeat in the Sino-Japanese War and the navy's decline. After the revolution of 1911 Sun Yat-sen discussed Chinese sea-power issues many times, but he was helpless in the face of the numerous great powers and China's waning strength. All he could do was sadly lament the realities of sea power in East Asia.

In the period following the founding of the People's Republic of China, the deep pain felt after a hundred years of imperialist invasion and the new wounds of ideological conflict obstructed the introduction of these Western theories. In 1978, one of China's most authoritative academic publications, *Historical Research*, published Feng Chengbai and Li Yuanliang's "Mahan's Theory of Strength at Sea." They argued that this theory "was a blueprint that established maritime forces for the sake of imperialism, seized control of the sea, redivided colonies, and contended for global hegemony. . . . It represented a monopoly of the capitalist classes' interests and demands. From theoretical and strategic perspectives it demonstrated the position and function that maritime power occupied in the struggle for global hegemony." The essay also criticized "Russia's twentieth century Mahan," Sergey Gorshkov, the former commander in chief of the Soviet navy, and his propagation of "maritime hegemony." The authors thought Gorshkov's ideas followed in the footsteps of the imperialism of the old tsarist regime and the United States and that building an offensive far-seas navy would become "the important force behind the counterrevolutionary global strategy to achieve control of the seas, seize Europe, and dominate the world." They saw this as an "evil instrument" with which the strong bullied the weak.¹ The essay represented the Chinese people's basic understanding of Mahan's sea-power theory at that time.

In 1978, the Third Plenary Session of the Eleventh Central Committee of the Communist Party of China launched the era of reform and opening up.

^{*} This is a direct translation from the Chinese. The original German title could not be found.—Trans.

Chinese people began to use the ocean and reach out to the world. They started to acknowledge rationally the relationship between the ocean and the survival and development of the Chinese people. Chinese conceptions of the ocean took flight, and people began to reexamine sea-power theory. The year 1985 was the first time the People's Liberation Army Navy [PLAN] sent ships overseas and became a genuinely "international military service." The navy also promoted the strategic idea of "near-seas defense," which became a new direction for China's naval development. This led to the post-1990s resurgence of research on sea-power theory.

In 1991 the Ocean Press published the first volumes of the Ocean Consciousness series, which contained Zhang Wei and Xu Hua's *Sea Power and Prosperity*, the first book on sea power openly published in China. The book uses Karl Marx's "two types of natural resources" as its theoretical foundation. It begins with an analysis of the early cultures of Eastern and Western states and of their natural geographic environments and then compares Chinese and Western civilizational history. The work contrasts China, representing land-based civilization, with the Mediterranean states, representing maritime civilization. "The former is based on agriculture, and is controlled by natural economic patterns. The latter, however, is based on commerce, and is controlled by the economic patterns of commodities." Zhang Wei and Xu Hua point out that sea power was rooted in the conflicts of economic interests opened up by trade between maritime states. States that were successful in maritime trade needed to control sea lines of communication and capture desired markets, while simultaneously blocking other countries from controlling or occupying them.

This kind of power was required of states. Power belongs to the realm of politics, and politics is full of violence. Thus, a few merchant ships began to carry soldiers. As ships became more specialized, navies emerged. Therefore, behind the rise and fall of Mediterranean and Atlantic states "was hidden an invisible sword—sea power." Zhang and Xu state, "For the sake of their own economic and political interests, states use maritime forces (most importantly navies) to control the ocean, and this is called sea power." Their analysis is based on several centuries' history of struggle for control of the oceans. Their book forms, by linking the oceans and the state's political, economic, and military interests, an abstract concept. It does not focus on researching sea power itself but rather studies its use from the perspective of national strategy. It is a work of high-level, state-strategic theory. Dialectically, Mahan's sea-power theory takes the creation and development of capitalist sea power as its object of inquiry. It is strongly affected by the social class of its author and the age in which it was produced. But it also has a "rational core"—it accurately recognizes and grasps the patterns of capitalist production and development with respect to the use and control of the

ocean. From a high-level, national-strategic perspective, sea power exerts a huge effect on a state's rise.²

In 1998, Zhang Shiping's *Chinese Sea Power* was published by the People's Daily Press. Writing with a strong sense of urgency, the author used the past to discuss the present. He thought that in human history the states and peoples that had been and continued to be powerful and prosperous had either once or later possessed sea power. The Chinese people were the first in the world to move toward the sea, yet the phrase "sea power" has always been unfamiliar to them. Zhang Shiping's book declares that sea power is a category of history and that its meaning—especially the development of concepts of the ocean—changes continuously as societies grow. "In the simplest terms, sea power is the freedom to conduct activities in the maritime domain."³ The author emphasizes that to maritime countries or people, possession of sea power is not an objective but a means, an indispensable way of ensuring the survival and sustainable development of the state and nation. The book divides sea power into purely "military" and "comprehensive" sea power. Military sea power refers to one party in a war asserting control of a fixed maritime space for a certain period of time. Comprehensive sea power includes political, economic, and military factors. It denotes a state's freedom to act within a fixed maritime space during a specific period of time. The two are closely intertwined. If a state does not have comprehensive national power, it cannot possess military sea power; likewise, if a state lacks a certain amount of military sea power, it cannot have comprehensive sea power. Zhang Shiping identifies four factors affecting sea power in the world today: maritime military forces, maritime entities, ocean development, and maritime legal systems.

In 2000, the Sea Tide Press ceremoniously rolled out Wang Shengrong's *Maritime Great Powers and the Struggle for Sea Power*. The book hails America's Mahan as the "founder of 'sea power'" and the former Soviet Union's Gorshkov as having "reconstructed the new concept of 'state sea power.'" It uses John F. Lehman's "revival of Mahan's 'seapower' thought" as a section heading and goes even farther, systematically explaining the classic theories of "sea power" as well as methodically researching and discussing the history of the development of Western sea power.⁴ The book explains Mahanian sea power as follows. Sea power is an important historical factor or process. The economic basis of sea power involves the rights and interests in the sea—that is, economic sea power. The superstructure of sea power is the power to control the ocean—that is, military sea power. The cultivation, growth, and development of sea power rely on six discrete geographical factors: a state's geographic position, the natural territorial contours of the state, the scope of its territory, the size of its population, its national character, and its political traits. Wang believes Gorshkov's "state sea

power” concept is richer than Mahan’s sea-power theory—that “sea power is the sum of the organic composition of developing the world’s oceans and protecting national interests. Fixed national sea power determines the use of the ocean’s military and economic value, and [this form of sea power] is the capacity to achieve the state’s goals.” This work has similarities to Zhang Shiping’s *Chinese Sea Power*. They both deeply consider contemporary sea power, and both find that China must develop sea power, because “in the twenty-first-century world, people are still ‘dancing with wolves’”;⁵ also, “in the future the world’s oceans will still be under the control of strong states that possess sea power.”⁶

In this period translations on sea power were published one after the other: Gorshkov’s *Sea Power of the State*, Mahan’s *The Influence of Sea Power upon History and Naval Strategy*, a Mahan collection entitled *Sea Power Theory*, and Lehman’s *Command of the Seas*, among others. Domestic monographs on sea-power issues also increased, such as Yang Xinhua and Shi Ping’s *Chinese Sea Power and Historical Culture*, Qin Tian and Huo Xiaoyong’s *On the History of Chinese Sea Power*, Liu Yijian’s *Command of the Seas and Naval Strategy*, and Lu Rude’s *Ocean–State–Sea Power*, as well as the PLAN Command Department’s *Modern Chinese Navy* and Cheng Guangzhong’s *On Geopolitics*. All of these objectively explained and assessed Mahan’s sea-power theory.

It can be seen, then, that after reform and opening up, more and more Chinese people became conscious of the ocean and an increasing number of Chinese scholars considered the nation’s sea-power issues. This was the call of history.

THEORETICAL DIALECTICS: THE NATURE OF CHINA’S SEA POWER

In English, *haiquan* is translated as “sea power.” “Sea power” can be also rendered [in Chinese] as 海上力量 (*haishang liliang*), 海上实力 (*haishang shili*), 海上强国 (*haishang qiangguo*), etc. As a political term and strategic concept, *haiquan* perhaps comes closest to Mahan’s original meaning. This is because the noun “sea” connotes the ocean; Mahan said that he chose it after much careful thought, deliberately avoiding the popular adjective “maritime” to compel people to pay attention and so make the phrase widely used. Translating “power” as *quanli* gives a more political cast than the alternative word *liliang*. It may be that [for the Chinese] “sea power” has become too politicized or has “bad origins.” Thus, even as one set of Chinese people vigorously calls for Chinese sea power, another has misgivings. In the early years of the twenty-first century, China’s peaceful rise is attracting the world’s attention; the modernization of China’s national defense and navy is rapidly proceeding, and the “China threat” theory (especially the “Chinese naval threat” theory) is surfacing again and again in the international

community. As a result, the question whether or not the nation should develop sea power has once again stirred discussion in China.

Since 2003, the “sea-power school,” of which Zhang Wenmu is a representative, has attracted a great deal of attention in Chinese academia. Zhang has published a multitude of dissertations and books on sea power, including *On Chinese Sea Power*, *China’s National Security Interests within the Global Geopolitical System*, *Command of the Seas*, and *The Historical Experiences of the Rise of Major Powers*. He finds the deductive, logical origin of geopolitical theory in resources. In this context, humanity’s means for controlling geography have evolved from command of land to command of the sea. This is because with the Industrial Revolution, mankind’s methods of survival, production, and earning wealth changed. States’ economic development expanded beyond national boundaries and formed interdependent relationships with global markets and resources.

The most convenient medium that connects the world is the ocean, and the easiest, most direct routes are along sea lines of communication. In the age of capital globalization,* whoever had a large, strong navy and effectively controlled sea lines held an advantageous position in the division of international interests. The reality of history is that trade followed gunboats, not contracts. Any major trading power will also be a sea power. Issues of control of the seas are global issues. What happens in China depends on what happens in the world beyond its borders. Sixty percent of China’s oil resources come from the Middle East, and an enormous amount of trade relies on overseas markets. In today’s world, having laws but not power makes justice unattainable. China must have strong maritime forces. The navy is an important means for the state to expand its sea power. Therefore, to adapt to economic globalization and the context in which China is attempting to rise, as well as to the demands of its national interests and security strategy, China must greatly develop sea power and establish a strong navy—specifically, it should construct a far-seas navy, with an aircraft carrier at its core.⁷

At the same time, many in China oppose expansion of sea power. Xu Qiyu has pointed out, in “Reflections on the Sea-Power Fallacy,” that people currently have four misunderstandings about sea-power issues. One is that sea power has determined history, that it is in a class of its own, and that this is still the case. A second is that globalization demands that states have more international markets and resources and that having sea power means a country can guarantee security for these things. A third misconception is that major powers must struggle for sea power or they will have no prospects for development. The fourth is that through the development of naval forces a state can enjoy the sea power of a hegemon and that this is the foundation of genuinely equal “friendly relations” with hegemonic

* A reference to the late nineteenth and early twentieth centuries.—Trans.

countries. Xu believes that sea power has indeed played a deeply significant role in history but that this does not mean that sea power “determines” history. It has functioned within the context of given periods of historical development and has never been in a category of its own. He examines sea power from the perspective of an up-and-coming major power—its strategic choices and geopolitical restrictions, its ability by means of comprehensive national power to support sea-power development, and its risk of conflict with hegemonic states. In light of these considerations, he maintains, China should avoid the “sea-power fallacy.”⁸

In 2005, Ye Zicheng and Mu Xinhai published [the article] “A Few Thoughts on China’s Sea-Power Development Strategy” in *Research on International Politics*. The essay argued that a state having naval forces alone is incapable of becoming a major sea power; traditional Western concepts of sea power are not adaptable to the current development of China’s sea power. China’s sea power encompasses Chinese capacity for and influence over research on and development, use, and control of the oceans. It is not likely that China can become a major power with sea power, or even a major power that equally values land and sea; rather it can only position itself as a land-based power that has established substantial sea power.⁹ In 2007, Ye Zicheng published “China’s Peaceful Development: The Return to and Development of Land Power” in [the journal] *World Economics and Politics*. The essay posits that if China does not regard geopolitics from a hegemonic military-strategic perspective, then in the end land power will determine the development of sea, air, space, and information power. China’s peaceful development is primarily that of a land power, in a certain sense the return to land power. China’s peaceful growth has been oriented throughout toward its economic development and has not made obtaining power to control land its primary objective. As a result, China’s peaceful growth has advanced a new concept of land power—one that is focused on land, people, and development, as well as on the Eurasian continent and on comprehensiveness. Ye argues that building up inland areas was the first level of China’s land-power strategy and that [today] the Eurasian mainland should be the focus. China should establish a foothold in the Eurasian continent to develop strategic partnerships with Europe, Russia, and India. At the same time, good-neighbor diplomacy should be an important element in China’s land-power strategy. Moreover, Ye pointed out that land-power development is beneficial in easing the strategic contradictions with the United States resulting from China’s rise.¹⁰ These two essays* can be said to be the representative texts of China’s “land-power school.”

In the land-power-versus-sea-power debate, both sides accept the assumptions of China’s peaceful rise and that China will not pursue global hegemony, but the strategic choices they emphasize are markedly different.

* That is, that by Xu Qiyu and the one by Ye Zicheng and Mu Xinhai.—Trans.

The “sea-power school’s” theories certainly do not embrace Mahan’s original meaning. Zhang Wenmu has said that in English “sea power” denotes “maritime power,” not “maritime rights.” Moreover, Chinese sea power is a type of maritime right pertaining to Chinese sovereignty—not maritime power, much less maritime hegemony. In practice, China’s sea power is far from seeking maritime power; it is in the stage of merely protecting maritime rights and interests.¹¹ Zhang also notes that Chinese sea power unifies its objectives and means, to include “maritime rights” that proceed from China’s national sovereignty and the “maritime forces” that would bring about and protect such rights. It should not include the “maritime power” for which Western hegemons generally strive. The characteristics of Chinese sea power [in Zhang Wenmu’s view] are as follows: first, the processes of national unification and achievement of sea power are in lockstep; second, as determined by special geopolitical conditions, Chinese sea power can be described as limited; third, the development of China’s maritime military forces combines the limited nature of China’s long-term strategy with the unlimited nature of its near-term strategy.

The scholar Liu Zhongmin, of the sea-power school, holds that from a geopolitical perspective, China must on the one hand consider how improvements in security on land offer the strategic possibility of concentrating force for the purposes of promoting sea power, while on the other hand it must consider the necessity of developing sea power itself, given the pressures on maritime frontier security. With respect to the relationship between developing sea power and comprehensive national power, China should be calculating not how to decrease the already quite low investment in naval defense but how to increase the contributions of the maritime economy to comprehensive national power. In the relationship between sea-power development and China’s peaceful rise, the former should not conflict with or hinder the latter.¹²

The doctrine of the land-power school does not completely reject the idea that China should develop sea power. Ye Zicheng has said that Chinese sea power should be defined as the nation’s capacity and influence with respect to researching, developing, using, and to a certain extent controlling the sea. It should also address in a detailed way the question of how to “walk the road of developing sea power with Chinese characteristics.”¹³ Ye Zicheng has pointed out that China’s peaceful development is a new type of land-power conception. If, as it is stated previously, China does not view geopolitics from a hegemonic military strategic viewpoint, land power should in the end be determined by sea, air, space, and information power.¹⁴ Xu Qiyu too has not completely rejected sea-power development. He has said that sea power is not simply a military question but a grand-strategy issue that concerns national security and development. From a grand-strategy perspective, however exalted sea power becomes,

it is only one means of actualizing grand strategy. In summary, sea power serves strategy—strategy does not serve sea power.¹⁵

In 2006 the Current Affairs Press published the book *Roadmap for Asian Regional Cooperation*, which mentions the “theory of harmonizing sea power and land power.” This book argues that in the process of economic globalization and regional integration, states should advocate peace and cooperation between maritime and land-based countries, “adopting peaceful methods to manage and use geopolitical relationships between states, promoting enduring peace, security, development and prosperity for individual states, the region, and the world,” thus realizing “harmony of land and sea” and common development.¹⁶

In the context of today’s continuously growing economic globalization and the rising importance and usefulness of the ocean, and given China’s deepening reform and “opening up,” rapidly increasing foreign trade, and gradual expansion of overseas interests, debate over the question whether or not China should develop sea power has become meaningless. This is obviously not the point being debated by the two camps. The substantive issues are that of the nature of Chinese sea power and the direction of its development, whether or not it should be a significant option in China’s national strategy.

Of these, the most basic question is the nature of Chinese sea power; today it is a given that China should develop sea power as a significant option of national strategy to support the nation’s rise. But China cannot repeat the mistakes of Mahanian sea power.

To begin with, times have changed. Mahan’s sea-power theory is from an age when capitalism led to imperialism and “imperialism was war.” Therefore it possessed characteristics of a time when the state used military force to control the oceans and promote the expansion of global capitalism and the pursuit of monopoly. However, ours are globalized times, in which peaceful development is the mainstream. Even though as the world’s sole superpower the United States still pursues sea-power “fundamentalism,” it too has been forced to change. This is because a high level of economic interdependence makes any country unwilling or unable to use military force frequently. The conditions under which a state’s maritime security rests completely on war and hegemony no longer exist.

Second, the scientific and technological foundations are not the same. Mahan lived in an age of broad-based development in the field of mechanization. Navies, because of their integration of surface, air, and undersea operations, as well as their good endurance, combat radius, and global power-projection capabilities, became the most important services of the age. Although these advantages are still maintained by navies in the information age, they cannot be absolute. New situations emerge as a result of struggles in space and in the electromagnetic realm, as well as over rights to control information and the Internet. The concept

of integrated operations guides decisions of military strategy; the technological foundation on which the supremacy of sea power rested no longer exists.

Third, cultural traditions are not the same. “Power” was at the core of Mahan’s sea-power theory. It possessed characteristics of traditional Western realist theory. To date it still influences the national- and maritime-security policy of the United States: develop maritime forces (the most important being the navy) and attain sea power—control the ocean (the most important [parts] being sea lines of communication)—control global trade—win global hegemony. But the theoretical paradigms of traditional Chinese military studies include the concepts of concord (*hehe*) and harmony (*hexie*) and the fundamental aspects of peace and defense. China cannot choose to imitate Mahan’s offensive, hegemonic sea-power model.

