Career
The tall ship Lynx, a replica of a War of 1812-era privateer, under sail near Nantucket Island, Massachusetts. In this issue, author Christopher J. McMahon discusses the history of maritime trade warfare and the prospects that it would be practiced in a future conflict. Lynx ("America's privateer") hails from Nantucket and is owned and operated by the Lynx Educational Foundation of Newmarket, New Hampshire. The nonprofit foundation, led by President Donald E. Peacock, teaches "the history of America's struggle to preserve its independence," concentrating on the 1812 era.
Photo: Mark Krasnow Photography
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FROM THE EDITORS

In this era of globalization, it often is taken as axiomatic that maritime trade warfare is obsolete. Yet serious analysis of this issue is conspicuous for the most part by its absence. In “Maritime Trade Warfare: A Strategy for the Twenty-First Century?,” Christopher J. McMahon sets out to rectify this situation. After an extensive survey of the role of antitrade warfare—guerre de course—in modern times, he develops and assesses systematically the arguments both for and against the likely utility or threat of such warfare today. He notes that most observers in the years of “globalization” prior to 1914 were similarly convinced that the economic interests of the great powers would preclude its use in future wars—a prediction that both world wars showed to be completely unfounded. He also points out that the United States today, with its far-flung global maritime presence and relatively limited inventory of lift and sustainment shipping, should be giving more attention to this potential threat than it appears to have done in recent years. Christopher J. McMahon is the Maritime Administration Emory S. Land Chair of Merchant Marine Affairs at the Naval War College (NWC).

There has been much discussion over the last few years of what has come to be called “gray-zone conflict.” According to some, this kind of conflict—exemplified in Russia’s relatively bloodless takeover of Crimea—is a fundamentally novel phenomenon. Van Jackson, in “Tactics of Strategic Competition: Gray Zones, Redlines, and Conflicts before War,” takes issue with this view. He argues that three interrelated tactics making up gray-zone conflict—avoidance of “redlines,” the use of intermediaries, and the use of faits accomplis—in fact have a venerable history, yet stand in need of more-thorough conceptualization. Van Jackson is a senior lecturer at Victoria University of Wellington.

The present moment is a propitious and critical one for reexamining fundamental aspects of the Navy’s fleet architecture, emerging maritime technologies, and acquisition challenges. In his timely “Impacts of the Robotics Age on Naval Force Design, Effectiveness, and Acquisition,” Jeffrey E. Kline makes a compelling case for a new “high-low” force mix that effectively reverses the prevalent concept centered on large-platform capital ships. Instead, he proposes a forward-deployed “offensive” force using new, smaller platforms capable of dispersed and highly autonomous operations and equipped with continuously evolved missile and sensor systems, while the legacy fleet would become primarily a “defensive”
or sea-control force dedicated to protection of sea lines of communication. This argument is very much in line with the Navy’s emerging concept of “distributed lethality,” while drawing out some of its potentially radical implications. Jeffrey Kline is a professor of practice in the Operations Research Department of the Naval Postgraduate School.

In “Organization and Innovation: Integrating Carrier-Launched UAVs,” Greg Smith also is concerned with the role of unmanned systems in the Navy of the future, but his focus is on the development of unmanned aerial strike vehicles and their integration into aircraft carrier operations. Drawing on the literature on military innovation, he explores in depth the organizational and cultural challenges involved in realizing the full potential of this revolutionary capability. Commander Greg Smith, USN, currently is assigned to the staff of the Deputy Chief of Naval Operations for Operations, Plans, and Strategy.

We turn, finally, to a less familiar—but not, for that reason, less important—mission of this journal and the institution it serves. The late Vice Admiral James Stockdale remains a revered figure throughout the U.S. Navy for his exemplary conduct as a North Vietnamese prisoner of war. As President of the Naval War College, Admiral Stockdale championed the centrality of moral virtue or character in the development of military leaders, and personally taught a course on the subject. The Stockdale legacy remains very much alive—as does the “Stockdale Course”—in the College of today. Over the last half decade, NWC has been at the forefront of a Navy-wide effort to systematize and strengthen the formation of naval leaders at every level, with particular emphasis on the development of character.

Questions of ethics and character lead us inevitably to the domain of philosophy. Stockdale himself was influenced deeply by the philosophy of the ancient Stoics, which he encountered by chance as a graduate student at Stanford. It takes nothing away from Stockdale to suggest, however, that there are alternatives. Mark N. Jensen, in “Epictetus vs. Aristotle: What Is the Best Way to Frame the Military Virtues?,” argues that the fourth-century BCE Greek philosopher Aristotle, because he frames ethical behavior more firmly in its social and political context, may be a better fit for today’s soldiers and sailors. Mark Jensen is a professor of philosophy at the U.S. Air Force Academy.

Returning to Stockdale, we conclude with two pieces that shed interesting light on the personality and character of this remarkable officer. Thomas J. Gibbons, in “Foundations of Moral Obligation: After Forty Years,” provides an account of the genesis and evolution of the Stockdale Course since its inception, drawing on unpublished materials in the NWC archives. Finally, also from our archives, comes a sample of the mind of the man himself, with a brief introduction by former Stockdale Professor of Ethics at the College Martin L. Cook: “Remarks of wing commander James B. Stockdale to the pilots of Carrier Air Wing 16 aboard
USS Oriskany, at sea en route to the Gulf of Tonkin, on April 29, 1965, one week before they entered combat.”

IF YOU VISIT US
Our editorial offices are 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 Jeff Harley is the fifty-sixth President of the U.S. Naval War College. The College is responsible for educating future leaders, developing their strategic perspective and critical thinking, and enhancing their capability to advise senior leaders and policy makers.

Admiral Harley is a career surface warfare officer whose sea-duty assignments have included command of USS Milius (DDG 69), Destroyer Squadron 9, and Amphibious Force Seventh Fleet / Expeditionary Strike Group 7 / Task Force 76. During his command of Milius, the ship participated in combat operations supporting Operation IRAQI FREEDOM and his crew won the Battle Efficiency Award and the Marjorie Sterrett Battleship Fund Award for overall combat readiness.

Admiral Harley attended the University of Minnesota, graduating with a bachelor of arts in political science, and received master of arts degrees from the Naval War College and the Fletcher School of Law and Diplomacy, Tufts University. Additionally, he served as a military fellow at the Council on Foreign Relations in New York City.
SINCE ASSUMING MY POSITION as Naval War College (NWC) President last July, I have identified four broad elements of a vision under which the institution will Operationalize, Navalize, Futurize, and Internationalize its education and research efforts, with an overall goal of contributing to the professionalism and capabilities of the nation’s future leaders. Previously I addressed aspects of the vision’s operationalization component in the Naval War College Review’s Winter 2017 issue and navalization in the Spring 2017 issue. In this issue I will outline the actions we are taking on futurization.

Core Course Modifications
NWC efforts at futurization include an ongoing reassessment of how to prepare students for the strategic environment that the Chief of Naval Operations (CNO) articulated in his January 2016 “Design for Maintaining Maritime Superiority,” with its emphasis on contestation of the maritime system, the rising influence of the global information system, and the increasing rate of technological change. Our goal is to produce graduates able to succeed in the dynamic and dangerous strategic environment of today and tomorrow.

With regard to the information domain, the College has greatly expanded the cyber content in its curriculum. It also has coordinated with the Naval Postgraduate School on a core cyber curriculum, with overlap in four content areas: cyber concepts; international cyber law, ethics, and standards; military cyber operations; and cyber policy and strategy. To augment the NWC joint professional military education curriculum, a series of classified and unclassified sessions on cyber and emerging technologies offered at the commencement of each academic year will prepare students better for engaging with the challenges of cyber and emerging technologies during their research and studies.
Certificate in Ethics and Emerging Military Technology

The College’s new certificate in ethics and emerging military technology (EEMT) seeks to deepen our students’ understanding of the ethical complexities that new technology imposes. The certificate option was launched in the fall of 2016 as a specialized version of our popular electives program. We anticipate that the first six certificates will be awarded in June 2017.

EEMT students enroll in a trio of relevant ethics and technology courses; complete one additional course (beyond the normal three-course electives sequence); and write an original, comprehensive, faculty-mentored research paper. They earn four additional graduate credits and recognition as certificate recipients in studies highly relevant to the Navy and the nation. Participation in this first-ever NWC certificate program is voluntary, goes beyond the level of effort required for the master of arts degree, and is limited to a small number of highly motivated students.

Certificate candidates will examine the ethical and military relevance of emerging technologies such as artificial intelligence, genetic manipulation, neuro-enhancements, cyber, cryptology, nano-engineering, 3D printing, robotics, and unmanned systems (air, surface, and maritime). They will apply ethical reasoning to the challenges and consequences of rapid technological change in the modern security environment. The courses and research they complete will help them formulate original perspectives on many potential technologies and their ethical implications for the profession of arms.

Center for Naval Warfare Studies Initiatives

Our Center for Naval Warfare Studies is directly supporting the Assessment Division of the CNO staff as they consider different variations of future fleet architectures following work done by the Navy Staff, the MITRE Corporation, and the Center for Strategic and Budgetary Assessments. Several faculty members are continuing to support the CNO staff in studying other future fleet architecture work, looking at the 2030 and 2045 time frames. The center’s talented researchers also continue to support future thinking and analysis through work with the College’s Center for Cyber Conflict Studies (known as C3S) and the Stockton Center for the Study of International Law’s work in the area of cyber conflict.

In March 2017, the College sponsored a workshop entitled “Military Innovation and the New Presidential Administration: Lessons from the Past, Solutions for the Future.” This event focused on the notion that, regardless of what national security strategy the Trump administration ultimately pursues, maintaining the U.S. military’s qualitative edge will give his administration and those of his successors greater degrees of freedom in responding to long-term security challenges.
and short-term crises. Given the range of American security responsibilities and the dictates of geography, the belief is that the United States must out-innovate its rivals or it will be unable to accomplish American security objectives in the long term. The workshop also examined the successes and failures of the Defense Department’s widely reported “Third Offset Strategy” to help chart a proposed course for the new administration. It focused on practical, policy-oriented issues useful for planning how to maintain the technological advantages of the U.S. military far into the future. The moderators, panelists, and postworkshop analysts emphasized implications for USN future strategy, policy, operations, concepts, and technologies.

**Institute for Future Warfare Studies**

In February 2017, we opened the Institute for Future Warfare Studies (IFWS) as a new research and study department aimed at understanding how armed conflict may evolve in the future and how the U.S. Navy can prepare for it better. The mission of the new institute is to serve as a cross functional focal point for the College as we carry out the mission of helping to define the future Navy and its associated roles and missions.

Anticipating future security challenges is critical to national security, and navies are expensive and take many years to build. That's why we have to look out a long way to figure out what platforms, weapons, and capabilities the Navy is likely to need in the decades ahead. IFWS will be taking a long-range look at the warfare needs of the country. This longer time horizon is what differentiates our new institute from other external organizations that are looking at these issues; while many other forward-looking groups tend to view the next three to five years as the future, IFWS will be looking out thirty years or more from today.

The institute's location within the College allows the impressive academic horsepower housed in Newport to assist IFWS in carrying out its mission. We believe that this institute will become yet another vital service we provide to Navy decision makers and stakeholders. We are excited about the research findings that this group—working with partners in government, academia, and industry—will provide to NWC, the Office of the CNO, and the fleet.