Fourth, there are disparities in state character. Mahan’s sea-power theory was born in the United States, so it has been revered by Western capitalist countries and necessarily has the nature and ideological bent of these nations. Today’s China is a socialist power under Chinese Communist Party rule. This fact has determined China’s foreign strategy and foreign policy and established as the preconditions for developing sea power the principles of the “four persists” (*sige jianchi*). Under the guidance of “the five principles of peaceful coexistence,” the “new security” concept, and the “harmonious world” concept, China will extract the wheat and discard the chaff of sea-power theory.*

China will not repeat the mistakes of Mahanian sea-power theory, but [to ensure that it does not,] the country needs to reflect on the history of its national security strategy, how it conceptualizes the ocean, and the conservative, negative side of traditional military studies. In a certain sense, sea-power theory is an achievement of civilization, and China should draw from some of its rational elements, including the following: its basic patterns (maritime economic activities that are characterized by a commodity economy and influence the development of productivity, as well as a state’s rise); the philosophical methods it reveals (when the ocean ceases to be a barrier and instead brings the world together, a state needs to think about global strategy); and the important reality it exposes (the essential linkage between a state’s maritime security, national economy, and politics, and the navy’s important role among these). Lenin once pointed out, “In the Marxist revolution, the proletariat’s ideology gained historical significance because it did not forsake the most treasured achievements of the capitalist class’s generation. Conversely, it absorbed and altered that which was valuable from

* According to a Deng Xiaoping speech of 30 March 1979, the “four persists” are to persist in supporting “the socialist path, the dictatorship of the proletariat, the leadership of the Communist Party, and both Marxism and Mao Zedong thought.” For the full speech, see “邓小平：坚持四项基本原则（1979年3月30日）” [Deng Xiaoping: Persist in Supporting Four Basic Principles, 30 March 1979], available at www.people.com.cn/GB/channel1/10/20000529/80791.html.—Trans.

over two thousand years of humankind's ideological and cultural development.”¹⁷ This is the attitude we too should adopt toward sea-power theory.

HISTORICAL CHOICE: DEVELOP SEA POWER WITH CHINESE CHARACTERISTICS

Sea power is an issue that falls within the purview of national strategy and national-security strategy, but it does not constitute their entirety. Instead, it is the maritime component of national strategy and national-security strategy. The state's understanding and use of sea power are not a matter simply for the maritime domain. Rather, sea power is a complete policy, a process of specific steps to be implemented. It begins with the land and how the land influences the ocean. Emphasizing the development of sea power is not the same as following the path that Western powers took to maritime hegemony. Likewise, emphasis on a return to land power and a land-centric approach cannot be equated to a capacity for naturally peaceful development. A nation with land power can take the hegemonic path as well. In reality, a state must base its development on land, but it cannot ignore the objective existence of sea power. Thus, people should no longer deliberately separate “land power” and “sea power” but should consider the two in tandem and conduct integrated planning.

Contemporary Chinese sea power is, in practice, a component of the state's comprehensive national power and strategic capacity. It is a means of actualizing China's peaceful development strategy and national maritime security. It is concretely realized in national strategic plans for developing, using, managing, and controlling the sea and in the management systems and maritime forces themselves. Sea power can be an element of both “hard power” and “soft power.” China's sea power should be formed of the following components:

- National maritime strategy. Maritime strategy is comprehensive state planning of maritime matters taking account of such things as the economy, politics, the military, science and technology, law, and culture. It is a product of state power. It is also a fundamental reflection of the state's concept of the sea and of the government's level of understanding of the sea. National maritime-development strategy and national maritime-security strategy derive from national maritime strategy. Maritime-development strategy mainly expresses the general plan for the progression of a state's maritime economy and industry. A state's maritime-security strategy, however, comprises its comprehensive planning for and guidance of security affairs at sea—the sum total of the state's maritime-security concepts in the political, diplomatic, military, economic, and scientific domains.
- Governmental ocean-management mechanisms. The state is the subject of sea power, and the government is the material representation of the state's

power. Therefore, government mechanisms for ocean management should be a formative part of sea power and should mainly include policy mechanisms, legislative and executive institutions, and related cooperative structures.

- National maritime forces. They are the executors and protectors of the state's maritime strategy and ocean development strategy; they constitute the major support for sea power. These forces include civilian-use marine transport resources (the merchant marine), near- and far-seas fishing fleets, scientific survey vessels, and marine-resource exploration and development assets, among others; military forces at sea (of which the navy is central, but that also include maritime militia reserve fleets); and maritime law-enforcement forces, which include the Maritime Safety Administration (MSA), the Coast Guard of the Border Control Department, the China Marine Surveillance (CMS), Fisheries Law Enforcement (FLEC), and Maritime Customs, among others.

In the second decade of the twenty-first century, there was a change in China's peripheral maritime security environment. The security demands of national sea lines of communication and of overseas interests surged. As China's national power has increased, international society has increasingly demanded that China take on the burdens of a great power. As a result, China's sea-power development stands at a new historical starting point. Today, CMS and FLEC are taking positive actions to safeguard China's near-seas maritime security. China's navy has implemented routine antipiracy escorts in the Gulf of Aden and Somalia's maritime space, in accordance with a United Nations resolution. The hospital ship *Peace Ark* has journeyed to third-world countries in Africa and Latin America to provide medical care. Combat vessels have entered the Mediterranean for large-scale evacuation operations from Libya and to provide maritime security. China has launched a training aircraft carrier capable of far-seas operations and sent it on sea trials. The deep-sea submersible *Jiaolong* has dived to depths greater than seven thousand meters.

Today, development of Chinese sea power is not a subjective factor but an important historical choice of China's national strategy. First of all, in the age of globalization, humanity's development largely depends on the oceans. China's rise too greatly relies on the oceans. Sea lines of communication and maritime resources have already become strategic components of sustainable development, components from which the state cannot depart for even a moment. This consideration shapes sea power's historical influence on the momentous rejuvenation of the Chinese nation. This influence is not absolutely decisive, but its relative

decisiveness must be faced squarely. We need to expand the horizons of our security strategy, establish a foothold in the world, and strategically manage [*jinglüe*] the ocean. Furthermore, we should synchronize the maritime expansion of China's national interests and the process of its rise, demanding a modernized navy that provides maritime security and implements necessary, limited sea control [*haiyang kongzhi*]. China also requires a navy strong and large enough to fulfill new missions, as well as adapt to the nation's great-power status. Because China faces a global trend toward revolution in military affairs (RMA), it must confront the immutable laws governing the relationship between "spears" and "shields" in contemporary international society.*

Chinese sea power must have Chinese characteristics. The first such characteristic is big-picture, highly centralized strategic planning that aligns with China's national strategy regarding peaceful progress toward a harmonious world and its foreign strategy. Second, sea power should embody the core values of socialism with Chinese characteristics—a socialism that is guided by Marxist tenets, that has as its objectives eliminating exploitation and achieving justice, and that dialectically combines China's national interests and the shared interests of humankind. Third, sea power ought to give priority to the maritime economy, maritime economic forces, and exploration for and use of ocean resources. Fourth, Chinese sea power should emphasize comprehensive security and cooperative security; actively develop security cooperation with littoral states and states along sea lines of communication; and comprehensively deploy economic, political, diplomatic, military, scientific, and cultural means to achieve maritime security. Fifth, Chinese sea power should reflect the national-security strategy of "active defense." Its basic objective should be to assure national maritime security and national economic interests. Additionally, Chinese sea power should emphasize the limited use of military and paramilitary forces at sea, stressing especially the search for ways to use maritime forces in peacetime, including as instruments of political diplomacy. This will have to be an important component of China's future sea-power theory and a highlight of sea-power theory with Chinese characteristics.

In brief, China's development of an ability to control and manage the ocean is meant not only to protect national interests but also to safeguard world peace. This is the crux of the difference between sea power with Chinese characteristics and sea power in general. Chinese sea power is the application of national maritime forces to developing and using the sea. It is also the process of protecting national rights and interests and ensuring national maritime security. Above all, it is the process of developing strategic management of national maritime affairs, the capability of administering the ocean, and the art of doing so.

* The Chinese characters for "spears" and "shields," when combined, create the word "contradiction." The author's point is that contradictions are inevitable.—Trans.

NOTES

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FERNANDO OLIVEIRA'S *ART OF WAR AT SEA* (1555)

A Pioneering Treatise on Naval Strategy

Luis Nuno Sardinha Monteiro

The era of maritime discoveries was a period of expansive exploration, one that prompted the emergence of a range of maritime thinking in the sixteenth century, mainly in the countries of southern Europe. Of all the insightful and innovative works written at that time, as shown in table 1, Fernando Oliveira's *Art of War at Sea* has two distinctive features.¹ First, it went beyond the usual operational and tactical perspectives and entered the domain of strategy. While *Art of War at Sea* is certainly a period piece, it is unusual in foreshadowing some aspects of late nineteenth- and early twentieth-century naval strategic thought in the works of Alfred Thayer Mahan. Second, as evidenced in table 1, Oliveira's volume was the only one to be published at the time of writing.² As a matter of fact, it was the first printed treatise on naval strategy. However, it was written and published in Portuguese and never translated into another language.³ Therefore,

this article aims at presenting *Art of War at Sea* to English-reading audiences, with a focus on its strategic aspects, thus contributing to the international naval canon.

BRIEF BIOGRAPHY OF OLIVEIRA

Fernando Oliveira was born in the small hamlet of Gestosa, in Portugal, in 1507 and entered a Dominican convent at age ten.⁴ He was a disciple of one of Portugal's most important humanist scholars, the noted Dominican André de Resende, who educated him in Scholastic philosophy and

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TABLE 1
MAIN WORKS ON MARITIME SUBJECTS WRITTEN IN SOUTHERN EUROPE IN THE SIXTEENTH CENTURY

Date of Writing	Title	Author (nationality)	Date of Publication
1516–20	<i>Les faiz de la marine et navigaiges</i> (On the Nature of the Fleet and Navigation)	Antoine de Conflans (French)	1842
1530	<i>Quatri partitu en cosmografía práctica, y por otro nombre, Espejo de navegantes</i> (Navigator's Glass)	Alonso de Chaves (Spanish)	1983
1550–54	<i>Della Milizia Marittima</i> (Of the Maritime Militia)	Cristoforo Da Canal (Venetian)	2010 (fourth book was printed in 1930)
1552–54	<i>Arte da Guerra do Mar</i> (Art of War at Sea)	Fernando Oliveira (Portuguese)	1555

theology. Oliveira learned to read and write fluently in Latin and studied the most prominent classical authors. When he was twenty-five, he broke with his order and escaped to Spain, where he continued linguistic studies and may have acquired his interest in shipbuilding.⁵

After returning to Portugal, Oliveira published a grammar of the Portuguese language in 1536. This was his first book and also the first Portuguese grammar ever published.⁶ It is not clear when and where Oliveira learned navigation, but it may well have been during this time, as nautical matters were then popular in Portugal.

By 1541, he was again in Spain and embarked from Barcelona on a ship bound to Genoa. Oliveira's ship was captured by the French and taken to Marseille, but he soon went from prisoner to pilot of French galleys in the Mediterranean, because of his navigation knowledge and the high regard afforded to Portuguese pilots. He returned to Portugal in 1543, where he stayed for two years. In June 1545, a twenty-five-ship naval force, headed by the baron de La Garde, called at Lisbon to replenish stores on its way to Le Havre to join the two-hundred-ship armada that planned to invade England during the naval war of 1544–46. Oliveira was recruited to serve as a pilot on board the galley of the baron de Saint-Blancard and won his confidence, as well as that of La Garde, by virtue of some very useful suggestions about ship design.⁷

Saint-Blancard's galley was captured after a skirmish between French galleys and an English squadron in May 1546. Oliveira was taken to London, but it seems he was never imprisoned. Most probably, he "was employed as an ambassador in the negotiations over the French galley and its crew" and became well known in the court.⁸ Some historians believe that he gained the esteem of Henry VIII,

probably because of his “professional knowledge [as] . . . a pilot” and his “experience in galley construction and warfare, [which were] of immediate interest to Henry at the time.”⁹

The quickness and apparent ease with which Oliveira gained the respect of La Garde and King Henry VIII are indicative of his profound erudition and culture, qualities that made him valuable to those powerful men. Oliveira stayed in England for almost a year during a period preceding the rise of the country to mastery of the seas under Queen Elizabeth I. By then, Oliveira was certainly well aware that sea power was crucial for the integrity of the Portuguese empire. Nonetheless, during his stay in England he became acquainted with the English merchant classes (which were engaged in extending their overseas trade), consolidating his beliefs on the importance of sea power for the livelihood of maritime nations.

In March 1547, shortly after the death of Henry VIII, he was sent back to Lisbon with a letter to the Portuguese king, Dom João III. In Portugal, Oliveira did not refrain from praising some of the ideas of the arch-heretic King Henry VIII, prompting the attention of the Inquisition. Oliveira was interrogated at length and condemned on charges of heretical practices. He remained in jail until 1550 and under monastery arrest for another year.

In 1552 he joined, as chaplain, a Portuguese squadron composed of five small warships sent to northern Africa to help an allied Moroccan monarch, the king of Velez. The expedition failed, and Oliveira was taken prisoner for a short time by the Turks. He recounted (specifically, in chapter 12 of Part II) this failed campaign in *Art of War at Sea*, which he produced from 1552 to 1554 upon his

return to Lisbon. The book was published in 1555, and in it Oliveira criticized some maritime policies of the Portuguese administration and described chapters of Portuguese history in a manner not aligned with the official version. Therefore, he was imprisoned again by the Inquisition four months after the book’s dissemination; he remained in jail for two more years.

Little is known about Oliveira’s activities from 1557 until his death in about 1585, except that he continued to parlay his vast experience at sea to produce seminal treatises on nautical and naval warfare issues. As British professor Harold Livermore has written, Oliveira was “a passionate character which had imbibed a strain of Dominican zeal . . . and combined it with a rhetorician’s love of words and a marked taste for erudition: these he applied to the meticulous study of seamanship.”¹⁰



Cover of the original edition of *Art of War at Sea*

Around 1570 he wrote the encyclopedic *Ars Nautica* (Art of Navigation) in Latin, but it was never published. The incomplete manuscript is preserved today in the Leiden University Library in the Netherlands.¹¹ It has three parts: one about navigation, cartography, and meteorology; another about naval construction; and a third addressing broad naval logistical and administrative matters. According to the Portuguese maritime historian Francisco Contente Domingues, the second part was the first theoretical text on naval construction written by a Portuguese author and was unparalleled throughout Europe, with its extensive array of themes and penetrating analysis and explanations.¹²

Art of Navigation was followed by a companion work on naval construction, written in Portuguese and entitled *Livro da Fábrica das Naus* (Book on the Building of Ships). This piece dealt with the same subjects as the second part of *Art of Navigation*, but it was more than a translation from Latin to Portuguese of the earlier treatise, detailing and updating some of its subjects. The book was originally written around 1580 but was only published more than three centuries later in 1898.¹³ The manuscript of this treatise is in the National Library of Portugal, in Lisbon.¹⁴ Probably around 1581, Oliveira wrote a *History of Portugal*, the manuscript of which belongs to the National Library of France, in Paris.¹⁵

Oliveira, then, was a clergyman, a sailor, a pilot, a diplomat, a soldier, a philologist, a historian, a naval construction theoretician, and a naval strategist. He was in fact a true polymath, a man who mastered various fields of knowledge and pioneered by writing an original treatise on naval strategy, *Art of War at Sea*.

ART OF WAR AT SEA

Art of War at Sea is organized into one prologue and two parts, each containing fifteen chapters. The first part, "Intention and Preparation for War at Sea," is dedicated largely to broad political and strategic issues, including a reflection on the nature of war in its ethical, ontological, and moral dimensions. The second part, "Of Armed Fleets & Maritime Battles & Stratagems," covers nautical matters and naval tactics. Table 2 lists all the book's chapters.

This table of contents shows the comprehensiveness of the volume through a wide range of subjects, including naval construction, ship commissioning, navigation, seamanship, meteorology, oceanography, logistics, recruitment, training, education, command skills, maritime ceremonial, and intelligence. To illustrate his ideas, Oliveira employed warfare examples from ancient Greece and Rome, as well as from the discoveries era, with an emphasis on Portuguese history. Moreover, he recounted personal experiences, such as the capture of his galley by the English in 1546 and the failed expedition to Velez in 1552. Oliveira argues that the principal causes for those defeats were deficient leadership in the former episode and lack of organization, discipline, and training in the latter.

TABLE 2
CHAPTERS OF *ART OF WAR AT SEA*

Part I: Intention and Preparation for War at Sea	
Chap. 1	That It Is Necessary to Make War
Chap. 2	Of Who Can Make War
Chap. 3	That War at Sea Is Necessary
Chap. 4	Which War Is Just
Chap. 5	Of the Intention and Conduct of War
Chap. 6	Of the Admiral's Service
Chap. 7	Of Arsenals and Their Provisioning
Chap. 8	Of Wood for Ships
Chap. 9	Of When to Cut Wood
Chap. 10	Of Warehouses and Their Provisioning
Chap. 11	Of Victuals
Chap. 12	Of Sailors
Chap. 13	Of Captains of the Sea and of Their Power
Chap. 14	Of How Soldiers Should Be Selected and Recruited
Chap. 15	Of Soldiers' Training
Part II: Of Armed Fleets & Maritime Battles & Stratagems	
Chap. 1	Of Fleets' Ships
Chap. 2	Of Ships' Crews
Chap. 3	Of Provisioning of Supplies, Munitions, and Rigging
Chap. 4	Of When to Set Sail and of Weather Changes
Chap. 5	Of Storm Signs
Chap. 6	Of Winds, Their Regions and Names
Chap. 7	Some Warnings Useful for Sailing
Chap. 8	Of Tides, Currents, and Streams
Chap. 9	Of How Armadas Set Sail
Chap. 10	Of Sea Battles and Some Needed Stratagems
Chap. 11	Of the Place to Engage in Combat
Chap. 12	Of How the Ships That Went with the King of Velez Were Lost
Chap. 13	Of Rules of War at Sea
Chap. 14	Of Some General Rules of War
Chap. 15	Of the Work's Conclusion

Therefore, the book emphasizes the importance of those elements for success in naval warfare.