**Future Forces Gallery**

For the past eight years, the faculty moderators of the Unmanned Systems and Conflict in the 21st Century elective have sponsored multiple “futurization” events each academic year, focusing on emerging technology related to unmanned and robotic systems. These occasional events have brought manufacturers, designers, and government scientists and engineers to campus to provide informational displays and demonstrations on cutting-edge technologies.
Such events now are being presented in the College’s newly opened Learning Commons. To maintain a more persistent “future focus” throughout the year, we recently established a permanent “Future Forces Gallery” that features graphics, models, and large, flat-screen monitors to display new systems and concepts as they are designed, tested, and deployed throughout the services. A trio of “Future Navy” images by award-winning science-fiction artist John Berkey are featured prominently in the gallery, and rotating exhibits will ensure that future platforms, weapons systems, and exotic hardware are kept at the forefront of the minds of our students, faculty members, and visitors.

Some wise sage once said, “The future is closer than you think.” I agree, and we want to ensure that our students and our fleet customers not only learn from the lessons of history but consider them in the context of many possible futures.

JEFFREY A. HARLEY
Rear Admiral, U.S. Navy
President, U.S. Naval War College
Christopher J. McMahon holds the Maritime Administration Emory S. Land Chair of Merchant Marine Affairs at the Naval War College. He is a graduate of the U.S. Merchant Marine Academy at Kings Point, New York, and holds master’s degrees from American University, Long Island University, and Starr King School. He holds an unlimited master mariner license and is a commissioned rear admiral in the U.S. Maritime Service. He has held several Senior Executive Service positions with the Department of Transportation and the Maritime Administration.

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Maritime trade warfare, also called commerce warfare, is a naval/military strategy that has been followed since ancient times. The idea of maritime trade warfare is to attack or neutralize the commercial shipping of one's enemy in an effort to disrupt the enemy’s economy, make it more difficult for the enemy to continue waging war by disrupting the enemy’s military supply chain that uses the sea, or both.

Maritime trade warfare can take different forms. Until the twentieth century, close blockades of an enemy’s ports were most common, conducted to prevent the movement of an enemy’s commercial shipping. In the twentieth century, with the introduction of new technologies such as the torpedo, submarine, and airplane, distant blockades (farther from the enemy coast) became standard practice. Mining of ports also was practiced. In addition, maritime exclusion zones (MEZs) sometimes were established to prevent shipping from entering a designated area. Maritime trade warfare also has included attacking or seizing enemy shipping in general, or outright destroying an enemy’s commercial shipping in particular. In the twentieth century, destruction of an enemy’s port infrastructure to prevent the loading or off-loading of commercial vessels also became a type of maritime trade warfare.

The use of maritime trade warfare in World War II and, to some extent, World War I is commonly understood. In the latter part of World War I, for example, the Germans’ indiscriminate sinking of neutral vessels incensed the United States, eventually driving the country into the war on the side of the Allies. German employment of submarines (U-boats), particularly in World War II, played a large role in disrupting the flow of supplies from North America and the British
Empire that was supporting the Allied war effort. Similarly, the United States waged a very successful campaign of maritime trade warfare against the Empire of Japan in World War II.

The present question is: Is maritime trade warfare still a viable strategy and tactic to be employed by warring powers today, or is it an anachronistic practice that has no place in twenty-first-century maritime conflicts? There seem to be two very different views on this question. On the one hand, there are military scholars and experts who not only promote the use of maritime trade warfare but also emphasize that modern navies should plan and exercise for it, from both offensive and defensive perspectives. On the other hand, there are military scholars and experts who argue that commerce warfare is a tactic of the past that is no longer viable, with no valid bearing on today’s world. Reasons for the latter viewpoint, among others that will be discussed below, include the interconnectedness of the global economy and the nature of modern commercial shipping.

The purpose of this article is to consider both viewpoints and analyze their theories and supporting arguments. In the final analysis, the answer to the question whether maritime trade warfare belongs in the twenty-first century is complex. There are many obstacles to employing maritime trade warfare in a manner that would strangle an enemy’s economy effectively or prevent the movement of military supplies. However, history shows that, given just the right circumstances and time, maritime trade warfare can work. In any case, it is in the interest of military strategists and planners to plan for and exercise offensive and defensive maritime trade warfare in many potential conflict scenarios.

HISTORY OF MARITIME TRADE WARFARE
Maritime trade warfare is certainly not a new military strategy. It has been employed for thousands of years in various forms.

Early to Modern History
Maritime trade warfare was employed commonly throughout ancient Greek history. In his writings on the Greek Peloponnesian War, the ancient historian Thucydides (ca. 460 BCE–400 BCE) described nearly thirty years of war between Athens and Sparta. In these writings he referred to what was essentially maritime trade warfare.

For much of history, commerce warfare largely was performed by privateers, who received letters of marque from their governments. This instrument provided state authorization for their actions in seizing enemy shipping. In truth, however, there was often a fine line between privateers and pirates, since they operated in very similar manners. In theory, a privateer acted at least partly in the interest of his nation, whereas a pirate acted solely in his own interest.
Essentially, privateers operating under letters of marque were nonmilitary persons given permission by their sovereigns or other governments to raid enemy shipping. This activity often was referred to as *guerre de course*. The intention was to enable a weaker naval power to attack a stronger power—and to seize booty in the process. Acting as privateers with a letter of marque, a captain and crew were protected from being brought up on charges of piracy if captured. When successful in capturing an enemy merchant vessel, privateers turned over the vessel and cargo to the privateers’ government in exchange for prize money. Rewards for privateers often were substantial.

From a government’s perspective, the major potential advantages of using privateers were the revenue generated and the damage inflicted on an enemy’s economy. And the efforts of privateers could be had with little or no cost to a belligerent’s treasury, because privateers often were completely self-funded. They might receive a small stipend from their host governments; Queen Elizabeth I of England, for example, partly funded the privateering efforts of Sir John Hawkins and Sir Francis Drake—Drake being, perhaps, the most successful privateer in history. Probably because of their low cost to governments combined with their successes, privateers continued to be used to wage warfare on enemy commerce until the dawn of the twentieth century.

Through the seventeenth and eighteenth centuries, maritime trade warfare in Europe played a role in the almost continuous conflicts among the British, French, Spanish, Dutch, and others. In the second half of the seventeenth century, Louis XIV of France, “the Sun King” (1638–1715), engaged his country in three major wars: the Franco-Dutch War, the War of the League of Augsburg, and the War of the Spanish Succession. In all three wars, maritime trade warfare played an important role in damaging enemy economies and preventing the movement of military supplies. Because France was primarily a continental power, it needed to fund and support large land forces. This left it with only a limited ability to build or sustain a substantial navy with which to attack enemy shipping or fleets directly (i.e., *guerre d’escadre*, or war of fleets). As an alternative, in the last decade of the seventeenth century the French began to practice *guerre de course* to contest their enemies’ complete command and control of the sea.

The French enjoyed such great success with maritime trade warfare during this period that the noted late nineteenth-century naval theorist Rear Admiral Alfred Thayer Mahan, USN, suggested that “at no time has war against commerce been conducted on a larger scale and with greater results than during this period, . . . [which was] a large factor in bringing the sea nations to wish for peace.”

*Guerre de course* or maritime trade warfare has been called a tactic of the weak because it often has been practiced by nations with weaker navies. The
American colonies employed commerce warfare from the late 1600s onward. For example, during times of conflict in the period 1739 to 1748, American colonial privateers sailed on some 466 privateering voyages and captured at least 829 foreign vessels.\(^\text{17}\) During the War of 1812, American privateers profited handsomely from attacks on British shipping.\(^\text{18}\)

In the Mediterranean, commerce warfare—perhaps legitimately called piracy by some—occurred from Roman times into the nineteenth century. The Knights of Malta preyed on Ottoman shipping sailing between North African and Spanish ports. During the Crusades, Ottoman pirates profited frequently from attacks on European shipping. So too the famed “Barbary pirates” attacked ships from countries unwilling to pay a tribute to the local beys (rulers). This included attacks in the late eighteenth century on merchant ships flagged by the new American republic, which prompted the U.S. Congress and president to establish a navy.\(^\text{19}\)

Following the Crimean War in the mid-nineteenth century, the great powers of Europe negotiated the Declaration of Paris in 1856. Signing nations agreed to end guerre de course. The declaration pledged as follows: “Neutral goods, with the exception of contraband of war, are not liable to capture under the enemy’s flag.”\(^\text{20}\) Not surprisingly, other countries did not sign the declaration. One such was the United States; because its Navy was small, guerre de course offered one of the few options by which it could attack a more-powerful naval power.\(^\text{21}\) Indeed, during the American Civil War, the Confederates employed guerre de course against Union merchant ships, albeit with only a modest degree of success.\(^\text{22}\)

The twentieth century brought an entirely new approach to maritime trade warfare with the introduction of several new maritime and naval technologies. At first, in the very early part of the twentieth century, it appeared to some that maritime trade warfare actually might cease to be a tactic because of these technological advances and treaties such as the Declaration of Paris.

In fact, in 1911 the noted British naval theorist Sir Julian Corbett declared, “Modern developments and changes in shipping and naval material have indeed so profoundly modified the whole conditions of commerce protection, that there is no part of the strategy where historical deduction is more difficult or more liable to error.”\(^\text{23}\) Corbett believed it would be difficult to provide sufficient coaling stations for modern steam-powered warships to cruise extensively to attack enemy shipping. He also believed (as though it were a requirement) that it would be difficult, if not impossible, to embark a prize crew on a captured vessel. As to merely sinking enemy vessels, Corbett famously stated, “No Power will incur the odium of sinking a prize with all hands, and their removal to the captor’s ship takes time.”\(^\text{24}\) He also theorized that since commercial steam vessels had great maneuverability, they could avoid potentially dangerous routes on which enemy warships might be lying in wait.\(^\text{25}\)
Needless to say, World Wars I and II clearly demonstrated the potential and effects of maritime trade warfare. At the beginning of World War I, German reliance on maritime trade for both imports and exports was substantial, and the British navy believed it had the potential to destroy the German economy through blockade.\textsuperscript{26} Ultimately, with the largest and most powerful navy in the world, Great Britain successfully blockaded Germany and prevented merchant vessels, German or otherwise, from trading at German ports.