Influences in Art of War at Sea

Art of War at Sea was inspired by Oliveira's own experience, having spent long periods under way in the Mediterranean and in the Atlantic aboard Portuguese and French ships, and also having become acquainted and, in some cases, even working with Spanish, Italian, and English sailors and tradesmen, as well as with Moors.

In addition, Oliveira was a man of his time and therefore influenced by the Renaissance, a movement characterized by humanism, consisting of the rediscovery, study, and imitation of the philosophy, art, history, and literature from ancient Greece and Rome. Many Renaissance humanists were clergymen, and combined the revival of the great classical authors with the promotion of biblical texts. That was also the case with Oliveira, whose Renaissance humanism and Christianity are clearly evident in his writing. Professor Livermore even considers that "much of the value of Oliveira's book lies in the glimpses of reality that shine through a welter of classical and Biblical allusions."¹⁶

In the prologue of his treatise, Oliveira claimed the pioneering nature of his work on naval warfare "about which no author, to my knowledge, wrote any documents before or, if someone wrote about it, I confess it did not come to my cognizance, only a little thing from Vegetius."¹⁷ However, Publius Flavius Vegetius Renatus's influence was far from little. Vegetius was a Roman writer of the fourth century AD who wrote *Epitoma Rei Militaris* (Concerning Military Matters), a treatise about warfare and military principles to explain methods and practices used during the Roman Empire. The final chapters (31 to 46) of Book IV of Vegetius's piece are devoted to naval tactics and constituted Oliveira's primary source.

Oliveira mentions Vegetius thirty times in *Art of War at Sea* on such diversified matters as personnel issues, including conscription, qualities required for soldiers and seamen, leadership, training, organization, and discipline; matériel issues, including fleet balance, types of ships, logistics, and properties of materials; and employment of military and naval power, including combat readiness, military and naval tactics, meteorology, and deception. Furthermore, Oliveira presents (in chapter 14 of Part II) thirty-nine general rules of war, inspired by Vegetius's thirty-five general warfare maxims, from chapter 26 of Book III of *Concerning Military Matters*. While most of Oliveira's rules were original, some were adaptations of Vegetius's maxims. Oliveira drew as well on the work of a number of other Greek and Roman authors, summarized in table 3.¹⁸

The other main sources for *Art of War at Sea* were the Bible (Isaiah, Jeremiah, Pauline epistles, and the Gospel according to John) and some medieval Catholic authors, such as Saint Augustine. A notable Algerian-Roman theologian and

TABLE 3
CLASSICAL AUTHORS QUOTED IN *ART OF WAR AT SEA*

Author	Topics of the Quotes
Quintilian	Rhetoric
Aelian	Combat readiness, dissuasion, and military organization
Plato	Combat readiness and dissuasion
Sallust	Combat readiness and dissuasion
Diodorus Siculus	Combat readiness, dissuasion, characteristics of soldiers, and maritime swell
Alexander the Great	Politics
Aulus Gellius	Characteristics needed for seamen and victory in war
Vitruvius	Qualities of shipbuilding wood and ship design
Pliny the Elder	Qualities of shipbuilding wood, nourishment of seamen, winds, tides, and advantages of teamwork
Julius Caesar	Weapons, influence of meteorology, and maritime signaling
Marcus Varro	Properties of food, characteristics of men, and leadership
Justinus	Unity of command, unity of action, and trade
Cicero	Vicious behaviors
Seneca	Metaphors from Seneca's tragedies and information on winds and storm signs
Cato the Elder	Seamen and military discipline
Julius Frontinus	Seamen and military discipline
Claudian	Transition from oared vessels to sailing ships
Columella	Maxim from one of Columella's works

philosopher of the fourth and fifth centuries, Augustine helped craft the just war theory, which was central to *Art of War at Sea*. Oliveira also quotes Saint Ambrose (on the appropriateness of priests going to war) and Saint Thomas Aquinas (on war and religion).¹⁹

The bibliography employed in *Art of War at Sea* reveals an erudite author, cognizant of an impressive catalogue on the most varied subjects. Most of the sources Oliveira used are related not to war at sea but to warfare in general and to generic matters, such as rhetoric, wood qualities, and food properties. This confirms that he was being truthful in asserting his unawareness of other works on naval warfare, with the exception of the chapters on naval tactics in Vegetius's *Concerning Military Matters*. Even that source must be qualified, as those chapters correspond to only seventeen pages and were written more than a thousand years before, when navigation and naval warfare were completely different.²⁰

Strategic Insights of Art of War at Sea

The British historian Richard Barker opines that “there is little doubt[:] . . . *Art of War at Sea* is on a grander scale than any of its predecessors.”²¹ It was also a book ahead of its time, as it established some of the basis of modern naval strategy, according to the Portuguese scholar and naval officer António Silva Ribeiro.²² In fact, while the preceding and contemporary works on maritime or naval affairs focus on operational, tactical, or technical issues, *Art of War at Sea* offers a strategic reflection on the importance of naval power as the key to maintaining a mighty empire, such as the Portuguese held at that time, with territories and possessions in all five populated continents.

In the sixteenth century the concept of naval power had not been introduced. Nevertheless, a careful reading of *Art of War at Sea* shows that Oliveira uses the expression “war at sea” in a sense that encompassed all aspects of military organization for sea warfare, including construction, commissioning, training, and operation of warships—that is, what would come to be defined as naval power.

In his prologue, Oliveira emphasizes the importance of war at sea: “In particular for this land’s men, that now use the sea more than any others, thus acquiring high profit and honor. . . . Nurturing this war [i.e., this power], Portuguese people have gained lots of wealth & prosperity . . . & have gained honor in a short period of time, as no other nation in longer periods.”²³

Oliveira’s volume throughout reiterates this idea that nations must defend their interests at sea by the use of naval power, stressing that maritime security should not be taken for granted.

Because the sea is very licentious and men cannot avoid using it to trade, to fish and with other purposes, taking supply and profit from it, it is essential to safeguard it, through fear or severe punishment. . . . Due to all these reasons, it is necessary to have navies at sea, that safe keep our coasts and passages and that protect from the surprises that can storm from the sea, which are much more sudden than the ones coming from land.²⁴

This view is as applicable today as it was five hundred years ago, because the main challenges to naval power in the twenty-first century are similar to those of the sixteenth.

Another prominent feature of Oliveira’s book is the way it addresses some perennial strategic principles, with insights that are still valid and useful. In fact, *Art of War at Sea* highlights the importance of a substantial number of factors (noting the reference in the 2008 Portuguese-language edition cited above):

- *National defense*: “Good war makes good peace. And therefore the peace that we now enjoy was conquered by past wars, but careless peace will leave war to posterity. Peace lovers that now enjoy it should not rest if they want it

perpetually, because if the enemies of peace see a soft peace, they will take it away” (Part I, chap. 1, p. 12).

- *Readiness at sea*: “It is necessary to be ready to defend ourselves from those who want to attack, because promptitude, as says Vegetius, is sometimes more useful than strength in war” (Part I, chap. 1, p. 11), and “Promptitude gives victory to the diligent and negligence defeats the careless” (pp. 11–12).
- *Surprise factor*: “Sudden attacks terrify the enemies, but expected encounters do not frighten them” (Part II, chap. 14, p. 133).
- *Time as a fundamental element of strategy*: “There is a time to engage in battle, when we have an opportunity or when the advantage is on our side” (Part II, chap. 10, p. 118), and “[In battles] the occasion is more important, than bravery or wisdom” (Part II, chap. 14, p. 133).
- *Space as a fundamental element of strategy*: “In combats, the location is responsible for a great part of the victory, because those who find themselves in an inadequate position double their works: some caused by the position and some caused by the opponent” (Part II, chap. 11, p. 121), “At sea, as well as on land, there are places . . . that give and take opportunity and benefit to ships at the time of fighting” (p. 121), and “The location is often worthier than the force” (Part II, chap. 14, p. 133).
- *Dissuasion*: “And therefore, favor weapons because they are not as contrary to peace as they may seem, contrarily they protect peace as the dogs protect the sheep, although they may seem their foes” (Part I, chap. 1, p. 12).
- *Deception*: “Let us deceive as much as we can, so that we will be taken as liars” (Part II, chap. 14, p. 134), and “He who tells the truth to his enemy, warns that enemy against himself” (p. 134).
- *Intelligence*: “The captains must have warning about the opponents’ fleets, if they are big or not, so that they do not miss or unnecessarily exceed what is needed” (Part II, chap. 1, p. 68), and “As important as covering our intentions is trying to know the opponent’s” (Part II, chap. 14, p. 134).
- *Unity of command*: “The Greek army, while it had only one head and King [Alexander the Great], conquered and won the world, but as soon as the King died and divisions arose, everything started falling apart” (Part I, chap. 13, p. 49), and “It is necessary that men of war have a head . . . and one that commands over everyone” (p. 50).
- *Unity of action*: “Many times, a few aligned people can achieve more than many non-aligned” (Part I, chap. 13, p. 49).

- *Tailoring war-fighting capabilities to the type of conflict*: “Thus, according to whom we fight, we shall use those weapons” (Part I, chap. 10, p. 42) and “The warships must also be adequate to the wars they are expected to fight, both in number and in type” (Part II, chap. 1, p. 68).
- *Balanced fleet composition*: “Therefore in the fleets it is necessary to have different ships, ones to bear the weight of war, and others to support and help those ones” (Part II, chap. 1, p. 69).

To conclude this analysis of the strategic insights of *Art of War at Sea*, it is worth highlighting some of the listed general rules of war. These short aphorisms summarize and encapsulate the key takeaways of the book, stressing the importance of (as found in Part II, chapter 14, pages 133–34, of the Portuguese-language edition cited above) *recruitment* (“Mistakes in commissioning endanger the battles”), *training* (“Exercises make men braver than nature”), *motivation* (“When personnel are hesitant, do not enter a fight”), *logistics* (“Those who do not supply themselves with provisions . . . will be beaten without fighting”), *organization and discipline* (“Better order than multitude”), *leadership* (“The prudent captain is always ready, the skillful one does not miss a good opportunity, when it shows up”), and *meteorology* (“It must not be the sea waiting for you, it must be you waiting for the sea,” and “We shall protect from sea state and weather, the same way we protect against our enemies”).

These general rules conclude with a maxim, on the contradictory nature of war: “War requires fairness and deceit, truth and lies, cruelty and pity, preserving and destroying.”²⁵

Humanitarian Convictions in Art of War at Sea

Another important feature of this treatise is the humanitarian (that is, benevolent) approach to the theory of just war and to the problem of slavery. The just war theory evolved from the concepts of holy war contained in the Bible, and *justum bellum* (just war) theorized by the Romans. It sought to justify aggression morally through codification of a set of rules that evolved with time. For example, Augustine averred that Christians should, by definition, be against war. But the pursuit of peace should include the option of going to war (a just war) if that is the only option to prevent a grave wrong. Almost nine centuries later, Aquinas delineated criteria for just war, as needing to be declared by the proper authority, have a just cause, and involve fighting with the right intention.

Oliveira draws on the heritage of Augustine and Aquinas to write in the prologue that “the war of Christians that fear God is not bad, it is full of virtues, because it is done with a desire for peace, without greediness nor cruelty, as a punishment to the bad and relief of the good.”²⁶ Then, he invoked Augustine to

define just war as “the one that defends a people from those who want to offend it without reason . . . and [the war] that punishes the offenses to God.”²⁷

By the mid-sixteenth century, theologians were expanding this theory to rationalize the fights against pagans and heathens who had never encountered Christianity—namely, the indigenous peoples of Africa and the New World. However, Oliveira’s work takes a more fraternal approach: “We cannot make just war to the infidels who were never Christians, like Moors, Jews and pagans, that want to be at peace with us and did not take our lands or prejudiced Christianity.”²⁸

Oliveira also imposes humanitarian rules of engagement: “You shall not kill women, children nor beasts, cut fruit trees, burn warehouses, nor damage the things that men need.”²⁹ These humanitarian convictions prompted him to condemn slavery—a position that was anathema among the widespread acceptance of slavery as natural in the sixteenth century. Audaciously, Oliveira condemns slavery as a “bad habit,” arguing that “no human reasoning allows the public and free practice of buying and selling free and peaceful men, as one buys and sells beasts, cattle or horses.”³⁰

Art of War at Sea and Mahan

Because *Art of War at Sea* was neither widely disseminated nor translated, it had only marginal impact on subsequent naval strategy. Nonetheless, the main ideas that would later be conceptualized and publicized by some of the most notable naval thinkers were already present in this pioneering treatise. In particular, *Art of War at Sea* is a distant yet direct ancestor of the works of the world’s best-known maritime strategist, Alfred Thayer Mahan, who 350 years later brilliantly theorized about the influence of sea power on history and its importance for the wealth and prestige of nations. Both strategists shared the conviction that the prosperity and international status of maritime nations (like Portugal and the United States) depended heavily on seaborne trade and connected maritime activities. They believed that those nations should develop robust sea power, including powerful navies, to achieve their full potential. The main difference between Oliveira and Mahan is that Oliveira wrote when the Portuguese empire was starting to decay (his writings constituting a warning about the consequences on economic and political status of disinvestment in naval power), whereas Mahan wrote when the United States was initiating an expansionist era (his writings representing a road map to world supremacy, based on a strong sea power and a dominant navy).

Furthermore, Oliveira and Mahan were both pious Christians, Oliveira a Catholic and Mahan Protestant. They shared views consistent with the theories of just war and advocated the use of naval/sea power to disseminate Christianity. In *Art of War at Sea*, Oliveira commends the use of naval power for spreading

Christianity, praising the Portuguese discoveries as “allow[ing] multiplying the God’s faith & the salvation of men.”³¹ He also adds that “His Highness [the king of Portugal] has armadas at sea to augment the Christian faith and to defend his lands.”³² Mahan offered a similar sentiment in “A Twentieth-Century Outlook,” an essay for the *Harper’s New Monthly Magazine*.³³ “The great task now before the world of civilized Christianity, its great mission, which it must fulfil or perish, is to receive into its own bosom and raise to its own ideals those ancient and different civilizations by which it is surrounded and outnumbered.”³⁴

Although written more than 450 years ago, *Art of War at Sea* is comprehensive and relevant, addressing the various elements of establishing, organizing, and employing naval power. It is innovative in the conceptualization of naval power as an instrument for countries’ political goals and economic interests. It considers perennial principles of strategy, with insights that remain valid and applicable. Additionally, its respectful approach is unique and commendable; its benevolence and prescience guarantee this treatise a place in posterity.

It was, therefore, a book ahead of its time, helping to establish the foundations of modern naval strategy. However, *Art of War at Sea* did not enjoy the international dissemination it deserved and has remained in obscurity, having been written in sixteenth-century Portuguese and never translated. This impediment will soon be overcome by a forthcoming English translation.³⁵ The translation will allow the treatise to receive the attention it deserves, owing to its historical value, the broad range of issues analyzed, and its strategic insights, many of which ring true today.

NOTES

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1. For more information on this emergence of naval thinking in Europe from the sixteenth century to the beginning of the seventeenth, see Hervé Coutau-Bégarie, “L’émergence d’une pensée navale en Europe au XVI^e siècle et au début du XVII^e siècle,” in *L’évolution de la pensée navale* (Paris: Economica, 1994), vol. 4, available at www.institut-strategie.fr/.

2. Full bibliographic information on the sources listed in table 1 is as follows. Antoine de Conflans, *Les faiz de la marine et navigaiges* (1516–20), printed in Augustin Jal, “Documents inédits sur l’histoire de la marine (XVI^e siècle),” *Annales maritimes et coloniales* 2 (1842), pp. 29–95. The book was republished in 1982 as Michel Mollat du Jourdin and Florence Chillaud-Toutée, “Le livre des faiz de la marine et navigaiges d’Antoine de Conflans, v. 1516–1520,” in *Actes du 107^e Congrès national des sociétés savantes, Colloque d’histoire maritime* (Paris: 1984), pp. 9–44. The fifty-one-page scanned manuscript is available online at gallica.bnf.fr/ark:/12148/btv1b9059155s.

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3. An English-language translation for publication is currently being prepared by Tiago Maurício.
4. This short biography is based on the following sources: Quirino da Fonseca, introduction (“Comentário preliminar”) to *Arte da Guerra do Mar* (1969), pp. xi–xxxvii; Francisco Contente Domingues, “A expedição de auxílio ao rei de Velez em 1552: o relato oficial versus o testemunho de um participante,” in *A*

Guerra Naval no Norte de África (séculos XV–XIX), comp. Francisco Contente Domingues and Jorge Semedo de Matos (Lisbon: Edições Culturais da Marinha, 2003), pp. 157–72; António Silva Ribeiro, introduction (“O Padre Fernando Oliveira: Breve Apontamento Biográfico”) to *Arte da Guerra do Mar* (2008), pp. ix–xiii; João Gonçalves Gaspar, “Fernão de Oliveira: Humanista insubmisso e precursor,” in *Fernando Oliveira: Um Humanista Genial — V Centenário do seu nascimento*, ed. Carlos Morais (Aveiro, Port.: Universidade de Aveiro—Centro de Línguas e Culturas, 2009), pp. 31–82; Francisco Contente Domingues, “A enciclopédia do mar: o manuscrito da *Ars Nautica* e a sua história,” in *ibid.*, pp. 405–29.