According to Naval War College professor and naval theorist Dr. Milan Vego, “a blockaded country often resorts to commercial counterblockade.”\textsuperscript{27} As an imperial power with the most far-flung empire in history, Britain was dependent on the sea for trade with its colonies and with nations providing matériel for the war effort. Not surprisingly, as the war progressed Germany increasingly countered the British blockade with commerce warfare, using the submarine.\textsuperscript{28}

By the end of World War I, the Germans had managed to sink 11,153,000 tons of Allied merchant shipping, comprising 2,990 commercial ships and 578 fishing vessels. To accomplish this, the Germans used some 390 submarines, of which Allied forces sank 178.\textsuperscript{29}

Although Germany was not as dependent on seaborne commerce at the beginning of World War II as it had been in 1914, its maritime trade was still important. As in World War I, the British early in World War II established a blockade of German ports. The Germans responded with commerce warfare in the form of air and submarine attacks on British, and later Allied, maritime trade and on British port infrastructure. In total, during this war the Germans sank 5,150 Allied merchant ships displacing 21.57 million tons.\textsuperscript{30} The German attacks on maritime trade not only destroyed ships; they greatly disrupted the entire military supply chain by requiring the use of large, slow convoys and by causing substantial rerouting of ships, which increased voyage times. They also caused negative second-order effects by slowing the production of military equipment and supplies.\textsuperscript{31}

The cost to the Germans of their submarine warfare campaign was the loss of 785 submarines and their crews.\textsuperscript{32} However, looking at the big picture, the Allied cost in dollars and additional resources for protecting vessels with convoys and other measures and for merchant vessels lost nonetheless was substantially higher than the cost to the Germans of building and operating their submarine fleet.\textsuperscript{33}
other words, although the Germans were not ultimately successful in curtailing Allied maritime trade, they might have been if circumstances had been somewhat different. In any case, the U-boats greatly disrupted the entire Allied war effort and caused the Allies to expend substantial resources to protect their sea-lanes. In any case, the U-boats greatly disrupted the entire Allied war effort and caused the Allies to expend substantial resources to protect their sea-lanes. \(^{34}\)

German maritime trade warfare was at least partly successful. In World War II, the United States prosecuted a very successful maritime trade warfare campaign against Japan, destroying 8.1 million tons of merchant shipping. The United States employed 288 submarines in the Pacific, which were responsible for sinking about 4.9 million tons of that total; aircraft, surface ships, and mines accomplished the remainder. This crippled the Japanese merchant marine, which prevented the importation of critical supplies, starving the Japanese military, economy, and people. \(^{35}\) The Japanese did not employ any significant maritime trade warfare against the United States during World War II, because it simply was not a part of Japanese naval doctrine, nor did it seem to conform to the Japanese Bushido (warrior) code. Further, the Japanese offered no effective defenses against the U.S. maritime trade warfare campaign. \(^{36}\)

**Maritime Trade Warfare in the Latter Half of the Twentieth Century**

As noted earlier, the 1856 Declaration of Paris banned attacks on commercial shipping by privateers—at least, those of the European nations that signed the treaty. This was followed by significant maritime technological advances in the construction of naval vessels, including submarines, and the torpedo, which caused at least some naval theorists—such as the respected Sir Julian Corbett quoted earlier—to believe that commerce warfare in the modern age was far-fetched and very unlikely. Obviously, the events of World Wars I and II proved otherwise. \(^{37}\)

In the dozens of conflicts that have broken out around the globe since World War II, maritime trade warfare has been relatively rare. During the U.S. interventions in Korea, Vietnam, Iraq, and Afghanistan, it was and has been limited or nonexistent. As a result of the lack of maritime trade warfare in recent times, and in a manner similar to the propositions of naval theorists a century ago, there are those who believe that commerce warfare has been relegated to the history books. As Professor Douglas Peifer of the University of North Carolina notes in an article, “‘Maritime commerce warfare’ has a distinctly dated whiff.” \(^{38}\) Still, as in the days of Corbett, this contention can be called into question.

Indeed, maritime trade warfare did occur in the second half of the twentieth century, albeit infrequently. During the period of the Yom Kippur or Ramadan War of 1973, for example, the Egyptians attempted to blockade commercial shipping traffic to prevent oil tankers from reaching Israel from Iran. To accomplish this, the Egyptians mined Israeli ports and declared a naval blockade in the Red
Sea. Had the war lasted longer, the Egyptians’ maritime trade warfare might have been successful, because Israel had no other method of obtaining the necessary oil supplies.\textsuperscript{39}

The Iran-Iraq War (1980–88) provides another very clear example of maritime trade warfare in relatively recent times. The so-called tanker war began in early 1981, when the Iraqis announced that all shipping headed to and from Iran was subject to attack. In 1982, Iraq attacked the Iranian oil terminal and commercial shipping at Khärk (Kharg) Island.\textsuperscript{40} In every respect, this was maritime trade warfare.

Initially, Iran had little ability to attack commercial shipping bound for Iraq, but this eventually changed; by 1987, Iran was targeting tankers bound for Iraq effectively. In 1986, to protect its shipping interests, Kuwait requested assistance from the international community, including the United States. In 1987, several Kuwaiti tankers were reflagged to the United States, in theory protecting them from Iraqi or Iranian attack, since the United States was a neutral nation.\textsuperscript{41} In any case, it was conjectured that the U.S. Navy would protect these ships through a convoy system, which is what eventually occurred.

In total, the marine insurance company Lloyd’s of London reported that 546 commercial ships were damaged during the Iran-Iraq War, killing 430 merchant mariners.\textsuperscript{42} Of the ships attacked, very few actually were sunk. Sixty-one percent of the vessels attacked (239 ships) were tankers. Fifty-five of these tankers were declared “constructive total losses.” Thirty-nine percent of the bulk carriers attacked and 32 percent of the freighters attacked also were declared constructive total losses.\textsuperscript{43}

\textit{The Use of Mines in Maritime Trade Warfare}

Although the American David Bushnell is credited with developing the first naval mine in 1776 and mines were used to a limited extent in nineteenth-century wars, it was during World War I that the mine became a major weapon against navies and merchant ships.\textsuperscript{44} Mines historically have been used to restrict access to a sea area and to blockade commercial vessels from port areas—a form of maritime trade warfare. Certainly World Wars I and II offer many examples of this type of warfare. In World War II alone some seven hundred thousand mines were sown. These accounted for the loss of 650 Allied ships and 1,100 Axis ships, with another eight hundred damaged between them. In fact, mines damaged or sank more vessels than any other weapon.\textsuperscript{45} Perhaps the best example of the use of mines in maritime trade warfare was Operation \textit{STARVATION} in the summer of 1945, for which the U.S. Navy and Army Air Corps sowed eleven thousand mines off the coasts and ports of Japan, sinking 605 Japanese merchant ships and sixty-five warships.\textsuperscript{46}
From May 1972 through January 1973, the United States mined Haiphong Harbor in North Vietnam and two other, smaller North Vietnamese ports. This effectively closed these ports to commercial shipping, forcing North Vietnam to use inland roads and railroads from Chinese ports for imports and exports.\(^{47}\)

During the Iran-Iraq War of the 1980s, Iran made extensive use of mines in an effort to blockade Kuwaiti ports. The mines damaged numerous merchant ships from many countries, although these efforts did not curtail merchant shipping in the Persian Gulf.\(^{48}\)

ARGUMENTS FOR THE USE OF MARITIME TRADE WARFARE IN THE FUTURE

Some theorists believe that maritime trade warfare will continue to be used in any lengthy war conducted at least partly at sea.\(^{49}\) Supporters of maritime trade warfare acknowledge that, for it to be an effective instrument for crippling an enemy’s economy in general and preventing military supplies in particular from getting through, the time factor is essential. In other words, it takes time for maritime trade warfare to have the desired economic and military effects.

Geography also plays an important role in maritime trade warfare. An island nation, a coastal nation isolated by geographical features that are a barrier to land trade, or a nation with hostile neighbors is more vulnerable to maritime trade warfare.\(^{50}\) Regarding the notion that because of the integration of the global economy commerce warfare is unlikely in future conflicts, proponents note that before 1914 many Europeans believed that a large-scale European war never would happen because it would lead to a European economic collapse that would harm all participating nations. Proponents argue that in many ways the global economy was intertwined prior to World War I in ways similar to today, yet both sides used maritime trade warfare as a tactic during the war.\(^{51}\)

Prospects for Blockading

Given the past successes of maritime trade warfare, some experts contend that commerce warfare not only is likely to be practiced but should be incorporated into many conflict scenarios as an essential component of military strategy and tactics. In a *Yale Law Journal* article written in the 1990s, author Michael Fraunces notes:

In the future, blockade may become even more important as the need of a blockading state to stop every merchant ship grows vital. The recent willingness of ostensibly neutral states to supply not simply technical know-how and materials for weapons of mass destruction, but also ready-for-use missiles and other decisive weapons, to the highest bidder portends such a future. As the negative consequences of allowing even one ship to pass uninspected grow more severe, blockading states will become more
willing to use the new blockade forms (long-range blockade and blockade zones) at
the expense of neutral interests. To be sure, discussion in military circles today regarding maritime trade warfare is very limited, if it occurs at all. There currently is no U.S. military doctrine that even raises the issues of offensive or defensive maritime trade warfare. This situation is reminiscent of the interwar years: despite the extensive use of maritime trade warfare during World War I, requiring the United States to protect its convoys, during the 1920s and ’30s the Navy essentially forgot the lessons it had learned. When the United States entered World War II, German submarines had a field day sinking American shipping, often in plain sight of the American mainland, because merchant shipping was given no protection at all. The then Commander in Chief, United States Fleet, Admiral Ernest J. King, believed the Navy had no obligation to protect commercial shipping, in light of the many other demands the service faced at the time. Whether today’s Navy leadership believes that protecting shipping in a maritime trade warfare situation is a Navy mission is a moot point. Aside from fighting piracy in East Africa, which could be regarded as protecting shipping, the U.S. Navy has no doctrine and no current practices regarding protecting maritime commerce from attack, and precious few resources with which to do so in any case.

Some military experts contend that maritime trade warfare not only is likely in future conflicts, but that it can and should be a strategy the United States directs its military to employ. The services therefore should plan for and practice this employment, in the form of military exercises conducted from both offensive and defensive perspectives. Given the growing power, including naval power, of several nations around the world, some military experts have weighed the potential for maritime trade warfare being employed in a conflict and believe it is a worthy strategy.

The possibility of conducting maritime trade warfare against China is one example. In a paper entitled “Offshore Control: A Proposed Strategy for an Unlikely Conflict,” retired U.S. Marine Corps colonel T. X. Hammes contends that in a protracted conflict with China the United States could employ a strategy of “offshore control” to interdict China’s energy, raw material, and industrial imports and exports to strangle the country’s economy. According to Hammes, this could be achieved through the use of Navy ships, Army and Navy boarding teams, and contracted shipping and helicopters.
Essentially, Colonel Hammes believes that blockading shipments to China through the Straits of Malacca, Lombok, and Sunda and controlling the north-south routes to and from Australia could block 80 percent of China’s oil imports. Further, blockading exports from China would rob China of its source of economic power. This would force the Chinese to the bargaining table, which very likely would end the conflict.  

Colonel Hammes states:

Clearly the U.S. Navy has insufficient ships to control the almost 1,500 very large commercial ships projected to be in use by 2015. However, these numbers can be controlled by U.S. amphibious shipping projecting Army and Marine boarding parties that will travel with the ships to ensure they do not enter the maritime exclusion zone. Commercial shipping and helicopters could be contracted to support the distant efforts, thus reducing the stress on the amphibious fleet.

In their article “No Oil for the Lamps of China,” authors Gabriel Collins and William Murray further explain how the U.S. Navy could block the key straits on Chinese trade routes effectively:

It appears then that at least ten surface warships and two replenishment vessels would be required to establish an effective and protected distant blockade at the Straits of Malacca. This number would increase proportionally if the Lombok Strait, Sunda Strait, and the route around Australia also had to be patrolled. The authors estimate that three surface warships and accompanying replenishment vessels per additional strait would be necessary to provide reasonable assurance that all passing tankers could be boarded, inspected, and if necessary escorted to a quarantine anchorage. This gives a minimum total of sixteen surface warships and four replenishment vessels.