5. Oliveira claimed to have practiced and studied in shipyards in Spain, Italy, France, and England, and even in those of the Moors, probably in North Africa. Fernando Oliveira, *Livro da Fábrica das Naus* (Lisbon: Academia de Marinha, 1991).
6. Fernão de Oliveira, *Grammatica da lingoa-gem portuguesa* (Lisbon: Germam Galharde, 1536). The book has been republished eight times, in 1871, 1933, 1936, 1975, 1981, 1988, 2000, and 2002.
7. His recommendations centered on the efficiency of the rowing arrangements. Oliveira, *Arte da Guerra do Mar*, pp. 71–72.
8. Richard Barker, *Fernando Oliveira: The English Episode, 1545–47* (Lisbon: Academia de Marinha, 1992), p. 16.
9. *Ibid.*, p. 14.
10. Harold Livermore, “Padre Oliveira’s Outburst,” *Portuguese Studies* 17 (2001), p. 41.
11. Cod. VOSS. LAT. F 41, pp. 1–283v.
12. Domingues, “A enciclopédia do mar,” pp. 418–19.
13. Fernando Oliveira, *Livro da Fabrica das Naos* (c. 1580), printed in Henrique Lopes de Mendonça, “O Padre Fernando de Oliveira e a sua obra náutica. Memoria, compreendendo um estudo biográfico sobre o afamado grammatico e nautógrafo e a primeira reprodução typographica do seu tratado inédito *Livro da Fabrica das Naos*,” *Memorias da Academia Real das Sciencias de Lisboa* 7, part 2 (1898), pp. 149–221. The book has been republished twice, in 1991 and 1995.

14. Cod. 3702, pp. 1–164.
15. Fonds Portugais 12, pp. 1–176.
16. Livermore, “Padre Oliveira’s Outburst,” p. 33.
17. Oliveira, *Arte da Guerra do Mar*, prologue, n.p.
18. Marcus Fabius Quintilianus was a Roman rhetorician of the first century AD. Aelianus Tacticus was a Greek military writer of the second century AD, author of the military treatise *On Tactical Arrays of the Greeks*. Plato was a famous Greek philosopher of the fifth to fourth century BC. Gaius Sallustius Crispus, a Roman historian of the first century BC, wrote on the Catiline and Jugurthine wars. Diodorus Siculus, a Greek historian of the first century BC, is known for writing a monumental universal history, *Historical Library*. Alexander is, of course, the famous king of Macedonia and military genius of the fourth century BC. Aulus Gellius was a Latin author and grammarian of the second century AD. The writings of Marcus Vitruvius Pollio, a Roman author and architect of the first century BC, inspired Leonardo da Vinci to draw the *Vitruvian Man*. Gaius Plinius Secundus, a Roman author, philosopher, and military commander of the first century AD, wrote the encyclopedic *Natural History*. Julius Caesar, Roman general and statesman of the first century BC, played a key role in the demise of the Roman Republic and the rise of the Roman Empire. Marcus Terentius Varro was a Roman scholar and writer of the second and first centuries BC. Marcus Junianus Justinus, a Roman historian of the third century AD, wrote an abridgment of the monumental (forty-four book) historical work *Historiarum Philippicarum*. Marcus Tullius Cicero was a Roman politician, orator, and writer of the first century BC. Lucius Annaeus Seneca, a Roman statesman, philosopher, and dramatist of the first century AD, wrote tragedies still famous today. Marcus Porcius Cato was a Roman statesman and military commander of the third and second centuries BC. Sextus Julius Frontinus, a Roman senator of the first century AD, is best known for technical treatises, including one on military matters, *Stratagemas*. Claudius Claudianus was a Roman poet of the fourth century AD. Lucius Junius Moderatus Columella, a Roman author of the first century AD, was the most important writer on agriculture of the Roman Empire. Oliveira translated to Portuguese Columella’s masterpiece *Res Rustica*.
19. Ambrose, an Italian bishop who became one of the most influential ecclesiastical figures of the fourth century, influenced, among others, Augustine. Aquinas, Italian priest and Dominican, was an extremely influential theologian and philosopher of the thirteenth century who further deepened Augustine’s arguments about just war.
20. Flavi Vegeti Renati, *Epitoma Rei Militaris* (Leipzig: Editio Altera, 1885), pp. 150–66.
21. Barker, *Fernando Oliveira*, p. 9.
22. António Silva Ribeiro, “Uma visão estratégica da *Arte da Guerra do Mar*,” *Revista Militar* 2465/2466 (June–July 2007), pp. 719–33.
23. Oliveira, *Arte da Guerra do Mar*, prologue, n.p.
24. *Ibid.*, part 1, chap. 3, p. 19.
25. *Ibid.*, part 2, chap. 14, p. 134.
26. *Ibid.*, prologue, n.p.
27. *Ibid.*, part 1, chap. 4, p. 23.
28. *Ibid.*
29. *Ibid.*, part 1, chap. 5, p. 27.
30. *Ibid.*, part 1, chap. 3, p. 20.
31. *Ibid.*, prologue, n.p.
32. *Ibid.*
33. Alfred Thayer Mahan, *The Interest of America in Sea Power, Present and Future* (London: Sampson Low, Marston, 1897).
34. *Ibid.*, p. 243.
35. Tiago Maurício, *Expanding the Naval Canon: Fernando de Oliveira and the 1st Treatise on Maritime Strategy* (Washington, D.C.: Center for International Maritime Security, 16 July 2014), available at cimsec.org/.

RESEARCH & DEBATE

THE NEW YOUNG TURKS

Commander Benjamin Armstrong, U.S. Navy

From the sixth floor of the University of Chicago Gleacher Center you can look down the river and into the reflected prism of the bustling city's concrete, steel, and glass. In the opposite direction you look out across Lake Michigan where the blue and grey come together at a far horizon. These remarkable vistas welcomed the second annual Defense Entrepreneurs Forum (DEF) in October 2014. Over one hundred and fifty military personnel, defense-industry professionals, and innovation experts came together for three days to discuss the issues and critical questions faced by American defense in the twenty-first century.

DEF was the brainchild of a small group of relatively junior officers. Coming out of more than a decade of war, many served with a high level of responsibility that is uncommon for young men and women. They encountered not just the issues of life and death that combat brings but also the demands of humanitarian work for entire towns, nation-building responsibilities in large cities, and the need to come up with creative solutions to the problems they faced. Frequently this included working with limited resources or for an unresponsive, stagnant bureaucracy. They knew, with challenges looming in the coming decades, that

the search for critical thinking needed an advocate in today's military services.¹

DEF was established to bring together those creative junior men and women, who heartily embrace the Silicon Valley definitions of the terms *innovation* and *entrepreneur*, with civilian workers in the defense industry and both critics and current leaders. Through personal interaction at conferences and encouragement to advocate for ideas through professional writing, DEF's board

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of directors looked to expand the circle of people talking about new ways of addressing the defense world. They aimed to support those who were being constructively critical of military organizations, particularly those inside the system.²

As a naval officer by profession and military helicopter pilot by trade, I was drawn to these ideas. As a historian by education, I also knew that the processes they were exploring and the grand narrative they looked to build were not quite as new and disruptive as some believed. Context, as is said, is king.

Twice I've been asked to serve as a speaker at the annual DEF conference in Chicago, most recently as the opening keynote. My historical talks have looked to illuminate some of the recurring questions that come along with defense innovation and adaptation.³ But as I have interacted and collaborated with these inspired defense professionals, I have also come to realize that there is a great deal of history in the existence of this organization, despite its clearly twenty-first-century roots.

A COMMENDABLE LITTLE INSTITUTION

Almost two hundred years ago during the presidency of Andrew Jackson, a period emerged in U.S. naval history that some historians have termed an *age of naval enlightenment*. The first two decades after the U.S. Navy's refounding in 1798 were a busy time for naval officers, who saw four wars: the Quasi-War with France, First Barbary War, War of 1812, and Second Barbary War. The following Jackson years brought a period of relative peace for the service, opening up a period of reflection and professionalization.⁴

With less combat and fewer deployments, officers began considering the details of their service more closely. The officers assigned to the Brooklyn Navy Yard took inspiration from the lyceum movement that had spread across Europe. In 1833 they established the U.S. Naval Lyceum in a small building on the base. Dominated by junior officers, the group wrote in its constitution: "We, the Officers of the Navy and Marine Corps, in order to promote the diffusion of useful knowledge,—to foster a spirit of harmony and a community of interest in the service, and to cement the links which unite us as professional brethren, have formed ourselves into a Society, to be denominated 'The United States Naval Lyceum.'"⁵

Their effort was twofold. First, they looked to establish a museum of artifacts, art, and curiosities that naval officers collected from their deployments across the seven seas. Second, they established the *Naval Magazine* to discuss the pressing issues of the day.

For two years the *Naval Magazine* was at the forefront of naval professionalism and criticism. Subjects for discussion included the military promotion system and rank structure, the introduction of new technology like steam power, and strategic and geopolitical subjects. Unfortunately, the maintenance of the

museum and building that housed the lyceum appears to have taken up a majority of the funds, and the magazine ceased publication in 1837. But the ideals of innovation and reform were alive and well, as one of the magazine's pseudonymous authors wrote: "The spirit of the times and the necessities of the navy loudly declare that change is requisite. We cannot remain as we are."⁶

The lyceum lived on well beyond the last issue of the magazine, continuing to host lectures and talks on the vital naval subjects of the day. The museum's collection grew into an important repository. The *New York Times* described it as "a commendable little institution in every sense."⁷ The members who established the organization as junior officers rose through the ranks and became important naval leaders of the Mexican-American War and the Civil War. They commanded America's first steam-powered warships and led the Navy's growing responsibilities on the global stage. The lyceum established a vital intellectual foundation for military officers who looked to improve their service.

THE DECADE OF NEGLECT

Following the end of the American Civil War the United States continued a pattern that has been displayed throughout its history by dramatically cutting back on defense spending. The War between the States, reconstructing the nation in its wake, and the promise of continued expansion westward guided the American populace to a continental, internal focus that led to cuts in the Navy's size and capabilities. Many naval officers saw it as a decade of neglect.

In October 1873 fifteen of these officers came together on the grounds of the U.S. Naval Academy. Senior and junior commissioned naval officers, as well as warrant officers and Marines, they began as a discussion group to debate naval affairs and national and international issues. They named their society the United States Naval Institute. Many of the early meetings included discussing and commenting on papers that were prepared and presented by the members. They decided to publish their own journal, containing the best of the papers and some of the commentary. In December 1874 the journal was first published as the *Papers and Proceedings of the United States Naval Institute* and is now known today as *Proceedings* magazine.⁸

Early members of the institute included officers who would have enormous impacts on the Navy and Marine Corps, and even the nation at large. Stephen Luce, one of the first officers to present a paper, is best known as the greatest advocate for, and founding President of, the U.S. Naval War College. His virtual invention of American professional military education had an impact on strategic thought and military and naval affairs that rippled across generations. Another early member was Alfred Thayer Mahan, known to most students of military history for his strategic writing and his famous book *The Influence of Sea*

Power upon History. He was one of the institute's earliest presidents. He began his publishing career with his essay on naval education in the pages of *Proceedings*. From Civil War officers like Admiral David Dixon Porter to the future Spanish-American War leaders like W. T. Sampson and George Dewey, the organization grew rapidly. The articles published in *Proceedings* questioned the status quo and raised American knowledge of naval affairs as the country came out of its Manifest Destiny period and returned its attention to the larger world.⁹

The U.S. Naval Institute and *Proceedings* began primarily as a place for junior and midlevel officers to express their ideas and advocate for reform. Over time they continued that tradition but also became a place for thought leaders, from senior admirals to established academics, to debate the issues with upstart junior officers and military critics who looked to move in new directions. The professional society officially adopted the mission "to provide an independent forum for those who dare to read, think, speak, and write in order to advance the professional, literary, and scientific understanding of sea power and other issues critical to national defense."¹⁰

REGENERATING SERVICE INTELLECTS

Forty years after the officers met in Annapolis another group gathered in discussion in Hampshire, England. These Royal Navy officers saw the approach of the Great War and feared that their service was unprepared. They met, as Reginald Plunkett said, to develop "some means of regenerating Service intellects before Armageddon."¹¹ These British sailors were focused on their own officer corps, which they believed needed a greater understanding of naval affairs and war as the United Kingdom approached the looming conflict.

Inspired by Admiral Sir Herbert Richmond and the noted civilian strategist Sir Julian Corbett, they founded what was originally thought of as a correspondence society. The purpose was to bring junior officers together in discussions for their own self-improvement. In 1913 they began publication of a journal titled the *Naval Review*. There was significant official resistance from the newly established Naval War Staff, and during World War I the Admiralty ordered the *Naval Review* to cease publication. However, W. H. Henderson, the editor at the time, continued to collect material and even circulated some of it to members in the original spirit of a correspondence society. At the end of the war the *Naval Review* began publication again, including the material Henderson had collected, to ensure there wasn't a loss of lessons learned from the conflict.¹²

When publication began again in 1919, Henderson's opening article specifically took inspiration from the U.S. Naval Institute but looked to take a uniquely British tack. Concerns that expressing contrarian views would have a negative impact on the careers of junior officers, who were the target audience, led to a

unique editorial policy. Where *Proceedings* has a clear editorial requirement for authors to write under their own names, and the *Naval Magazine* encouraged the use of pseudonyms, the *Naval Review* elected not to use bylines at all. Articles were considered “from the membership,” and the editors diligently protected the contributors.¹³

The no-name policy had a secondary impact. Senior officers or establishment supporters could write counterarguments without standing on their rank. Genuine debates about naval subjects were fostered through the process. Over the course of time the publication, which is still active and vibrant today, has gone through cycles of official approval as well as censure from the Admiralty. In World War II there was no censorship, and the “Diary of the War at Sea” published in the journal’s pages has become an important historical record. Today, the *Naval Review* has adjusted its editorial policy to allow both pseudonyms and real names, increasing flexibility for writers and editors while maintaining the ability to protect new thinkers. Like *Proceedings* in the United States, it has become the central place for discussions of naval affairs and constructive criticism from inside the naval sphere.¹⁴

TWENTY-FIRST-CENTURY YOUNG TURKS

At the start of the twentieth century a cadre of revolutionaries in Ottoman Turkey was first described with the label the Young Turks. Across the past hundred years the label came to mean a new breed or a young advocate for change. American politicians in the 1920s and beyond have described the junior officers who drove debate and writing in the pages of the *Naval Magazine*, *Proceedings*, and the *Naval Review* as Young Turks. Today, the members and leaders of DEF follow in the wake of these previous reformers and idealists. The ease of access to publishing created by digital and social media has led to a growing proliferation of new groups looking to foster ideas and critical debate. Examples include think-tank Internet forums like the Center for International Maritime Security (based in Washington, D.C.); blogs focused on strategy, policy, and leadership, such as the *Bridge* (also known as the Strategy Bridge on Facebook and Twitter) and *War Council*; and more formal web-based publications like *War on the Rocks*.

These new organizations should look to the history of reform-minded societies of the past to help chart their way. The career dangers from a military culture that remains conservative and slow to change are still real for internal critics, despite historical examples of successful reformers. Many senior officers still appear to ascribe to Admiral Arleigh Burke’s invective that “dissent is not a virtue.” Because of this, questions of attribution and clearly stated publication policies are important for the new Young Turks to consider. The longevity of *Proceedings* and the *Naval Review* offers both examples and warnings about balancing new ideas and criticism with explanations and defense of established policies.

It is inspiring to see those who are interested in looking at their military service, or employment in the defense world, with a critical eye. The field of critical military studies sometimes focuses on the work of academic, political, or civilian-interest groups to reform our military forces and defense industries from the outside. These groups can occasionally be seen as antagonistic toward those who wear uniforms, or even dismissive of them. However, criticism and dissent from within the armed forces are important drivers of change and adaptation. Publications, formerly in print but now commonly online, where these thinkers express themselves remain a vital outlet not only for forwarding modern debate and innovation but also for studying the past successes and failures of military criticism.

Finding organizations that, like DEF, aim to bring civilian and uniformed critics together to think of new ideas and harvest solutions will be an important part of progress in the twenty-first century.

NOTES

1. "Our Call to Action," *Defense Entrepreneurs Forum*, defenseentrepreneurs.org/.
2. "Our Motivation," *Defense Entrepreneurs Forum*, defenseentrepreneurs.org/.
3. See B. J. Armstrong, "The Nuclear Option: Military Organization, Leadership, and the Entrepreneurial Spirit," *Hasty Ambush* (blog), *War on the Rocks*, 29 November 2014, warontherocks.com/.
4. Claude Berube, "The Crucible of Naval Enlightenment," *Naval History* 28, no. 5 (October 2014).
5. *Constitution and Bylaws of the United States Naval Lyceum: Established at the Navy Yard, New York* (Brooklyn, N.Y.: E. B. Spooner, 1838), p. 5.
6. Quoted in Berube, "Crucible of Naval Enlightenment."
7. Vauc. [pseud.], "Original Miscellany: The United States Naval Lyceum," *New York Times*, 8 December 1852, NYTimes.com/.
8. Thomas B. Hayward, "A Star Is Born: The U.S. Naval Institute Proceedings, 1874–1879," U.S. Naval Institute *Proceedings* 140/5/1,335 (May 2014), pp. 12–13; *The Papers and Proceedings of the United States Naval Institute*, vol. 1 (New York: D. Van Nostrand, 1874).
9. Peter M. Swartz, "Looking Out over the Promised Land: The U.S. Naval Institute Proceedings, 1880–1889," U.S. Naval Institute *Proceedings* 140/6/1,336 (June 2014), pp. 16–18; Robert C. Rubel, "The Voice of Mahan: The U.S. Naval Institute Proceedings, 1890–1899," U.S. Naval Institute *Proceedings* 140/7/1,337 (July 2014), pp. 16–17.
10. "About USNI," *U.S. Naval Institute*, www.usni.org/.
11. Quoted in James Goldrick, "The Irresistible Force and the Immovable Object: *The Naval Review*, the Young Turks, and the Royal Navy, 1911–1931," in *Mahan Is Not Enough: The Proceedings of a Conference on the Works of Sir Julian Corbett and Admiral Sir Herbert Richmond*, ed. Goldrick and John B. Hattendorf (Newport, R.I.: Naval War College Press, 1993), p. 87.
12. "History," *Naval Review*, naval-review.com/.
13. Peter Hore, ed., *Dreadnought to Daring: 100 Years of Comment, Controversy and Debate in The Naval Review* (London: Pen & Sword, 2012).
14. "History," *Naval Review*.

BOOK REVIEWS

A CALL FOR RESTRAINT

Posen, Barry R. *Restraint: A New Foundation for U.S. Grand Strategy*. Ithaca, N.Y.: Cornell Univ. Press, 2014. 234pp. \$29.95

Sometimes, less is more. “More” may seem the order of the day in U.S. security policy, between ISIS, Ukraine, and other issues, but MIT political scientist Barry Posen offers a powerful cry for “less!” His book *Restraint: A New Foundation for U.S. Grand Strategy* calls for doing less, promising less, and spending less than the United States does today. The book is not a plea for isolationism or disarmament, but it makes a convincing case that America’s current strategy of “liberal hegemony” is both wasteful and counterproductive, creating more problems than it solves. Posen’s strategy is not entirely novel—it is a form of offshore balancing—but *Restraint* is a worthy contribution. The book offers the most thorough and theoretically grounded rationale for offshore balancing to date, as well as practical diplomatic and defense planning recommendations, in a concise and well-organized monograph.

Posen has not always been in the restraint camp. A long-standing scholar of grand strategy, in the 1990s Posen favored “selective engagement”—maintaining U.S. alliances and forward presence in Europe, Asia, and the Persian

Gulf, but eschewing liberal interventionism or pursuit of global primacy. Why should America now pull back? First, Posen argues, the relative economic and military strength of the United States has eroded; supplying security while allies take a free ride is not affordable. U.S. soft power has also been diminished by the excesses of liberal hegemony. The Iraq war, the Kosovo war (the geopolitical consequences of which Americans underestimate), NATO expansion, “color revolutions,” and the like convinced China, Russia, and even democracies like Brazil that America is not a status quo power, and many nations now affirmatively challenge U.S. activism. Third, nationalism remains a potent force—contra the predictions of liberals—meaning that an anti-United States stance is good politics in many countries, and that U.S. meddling in other regions motivates nonstate extremist groups.

Posen recommends two basic changes in U.S. military intervention and military posture. He believes the United States should avoid intervention by force in other nations’ politics—whether preemptive regime change or

“humanitarian” operations in the middle of civil wars. The more fundamental change he advocates is for the United States to withdraw gradually from security guarantees and permanent forward basing of American forces. Pulling back would incentivize allies—NATO, Japan and South Korea, Israel, Saudi Arabia, etc.—to provide more of their own security. Posen recognizes and accepts that some allies might go nuclear in response, but he sees such proliferation as less risky than U.S. entanglement, particularly since some allies treat U.S. support as a blank check for reckless behavior. In Posen’s world, the United States would rely on local power balancing to prevent the rise of regional hegemonies in Eurasia, on nuclear deterrence as an ultimate backstop for the United States, and on “command of the commons” both to prevent power projection by others against U.S. interests and to facilitate American involvement in Eurasia if that becomes necessary.

Perhaps the most compelling case against this minimalist approach comes from fellow realists like Robert Art, who would agree with the critique of liberal hegemony but argue that the costs of U.S. alliances and forward basing are better than the risks inherent in letting local powers sort out power relationships on their own. The United States might be safe from attack, but regional wars could damage the global economy, bringing painful recessions to American citizens. Posen does address that argument, responding essentially that there is a great deal of ruin in a global economy (apologies to Adam Smith). True, there is much alarmism on the subject, particularly around oil shocks, but one still wonders about applying past examples of neutral countries doing fine during

major wars to today’s tightly coupled supply chains and financial markets.

Posen also offers force structure implications. Many grand strategy proposals leap directly from foreign policy ideas to laundry lists of weapons to purchase or cancel. To his credit, Posen conducts the intermediate linking step of identifying military missions and broad operating concepts (the guidance provided—in theory—by a National Military Strategy). The core recommendation is to design a force for securing “command of the commons,” i.e., sea, air, and space. This is an idea Posen has advocated for some time, but is fully appropriate to offshore balancing. The Navy fares very well in his recommended force structure, e.g., keeping nine carriers, while the Army and Marines take the bulk of cuts. Overall Posen thinks spending 2.5 percent of GDP on defense would suffice, a 25 percent cut from today’s base budget.

While it is suited to his strategy, some might criticize Posen’s proposed force as too conventional in its details—i.e., emphasizing aircraft carriers in the face of growing threats like the Chinese DF-21 missile. There is room for more attention to such emerging challenges. That said, Posen’s strategy would have little requirement for close-in U.S. strikes against the Chinese or Russian homeland versus being able to thwart an *adversary’s* attempts to project power across open oceans at *us*.

For those familiar with the grand strategy literature, the broad case in *Restraint* is in line with those of other offshore balancers, like John Mearsheimer, Steve Walt, and Christopher Layne. What Posen adds is a comprehensive theory-grounded analysis of the problems of liberal hegemony and merits of an offshore approach, backed by forty-five

pages of endnotes. Uniquely, the book also develops practical recommendations for implementing the strategy with serious attention to timelines and regional nuances. Where Layne's *Peace of Illusions* traces historical failings of the hegemonic approach, *Restraint* is a timely, fleshed-out policy proposal.

Ultimately, many policy makers will never get past page 1, where Posen defines American national security interests as the traditional sovereignty, safety, territory, and international power position. Threats to those are modest and Posen makes a compelling case they are best managed through limited overseas commitments. On the other hand, many in Washington believe American hegemony—euphemized as “leadership”—is *in and of itself* a fundamental interest, and that *no* economic and physical risks are acceptable. That one televised beheading five thousand miles away can so alarm America suggests this will not change soon. For those willing to think critically about America's security needs, however, *Restraint* offers a deeply logical challenge and a thoughtful blueprint.

DAVID T. BURBACH



Stavridis, James G. *The Accidental Admiral: A Sailor Takes Command at NATO*. Annapolis, Md.: Naval Institute Press, 2014. 288pp. \$32.95

In the early days of the Second World War, General Eisenhower, the first Supreme Allied Commander of Europe, struggled to keep the alliance together. One of the more interesting anecdotes about this struggle is when he almost fired a member of his staff because the officer was, shall we say, culturally insensitive. The story goes that an American

officer, a colonel on Eisenhower's staff, insulted a British officer by calling him a *British* bastard. Ike wasn't pleased. Ike threatened to bust him down to private. Being a bastard, he said, was not a national characteristic. All were equal in the eyes of the allies. But admittedly, handling NATO has not gotten any easier over the years. Secretary Gates, prior to his departure, had some choice words for the alliance, urging more NATO members to meet the required 2 percent of their GDP on defense spending. America, he noted, continues to pick up the slack—from Afghanistan to Libya. Yet the alliance remains.

Admiral James Stavridis, USN (Ret.), most recently Supreme Allied Commander Europe (SACEUR) and commander of U.S. European Command (EUCOM), and unofficially, the Navy's advocate of the well-known John Adams quotation—“Let us tenderly and kindly cherish, therefore the means of knowledge. Let us dare to read, think, speak and write”—has written an enjoyable memoir of his time in Eisenhower's old chair.

Stavridis's memoir stays away from criticism of U.S. officials and discussions of contentious closed-door meetings. This is in contrast to two other high-profile, former administration officials' memoirs—those of Ambassador Christopher Hill and Defense Secretary Leon Panetta—which were published around the same time to much hoopla. While Stavridis was dual hatted as SACEUR and EUCOM his reputation around the headquarters was one of civility and intelligence, certainly not a bad combination. Stavridis says he wants to show the reader not what happened during his four years, but rather why it happened. He proceeds to take the reader on a tour

of challenges: from the toppling of Qadhafi to the civil war in Syria, Israeli security, a resurgent Russia, the Balkans, and finally, of course, Afghanistan. Thus the first few chapters are a whirlwind of individuals, meetings, and events. Among all this, he often pauses within chapters to highlight some of the more important senior military and political officials that make up the NATO alliance.

Stavridis spends considerable time in these early chapters setting up the facts—stating what happened—and then trying to balance it against why it happened and what he learned from it. The first part of the book, however, feels rushed and compressed, and even in his best efforts the balance tilts toward more numbers and facts and away from a deep exploration of the why. If there was one weakness, this is it. You are left wanting more discussion on how the policy was shaped in Washington and in Brussels. What was the dialogue during these many meetings? And why was it persuasive? The second part of the book shines. Here he discusses leadership, strategic planning, innovation, and strategic communication. All of these chapters are excellent and well worth the price of the book. In one chapter, Stavridis talks about the actions that led to Generals McChrystal's and Petraeus's resignations—and his own stumbles. It is here he almost passes the George Orwell test. Orwell once said, "Autobiography is only to be trusted when it reveals something disgraceful. A man who gives a good account of himself is probably lying, since any life when viewed from the inside is simply a series of defeats." And for Stavridis it is not all good. Stavridis explains that he was nominated to be the Chief of Naval Operations, following

what was, by many accounts, a successful tour as the supreme allied commander. This was not to be. He describes, plainly, that some of his official travel was not properly paid for, and a single trip was deemed questionable by the inspector general. He accepted responsibility for his and his staff's mistakes, and made reparations. Although he was cleared by the Secretary of the Navy from any wrongdoing, the long investigation was enough to complicate the political winds that are Washington, and the Secretary of Defense had to remove his nomination. While certainly not rising to Orwell's definition of disgraceful, nonetheless, it was not his shining hour.

For this reader, the stories of his days commanding USS *Barry*, beautifully captured in his book *Destroyer Captain*, remain my favorite. Its style, written in a journalist's hand, is intimate and moving—a man that loves the sea yet knows he is human and only can go as far as his crew takes him. Still, his new memoir is a refreshing dose of honesty, intelligence, and reflection—much needed in today's Navy and tomorrow's leaders.

CHRISTOPHER NELSON



Winklareth, Robert J. *The Battle of the Denmark Strait: A Critical Analysis of the Bismarck's Singular Triumph*. Havertown, Pa.: Casemate Publishers, 2012. 336pp. \$32.95

From Johnny Horton's 1960 ballad "Sink the Bismarck" to James Cameron's *Expedition Bismarck* for the Discovery Channel in 2002, the sole sortie of the German battleship in May 1941 has held the attention of both the general public and naval historians. The latter mainly concentrate on the destruction of

Bismarck on 27 May after a lucky aerial torpedo hit disabled the ship's steering mechanism. Not so Robert Winklareth. His focus instead is on *Bismarck's* "singular triumph" in destroying the British battle cruiser *Hood* three days earlier. A 38 cm shell from its fifth salvo sliced through *Hood's* armored side below the aft turrets, setting off first the 4 in. secondary armament magazine and then the main 15 in. magazine. Only 3 of its complement of 1,421 survived.

So, what is new? Winklareth, a military weapons systems expert, traces all action at sea in five-second intervals. He primarily uses translated German records of the battle of the Denmark Strait to offer a salvo-by-salvo analysis, to re-create the speed and headings of the major combatants, and to determine the precise firing angles and effects of the heavy guns. Unsurprisingly, the book is highly detailed and a feast mainly for naval engineering and gunnery enthusiasts. It is complemented by countless charts, diagrams, photographs, and pencil drawings (by the author). Winklareth's own battle is with the (unnamed) historians who claim that just before the engagement with *Hood*, *Bismarck*, in a mere six minutes, came up the port side of the heavy cruiser *Prinz Eugen*, crossed its wake to its starboard side, and then recrossed the cruiser's wake to take up position on its port side again (15–16, 258). What he calls a "reversed photo" error resulted in this assumption. Few will cross swords with the author on this matter.

On the other hand, serious historians of the battle will take umbrage at two of Winklareth's strong statements, both on the first page (11) of the book. His claim that the battle of the Denmark Strait "was undoubtedly one of the most

famous and most important naval battles of World War II" will raise the hackles especially of historians of the U.S. Navy in the Pacific 1941–45. And his second claim, that the encounter between *Bismarck* and *Hood* "is perhaps the most documented event in naval history," will come as news to German naval historians who are all too aware of the fact that *Bismarck's* war diary (*Kriegstagebuch*) went down with the ship.

With regard to the broader aspects of the battle of the Denmark Strait, Winklareth spends a great deal of time sketching out the past histories of the German and British navies as well as the major ship designs of the two powers. The actual artillery duel between the German battleship and the British battle cruiser, in fact, consumes but half a dozen pages of chapter 13. Unfortunately, there is no attempt to place "Operation Rheinübung," the German sortie into the Atlantic, into the wider context of Grand Admiral Erich Raeder's double-pole strategy of attacking Britain's maritime commerce with two modern battle fleets in the Atlantic Ocean, while a third fleet of elderly battleships tied the Royal Navy down in the North Sea. The reader deserved this analysis.

HOLGER H. HERWIG



Untermeyer, Chase. *Inside Reagan's Navy: The Pentagon Journals*. College Station: Texas A&M Univ. Press, 2015. 352pp. \$25

The Washington diary is something of a lost art these days. Instead, we have to be satisfied with books of instant journalism using largely anonymous sources or memoirs too often tendentiously crafted after the fact. Chase Untermeyer is a

wonderful outlier. Apparently, Untermeyer started keeping a diary at age nine, and has already published excerpts covering his initial Washington service as executive assistant to Vice President George Bush (1981–83). This latest volume covers the period of his service in the office of the Secretary of the Navy (1983–88), during the tenures of John F. Lehman and later James Webb as Secretary of the Navy. The result is an engaging portrait of the glories and miseries of life within the Beltway. Though lighthearted and refreshingly modest, Untermeyer's book also offers up telling anecdotes and keen insights into the practice—or lack thereof—of civilian control of the United States Navy at a critical juncture of the Cold War.

Though he had served briefly in the Navy as a very junior officer, Untermeyer was the classic political appointee. Born in Texas and educated at Harvard, he became involved in Texas politics and was elected to the statehouse in 1976. After his stint working directly under the vice president, Untermeyer was appointed initially as Deputy Assistant Secretary of the Navy for Installations and Facilities, and then for some four years served as Assistant Secretary for Manpower and Reserve Affairs. Both jobs are political plums, offering many opportunities for ingratiation of the holder with defense contractors and members of Congress. Untermeyer makes no attempt to hide his own ambitions, or the intoxicating effects of constant mingling with the good and the great not only in Washington but on many tours of inspection or protocol in the provinces. (At one point, he charmingly announces that he has at last become a “toff”). But he also makes clear that he took his responsibilities seriously and was intent on serving the boss well.

And what a boss! To get the flavor of John Lehman, it is hard to improve on this riff of Untermeyer's at Lehman's farewell party at the Naval Observatory in April 1987: “People have asked me, what's the difference between Jim Webb and John Lehman? And I've said that the thing to remember is that Jim is a former Marine officer. Tell him to take a hill, and he'll take the hill. But with John it's a little different. Tell him to take a hill, and the first thing he'll do is get together with Mel Paisley [perhaps best described as his *consigliere*] for a few drinks to concoct the plan. . . . Then John will start a competition among real estate agents over the purchase price of the hill. Next he'll go to the senator in whose state the hill is located and make a deal: the Navy will build the chrome bumper-guard assembly for the Trident sub in his hometown if the senator will slip an amendment into the Wild and Scenic Areas Act to purchase the hill. Then, with the money saved from the competition, John buys another Aegis cruiser.”

Lehman's methods did not appeal to everyone, and in fact could be outrageous; but he could claim results. He nearly achieved the “600 ship Navy” for which he lobbied so ferociously. But the Navy leadership was ambivalent toward him. He had a habit of breaking Navy crockery—for example, by forcing the Naval Academy to put more humanities in its curriculum, and by engineering the retirement of Admiral Hyman Rickover (the story of Rickover's tantrum in his departing courtesy call with Ronald Reagan is told with great relish at the beginning of Lehman's memoir *Command of the Sea*). Anyone concerned about the current state of civil-military relations in Washington would do well to read this book.

CARNES LORD



Armstrong, Benjamin F., ed. *21st Century Sims: Innovation, Education, and Leadership for the Modern Era*. Annapolis, Md.: Naval Institute Press, 2015. 176pp. \$21.95

Over a century after first being composed, the writings of Admiral William S. Sims continue to have relevance to all Navy leaders. Benjamin Armstrong has compiled a selection of *Proceedings* articles (originally published between 1905 and 1940) and provides an informative perspective of the character and career of Admiral Sims and the impact of his initiatives on innovation and commitment to leader development. Armstrong introduces us to the young Lieutenant Sims as he begins his journey of revolution in Navy strategy, education, and ship design. From the deck plate to the President of the Naval War College, we gain an appreciation for Admiral Sims's career and his achievements from this compelling collection of his writings that resonate with the challenges of the twenty-first century.

Armstrong's commentary provides us with insights into each topic's relevance. From the "Gun Doctor" and "The Battleships of High Speed" to the chapter on military character, we view the development of Admiral Sims as a military leader as someone who challenges the bureaucracy of the military institution. In his lecture on military character, Sims reflects on the qualifications of a military leader and emphasizes a strong moral character as essential for the development of a military leader. While this was written in 1916, this topic remains critical for the development of twenty-first-century military leaders. Sims's perspective provides a lens for the reader to evaluate breaches in ethics,

morality, and decision making in the twenty-first century. Sims challenges each person to view character as an element of leadership and effective decision making. He commands officers that "it is the duty of every officer to study his own character that he may improve it." Upon reflection, this is perhaps the most important message taken from this volume of articles, as moral character underlies and reinforces decision making. Today, in an era during which our nation's military leaders have committed numerous ethical violations, there is a moral imperative to develop military character as part of the education process of every military officer. For it is from the foundation of their moral character that leadership matures and enables our nation's military leaders to build a bridge of trust between the military and our nation.

This collection of Sims's writings and Armstrong's analysis provides a lens for us to view and share Sims's perspectives as he moves through the pre- and post-World War I period. Although Sims's career was nearly a century ago, the issues he addressed remain current, including acquisition reform, technological deficiencies, and the need to educate Navy leaders. Armstrong invites us to accompany Sims on his journey as he moves across Europe, inspecting and reporting on the deficiencies of gunnery and battleship designs. Imagine, if you will, meeting the young Lieutenant Sims as he moves around Europe checking on the newest advances in ship design. A young Lieutenant Commander Sims boldly sparks criticism with his critique of gunnery techniques, technologies, and platforms, as he sets the course for a career of innovation. Impervious to criticism, Sims challenges bureaucracy and is the first to push for a change in

gunnery and the development of continuous-aim fire. He begins to innovate!