In a well-researched article in the Journal of Strategic Studies, author Sean Mirski argues as follows: “A blockade strategy [against China] is viable, but it would be limited to a narrow context: the United States would have to be engaged in a protracted conflict over vital interests, and it would need the support of key regional powers. The United States would also need to implement a mix between a close and distant blockade in order to avoid imperiling the conflict’s strategic context. If enacted, a blockade could exact a ruinous cost on the Chinese economy and state.” Mirski comments that the existing literature on commerce warfare is “remarkably sparse, circumscribed, and inconclusive,” in large part because commercial links between China and the United States are so intertwined that maritime trade warfare is considered unlikely because it would be too mutually destructive.

Yet Naval War College professor Dr. Milan Vego believes that maritime trade warfare remains a possibility in the future. He notes that another large-scale
global war may never occur; however, history suggests that the improbable often becomes reality. He uses World War I as an example; as noted earlier, theorists in the early twentieth century did not believe a large European war would occur—yet it did. Similarly, some naval theorists in the early part of the twentieth century suggested that the days of commerce warfare were over—yet in both world wars, maritime trade warfare was definitely a reality. Accordingly, Vego believes that in a large, long-term conflict, maritime trade warfare is probable. He also believes that attacks on maritime trade might take the form of attacks on infrastructure and ports and, perhaps, some forms of cyber warfare, but that “attacks on ships at sea and in port would also be essential.”

Prospects for Use of Mines
Historically, mines have been used effectively to blockade merchant shipping from entering a belligerent's ports. In numerous conflicts, mines have proved themselves to be quite deadly. It is noteworthy that since World War II, fourteen USN ships have been sunk or damaged by mines, compared with only two that have been damaged by missile or air attack. Mines are relatively inexpensive, and nations throughout the world keep tens of thousands in their inventories.

Available current literature on the use of mines to blockade as a form of commerce warfare is quite sparse. However, given the low cost and deadly effectiveness of mines in past conflicts, it seems reasonable to some experts that mines could play an important role in modern maritime trade warfare by effectively blockading the ports and harbors of an enemy.

ARGUMENTS AGAINST THE LIKELIHOOD OF MARITIME TRADE WARFARE IN THE FUTURE
While acknowledging the historical successes of maritime trade warfare, there are those who contend that this type of warfare is essentially a strategy and tactic of the past. Numerous factors support this position.

The Nature of the Global Economy
In a manner similar to the arguments offered prior to World War I, the integrated nature of the global economy today and the difficulty of interdicting maritime commerce often are cited as reasons there will be no maritime trade warfare in the future. In 1897, Germany's Grand Admiral Alfred von Tirpitz—given the situation at the time—projected as follows: “Commerce raiding and transatlantic war against England is so hopeless, because of the shortage of bases on our side and the superfluity on England's side, that we must ignore this type of war against England in our plans for the constitution of our fleet.” Obviously, Admiral Tirpitz’s prediction of how developments would unfold was significantly off the mark.
Regarding the integrated global economy of today, opponents of modern commerce warfare contend that it simply is not possible to isolate a powerful nation through maritime trade warfare without devastating the entire global economy. Yes, the global economy was integrated to some extent prior to World War I, but not to the degree and scope that it is today. The technological developments in communications and transportation and more-positive international government policy environments established around the world in the last half-century have expanded trade greatly in both size and scope. At the beginning of the nineteenth century, global trade was estimated to be U.S.$1.5 billion; by 1850 this had risen to $4 billion; and by 1900 to $24 billion. In 2014, global trade was reported to be $18.5 trillion. Worldwide, in manufacturing exports alone there was a 3,500 percent increase just from 1950 to 1998.

World Wars I and II devastated the global economy. The reasoning follows that, with the economic destruction they inflicted so obvious, and with the global economy even more integrated today than it was prior to those wars, another conflict involving maritime trade warfare is as unthinkable as it is unlikely.

**The Nature of Global Merchant Shipping**

The complexity of the global commercial maritime business also is put forward as a reason maritime trade warfare is unlikely in the future. Until the late 1940s, commercial ships typically were financed, owned, built, and crewed in the flag state of their registry. This changed dramatically in the decades after World War II, with the proliferation of “flag-of-convenience registries.” Today, more than half the world’s merchant ships are registered in flag-of-convenience countries. In many cases, the actual ownership of a vessel is difficult to ascertain.

Complicating this is the very nature of modern commercial shipping. Ownership of bulk cargoes such as oil, grain, and iron ore, as well as the destinations of those cargoes, can change, sometimes repeatedly, as cargoes are sold and resold throughout the course of a voyage. With general cargo and container vessels, ownership and cargo destinations also can be complex. A single ship can contain multiple cargoes—sometimes thousands—destined for dozens of countries, often located far beyond the port of discharge. The basic problem is that boarding, search, and seizure of vessels and cargoes on the high seas is complicated because it can be difficult to identify the ownership of a ship and cargo and because a vessel's cargoes often are destined for many countries. When a nation seizes or sinks a vessel apparently bound for a belligerent nation, its cargo, or at least a portion thereof, may be the property of a neutral nation, or even an ally.

Another factor of the modern global merchant marine is simply its size. In 1939, prior to World War II, the combined size of the entire global merchant marine was about fifty-seven million deadweight tons. This included
approximately twelve thousand vessels in deep-sea trade. Today, the size of the global merchant marine is about 1.75 billion deadweight tons, with about ninety thousand commercial vessels.\textsuperscript{74} In other words, there are tens of thousands more vessels in the world today than in the decades prior to World War II, and they are larger as well. At the same time, the number of naval vessels available in the larger navies of the world today—those warships capable of conducting maritime trade warfare or interdiction in any form—is very small.

These factors clearly indicate that conducting maritime trade warfare effectively would be exceedingly difficult in most scenarios today. Identifying vessels and cargoes belonging to a belligerent is much more complex today than it was in those historical situations in which maritime trade warfare proved a productive strategy and tactic. In any case, the number of naval vessels or auxiliaries needed to implement successfully an effective maritime trade warfare campaign would be very substantial—far more, in most scenarios, than the number of vessels needed during World War II. Compounding this is the fact that even the large navies of the world today are much smaller than in the era of the world wars.

**Use of Alternative Intermodal Transportation**

There are other reasons to argue that maritime trade warfare in the twenty-first century would require massive resources yet would be ineffective. As maritime transportation technologies have made great strides with the development of containerization and container shipping, so too have land port infrastructure and intermodal transportation. The majority of the world is linked as never before, not just by ports but by highly efficient ports, ports that are linked to vast networks of roads, railroads, and airports. This means that, in many cases, trade by sea can be bypassed by using other modes of transportation. Doing so might raise transportation costs significantly, but it nonetheless could render maritime trade warfare ineffective.

It must be noted, for example, that even during World War II German maritime trade warfare in the Atlantic was not effective in blocking the majority of economic and military supplies from reaching the Soviet Union from North America. In fact, of the supplies sent that reached the Soviet Union, 23 percent did so through Iran and another 46 percent reached Pacific coast ports of the Soviet Union—passing near Japan, which had a nonaggression pact with the Soviet Union until 1945. Today, in an era of much more sophisticated railroad, pipeline, and aviation intermodal links, maritime trade warfare alone, in many cases, would not isolate a country—particularly one with friendly or neutral countries on its borders. In a conflict with China, for example, it would be highly unlikely that land intermodal shipments of oil and other cargoes to and from one or more of China’s many neighbors could be blocked.\textsuperscript{75}
In November 2014, for example, China initiated a new train service from China west to Spain, a route covering a distance of some 6,200 miles and requiring approximately twenty-one days’ travel. In January 2017, the first freight train from China arrived in London after a 7,500-mile journey, having reached its destination in eighteen days—half the time required for a sea voyage. In addition, China has the ability to link to Russia’s Trans-Siberian Railway and other rail lines across Asia. Further, according to Global Risk Insights, during the past few years Russia and China have forged new energy deals that will open energy pipeline links from Russia to China. The Chinese also are funding both rail and pipeline links from China to Myanmar ports so as to bypass the Straits of Malacca, Lombok, and Sunda.

In other words, although the Chinese do rely on ocean transportation for the majority of their energy, raw materials, and exports, they have several neighbors and connections to numerous intermodal links to the Middle East and Europe that could ease their dependence on marine transportation during a military conflict. Most coastal nations, especially large nations, have the same ability.

**Use of Reserves and Rationing**

For any military conflict or other national emergency in which vital imports such as energy supplies are required, many nations around the world have plans and infrastructure in place to conduct rationing. In addition, many countries, including the United States, have established substantial petroleum reserves, which would provide energy supplies for an extended period during a national emergency.

If targeted states brought in resources via intermodal links other than the sea, then rationed them carefully, the results desired from maritime trade warfare might be minimal.

**The Naval Resources Question**

The question of the naval resources needed to conduct maritime trade warfare in the form of imposing an effective blockade is a very significant one. With regard to a country such as China—or any other country in East Asia, for that matter—the supporters of maritime trade warfare cited in this article focus on blockades of the Straits of Malacca, Lombok, and Sunda as the method for restricting energy supply lines or otherwise curtailing economic activity, particularly exports. These studies indicate that a relatively small number of naval ships could blockade the Straits of Malacca, Lombok, and Sunda successfully, effectively isolating the energy and economic supply lines to and from China.

However, the imposition of a blockade in these straits would be illegal under international law, as represented by the United Nations Convention on the Law of the Sea. *The Commander’s Handbook on the Law of Naval Operations* notes:
Belligerent forces transiting through international straits overlapped by neutral waters must proceed without delay, must refrain from the threat or use of force against the neutral nation, and must otherwise refrain from acts of hostility and other activities not incident to their transit. . . . Belligerent forces may not use neutral straits as a place of sanctuary or as a base of operations and belligerent warships may not exercise the belligerent right of visit and search in those waters.82

It could, perhaps, be argued that blockading naval vessels could operate in waters sufficiently far away from international straits to remain compliant with international law. However, this would increase significantly the number of naval resources required to implement an effective blockade. In any case, 2014 data indicate that in that year alone there were some 79,000 transits through the Strait of Malacca. These involved 25,071 containerships and 4,993 very large crude oil carriers (VLCCs), in addition to tens of thousands of smaller cargo vessels and tankers. This translates to about 217 ships a day passing through the Strait of Malacca.83 Adding the vessels transiting the Sunda and Lombok Straits would increase significantly the daily and annual ship-transit totals. Simply put, the naval resources needed to effect a legal blockade in areas near these straits—to board, search, and inspect vessels and to provide escorts to quarantine anchorages for suspect vessels—would be far more significant than is accounted for in any of the sources cited in this article.

It further complicates this problem that there is a huge swath of the Pacific Ocean that could be used for alternative routes to China and the rest of East Asia—numerous Pacific Ocean trade routes to Asia are available that do not use any strait. True, this would add to shipping and other transportation costs, owing to the longer distances covered (west from the Panama Canal and northwest from Cape Horn), but nevertheless these routes could be used.

For a VLCC traveling from Saudi Arabian oil terminals to Shanghai, China, today, for example, the transportation cost of crude oil is thirteen to eighteen cents per gallon for a transit of about eighteen days.84 Crude oil transportation to China from Venezuela instead, via the Panama Canal in a tanker somewhat smaller than a VLCC, would require twenty-six days. VLCC oil transportation from Angola to China via Cape Horn would entail a voyage of about forty days.85 Clearly, the added distance in longer voyages would add to transportation costs—possibly doubling them, or more—but this hardly would impose an insurmountable expense if the Straits of Malacca, Lombok, and Sunda were being blockaded. The Suez Canal has been closed five times since its opening in 1869, including for the eight years between 1967 and 1975.86 Oil tankers and cargo vessels transiting from the Middle East to Europe and the Americas were required to transit much longer distances around the Cape of Good Hope, and at greater expense to shippers, but this did not impose an overbearing economic hardship.
on the countries of Europe or the Americas. Similarly, if the Straits of Malacca, Lombok, and Sunda were blockaded, using Pacific Ocean shipping routes to East Asia would create a hardship, but one that could be endured.

Any attempt to conduct maritime trade warfare (or interdiction) against all the Pacific Ocean route approaches to Asia and the approaches to the Straits of Malacca, Lombok, and Sunda would require a huge number of naval vessels, with all the complicated logistics and resupply associated therewith. Further, for every naval and resupply vessel used for maritime trade warfare and blockade, one fewer vessel would be available for other naval missions—missions that probably would be critically important in a time of military conflict.

**The Targeting Problem**

As noted earlier, there are some ninety thousand deep-sea commercial vessels in the world. This does not include hundreds of thousands of fishing vessels, coastwise vessels, and other special-purpose vessels. The waters in and around East Asia teem with traffic—thousands of vessels within a relatively small area. Identifying which vessels to board, search, and seize would be a daunting task that would get harder the closer one approached the Asian mainland or a choke point such as a strait.

It is true that commercial vessels now broadcast on an Automatic Identification System (AIS) frequency, by which they identify themselves, but AIS can be switched off. During the recent piracy crisis off the coast of Somalia, for example, many vessels simply turned off their AIS to avoid identification. In a maritime trade warfare situation, many vessels, including neutral vessels, likely would not broadcast their AIS signals, further complicating identification efforts.

**The Complexity Involved in Sinking Vessels**

Some supporters of maritime trade warfare suggest the establishment of a maritime exclusion zone, with any commercial vessel entering the MEZ subject to attack and sinking. The theory is that this would prevent merchant ships from entering the zone.

However, the collateral consequences of sinking a modern commercial vessel would be huge. Sinking a vessel likely would result in the deaths of innocent merchant mariners, probably from a large number of nations, including friendly or neutral ones. Some might view this as a war crime.

In addition, the environmental impact of sinking a large ship, especially a petroleum tanker, would be immense. Sinking a VLCC, which can carry more than 165 million gallons of crude oil, would create an environmental disaster of epic proportions. The destruction of fishing grounds and the pollution of thousands of square miles of coastlines would be enormous.
While the German and American navies had great success in sinking merchant vessels during World War II, the problem today is much more complex. Simply put, merchant ships now are huge—much larger than those that sailed the seas during the twentieth-century world wars. It likely would take a significant amount of ordnance to sink a ship, or even to damage and disable it. Recall that very few of the 546 ships attacked during the Iran-Iraq War in the 1980s were declared constructive total losses, and almost none actually were sunk. No recent studies are available that analyze the methods and weapon capabilities needed to sink modern commercial vessels; the problem is likely much more complex than many realize.

Adding to this problem is the scarce inventory of available weapons and ordnance. Just as the number of naval vessels available for maritime trade warfare is extremely small, so too is the availability of ordnance needed to accomplish the task. While production of naval ships, weapons, and ordnance in theory could be ramped up, this would take a substantial amount of time. In fact, it would take much more time than was needed after America entered World War II in December of 1941. At that time shipbuilding and weapons-manufacturing companies already had increased their production substantially over a span of years, yet it took years more for the United States to produce enough ships, weapons, and ordnance to protect against German maritime trade warfare effectively and to establish an offensive maritime trade warfare campaign against Japan.

**Maritime Trade Warfare Does Not Curtail Shipping**

Some believe that even the threat of maritime trade warfare would cause shipowners from nonbelligerent countries to keep their vessels out of hostile waters. In individual instances this might be true, but history shows that generally it is not so. During the age of sail, shipowners were quite willing to sail into harm's way because profit motives outweighed concern for the safety of their vessels. The world wars of the twentieth century also offer no exception. During the relatively recent tanker wars during the Iran-Iraq War, there was an initial 25 percent decrease in shipping traffic, but this soon changed as profits for shipowners soared. More ships became available to carry crude oil, despite the dangers involved. To cover the cost of higher marine insurance premiums, Iran reduced the price of its oil exports.38

**The Question of Mines**

Historically, mines have been used effectively in commerce warfare as a form of blockade to close the ports and harbors of a belligerent. Given the massive number of mines in the current inventories of some nations, it seems reasonable that mines might be used with great effectiveness, and in some cases this is
probably true. For a relatively small island nation with a limited number of ports, an enemy with substantial mining capabilities probably could blockade its ports very effectively.

However, the scenarios under which this might occur are quite limited. With regard to large countries having multiple ports and effective militaries, the challenges to effective mining are many. In a country such as the United States or China, for example, it would be exceedingly difficult for an enemy’s submarines, other vessels, or aircraft to sow mines in ports, harbors, or approach channels. During the India-Pakistan War of 1971, for example, Pakistan attempted to sow mines in Indian waters with a submarine, but was unsuccessful owing to Indian navy intervention.89

A large country such as the United States, India, or China or an economic zone such as the European Union has dozens of ports. The resources needed to blockade all these ports effectively using mines would be quite substantial, and such efforts similarly would be vulnerable to intervention by local navies. Further, merchant ships blockaded from one port could shift to ports in neighboring countries and load and discharge their cargoes at intermodal facilities there, thereby limiting the mine blockade’s effectiveness. As noted previously, the United States did manage to close North Vietnamese ports with mines during the latter half of the Vietnam War; however, North Vietnam at the time had only one large port and two smaller ones, and no navy to challenge the U.S. Navy. Despite the resultant reduction in transportation capabilities, North Vietnam was able to divert shipping to Chinese ports and use road and rail into North Vietnam, although this was less efficient.

Finally, the mine ordnance necessary to effect a commercial blockade is significant and grows substantially as the number of ports, harbors, channels, and coastal areas that require mining increases. And the United States, for example, has only a very small inventory of mines.

A review of the sources cited in this article reveals general agreement that determining the likelihood of maritime trade warfare being practiced in the future is a complex question. The proponents and opponents of maritime trade warfare agree that, to be effective, maritime trade warfare generally needs to be executed over a significant span of time. The American and German campaigns of World
War II eventually had great effect, but required several years to reach that point. The Egyptian campaign against Israel in 1967 was not effective because of its short duration.

Proponents and opponents of maritime trade warfare also agree that any use of this strategy and tactic would have devastating impacts on today’s global economy. An unanswered question is whether maritime trade warfare really would bring a belligerent nation to the bargaining table, or simply escalate the conflict, which might spiral out of control. The answer seems to be that it would depend entirely on the situation; either result might occur. This certainly makes reliance on maritime trade warfare a dangerous business.

Another concern is that in regional or limited wars with powerful nations involved, commerce warfare is likely to create second-order effects that might draw other nations into the conflict. In the colonial-era Seven Years’ War, for example, British commerce raiding expanded beyond attacks on French vessels to include attacks on neutral Dutch vessels, which strained relations with a friendly country. In the 1904–1905 Russo-Japanese War, Russia, fearing consequences after numerous protests from the British and American governments, restricted its maritime trade warfare. In the early part of World War II, Hitler specifically forbade German submarines from attacking American vessels lest such attacks bring the United States into the war on Britain’s side. Would similar problems arise with modern use of maritime trade warfare? Would allied nations support maritime trade warfare, or would they attempt to circumvent blockades? Again, either outcome might occur.

Maritime trade warfare, however likely or unlikely it is to occur, could have vast global, regional, and national consequences. Therefore policy makers and military planners should consider the topic thoroughly from an offensive and—equally important—a defensive standpoint. When the United States entered World War II, the Navy was ill prepared for German maritime trade warfare and largely remained so until 1943. The resulting commercial and military sealift shipping losses were enormous, and thousands of merchant mariners lost their lives. The United States today is equally unprepared to defend itself against maritime trade warfare or to protect American commerce and strategic sealift on the high seas.

To support its allies and national interests, the United States has taken on worldwide missions, and therefore has the most expeditionary military in the world. With the requirement to operate, in many cases, far forward from the continental United States, the armed forces rely heavily on ocean transportation for the majority of their lift capacity, in terms of tonnage. To support its worldwide ocean-transportation needs, the U.S. military depends on internal sealift...
capabilities through the Navy’s Military Sealift Command; for rapid deployment, on the Maritime Administration’s Ready Reserve Fleet of government-owned vessels; and for sustainment, on the U.S. Merchant Marine (commercial vessels). This triad of fleets offers substantial sealift capacity.

However, the potential for losses in this maritime capability through the offensive actions of enemy maritime trade warfare against the United States simply is not factored adequately into the nation’s policies or plans. During a July 2014 congressional hearing on sealift force requirements, the deputy commander of U.S. Transportation Command was asked about the potential for attacks on strategic sealift vessels. In his response he admitted, “So in terms of protecting ships as they go across [the ocean], we . . . don’t have a lot of attrition built into our modeling. . . . That is not something that we really build in there.” In other words, although the United States currently has a substantial military sealift capability, the losses resulting from even moderately successful attacks on U.S.-flag shipping could have far-reaching consequences.

Further, the number of U.S.-flag merchant vessels engaged in international trade and available for strategic sealift is very small—seventy-eight—compared with the tens of thousands of merchant ships under other flags. Should losses occur in the U.S. Merchant Marine as a result of an enemy maritime warfare campaign, it is certainly questionable whether America could rely on foreign-flag commercial vessels for economic or military sealift. Yet this topic receives little attention.

Perhaps logically, USN planning efforts center on the protection of surface combatants, particularly aircraft carriers. However, if plans are not put in place and exercised to protect strategic sealift vessels, to include both government-owned vessels and those of the U.S. Merchant Marine, protection of warships is really a moot point. Without a reliable and capable supply chain of commercial and military logistics ships, warships cannot operate and fight far from American shores for any significant span of time.

The conduct of maritime trade warfare in the twenty-first century represents a complex problem that in many conflict scenarios would not yield positive results. However, history is full of examples of maritime trade warfare proving an effective strategy against enemies—which sometimes was the United States. Likewise, history is full of examples of “experts” and political leaders insisting that maritime trade warfare would not work—only to be proved very wrong as new conflicts and scenarios presented themselves.

Accordingly, it seems quite appropriate in the twenty-first century that historical lessons learned from maritime trade warfare campaigns of the past be studied carefully, and that political leaders and military planners consider, plan, and exercise scenarios involving maritime trade warfare from both offensive and
Defensive perspectives. Doing anything less risks repeating some of the greatest mistakes of maritime history.

NOTES

1. The terms maritime trade warfare and commerce warfare will be used interchangeably in this article.
6. Ibid., p. 7.
11. Ibid., p. 87.
12. As will be discussed later, the Declaration of Paris in 1856 banned privateering, but the practice still was employed by some nations, including the Union and the Confederacy during the American Civil War.
14. Ibid.
15. Ibid.
18. Ibid., p. 158.
19. Ibid., p. 124.
21. Ibid., p. 97.
22. Ibid.
24. Ibid., p. 269.
30. Poirier, Results of the German and American Submarine Campaigns of World War II, p. 3.
31. Ibid.
32. Ibid.
33. Ibid., app. 2. The Germans invested $2.7 billion on their submarine campaign, while the Allies invested $26.4 billion on shipping and the protection thereof.
34. Ibid., pp. 3–4.
35. Ibid., p. 7.
36. This was particularly ironic given Japan’s alliance with Germany and considering Germany’s major maritime trade warfare effort.