Sims forged the Navy in preparation for World War I with his focus on naval gunnery, battleship design, and destroyer operations. Always the rebel and revolutionary, his insights were grounded on firsthand knowledge and experience. Sims was a critical thinker whose ability to evaluate technologies and platform designs was matched by his determination to fight for those changes required for military readiness. He abhorred risk-averse behavior and what he termed “military conservatism,” referring to the “dangerous reluctance to accept new ideas.”

From Sims’s perspective, the opportunity for officers to conduct war games served to enhance the development of critical thinking skills and innovative operational solutions. He would enjoy exploring advanced technologies, such as drones, networks of autonomous, unmanned systems, and artificial intelligence, and would integrate these technologies into military war-fighting capabilities. Sims would be the first to accept and adopt these technologies to gain a military advantage.

As President of the Naval War College, Sims exemplified a career dedicated to the education and development of Navy leaders. Throughout his career, Sims emphasized the need for the development of leaders with strong moral character, who were capable of strategic thinking and effective decision making.

Sims continues to inspire and challenge a new generation of Navy leaders. Sims would remind us that the main objective of the Navy is to prepare for war! He cautions us to be aware of our own fleet’s vulnerabilities and tasks us to remain

vigilant with regard to maintaining military readiness. While I would not presume to know how he would handle each of the military crises in today’s military operational environment, I would offer that Sims would applaud the Naval War College’s commitment to excellence in education and its commitment to developing revolutionary innovative naval warfare concepts through war gaming.

In conclusion, Sims serves as a model for all leaders and challenges us to examine our personal and professional development. How do we compare in our dedication to duty, our commitment to discipline and moral courage, our ability to innovate, and our ability to challenge ourselves continuously by learning? One could argue that we need a young Lieutenant Sims today if we are to remain a world power. The question is, Would we recognize a Lieutenant Sims in the twenty-first-century Navy?

This is a welcome addition to the 21st Century Foundations series from the Naval Institute Press, informative, inspiring, and a must-read for those interested in leader development. The bibliography provides further reading recommendations to enhance the reader’s interest in this topic.

YVONNE R. MASAKOWSKI



Kaiser, David. *No End Save Victory: How FDR Led the Nation into War*. New York: Basic Books, 2014. 408pp. \$28

David Kaiser’s *No End Save Victory* stands out as the best of several books published in 2014 that examine FDR’s leadership during the interlude between the fall of France and the Japanese attack on Pearl Harbor in December

1941. In contrast to Lynne Olson's *Those Angry Days: Roosevelt, Lindbergh, and America's Fight over World War II*, Susan Dunn's *1940: FDR, Willkie, Lindbergh, Hitler—the Election amid the Storm*, and Nicholas Wapshott's *The Sphinx: Franklin Roosevelt, the Isolationists, and the Road to World War II*, Kaiser extends his analysis beyond the domestic struggle between Roosevelt and the isolationists. While his analysis includes discussions of congressional politics, neutrality legislation, the America First Committee, and the election of 1940, it encompasses additional dimensions that shaped FDR's foreign and security policy ranging from the role of ULTRA and MAGIC intercepts to naval and military advice regarding capabilities and force development. Kaiser presents a wide-ranging analysis of policy, strategy, capacity, and mobilization during a period when danger loomed but much of the public opposed direct military intervention in the ongoing conflicts in Europe, China, and the Atlantic. His cast of individuals and institutions includes not only the familiar top tier of figures and committees but the military planners, labor union bosses, business leaders, and second tier of executive officials who translated FDR's visionary ideas into tangible plans and policies.

Kaiser is particularly skillful in three areas. Most strikingly, his narrative does a marvelous job of capturing the flavor of FDR's decision making. While highly organized individuals such as Secretary of War Henry Stimson and Army Chief of Staff George Marshall could be driven to distraction by the president's intuitive—sometimes meandering—approach to strategy and planning, the reader gains an understanding of what Roosevelt was doing. He was exploring and creating options. He was testing

ideas and concepts, sometimes dropping them and sometimes merely pocketing them for later use at the appropriate time and place. Kaiser repeatedly points out how Roosevelt prodded subordinates to provide him feedback on various germinating concepts months and sometimes years before they became policy, with Lend-Lease, the destroyers-for-bases deal, the occupation of Iceland and Greenland, and the oil embargo of Japan among the concepts he examined discreetly and informally well before he unveiled his intentions to cabinet members, congressional leaders, and allies.

Second, Kaiser makes clear that FDR was thinking in terms of victory over the Axis powers even while Marshall, Hap Arnold, and others remained focused on hemispheric defense and building up American forces in 1939 and 1940. Even before the outbreak of war in Europe, Roosevelt grasped the importance of airpower, pushing for a huge air force “so that we do not need to have a huge army.” Likewise, the Two-Ocean Navy Act passed in the summer of 1940, providing the U.S. Navy with the means to mount offensives in the Pacific even while supporting Anglo-American amphibious assaults in the Mediterranean and France in 1943–44.

Lastly, Kaiser takes on the latest generation of literature postulating that FDR sought to find a “back door to war” against Germany by implementing an oil embargo of Japan that he knew would provoke a Japanese military response. Kaiser weighs the evidence very carefully, and while he concludes that FDR was fully aware that implementing the embargo might lead to war with Japan, FDR was reacting to MAGIC intercepts that indicated that the Japanese occupation of southern French Indochina

was designed to prepare the way for the conquest of Singapore and the Dutch East Indies. FDR, aware that Japan had plans for continued expansion, simply did not see why the United States should supply Japan with the means for its southward drive. Kaiser puts it as follows: “The American embargo did not lead the Japanese to decide on a southward advance. That decision had taken place before the American freeze of Japanese assets” (258).

Kaiser’s work is a must-read for those interested in strategy, policy, and the preparation for war. Kaiser rates Roosevelt’s performance very highly. While the book lacks a bibliography, the endnotes confirm that the work rests on a thorough use of both primary and secondary sources. Those seeking to understand how Roosevelt prepared the United States for a war he viewed as inevitable will find this book insightful, delightful, and multilayered.

DOUGLAS PEIFER



Fisher, David. *Morality and War: Can War Be Just in the Twenty-First Century?* Oxford Univ. Press, 2012. 320pp. \$30 (paperback)

David Fisher’s recent book, *Morality and War*, offers an account of the philosophical foundations of the just war tradition that integrates various contemporary forms of ethics into a new approach he calls “virtuous consequentialism.” He argues against moral skeptics and antifoundationalists, insisting that some account of the underpinnings of morality must be given if moral prescription is to maintain its normative force and not collapse into relativism. For Fisher, thinkers as diverse as Isaiah Berlin and

Michael Walzer succumb to a false dichotomy; the impoverished moral vocabulary of the twentieth century forces them to oscillate between two extremes—an infallible totalitarianism and a groundless liberalism. In this picture, any attempt to define what is required for all humans at all times and everywhere to flourish is seen as the attempt to subjugate one’s own choices to an irrationally inerrant worldview, which in the postmodern age is criticized as feigning objectivity for the interests of prevailing power structures.

Countering this, Fisher adopts an Aristotelian approach to moral theory. Aristotle’s teleology allowed him to understand the life of virtue as both necessary for all human flourishing and pluralistic in its manifold expression. Both the athlete and the artisan might flourish as human beings just so long as they possess the virtues, even if it is understood that courage, justice, and the rest are expressed in very different ways between the two; and a soldier’s courage is the same even when comparisons are made between drastically different times and places.

Yet despite this endorsement of Aristotle, Fisher believes that no single moral theory—Aristotelian virtue ethics, utilitarianism, deontology—adequately accounts for the complexity of our contemporary moral lives. Therefore, his project combines consequentialism with virtue ethics because he sees each as having something the other requires to make sense of contemporary morality. Fisher argues that to know what the right thing to do might be in a given situation we must reflect on how our actions conduce to human flourishing but also understand our actions’ consequences. That is, virtue

theory provides but one piece of what is required and cannot fully account for the richness of our moral experience.

Fisher's hybrid approach results in a theory about war that rejects a firm distinction between the morality of the individual and that of the political community. He answers Plato's question "why be just?" by saying that one should be just because it is in one's self-interest. However, Fisher advocates an understanding of self-interest that goes beyond what he thinks is a post-Enlightenment preoccupation with selfish individualism and takes into account our communal nature as social animals. Justice is necessary for the proper functioning of society, and since man is fundamentally a social animal then justice is required for his own flourishing. Just as utilitarianism's cost-benefit calculations are otiose when explaining how mothers, fathers, sons, and daughters relate to each other in families, so too, Fisher argues, for societies as a whole.

Still, consequences matter; and Fisher wants to demonstrate that no theory of virtue is complete that ignores them. He thinks our communal nature enables virtue ethics and consequentialism to become united in a way that helps answer questions about justice—including justice in war. Fisher's approach reinterprets the moral precepts of the just war tradition and argues not only for their adequacy but for their necessity in the contemporary moral evaluation of war.

The result is an interesting and admirably lucid attempt to fill the gaps in contemporary moral theory while rendering it serviceable to the just war tradition. *Morality and War* is, therefore, an important contribution to a growing body of literature that attempts to make various aspects of Aristotelian

ethics serviceable to normative reflections about warfare. It is no wonder that Fisher's book won the prestigious W. J. M. MacKenzie Book Prize by the Political Studies Association in 2013.

Fisher, who died in March 2014, had a distinguished career in the British Civil Service, serving as a senior official in the Ministry of Defence, the Foreign Office, and the Cabinet Office, before taking up a post at King's College London as a Teaching Fellow in War Studies. His ability to combine practical know-how with theoretical sophistication was a rarity, and *Morality and War* demonstrates this with aplomb. For example, he concludes his book by offering several practical proposals, focused mainly on the UK Ministry of Defence, that seek to help improve justice in war.

Despite these abilities, Fisher's approach is ultimately inadequate. His rejection of a thoroughgoing Aristotelian view, one without references to modern moral theories such as utilitarianism, is motivated by important misunderstandings and misappropriation of Aristotle. While Fisher's insistence that a reinterpretation of the just war tradition must include aspects of the recently resurgent virtue ethics approach is refreshing, his rejection of key tenets of Aristotle's views—from the doctrine of the mean to the unity of the virtues—led Fisher to adopt modern consequentialist doctrines that sour what promised to be a thoroughly Aristotelian approach to the ethics of war. As such, many virtue ethicists would argue that Fisher's theory offers a distasteful blending of traditions without sufficiently exhausting the resources Aristotle offered.

Furthermore, Fisher's charge that no contemporary moral theory can

adequately account for the complexity of our contemporary moral lives rests on epistemological presuppositions that take the moral speech acts of the present as an epistemic starting point rather than as resulting from historical contingency. Finally, Fisher leaves questions about the adequacy of the just war tradition in accounting for contemporary warfare largely unexamined.

JOSEPH M. HATFIELD



Emerson, Stephen A. *The Battle for Mozambique: The Frelimo-Renamo Struggle, 1977–1992*. Solihull, U.K.: Helion, 2014. 288pp. \$35

Stephen Emerson has written the definitive work on the war in Mozambique between Frelimo (Front for the Liberation of Mozambique) and Renamo (Mozambican National Resistance) that began in 1977 and ended with the signing of the General Peace Agreement in October of 1992. It would be an impressive effort to capture just the fight between these factions vying for control of Mozambique, then newly independent after 450 years as a Portuguese colony: Emerson goes much further. He describes the complex environment in which this struggle takes place—overshadowed by a larger Cold War and bordering countries like South Africa with its own fight over apartheid, as well as the war against white minority rule next door in Rhodesia.

Emerson traces the beginnings of Frelimo and its armed struggle against Portugal. Despite its success in gaining independence from Portugal in 1975 after over a decade of war, Frelimo struggled with postindependence nation building. Formed by opponents of the Marxist-aligned Frelimo, Renamo

initially achieved operational effectiveness by obtaining arms, logistics, training, intelligence, and planning support from a Rhodesia seeking to counter Frelimo's support of Robert Mugabe and the Zimbabwe African National Union (ZANU) forces. Mugabe's eventual success in establishing an internationally recognized Zimbabwean state cost Renamo its major benefactor. In the 1980s, however, Renamo gained a new partner in its fight against Frelimo from the South African government of P. W. Botha looking to create instability in its "frontline states" as a way to stave off support for the African National Congress. This patronage allowed Renamo to continue its fight against Frelimo—now the ruling party of an independent Mozambique—for another thirteen years.

The conflict's ebbs and flows affected every part of the country and its inhabitants. Between 800,000 and 1 million Mozambicans were killed in the fighting, and more than 2 million were displaced. The war's effects included a plundering of natural resources and environmental disasters made worse by drought. An end to the Cold War and South Africa's apartheid regime—coupled with leadership changes in Frelimo itself and all-around war exhaustion—eventually enabled peace talks and a successful settlement.

The Battle for Mozambique benefits from Emerson's decade of research. It reflects his access to formerly classified Rhodesian military documents coupled with the firsthand accounts gleaned from hundreds of hours of interviews with both former Frelimo and former Renamo fighters as well as Rhodesian and South African military and civilian personnel. The descriptions of

operations and battles are graphic and bring a reality not seen very often.

A longtime resident of southern Africa, Emerson is a renowned scholar of African affairs, having served as Chair of Security Studies at the U.S. National Defense University's Africa Center for Strategic Studies, and as head of the Africa regional studies program at the U.S. Naval War College. His knowledge and experience make *The Battle for Mozambique: The Frelimo-Renamo Struggle, 1977–1992* a must-read for anyone seeking to understand the history and challenges of the African continent.

ROGER H. DUCEY



Epstein, Katherine. *Torpedo: Inventing the Military-Industrial Complex in the United States and Great Britain*. Cambridge, Mass.: Harvard Univ. Press, 2014. 328pp. \$45

Kate Epstein's book about the relationships between the torpedo and the creation of the military-industrial complex builds on her earlier work about naval tactics, in particular her essay in the April 2013 *Journal of Military History* about "torpedoes and U.S. Navy battle tactics" before World War I. (See Katherine C. Epstein, "No One Can Afford to Say 'Damn the Torpedoes': Battle Tactics and U.S. Naval History before World War I," *Journal of Military History* 7, no. 2 [April 2013], pp. 491–520.) Here she goes after much bigger "fish"—excuse the pun. Epstein wastes no time in getting to her primary thesis in this fascinating monograph about the development of the torpedo as a weapon system in the United States and Great Britain. She begins boldly: "Thus, in addition to the part they

played in the origins of the military-industrial complex, torpedoes were at the nexus of the international arms race, globalization, and industrialization after World War I." Epstein takes the reader on a journey back in time to relate a story little told and even less known.

The modern self-propelled torpedo, invented and improved in the last half of the nineteenth century by the Englishman Robert Whitehead, was naval warfare's first "fire and forget" weapon. Like breech-loading rifles and artillery, also products of the nineteenth century, it changed the landscape of war in its environment—the maritime domain. Just as breech-loading rifles increased the lethality and scope of land warfare, so too did the torpedo, but on unimaginable scales in a very short time period. As Epstein notes in her introduction, "Over a fifty-year period the speed of torpedoes had increased by roughly 800 percent, and their range by 5,000 percent. They were the cutting edge of technology." When combined with other so-called disruptive technologies, like the airplane and the submarine—that is, technologies so unique that they break sociopolitical, commercial, and military paradigms—they had the potential to and, in fact, did throw existing notions of sea power, naval tactics, and even maritime strategy into question. It was no accident that the great maritime strategists—A. T. Mahan and Sir Julian Corbett—emerged during the period of the torpedo's rise to prominence as sailors recast their thinking about naval tactics in the modern age in part because of cutting-edge technology.

Epstein builds on the work of historian William McNeill and his arguments about the emergence of "command technology" in the nineteenth century,

which she defines as “technology commanded by the public sector from the private sector that was so sophisticated and expensive that neither possessed the resources to develop it alone.” Because the public sector could not deliver expensive new technology on its own, it “had to invest in [research and development] by the private sector.” Her larger argument about the emergence of military-industrial complexes in the United States and Britain hinges on this relationship, and torpedoes represented what one might call an agency technology, providing a forcing function for public and private sectors to overcome the difficulties in solving complex military problems—problems that could only be solved in partnership. Throughout the book Epstein emphasizes, constantly, the contingent nature of these developing relationships—that the actors did not conform to some script. They simply wanted to solve difficult, complex problems, and their decisions shaped how the military-industrial complexes and both countries developed as a result.

In her closing Epstein makes conclusions that get to the heart of today’s discussions about American decline, technological challenges, and innovation and that may seem counterintuitive—especially in light of the challenge of China and antiaccess and area denial (A2/AD) strategies. These may be of some comfort to the pessimists out there who claim America is in an irreversible decline. The British had a larger research and development infrastructure in both public and private sectors precisely because they were the naval hegemon of that era. Even though many of their decisions vis-à-vis technology seemed more cautious than those made by American naval officers—who were somewhat credulous in embracing new

technological ideas—the British came out ahead in developing better torpedoes in the long run. It also seems counterintuitive that the British would do better than the weaker Americans in developing a weapon that threatened Britain’s naval hegemony, but that is precisely what happened. The British did better in developing the “weapon of the weak” than the relatively weak Americans, who would have seemed to have had more interest in such weapons. The British went further, realizing savings in the long run as they envisioned a future without battleships, using flotillas of torpedo craft and battle cruisers to protect their interests. This future essentially came to fruition during and after World War II as the new battle cruiser—designed to patrol the global commons and protect British maritime interests—evolved into the aircraft carrier. As for torpedo flotillas, what emerged during the Cold War were submarine and antisubmarine fleets of very large size both to dispute and to protect those same sea lines should all-out war break out.

The one critique this reviewer has of the book involves the impact of the Russo-Japanese War on torpedo development during the period covered by this book. Japan’s opening torpedo attack on the Russian fleet in 1904 at Port Arthur was not exactly a “coming-out party” for the weapon system: 85 percent of the Japanese torpedoes missed their targets. Perhaps the Americans and British thought they had solved the clear problems that torpedoes presented in their design and use, but a mention of this key episode in the development of the torpedo—a flop on opening night if you will—would seem merited. Nonetheless, Epstein’s book goes places and discovers truths that few other books on naval history have. Although it is not

an easy read, the arguments it makes are of vital interest to naval strategists, innovators, and those interested in the complex relationships and processes that are now part and parcel of the national defense paradigm.

JOHN T. KUEHN



Friedman, B. A., ed. *21st Century Ellis: Operational Art and Strategic Prophecy for the Modern Era*. Annapolis, Md.: Naval Institute Press, 2014. 150pp. \$21

21st Century Ellis is a solid contribution to the Naval Institute's 21st Century Foundations series and the scholarship regarding the touted U.S. Marine Corps visionary Lieutenant Colonel Earl "Pete" Ellis. The strength of this volume lies in the compilation of most of Ellis's scholarly works. B. A. Friedman has assembled five articles written by Ellis in the decade between 1911 and 1921 (a total of about 110 pages) into four chapters. Ellis's text is supplemented by Friedman's introduction and additional commentary highlighting the value of Ellis to both his contemporaries and current executors of the operational art.

Friedman arranges the essays by subject rather than chronologically. This allows the reading of the book by section without any loss of flow or context. Chapter 2, the shortest, reviews Ellis's First World War experience in France on the staff of John A. Lejeune. Chapter 3 is substantially longer but unlike the preceding chapter is perhaps of more applicability to modern practitioners. Two lectures prepared by Ellis during his tenure as a faculty member at the U.S. Naval War College examined the challenges of fighting a naval campaign in the western

Pacific. Composed in 1911–12, these proved prescient in their assessment of the tension building between Pacific naval powers and the war they would fight after Ellis's death. There is great legitimacy to the editor's claim that "Ellis predicted war with Japan in 1912."

Chapter 1 may be most relevant to Marines of this century. Ellis draws from his substantial experience fighting counterinsurgency in the Philippines during the early years of last century. His seventeen-page article "Bush Brigades" provides a solid foundation for any twenty-first-century warrior preparing for service in Iraq or Afghanistan. The editor summarizes how Ellis's tenets are strongly reflected in the Marine Corps's *Small Wars Manual* as well as today's counterinsurgency doctrine, while lamenting the "ill use of many of these tenets" in more-modern conflicts. A current practitioner would benefit by paying attention to Ellis's words.

The final chapter built around Ellis's work, chapter 4, is the longest and the major impetus behind Friedman's effort. Ellis is frequently viewed by Marines as the man who laid the template for modern amphibious operations. Read in detail, Ellis's article "Advanced Base Operations in Micronesia" reinforces that view. Ellis systematically takes a reader through the requirements for an advance across the Pacific to be successful. Many of these tenets informed Marine Corps development prior to the U.S. entry into the Second World War, laying the groundwork for highly successful amphibious operations in both the Pacific and European theaters.

While successful in providing a new generation of military practitioners easy access to Ellis's work, *21st Century Ellis* could have more successfully achieved

the book series's stated purpose of asking "the right questions." With the operational factors of time, space, and force still vital to success, few questions with which the Marine Corps must struggle in the twenty-first century relative to Ellis were asked. The editor's acceptance of "Air-Sea Battle" as a valid concept relative to Ellis falls short. The editor's comments fail to question shortfalls of the current Navy-Marine Corps team to sustain the logistics necessary for any large-scale amphibious operations in the maritime environment of the Pacific—a setting whose scope and scale have not changed since Ellis's day. Questions should be asked about whether current equipment procurement can fulfill the tenets Ellis was prescient in defining should they become required again in this century. This solid work of scholarship, produced by a junior Marine Corps officer, missed a chance to challenge current Marine Corps efforts by failing to ask tough questions the way that Ellis did a century ago. So, for practitioners of war, *read this book*, but keep a paper and pen handy to scribe your own tough questions for the future.

DAVID C. FUQUEA



Friedman, Norman. *Fighting the Great War at Sea: Strategy, Tactics and Technology*. Annapolis, Md.: Naval Institute Press, 2014. 416pp. \$85

This title is the most recent "tour de force" from this prolific and authoritative naval historian. It is a massive undertaking in almost every way, from its imposing 12" × 10" coffee-table format to its 360-plus pages (over 400 with notes) filled with dense, small print and lavishly illustrated with contemporary photographs. People familiar with

Friedman's other works will understand that it is no exaggeration to say that the detail that he provides in these captions alone could form the framework for any number of smaller, themed books were they to be collected and organized differently. So, coffee-table format it may be, but this is a serious work, covering all aspects of the maritime war in an encyclopedic fashion. The endnotes alone run to forty-plus pages and, while we may lament the imprecise citations in some areas, the notes are filled with further ideas to stimulate still more work in the future.

In many ways this is a book that only Dr. Friedman could have attempted; most others would have shied away from the immensity of the task and back into the comfort of a focused analysis on a smaller, more easily bounded theme. Friedman, however, has an almost unique ability to sweep across the disciplines, picking out the main points and delving into both the historical and technological detail where necessary. A case in point is his exposé of the loss of the three British battle cruisers at Jutland, a tragedy that he lays squarely at the feet of the poor magazine practices prevalent in certain quarters of the Grand Fleet at the time and not, in spite of the official sanction, the result of any undue design flaws in the ships themselves. Such an approach is not an easy one, and some may feel that the book sits rather uncomfortably between the true historical monograph or narrative and a specialist reference work as a result. Technically speaking, it is neither. The text is not chronological and is too dense and concentrated to be read easily from cover to cover, while the inconsistent citations, although far better than in other works, will likely still aggravate the serious scholar. Enticing and unattributed

comments like “in the words of one senior officer . . .” or “Jellicoe’s pre-battle correspondence reveals . . .” can make for a frustrating start for a researcher.

What the volume does do very well is to provide a technically well-informed, strategic, and tactical analysis of the main events from a maritime practitioner’s perspective. As Friedman himself explains in his introduction, “It is not a full, operational history, but instead it explores various themes in the naval history of the war, many of them technological and tactical.” He opens, logically enough, by examining the prewar strategic aspirations and expectations of the main protagonists, following with two very useful chapters on the resources available to each side and their expectations with regard to the new technology. Somewhere here in these first four chapters, however, there is arguably one of his few omissions, and this would be a more detailed coverage of Admiral “Jackie” Fisher’s interdependent and comprehensive series of reforms drawn out for the Royal Navy between 1902 and 1907. While admittedly taking place well before the period covered by the book, they (and Fisher’s character) were hugely influential in shaping the navy that fought the Great War—from the ships that it built to the intellectual leanings and the polarization of attitudes within the officer corps. Given the depth with which Friedman covers the other, related subjects and the controversies surrounding the advent of the “all-big-gun” ship to which he later refers, this would have been a useful foundation and might have enriched the rather truncated and one-sided discussion on the rationale for the battle cruiser that comes later in chapter 8.

The second half of the text examines the nature of the ships themselves, starting

with the capital ships and the fleets into which they were organized, before moving on to consider the newer forms of warfare, including inshore warfare, amphibious warfare, submarines and their counters, trade protection, and mine warfare. This is where Friedman excels, his eye for detail and technical acumen allowing him to describe accurately the precise ways in which new technologies altered the very nature of the maritime problem. As has often been said, while the big fleets and the capital ships that make them up may underwrite the notion of a nation’s claim to sea control and act as its overall guarantor, it is the smaller craft that actually exercise it. So it was with the Great War, and Friedman amply recognizes this point, affording each and every aspect of the naval problem good coverage, thereby cementing the comprehensive nature of his work. Here again, though, the interrelated nature of some of his chosen themes, and in particular the first eight chapters, which deal with differing aspects of essentially the same capital-ship dilemma, can lead to a tendency toward repetition, which is unfortunate, even if understandable.

The overall message, though, is timeless—as valid today as it was one hundred years ago. Friedman concludes that the strategic flexibility conferred by allied sea power was the decisive factor, allowing the allied powers to continue to trade and to run the world’s economic engine for their benefit across the maritime trade routes while denying the same luxury to the Central powers. As Friedman explains, the fact that Ludendorff was not beaten in the west was ultimately irrelevant. Ludendorff’s lack of viable allies by 1918 meant that he had no other options but to hold on in the west: a path that was as futile as it was exhausting.

The only bright light was the submarine offensive, which, for a while at least, looked as though it might threaten the British trade security. Once the allies recognized the threat, their subsequent mastery over the sea gave them all the options they needed to maintain an unpredictable and intolerable pressure over their adversary, an advantage that could only lead to one outcome.

In summary, this is not a book for the casual-interest reader. It will, however, suit those who have a background in the basics of the period and in maritime warfare generally, and who wish to know more. Dr. Friedman's research credentials are impeccable, and the huge amount of factual detail he has unearthed will be sure to delight many. While not definitive in any individual theme area, there is nothing comparable in either depth or scope out there, and for this reason, if no other, this book is likely to become a standard work on the naval aspects of the Great War.

ANGUS ROSS



Patalano, Alessio. *Post-war Japan as a Sea Power: Imperial Legacy, Wartime Experience and the Making of a Navy*. London: Bloomsbury Academic, 2015. 272pp. \$112

The Japanese Maritime Self-Defense Force (JMSDF) is one of the world's most powerful naval forces. As Alessio Patalano points out in his new history of the JMSDF, *Post-war Japan as a Sea Power*, its surface force is twice the size of that of the Royal Navy's, and Japan has three times as many submarines as France. However, the JMSDF has been the focus of surprisingly little writing by international historians. In fact,

prior to Patalano's welcome contribution, only three English-language books have been dedicated to the subject: Jim Auer's *The Postwar Rearmament of Japanese Maritime Forces, 1941–1971* (Praeger, 1973); James Wolley's *Japan's Navy: Politics and Paradox, 1971–2000* (Lynne Rienner, 2000); and Euan Graham's *Japan's Sea Lane Security, 1940–2004* (Routledge, 2005).

Post-war Japan as a Sea Power is particularly important because it offers unique insight into JMSDF history by exploring its organizational and cultural identity. Patalano investigates the extent to which the modern JMSDF draws on the experience and culture of its predecessor, the Imperial Japanese Navy (IJN), through access to previously unavailable archival materials, specifically records from the service's education system, recruitment data, and internal JMSDF guidance documents such as the *New Instructions* issued by each incoming chief of staff from 1961 to 2012. On top of this bedrock of archival research, Patalano, a professor at King's College London who averages several months a year in Japan, took advantage of his well-developed relationships with JMSDF officers of all ranks to conduct both focused interviews and group surveys. Patalano's extensive research reveals how heavily the IJN legacy influences the structure, role, and strategic outlook of the JMSDF.

When Japan sought to establish a maritime security force in the aftermath of World War II, its leaders studied the IJN—both its dramatic rise and catastrophic defeat. Patalano explains that the founders of the JMSDF, many of them IJN veterans, determined that the prewar navy had been plagued by its narrow professional focus. They concluded that IJN leaders and planners had

failed to match naval strategy to national security requirements. The result was an impressive fleet designed to defeat another major navy rapidly in blue-water action, when a more flexible force capable of securing and defending vital maritime interests might have served Japan better. The force structure and mentality of the IJN led to dramatic success for Japan in the early stages of World War II, but those gains could not be sustained, and Japan's poorly guarded sea lines of communication became a vulnerability that American submarines exploited to decimate Japan's merchant marine and undermine the Japanese economy.

As a direct result of this experience, writes Patalano, the founders of the JMSDF sought to ensure that Japan's new navy would have a broad, *maritime* focus rather than a narrow *naval* one, and that new generations of naval leaders would anchor their maritime strategies in Japan's national policy objectives. These leaders also worked to make the JMSDF immune to the internal rivalries that wracked the IJN in the 1930s by centralizing the JMSDF's command functions under a single Maritime Staff Office reporting to a single chief of maritime staff firmly under the control of civilian bureaucrats. The JMSDF's study of the IJN's failure to secure its sea lines of communication during World War II influenced the prioritization of sea-lane defense during the Cold War. Additionally, interservice rivalries that weakened the efforts of the Imperial Japanese Army and Navy during World War II were addressed postwar by the consolidation of initial officer training to foster interservice cooperation and camaraderie. Yet the IJN is more than a mere cautionary tale—its esprit de corps and traditions live on in the modern JMSDF.

Patalano's outstanding work falters only when the author attempts to explain the JMSDF's current tactics as a function of its IJN heritage. While the IJN's influence on the JMSDF is undeniably proven by the book's analysis, the links between the JMSDF's identity and its tactics are not clearly traced. It is the reviewers' experience and assessment that JMSDF tactics are generally either adopted directly from the United States or the product of analytical efforts to maximize the effectiveness of the force's combat systems vis-à-vis perceived threats. While it is logical that culture and identity elements are strong influences on those analytical processes, Patalano's argument lacks tangible examples to delineate this connection clearly. The link between JMSDF strategic culture and IJN heritage is clear, but the relationship between the IJN and modern JMSDF tactics is tenuous.

Well articulated, broad in scope, and drawing on sources not previously accessed by Western researchers, Patalano's work delves into previously unexplored territory essential to making sense of Japanese decision making in the maritime domain. Given rapidly developing events in East Asian waters, *Post-war Japan as a Sea Power* deserves attention from anyone seeking to understand maritime affairs in the Asia-Pacific.

CARLOS ROSENDE AND JOHN BRADFORD



Oliver, Dave. *Against the Tide: Rickover's Leadership Principles and the Rise of the Nuclear Navy*. Annapolis, Md.: Naval Institute Press, 2014. 178pp. \$27.95

Hyman Rickover almost single-handedly delivered nuclear power to the United

States Navy and, when this was combined with submarine and missile technology, gave the United States the assured second-strike capability that was the bedrock of Cold War deterrence. Rickover also ruled his nuclear navy for decades, setting unrivaled standards for safety and performance while also becoming one of the most controversial military officers of the twentieth century.

Dave Oliver, a retired rear admiral and veteran submariner who joined the Navy in the nuclear navy's adolescence, had a career that provided him both a unique opportunity to observe Hyman Rickover, and a chance to think deeply about what might be referred to as "the Rickover method." This book purports to examine that method, with a particular emphasis on Rickover's leadership style and how he changed naval and submarine culture. Oliver does this by focusing on large themes, such as "planning for success," and "innovation and change." He populates each chapter with descriptions of Rickover in action and more than a few personal anecdotes that in some cases simply beggar the imagination. The result is a fast-paced volume that reads much more like a memoir than a scholarly study of leadership or management. From this perspective, *Against the Tide* is a success. The book also has value as a window into a branch of the Navy that, for reasons good, bad, and inevitable, was insulated, isolated, and opaque to most outside observers.

Readers who approach this work with the hope of learning how to achieve similar results to Admiral Rickover's will be disappointed. In part this is due to Rickover's unique story, his consistent refusal to produce any form of comprehensive autobiography or memoir, and the complexity of his career. Rickover

is a hard man to understand truly and perhaps impossible to replicate. Oliver points out that Rickover himself occasionally deviated from his own first principles, but fails to explain why that happened. In another case Oliver argues that Rickover was able to anticipate the future far more accurately than almost all his peers, but offers no suggestion about how this gift might be replicated. Here too, questions arise. One of the examples used to demonstrate this prescience involved the admiral pulling an answer for a technical problem from a stack of solutions, written long ago, that he kept in his desk. The scene is dramatic, but leaves the obvious question; if Admiral Rickover, with his ability to anticipate the future, foresaw the problem, why didn't he fix it beforehand? In another example, toward the end of the book Admiral Oliver offers the observation that "hard work and focus can succeed for anyone." Yet in earlier chapters he makes a very convincing argument that Rickover's controversial interviews and ruthless "culling of the herd" of prospective and serving nuclear officers was warranted because some of those men, including one from his own wardroom, no matter how hardworking and focused, lacked what it took to be a successful officer on a nuclear submarine.

Oliver, when all is said and done, openly admires Admiral Rickover. He tries to maintain a balanced approach when it comes to identifying and analyzing Rickover's blind spots and personal weaknesses but still minimizes some of Rickover's less commendable attributes—while engaging in occasional hyperbole when it comes to describing the admiral's detractors. For example, Oliver refers to Admiral Rickover's "adversaries" as "attacking with the

viciousness and mindlessness of a pack of stray dogs.” The imagery is bold, but the truth is that, as later described by Oliver, some of those adversaries were principled officers with different and often broader portfolios and perspectives whose opposition to Rickover was anything but mindless.

To its credit, this book touches on and invites thought and discussion about more than a few attributes of senior leadership, including personal accountability. Rickover was quick to dismiss subordinates who he felt had failed his program—yet the degree to which he would be willing to sacrifice his own position and power is less clear, particularly when even many of his supporters feel the admiral clung to power too long and eventually became a detriment to the program he had created. Another area involves personal and professional ethics. Oliver seems to make the point that when the stakes are high enough, the ends do justify the means and a successful outcome justifies questionable or even illegal actions. This invites a subsequent discussion involving the deepest questions of what it is to be an officer and member of the profession of arms.

Perhaps the most surprising aspect of Admiral Oliver’s book is the revelation that the author identifies Admiral Rickover as a manager and not a leader, contrary to what Rickover desired and believed. Today, Admiral Rickover is among the leadership biographic cases senior students study at the Naval War College and the question—Was he a leader or manager?—always comes up. While there are some students who agree with Admiral Oliver, the majority identify Rickover as a leader. However, all are agreed Rickover should be credited

for daring greatly, building to last, and being most worthy of continued study.

RICHARD J. NORTON



Dubbs, Chris. *America’s U-boats: Terror Trophies of World War I*. Lincoln: Univ. of Nebraska Press, 2014. 206pp. \$24.95

Chris Dubbs, a Gannon University executive, followed a fascination with his discovery of a First World War German submarine wreck in Lake Michigan. He pursued meticulous research through collections of First World War U-boat accounts and recorded American attitudes on the war and the public fascination with submarines. Throughout the book, he grabs the attention of readers as he skillfully recounts the arrival of the German freighter submarine *Deutschland* in the United States to reopen trade with Germany, the horrors that U-boats caused during the war, and the end of the war, when the allies claimed U-boats as war prizes. His well-cited account of events in the United States, at sea, and in Europe between 1916 and 1920 entertains readers with riveting images of German submarines and crews, the perils of war at sea, and public reaction and debates on the war. Dubbs offers an informative and historically accurate description of the impact U-boats had on the evolution of warfare and the subsequent employment of submarines as offensive weapons in war. He concludes his book with a note on the entrance of the United States into the Second World War, when Admiral Harold Stark, Chief of Naval Operations, ordered U.S. submarines to commence unrestricted submarine warfare against Japan, thereby disregarding the moral outrage

against sinking ships without warning. USS *Swordfish* (SS 193) consummated the intent of that order nine days after 7 December 1941 when it torpedoed a Japanese freighter. *Swordfish*, commissioned on 22 July 1939, was certainly designed and constructed based on exploited First World War U-boat technology.