37. Corbett fully appreciated the major role submarines would play against capital ships but did not grasp the extent to which submarines would become the “cruisers” of the future. Indeed, in World War I and World War II submarines became one of the most serious threats to commerce, along with mines and aircraft.


41. Ibid.


43. Ibid.


45. Ibid., p. 5.

46. Ibid., p. 6.


50. Ibid.


56. Ibid., p. 5.

57. Ibid., p. 11.


60. Ibid., p. 387.


62. Ibid.


64. “THE THREAT IS REAL. A mine is a terrible thing that waits. More than a quarter-million sea mines of more than 300 types are in the inventories of more than 50 navies world wide, not counting U.S. weapons. More than 30 countries produce and more than 20 countries export mines. Even highly sophisticated weapons are available in the international arms trade. Worse, these figures are for sea mines, proper; they do not include underwater improvised explosive devices, which can be fashioned from fuel bladders, 50-gallon drums, and even discarded refrigerators.” U.S. Navy, 21st Century U.S. Navy Mine Warfare: Ensuring Global Access and Commerce (Washington, DC: Program Executive Office, Littoral and Mine Warfare Expeditionary Warfare Directorate, 2009), available at www.gryphonlc.com/.
67. Mark Albertson, They’ll Have to Follow You! The Triumph of the Great White Fleet (Murray, OK: Tate, 2007), p. 15.
70. A flag-of-convenience (FOC) country offers incentives to shipowners to register (flag) their vessels in that nation. Incentives include substantial tax reductions—even no taxes—on profits. In return, the country typically receives a fee for the registry. Among the dozens of FOC countries, the most prominent include Panama, Liberia, and the Marshall Islands.
72. Intermodal transportation has become a key concept in ocean shipping. It is defined as transportation that uses two or more modes of transportation, such as ships, trains, and railroads. Today, particularly with containerization of cargo, shipping usually is arranged from point of origin to the final destination, generally using several modes of transportation.
73. John S. Maclay, “The General Shipping Situation,” International Affairs (Royal Institute of International Affairs) 22, no. 4 (October 1946), p. 488. “Deadweight tonnage” includes the weight-carrying capacity of a ship plus fuel, stores, passengers, and crew; it does not include the weight of the vessel itself.
75. Collins and Murray, “No Oil for the Lamps of China?,” p. 92.
85. Distances were determined using the calculator function available at www.sea-distances.org.
87. “There have been reports of vessels in the Gulf of Aden sailing at high speed at night, not showing any lights, and with their AIS turned off, no doubt in the belief that this makes them less vulnerable to a hijacking attempt. That may be correct, but such action is foolhardy as it enormously increases the risk of collision in those congested waters, and puts innocent vessels in danger.” John Knott, “UK: The Paradox of Modern-Day Piracy off Somalia; The Dangers, and How to Reduce Them,” MONDAQ, December 9, 2009, www.mondaq.com/.

https://digital-commons.usnwc.edu/nwc-review/vol70/iss3/13
88. Reed, "Troubled Waters."
90. Elleman and Paine, Commerce Raiding, p. 3.
91. Ibid., p. 133.
93. In terms of percentage of service members killed in action, U.S. merchant mariners suffered a greater loss of life during World War II than any other branch of the U.S. armed forces.
94. Logistics and Force Requirements and Force Structure Assessment: Hearing on

Logistics and Force Requirements Before the Committee on Armed Services, Subcommittee on Seapower and Projection Forces, 113th Cong., p. 20 (July 30, 2014) (statement of William A. Brown [Vice Adm., USN], Deputy Commander, U.S. Transportation Command).
TACTICS OF STRATEGIC COMPETITION

Gray Zones, Redlines, and Conflicts before War

Van Jackson

Defense analysts and policy makers now refer routinely to the challenges of operating in a “gray zone” of conflict, which coincides with recent scholarly efforts to analyze more rigorously conflicts short of traditional coercion or war. Yet despite its frequent contemporary usage, the term gray zone does not seem to describe anything new. However, it does highlight something that is underconceptualized: the use of tactics that challenge the status quo without resorting to war. This article proposes that the gray zone is not a new concept, but that the term conveniently describes a broad class of events involving nonwar yet conflictual interactions—what might be considered “normal” or “stable” strategic competition. Taking policy makers’ concerns seriously, I argue that at least three types of interrelated tactics are historically common, if underconceptualized, ways of pursuing competitive gains while deferring the decision for war: sidestepping established defender “redline” commitments; employing intermediary actors as aggressors; and presenting faits accomplis to defenders.

Each of these tactics has ample historical precedent; yet, as discussed below, each is also vastly undertheorized, which might help to explain why security practitioners have reached for the term gray zone. Bringing these tactics to the analytic fore gives us a different way to think about aspects of crucial cases etched in popular historiography, such as the invasion of South Korea, Egypt’s nationalization of the Suez Canal, and the start of the Cuban missile crisis. The ability to draw on such marquee events to illuminate the logics of these
revisionist tactics also undermines suggestions that the gray zone of conflict represents a brave new world. What is more, recognizing when such tactics are in play has payoffs for how we might expect conflict interactions to unfold—the presence of each tactic plausibly biases the outcomes of strategic interactions in favor of those who take the initiative, while also introducing the classic risks of unintentional escalation.

The remainder of this article proceeds in three parts. The first part introduces the modern usage of the term gray zone, its conceptual limitation, and three interrelated tactics that simultaneously try to avoid inciting crisis or war while pursuing revisionist aims—the essence of the gray-zone challenge, as explained by its advocates. The second part makes a prima facie attempt to identify the ways in which these revisionist tactics logically complicate competitive interactions in international relations (i.e., how their employment plausibly affects the interplay of conflict, on the basis of their presence in familiar historical examples as well as the causal logics identified in the sparse but relevant literatures). The final part surveys a diverse range of modern cases of international competition to illustrate the centrality of these revisionist tactics to explaining those cases.

UNDERSTANDING THE GRAY ZONE . . . OR NOT

The term gray zone appears almost nowhere in scholarly literature. Among security practitioners, the broadest and most consistent use of the term seems to describe what amounts to a realpolitik state of competition short of war.¹ Deputy Secretary of Defense Robert O. Work acknowledged that “agents, paramilitaries, deception, infiltration, and persistent denial” constitute “what some people have called ‘the gray zone,’” arguing that it is the type of conflict for which U.S. forces are least prepared.² The former Under Secretary of Defense for Acquisitions, Technology and Logistics similarly eschewed the term itself but addressed the crux of the problem by describing the category of conflict in a 2015 internal memo as one “that occurs again and again. These conflicts are regional, may be presented by an insurgency against a standing government, military and political activities within a sovereign nation conducted by a neighbor, disputes over territory between neighboring nations, or terrorist or criminal activities within ungoverned territories or within failing states.”³ The memo even explained why these activities are a problem: “In these conflicts it has been very difficult to assess the situation and to determine what U.S. interests are at stake, . . . determining what actions should the U.S. take to protect those interests, who our allies and adversaries are in the particular situation, and what end-state would be best to protect our interests and result in the most favorable outcome.”⁴

But the gray zone is not a concern only for the U.S. government. In track 1.5 meetings with U.S. officials and analysts, South Korean and Japanese officials
have expressed rising angst that gray-zone challenges may erode the credibility of U.S. commitments. In particular, the government of Japan, which started using the term in 2010, has defined gray zones as "armed incidents that fall short of a full-scale attack." Examples that officials have offered to illustrate what Japan means by the term gray zone range from Chinese special operations forces infiltrating the disputed Senkaku/Diaoyu Islands dressed as fishermen to drone intrusions or cyber attacks aimed at compelling Japan to stand down in the event of a remote confrontation in the East China Sea. Japan's Defense of Japan 2014 annual white paper also articulates concerns that gray-zone situations will present the country with scenarios in which a military response might be necessary, but only its coast guard or law-enforcement agencies would have the authority to act.

A number of scholars and pundits additionally have seized on the term to describe contemporary cases of competition, ranging from recent North Korean violence and Russia's annexation of Crimea to China's East China Sea policy and its ongoing artificial island building in contested areas of the South China Sea. Although the term gray zone is not inherently problematic, it risks obscuring the actual observed behaviors that are raising concerns among policy makers. If focusing on the gray zone amounts to nothing more than identifying the numerous types of conflict short of war, there is little obvious benefit in aggregating them into a master category labeled gray zone. The term can be a convenient descriptive shorthand for referring to nonwar competition, but its use leaves unresolved any adequate explanation for how and why the behaviors of contemporary international actors apparently vex security practitioners to the point of leading many to reach for a new term.

But these public discussions of gray zones highlight a policy-relevant theoretical lacuna regarding revisionist tactics short of launching conventional war that make it possible for revisionists to establish new status quo baselines, secure gains at the expense of a competitor, and shape future bargaining contexts, all without automatically requiring coercive diplomacy, crisis, or war. From scanning the range of cases and definitions of gray zones that the practitioners and scholars mentioned above have advanced, three interrelated ideal-type tactics emerge: revisionism that avoids defender commitments; employment of intermediary actors; and faits accomplis.

The most obvious way to pursue an advantage while avoiding war is to avoid challenging any commitment a defender has defined as a casus belli. In other words, this means engaging in only those revisionist actions that sidestep defender redlines, the latter term understood as a commitment threshold for punishment or reaction. During the early Cold War period, Henry Kissinger and others wrote of the need to defend the "grey areas" of the globe, meaning those countries the NATO umbrella did not cover (i.e., the places where U.S. commitments were
Kissinger’s argument was a critique of President Eisenhower’s massive retaliation doctrine, which Kissinger believed basically prevented the United States from reacting to aggression in all situations other than a large-scale Soviet invasion of Europe. Kissinger feared that Cold War adversaries around the world would pursue political and military expansion in areas where the U.S. willingness to wage war or incur risks of conflict had not been established or was less than obvious. Much more recently, it has been argued that competitive states historically have exploited—and have enduring incentives to exploit—what Daniel Altman also calls “gray areas,” challenging a defender not where its resolve is clearest but rather where its commitments or retaliation thresholds have weaknesses, which come in several varieties.

As I describe it here, though, the tactic of redline avoidance shares more in common with Kissinger’s “grey areas” than Altman’s “gray areas.” The difference is subtle but conceptually and practically meaningful. With the tactic of redline avoidance, the revisionist is choosing a site of contestation involving issues or geographies where it views a defender’s redline commitments as being absent. The tactic does not constitute exploitation of a weak redline but rather exploitation of the absence of one. In 1962, the U.S. redline against Soviet invasion of Europe was strong, while no redline existed against Soviet missiles in Cuba prior to the Cuban missile crisis; in other words, there was not a weak redline against Soviet missiles in Cuba, but rather no redline whatsoever. By contrast, Altman’s redline typology and corresponding “gray areas” describe revisionism that exploits loopholes in perceived redlines. Such revisionism encroaches on a redline without crossing it, rather than avoiding it. The conceptual difference can be seen in the prelude to the Cuban missile crisis: Soviet premier Nikita Khrushchev is said to have thought that there was no U.S. commitment with regard to missiles in Cuba (redline avoidance), which is different from saying that he thought he was exploiting a U.S. commitment (redline encroachment) that was weak or not credible.

For policy makers, these are two fundamentally different problems. The former is about vulnerabilities where one allowed an absence of commitments, while the latter is about vulnerabilities arising from flaws in established commitments. To be sure, exploiting weak redlines is one way to challenge the status quo without resorting to war; that is a basic argument not only in this article but in the recent research on redlines. However, as the historical example above illustrates, challenging the status quo while avoiding redlines altogether is tactically different from encroaching on weak redlines; I treat the latter (encroaching on weak redlines) as a subset of the discussion on faits accomplis, below.

One way that revisionists avoid a defender’s redlines—a method that also can be used to encroach on a defender’s redlines without crossing them—is through
the second revisionist tactic: employing intermediaries. From prisoners’ dilemmas to games of chicken, theories of competition in international relations often employ a simplifying assumption of dyadic interaction. But many conflicts short of conventional war involve an aggressor’s third-party agents, not conventional military forces.

Intermediaries in international competition are conceptualized in at least three ways in the literature. First, in proxy wars, intermediaries are secondary states or rebel groups whose war fighting benefits, or at least is consonant with, the goals of a primary state. States resorting to proxy wars do so in part because they find themselves in rivalry or strategic competition with another state, yet are deterred by the prospective costs of fighting a war directly; this is also a prevailing logic of covert war.

Second, in the literature on third-party or “indirect” deterrence, intermediaries are those actors to whom pressure is applied so that they may in turn apply pressure to still another actor. A common, if faulty, argument about how best to pressure North Korea has been to pressure China, which has unique economic leverage over North Korea and might succeed in coercing North Korea where the United States and South Korea have not.

A third conceptualization of intermediaries that more commonly fits the kind found in the gray zone of conflict comes from the literature on state-sponsored terrorism. Intermediaries in this context are the agents in a principal-agent relationship and the state is the principal or patron, but the tie between them is an ambiguous or tenuous one. Agents in this sense sometimes are described colloquially as “little green men” or the “fifth column” to capture the deniable manner in which a patron may employ them. They can be any agents of a state that traditionally do not play a signaling role in executing the “high politics” of international security, such as law-enforcement authorities or guerrillas, or more-autonomous actors that implicitly act on behalf of an aggressor, including terrorist groups, computer hackers, fishermen, and even members of social movements or an ethnically bonded diaspora.

The distinction is meaningful because the use of militaries activates instrumental logics of either deterrence or battlefield efficiency between competitors. Intermediaries, by contrast, do not activate such logics as readily, which, as discussed below, is one of the reasons their presence both can “stack the deck” of interaction in favor of defender restraint and can generate distinct risks of miscalculation or blowback. Thus, China’s coast guard or its maritime militia—the latter is affiliated with the central government but is not a war-making instrument of the state—may engage in confrontational actions in the East or South China Sea. Such actions force defenders to ponder the extent to which—especially in contrast with the People’s Liberation Army (PLA) Navy under comparable
circumstances—they reflect a deliberately aggressive design by Beijing. The military instrument brings with it certain kinds of expectations and implied risks with regard to confrontation, while the actions of other agents of a state introduce at least the possibility of doubt about the logic governing their behavior.

An aggressor that employs an intermediary obscures culpability by obscuring identification of authority, assumptions of control, or intent. From the defender’s perspective, the use of intermediaries in any competitive interaction raises logical questions about these same factors. If the defender cannot know the answers to these questions with any great degree of confidence, then neither can it know whom to influence or how to do so.

Intermediaries in conflicts short of war are not passive or trivial actors. Often, they present defenders with a fait accompli, which is to say an “initiative that forces the opponent to initiate” or to stand aside. Faits accomplis have a long history in international politics, and in crisis bargaining in particular, but prior to recent research by Ahmer Tarar and Daniel Altman they were entirely untheorized. This may be due in part to what faits accomplis are: unilateral acts that come at the expense of a competitor’s preferences. They often present defenders with the choice of taking no direct action (i.e., backing down) or initiating a coercive interaction; in other words, they can, but do not inherently, constitute coercive actions themselves. Because faits accomplis often sidestep deterrence and compellence and leave the decision to initiate such hostilities to the defender, paradoxically—and sometimes intentionally—faits accomplis potentially transform a defender into a seeming aggressor.

As illustrated in the figure, faits accomplis can be gradualist or decisive, and coercive or noncoercive. In the coercive bargaining literature, some gradualist fait accompli strategies are what Thomas C. Schelling famously called “salami

### VARIATIONS OF THE FAIT ACCOMPLI

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- Egypt’s nationalization of the Suez Canal (1956)
- Russian intervention in Crimea (2014)
- China’s land reclamation in the South China Sea (2013–present)
- North Korean provocations (1966–present)
tactics”: deliberate erosion of a defender’s redline by consciously attempting to stay below the perceived threshold for reaction. Salami slicing presents defenders with situations, “none of which in isolation amounts to a casus belli, but which add up over time to a substantial change in the strategic picture.” While “not quite invoking the commitment,” in other words, they manage to make “the commitment appear porous and infirm.” Faits accomplis that take the form of salami tactics are revisionist attempts to exploit a weak redline, providing specific revisionist paths of least resistance (or windows of opportunity, if one prefers), considering the nature of the redline’s weakness.

But faits accomplis need be neither gradual nor coercive. They also can be decisive; alternatively, they can involve no threat making or redline erosion whatsoever. For example, a sudden military operation aimed at quickly seizing and occupying a swath of territory presents a defender with a fait accompli that is decisive, not gradual. One recent study found that territorial acquisition by fait accompli (defined as a unilateral, noncoercive “landgrab”) is both more common and more successful than attempts to acquire territory by coercion. Another study, also focusing narrowly on military faits accomplis that pursue decisive “landgrabs,” finds that they are often the consequence of a commitment problem in which the revisionist believes the defender will undertake military preparations (regardless of promises to the contrary) that would nullify or raise the costs of a fait accompli. Moreover, states may perform research and development on advanced weaponry or deploy military assets in outer space as ways to shift the military balance without intending to challenge or threaten an adversary; in such instances, an adversary not only may not have thought to introduce a redline but may not know whether such a situation warrants one.

Even the convergence of these tactics—intermediaries and faits accomplis, put to the service of exploiting ambiguities in defender commitments or avoiding defender commitments altogether—does not make gray zones a category of conflict that stands independent of coercive diplomacy, hybrid conflict, or other types of bounded conflict interactions short of conventional war. Such an understanding would conflate conflict tactics with conflict types. Instead, the gray zone, should the term be used at all, reflects a convenient description of normal strategic competition. The tactics we find in the gray zone are deployable in any competitive setting.

REVISIONIST TACTICS AND CONFLICT DYNAMICS

As a starting point for understanding how these tactics matter, this section draws on the applicable literature as well as classic historical examples to construct plausible claims about their causal implications.
How Avoiding Redlines Affects Conflict

There are several ways in which aggressors can challenge the status quo while encouraging defender restraint. The most prominent way of doing so while avoiding war is by steering clear of a defender’s clearest redlines entirely, pressing only where one believes defender commitments do not exist. Deterrence theory long has identified an inherent trade-off when it comes to threat making: when a defender establishes clear redlines for the sake of credible deterrence, “there is a good possibility of a gap emerging.” An adversary may interpret issues and areas that go unmentioned as permissible arenas for actions that will be less likely to trigger retaliatory commitments. When Secretary of State Dean Acheson outlined the “defense perimeter” of U.S. commitments in Asia in January 1950, he failed to mention Korea. This proved to be one of several reasons North Korea’s Kim Il Sung and the Soviet Union’s Joseph Stalin thought North Korea could invade South Korea quickly; by leaving Korea out of the articulation of U.S. defense commitments, Acheson inadvertently may have signaled that North Korea could advance there without risking a larger war with the United States. This example illustrates how an opportunistic aggressor may target issues and geographies where defender commitments are absent, expecting that it can do so at less cost and risk. Acheson’s announced defense perimeter and the outbreak of the Korean War constitute merely one of the best-known examples in a twentieth century full of them. Kissinger’s 1955 call to defend “grey areas” (that is, non-NATO areas of U.S. interest) was an explicit recognition of this kind of possibility. The reactive temptation for defenders facing this exploitive tactic is simply to add new or clarifying commitments to cover those ambiguities where an adversary may assert itself. But such a defender strategy involves high risk and brings diminishing returns, because there comes a point at which the accumulation of commitments to employ force logically outstrips the ability to maintain them credibly. Such an aggressor tactic thus encourages the defender to be discerning, and somewhat restrained, about adding new commitments or clarifying existing ones.

Before its eruption into the Cuban missile crisis, Khrushchev’s attempt to place nuclear-armed missiles in Cuba can be seen as an initially noncoercive move intended to shift the military balance by taking action in an area other than Europe, where commitments were more entrenched. The Soviet Union, in other words, may have believed “that there was no tacit commitment on Kennedy’s part to oppose such a deployment.” By shifting the military balance in its favor while avoiding U.S. redlines, the Soviet Union was attempting to gain a geostrategic advantage without engaging directly in a coercive contest.

But, as with North Korea’s invasion of South Korea, Khrushchev’s decision to place Soviet missiles in Cuba illustrates the risk an aggressor incurs when altering the status quo in places and on issues where defender commitments...
seem unclear, weak, or absent: underestimating the defender’s resolve. In neither case did the aggressor seek to precipitate what became the Korean War and the Cuban missile crisis, respectively, but in neither case was the United States willing simply to allow the aggressor’s actions to stand. Even though by using this tactic—challenging the status quo in a manner that avoids a defender redline, while targeting issues or areas high on uncertainty and low on precedent—a
gressors aim to achieve gains while avoiding conflict, doing so risks crisis or conflict anyway. In cyberspace, for example, there are indications that U.S. strategic ambiguity about cyber attacks may reflect the uncertainty of U.S. officials about the conditions that might lead to U.S. retaliatory attacks.\textsuperscript{42} If the United States is unclear about its own retaliatory thresholds, then surely state-sponsored hackers in China, North Korea, and elsewhere are as well.