Dubbs has never served in our Navy or been identified as a naval warfare analyst; however, his account of submarine technology and warfare describes in compelling detail the phases of a revolution in military affairs brought about by offensive employment of submarines.

Dubbs details capability/countercapability phases and the evolution of technology that began a revolution in military affairs. While this aspect of the book is not Dubbs's main focus, it serves as a textbook lesson for naval innovators and strategists in understanding the narrative on submarines and submarine warfare that continues today in the form of the U.S. Navy's undersea warfare dominance.

Dubbs offers details on how Germany, with the initial advantage of superior submarine technology, executed a strategy designed to intimidate the United States and then threaten American and allied shipping at sea and American cities along the Atlantic coast.

Imagine a Chinese high-speed freighter submarine arriving at the Port of Los Angeles to deliver bulk consignments of rare earth minerals. Imagine there were no known accounts of the Chinese freighter submarine being constructed or warnings of its passage until it surfaced west of Santa Barbara Island. Imagine its arrival in LA, with fanfare, public fascination, and U.S. government mortification.

This hypothetical arrival of a Chinese freighter submarine today is comparable to Dubbs's account of the 1916 prewar arrival of *Deutschland*. *Deutschland* commenced its surface transit through the Chesapeake Bay bound for a call on the Port of Baltimore on 9 July 1916. *Deutschland* delivered not only rare dyes from Germany but strategic communications that the British blockade of Germany was ineffective against German submarines and that German combat U-boats could arrive undetected along the Atlantic coast.

Deutschland's technology and apparent ability to transit the Atlantic established the first phase of a revolution in military affairs. It demonstrated superior German U-boat operational and functional capabilities to wartime enemies and potential adversaries.

Other accounts of German U-boat capabilities strengthened the initial demonstration of a strategic capability that provided Germany with a means of achieving strategic ends. Dubbs's detailed accounts of U-boat exploits, while compelling reading, also inform present-day arguments for operating forward with superior war-fighting capability.

Throughout the book, maritime warfare is recounted in deep detail including tactical maneuvers and operational effects that have strategic consequences in warfare. Phases of a classic revolution in military affairs are brought into focus as submarine operations versus antisubmarine warfare illustrates a response cycle to the introduction of unrestricted submarine warfare in the Atlantic. Wartime incidents described by Dubbs are certainly significant revelations for some readers and provide persuasive details related to military-political affairs for strategists. Those narratives

alone are well worth a serious reading of Dubbs's wartime U-boat operations.

The revolution in military affairs created by U-boats in the First World War had a dramatic effect on the public, the conduct of the war, and the near attainment of German strategic aims. According to Dubbs, German U-boats were a major focus in negotiating the armistices that ended the war.

Dubbs chronicles the debate by American Navy leaders on the benefits of taking U-boats as war prizes. They had to be convinced that there were benefits to crewing U-boats with American submariners and crossing the Atlantic. Dubbs also introduces American submariners in his account of these events. Those officers would later emerge as leaders of the submarine force in the Second World War. Their efforts to inject First World War U-boat technology into U.S. submarines formed the basis for the U.S. Navy's undersea warfare dominance today.

America's U-boats is an important book for naval warfare professionals and submariners. It conveys a near-complete history of the origins of submarine warfare and the revolution in military affairs that submarines have delivered to maritime and strategic warfare then and now.

WILLIAM F. BUNDY



O'Connell, Aaron B. *Underdogs: The Making of the Modern Marine Corps*. Cambridge, Mass.: Harvard Univ. Press, 2012. 400pp. \$18.95

In *Underdogs*, Aaron B. O'Connell (U.S. Naval Academy) presents a cultural history of the U.S. Marine Corps from 1941 to 1965. A lieutenant colonel in the Marine Corps Reserve, O'Connell explores

how mistrust among the Marine Corps, other military services, and civilian policy makers often motivated Marines to distinguish themselves. In response, Marines cultivated relationships with formidable allies in the U.S. Congress, media, and even Hollywood to disseminate their narratives to the public, which ultimately benefited the institution. Students, scholars, and general readers interested in military culture or the Marine Corps should find the volume useful.

O'Connell's purpose is to explain the Marine Corps's rapid growth from an undersized force of fewer than twenty thousand Marines in 1939 to a force peaking at nearly five hundred thousand Marines in 1945 and settling around two hundred thousand Marines by 1965. His thesis is that culture forms a vital tool for military organizations. O'Connell argues three main points: that Marine Corps culture was unique, that it helped the group thrive, and that it impacted American society as well. To his credit, O'Connell presents both positive and negative implications of these dynamics, highlighting subjects ranging from esprit de corps to alcohol abuse.

The author supports his arguments with extensive sources, examining archival material such as military and government records, personal papers, letters, and diaries, as well as published sources such as newspapers, magazines, films, and recruiting commercials. He makes good use of the *Marine Corps Gazette* and *Leatherneck* to present stories that Marines told. He also scrutinizes surveys, public opinion polls, memoirs, and oral history transcripts. A major strength of the volume is the inclusion of interviews that O'Connell conducted with Marine veterans, which personalize the broader narratives of the book.

First, O'Connell explores the massive expansion of the Marine Corps that occurred during World War II and the resulting stories that comprised the group's culture. He explains that Marine Corps culture functioned much like a religion in that it "bound people together in a system of shared obligations and beliefs." World War II reinforced those ties, since most Marines served in the Pacific, and the Corps suffered more than twice the casualty rate of other military services.

Second, he considers the dissemination of these stories to American society between World War II and the Korean War. Brigadier General Robert L. Denig's public relations specialists, known colloquially as Denig's Demons, eventually worked with nearly five thousand newspapers across the country. Other examples included the Toys for Tots program, which started in 1947, and the Marine Corps's collaboration with Hollywood in Republic Pictures' *Sands of Iwo Jima*, which included participation by more than one thousand Marines.

Third, the author studies the Marine Corps's mobilization of political power in the U.S. Congress. He explores avid supporters of the institution such as Paul H. Douglas (D-Ill.) and Joseph R. McCarthy (R-Wis.) and explains how their efforts protected Marine Corps missions and budgets. O'Connell rightly points out the irony that Marines' political efforts often "argued against militarism and excessive military influence in politics, even as they became the most politically activist branch of the armed services." For example, a nebulous group of influential supporters known as the Chowder Society led Marine Corps congressional efforts from relative obscurity.

Next, O'Connell explores American culture and civil-military relations after the Korean War. He analyzes stories about participants in the iconic Marine Corps battle at the Chosin Reservoir during the winter of 1950 and then investigates problems resulting from Marine Corps culture after the Korean War. Central among these difficulties was the 1956 Ribbon Creek scandal. This incident caused the deaths of six Marine recruits and resulted in the court-martial of Staff Sergeant Matthew C. McKeon for marching them through swamps around Parris Island, South Carolina.

Finally, the author considers the influence of culture on military strategy. He details the rise of Marine air-ground task forces (MAGTFs), which had both positive and negative implications. This novel structure provided scalable and relevant power projection capabilities focused on low-intensity conflict, but also risked militarization by making deployments easier to initiate for civilian policy makers.

Underdogs is a valuable addition to an understanding of military culture and illustrates how military organizations are unique. O'Connell contributes useful concepts such as "narratives of Marine exceptionalism"; "cultural discipline"; and "cultural politics," which relate culture to military institutions, militarization, and power. Ultimately, *Underdogs* explains how and why the Marine Corps created a distinctive identity after World War II and illuminates the dynamic and symbiotic relationship between the Marine Corps and American society.

WILLIAM A. TAYLOR

OUR REVIEWERS

John Bradford is the Regional Cooperation Coordinator on the staff of the U.S. Seventh Fleet. He holds a bachelor's degree from Cornell University and earned a master's degree from the Rajaratnam School of International Studies in Singapore as an Olmsted Scholar. He has written articles for publications that include *Asian Policy*, *AsianSecurity*, *Asian Survey*, *Contemporary Southeast Asia*, *Naval War College Review*, and U.S. Naval Institute *Proceedings*.

William F. Bundy directs research and teaches graduate warrior-scholars in the Center for Naval Warfare Studies. He received a PhD from Salve Regina University and served in the Navy as a career submarine officer, having served in seven submarines, including attack, nuclear attack, and nuclear fleet ballistic missile submarines. He had command in a conventional attack submarine.

David T. Burbach is an Associate Professor of National Security Affairs at the Naval War College, where he teaches courses on force planning, national strategy, and regional security. Dr. Burbach received a BA from Pomona College, and earned a PhD in political science from the Massachusetts Institute of Technology.

Roger H. Ducey is an Associate Professor of National Security Affairs at the Naval War College. Previously he served as the senior Air Force adviser to the Naval War College. He retired after almost thirty years of service. He holds a bachelor's of business administration from the University of Miami and master's degrees from Embry-Riddle Aeronautical University and the U.S. Naval War College.

David C. Fuquea joined the Naval War College's Maritime Staff Operators Course faculty as an associate professor following his retirement from the United States Marine Corps as a colonel after twenty-nine years. He conducts research and writes on modern amphibious warfare and the U.S. naval war in the Pacific, and has published in the *Journal of Military History*, the *Naval War College Review*, and *Proceedings*.

Joseph M. Hatfield is an active-duty naval intelligence officer and received a PhD from the University of Cambridge. He currently is assigned to the United States Naval Academy faculty and teaches political science.

Holger H. Herwig holds a dual position at the University of Calgary as Professor of History and as Canada Research Chair in the Centre for Military and Strategic Studies. He has published more than a dozen books, including the prizewinning *The First World War: Germany and Austria-Hungary 1914–1918*.

John T. Kuehn is the General William Stofft Chair for Historical Research at the U.S. Army Command and General Staff College (CGSC). He received a PhD from Kansas State University. He retired from the U.S. Navy in 2004 at the rank of commander after twenty-three years of service as a naval flight officer. His latest book is *Napoleonic Warfare: The Operational Art of the Great Campaigns*.

Carnes Lord is Professor of Strategic Leadership at the Naval War College, director of the Naval War College Press, and editor of the *Naval War College Review*. He received a PhD (classics) from

Yale University, as well as a PhD (government) from Cornell University. His latest books are *The Politics of Aristotle* (editor and translator) and *Proconsuls: Delegated Political-Military Leadership from Rome to America Today*.

Yvonne R. Masakowski is an Associate Professor of Strategic Leadership and Leader Development at the U.S. Naval War College. She received a PhD and a master's degree from the City University of New York, and a master's degree from the University of Connecticut. She is a contributing editor to the *Journal of Cognitive Engineering and Decision Making*.

Christopher Nelson is a career naval intelligence officer and graduate of the University of Tulsa and Naval War College. He is also a graduate of the Maritime Advanced Warfighting School in Newport, R.I.

Richard J. Norton is a professor of National Security Affairs at the Naval War College. He is a retired naval officer and holds a PhD from the Fletcher School of Law and Diplomacy. His most recent publications include articles in the *Naval War College Review* and *Marine Corps University Journal*.

Douglas Peifer is a professor and chair of the U.S. Air War College's Department of Strategy. His latest book, *Naval Incidents and the Decision for War*, is forthcoming from Oxford University Press. He is currently researching the historical record of "gunboat diplomacy," air control, and coercive airpower.

Carlos Rosende is an active-duty naval officer in USS *Stethem* (DDG 63), forward deployed to Yokosuka, Japan. He holds a bachelor's degree from the U.S. Naval Academy and his research and writing have been featured in *Naval History* and U.S. Naval Institute *Proceedings*.

Angus Ross is a retired Royal Navy officer; graduate of, and Professor of Joint Military Operations at, the Naval War College. A graduate of the Naval War College, he received a second MA from Providence College and is currently working on PhD studies, looking at naval transformation prior to the First World War. His recent published works include articles in this journal and others on the dilemma facing both the Royal Navy and the U.S. Navy in the wake of the *Dreadnought* revolution.

William A. Taylor is Assistant Professor of Security Studies at Angelo State University. A graduate of the United States Naval Academy and former Marine Corps officer, he received a PhD from George Washington University. He is author of *Every Citizen a Soldier: The Campaign for Universal Military Training after World War II* and the forthcoming volume *In Defense of Democracy: American Military Service from World War II to Operation Enduring Freedom*.

IN MY VIEW

THE INDIAN NAVY AND THE PIVOT

Sir:

Apropos the article by Harsh V. Pant and Yogesh Joshi titled “The American ‘Pivot’ and the Indian Navy: It’s Hedging All the Way,” in the Winter 2015 *Naval War College Review*. The authors argue that India has been overly cautious in demonstrating its support to the U.S. “pivot strategy,” based on the lack of any visible response by the Indian Navy in the region.

In my view, India’s primary interests lie in the Indian Ocean and India’s defence relations with the regional littorals in the West Pacific are driven by their own interests in the safety and security of their maritime trade in the Indian Ocean, rather than by India’s interests in the Pacific. A case in point is Japan, which receives almost all of its oil imports through the Indian Ocean. It would therefore be inaccurate to view the extant level of India’s navy-to-navy relations with Japan and Australia as a sign of India’s interest in the Pacific or a measure of India’s contribution to the American “pivot” in the Indo-Pacific. I think that task will always remain for the regional littorals, including Australia, Japan, Philippines, Singapore, and Vietnam, to back the U.S. Navy in the region or their respective areas of interest. Emergent navies, such as the Indian Navy, like to engage with other modern navies, such as the USN, the Japan Maritime Self-Defense Force, or the Royal Australian Navy, for various reasons, including “bench-marking” of their operating standards, learning and emulating best practices, or keeping pace with the latest technologies, besides developing a comfortable level of operational interoperability that could be put to use in time of crisis.

The emergence of the Indian Navy as a net provider of security in the Indian Ocean does, however, support the American “pivot,” since by easing its operational burden in the Indian Ocean region it allows the USN, as well as other Pacific navies, to focus assets in the Pacific theatre. Moreover, notwithstanding the extant level of naval exercises, the Indian Navy, as highlighted by the authors, has over the years built close trust and interoperability with the USN. This is more

important than the nature of exercises *per se*, a fact underscored in the 2007 U.S. “Cooperative Strategy for 21st Century Seapower,” which aimed at developing cooperative partnerships with like-minded nations over time, because in moments of crises, “[while] forces can surge when necessary . . . trust and cooperation cannot be surged.”

SHISHIR UPADHYAYA

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REFLECTIONS ON READING

COMING SOON TO YOUR COMMAND'S LIBRARY: *HOW WE FIGHT*

Professor John E. Jackson of the Naval War College is the program manager for the Chief of Naval Operations Professional Reading Program.

The Chief of Naval Operations Professional Reading Program (CNO-PRP) recently began distributing *How We Fight: Handbook for the Naval Warfighter* to all CNO-PRP libraries around the fleet. In describing the 166-page, full-color handbook, Admiral Jonathan Greenert, USN, says in his foreword:

“How We Fight” is a concise, single volume that explains the basic, unique, and enduring attributes associated with being a Sailor, going to sea, and conducting war at sea. It highlights the fundamentals of the environment in which the Navy operates, our uniquely maritime characteristics, our history in this domain, and the way of Navy warfighting. This book should serve as a companion piece to other sources of literature enabling Sailors to understand the essence of being “a Sailor” as they develop their skills as seagoing professionals.

The introduction to the handbook further explains its purpose:

Every Sailor is a warfighter first. The U.S. Navy exists to protect our nation and our access to the world. Our duty is to prevent and deter wars and, if necessary, fight and win them. The protection we provide the American people extends far beyond our homeland and includes the defense of our national interests and allies.

As a Service, the Navy is unique in that its continuing maintenance—directed by the U.S. Constitution—reflects the fact that our nation’s economic prosperity is based in a large part on international trade in products and resources, the majority of which travels by sea. We protect that access every day in peacetime. In conflict, we are dedicated to victory.

Those are facts we all know. We also know that our Navy is designed to operate forward in the far regions of the world. Much of our time, both in peace and conflict, is spent on deployment in the areas of potential crises, promoting, safeguarding and,

when required, defeating an enemy and restoring the peace. We protect American interests on a global basis, something with which we are very familiar.

We know that we must “be ready”—fully prepared to conduct warfighting operations while forward deployed into regions of potential crisis and conflict.

[The purpose of this book] is simple—to articulate in a single volume the elements that determine the way we operate, as well as some of the overall concepts that guide our methods. We are shaped by so many factors: the maritime environment, our Service attributes, our history, and our current and projected future missions.

These are the factors we examine in these pages. The book is meant to put all these pieces together and define who we are and what we do in a comprehensive, yet readable fashion. For some, it is a good review of material they have long known. For others, it may hold ideas with which they are not as familiar or have never examined intently. For civilian readers, it helps to explain what the U.S. Navy is truly about: what it does for our nation, what molds its culture, and what makes it unique among our joint U.S. Armed Forces.

The CNO-PRP managers at the Naval War College will ensure that a number of hard copies are made available to every ship, squadron, and major activity in the Navy for inclusion in their CNO-PRP lending libraries. An electronic (e-book, ISBN 978-1-935352-42-6) version will be available for download from the official Navy website at www.navy.mil and from the CNO-PRP website at navyreading.dodlive.mil. Command procurement officials can purchase additional hard copies (ISBN 978-1-935352-41-9) from the Government Publishing Office (GPO) bookstore at bookstore.gpo.gov. Individuals (including private citizens) who desire to add this book to their professional libraries may purchase copies from GPO using personal funds.

We strongly encourage everyone to read *How We Fight: Handbook for the Naval Warfighter*. It tells a story of honor, courage, and commitment that spans the centuries and provides a vision for the future.

JOHN E. JACKSON