\textbf{How Faits Accomplis Affect Conflict}

Regardless of whether a fait accompli is coercive or noncoercive, decisive or gradual, it presents defenders with incentives either to back down or to take coercive action themselves. The deliberate use of faits accomplis, as opposed to some other type of aggressive action, involves an implicit wager that the action taken will encourage restraint and not provoke defender retaliatory measures.\textsuperscript{43}

It can do this in at least two different ways. The first is by moving too quickly and completely for the defender to react because of material or capability constraints. North Korea’s 1950 invasion of South Korea was intended to do just this, presenting the United States with a situation on the ground that was so far gone it could not plausibly be reversed. In his memoir Khrushchev recalls that Stalin’s decision to permit Kim Il Sung’s invasion of South Korea was premised on the assumption “that if the war were fought swiftly . . . intervention by the USA could be avoided.”\textsuperscript{44} The second way a fait accompli encourages defender paralysis is by making the action such a small or gradual challenge to a defender’s redline that the defender finds it difficult to justify mustering a retaliatory response. Such gradualism can be seen in China’s repeated intrusions into the airspace surrounding the highly disputed (with Japan) Senkaku/Diaoyu Islands in the East China Sea. Each such occurrence forces the Japan Self-Defense Forces to scramble fighter aircraft to intercept and turn back the intruders. Between 2006 and 2014, the frequency of such high-friction encounters in the areas surrounding the Senkaku/Diaoyu Islands has risen steadily, reaching a peak of 464 aerial intrusions in 2014.\textsuperscript{45} Each incident is too minor for Japan to base thereon a credible threat of retaliation, but such incidents nevertheless repeatedly put Japan in the position of either scrambling fighters to confront intruders or simply allowing Chinese intrusions to go unchecked. The latter would establish a de facto precedent of Chinese presence in Japan-administered territory against the latter country’s will.
When deployed during noncrises and nonwar situations, faits accomplis thus “stack the deck” of strategic interaction in favor of the aggressor at the expense of the defender’s preferences by encouraging restraint in the latter. But, as with any wager, there is a risk of being wrong. With faits accomplis, from the aggressor’s perspective, the cost of being wrong takes the form of unintentionally triggering coercion or retaliation from the defender. Inadvertent conflict and escalation are possible if an aggressor attempting a fait accompli has misjudged where a defender’s redline is (i.e., what its retaliatory commitments are) or its resolve (i.e., its willingness to retaliate when its redline proscription is violated). From the defender’s perspective, the costs of inaction when presented with a fait accompli must be weighed against the costs of initiating retaliation and the risk of escalating a conflict. Kim Il Sung’s gamble that the United States would not intervene to reverse North Korea’s invasion of South Korea in 1950 certainly ended up incurring a high cost. But miscalculation-based escalation also can result from faits accomplis that do not involve military invasions or “landgrabs.” For instance, when Egypt’s president Gamal Abdel Nasser presented his famous fait accompli of nationalizing the Suez Canal in 1956, he inadvertently catalyzed British, French, and Israeli coordinated war plans, leading to Israeli ground forces’ seizure of the Sinai Peninsula. Nasser’s unilateral yet noncoercive declaration proved to be a gamble that did not pay off for Egypt.

Even if an aggressor has not misjudged an adversary’s likely reaction to a proximate incident, there are broader risks from second-order or ancillary reactions. Between the United States and North Korea during the 1960s, for example, North Korean salami tactics, in the form of small-scale violence, repeatedly were met with either U.S. decision paralysis or conciliatory offers to resolve an incident peacefully. While this might be framed as North Korea besting the United States in a string of specific incidents, the larger history worked against North Korea. The United States may have been “boxed in” to de facto acceptance of North Korea’s violent provocations—because the incidents were too minor to warrant retaliation—but it coped with that unsavory reality in ways anathema to North Korean interests: by redoubling its commitment to ally South Korea, enhancing the U.S. military presence on the Korean Peninsula, providing greater financial assistance to South Korean military modernization, and conducting grander military exercises.

How Intermediaries Affect Conflict
The presence of intermediaries in conflict interaction represents either some degree of delegation of authority from a principal to an executing agent or the deceptive appearance of delegated authority. From a defender’s perspective, it may be unclear what degree of autonomy an intermediary has, the degree to which an intermediary is compliant with an aggressor’s prerogatives, and whether there
even is a principal-agent relationship between the aggressor and the intermediary. Consequently, the presence of aggressor intermediaries structures strategic interaction in several ways that are potentially favorable to the aggressor—but with distinct risks.

One way, similar to the fait accompli approach, is to induce defender inaction or decision paralysis by complicating the task of identifying retaliatory targets. Attribution, a common problem with cyber attacks in particular, is essential for mounting retaliation or countercoercion.\(^50\) And even if a defender can link intermediaries and their patrons together accurately, ambiguities remain about the extent to which an intermediary is a mindless agent of a patron as opposed to a rogue actor.\(^51\) The United States quickly traced the 2014 hack of Sony Pictures Studios to intermediaries acting on behalf of the North Korean regime, but it was not immediately clear what exactly that meant.\(^52\) Were the perpetrators Chinese hackers for hire? Were they government operatives executing orders received from the regime in Pyongyang? Or were they autonomous actors launching attacks and making threats out of symbolic or identity solidarity with the North Korean regime?

The use of intermediaries also can enhance the credibility of aggressor threat making if it ties the hands of an aggressor, which can induce defender restraint through successful coercion. Daniel L. Byman and Sarah E. Kreps claim this as a major motivation of state-sponsored terrorism in the Middle East.\(^53\) Iran employs Hezbollah and Palestinian terror groups as intermediaries against Israel in part to credibly threaten retaliation for any and all grievances with Israel, whereas the relatively poor state of Iran's military does not allow it to make such blanket retaliatory threats directly.\(^54\) Credible threats of retaliation come in the form of support to intermediaries because direct interstate conflict per se would not favor Iran, in contrast with terrorist groups that are openly at war with Israel and credibly can engage in continuous retaliation if called on to do so.

A third way intermediary agents benefit the aggressor state is by giving it greater freedom of action through plausible deniability.\(^55\) An aggressor may seek openly to associate itself with, and claim responsibility for, intermediary actions, but only after they occur; plausible deniability allows it to take such a “wait and see” approach. Conversely, an aggressor may seek to distance itself from the actions of autonomous intermediaries whose actions go too far, crossing a defender’s redlines, or with whose tactics they disagree. The aggressor thus may employ intermediaries to give itself the latitude either to claim the benefits or to avoid the costs of intermediary actions. The plausible deniability that intermediaries offer also may allow for more aggressive salami tactics than a revisionist might pursue using direct military force.
Although intermediaries may skew interaction in the patron’s favor in multiple ways, risks of backfire or negative feedback remain. Delegating a task inherently involves some amount of risk (e.g., of the agent committing unintended errors or taking undesirable independent actions). By relinquishing direct control to a degree, an aggressor may have its hands undesirably tied. And when the linkage between an aggressor and its intermediary is grounded in a shared identity or raison d’être, the aggressor may find it difficult to disassociate itself from the intermediary, should it seek to do so. States that employ relatively autonomous intermediaries run a risk of being “chain-ganged” into escalation of conflicts they sought to avoid.

Use of intermediaries also risks engendering defender reactions of retaliation or escalation. If an intermediary takes actions the defender finds unacceptable, plausible deniability may not be enough to stifle a defender’s revenge-motivated reaction. Decision makers are often willing to impose certainty on and form beliefs about situations that are fundamentally uncertain. Politicians in a defending state may feel public pressure to react quickly and forcefully and to find a retaliatory scapegoat even if attribution is not immediately known—sometimes uncertainty is no excuse for inaction. Even if an intermediary complies perfectly and precisely with the intent of an aggressor, moreover, it nevertheless may be the case that the aggressor misjudged either the defender’s willingness to respond or its mode of response. Escalation logically could follow either type of misjudgment.

DEGREES OF GRAY
As with all theoretical choices, analytic narratives constructed with a “revisionist tactics lens” foreground some elements over others to explain events. This is not to trivialize other factors, nor to claim that contexts that exclude revisionist tactics do not also bedevil policy makers. But there is a mismatch between the academic literature’s lack of emphasis on redline avoidance, intermediaries, and faits accomplis and policy makers’ growing concern about them.

Event Selection
The table compares several contemporary cases involving revisionism that avoids or defers decisions for conventional war. These specific events with these specific actors merit attention because they have been at the center of debates between critics and advocates of the term gray zone. Demonstrating that the aforementioned revisionist tactics played a nontrivial role in the unfolding of events supports both aspects of my claim about the gray-zone debate.

First, the causal logics articulated in the prior section derived in part from examining important historical cases in the security and strategic studies canon. This demonstrates that they have explanatory power in contemporary cases,
undermining notions that there is something new about the gray-zone security challenges of the present.

Second, narratives of these cases would be incomplete without accounting for revisionist tactics short of war, which repudiates claims that there is no explanatory value added in conceptualizing these tactics. Parsing any of these cases solely with reference to logics of coercion, conventional war fighting, or game-theoretic crisis bargaining not only would offer limited explanatory value but would sacrifice understanding of the similar role that redline avoidance, intermediaries, and faits accomplis played across cases.

The range of cases reveals a common tendency (regardless of whether one or all three revisionist tactics were employed): defender paralysis in response to the immediate tactic, but inevitable second-order consequences in the form of indirect responses.

**North Korean Provocations**

Twice in 2010, North Korea engaged in isolated acts of violence against South Korea. The first was a torpedo attack that sank a South Korean naval ship in

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<th>Event</th>
<th>Intermediaries Involved?</th>
<th>Defenders Faced a Fait Accompli?</th>
<th>Aggressor Avoided Defender Redlines?</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Korean artillery attack (2010)</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Defender restraint, but adoption of “proactive deterrence” doctrine</td>
</tr>
<tr>
<td>North Korean naval attack (2010)</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Defender restraint, but international investigation</td>
</tr>
<tr>
<td>North Korean hack of Sony Pictures (2014)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Defender restraint</td>
</tr>
<tr>
<td>China's ADIZ declaration for the East China Sea (2013)</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Defender restraint, but defiance of Chinese claims</td>
</tr>
<tr>
<td>Chinese artificial island building in the South China Sea (2013–present)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Defender restraint, but increased U.S. patrols and regional security aid</td>
</tr>
<tr>
<td>Russian intervention in Ukraine (2014–present)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Defender restraint, but renewed U.S. emphasis on NATO; military aid to Ukraine</td>
</tr>
</tbody>
</table>
March of that year, killing all forty-six sailors on board. The second attack, eight months later, was an artillery barrage against South Korean–administered islands in a disputed maritime area near North Korea’s western coast, killing four South Korean marines and critically injuring a mix of dozens of marines and civilians on the island. North Korean conventional military forces conducted both attacks.

The torpedo attack, for which North Korea denied responsibility, was a covert action in international waters, taking place far from the view of any onlookers. The artillery attack, by contrast, was conducted close to the Korean Peninsula’s coast and was filmed and broadcast in near real time on South Korean news stations. North Korea not only accepted responsibility for the latter attack; it claimed the attack was a punitive measure in response to a South Korean military exercise in the area, against which North Korea had issued warnings.

The torpedo attack effectively forced South Korea to choose between doing nothing or retaliating despite North Korean denials of culpability. By comparison, the artillery attack is understood better as a coercive battlefield action, not a fait accompli. Both were isolated, limited attacks that fell well short of triggering a U.S. or South Korean invasion of North Korea, but did risk some retaliation. Whereas the March torpedo attack generated political controversy within South Korea about whether North Korea was actually responsible (a debate that prevented South Korean officials from being able to retaliate), the November artillery attack nearly led to South Korean punitive bombings of North Korea; these were avoided narrowly, only because senior U.S. officials intervened with their South Korean counterparts to prevent retaliation.

Although in a crisis-bargaining sense North Korea came out of these interactions unscathed and succeeded in encouraging U.S. and South Korean restraint, second-order consequences reified the hostility that gave rise to North Korean violence in the first place. The March 2010 attack led directly to an international investigation and the later imposition of punitive “5/24 sanctions” that cut off North Korea from most sources of South Korean currency. The November 2010 attack, meanwhile, triggered the adoption of a South Korean “proactive deterrence” doctrine of preemption, acceleration of South Korean precision-strike missile programs, and a discourse in support of South Korea developing an independent nuclear capability.

Contrasting with these attacks was North Korea’s 2014 cyber attack against Sony Pictures Studios in response to the latter’s insulting and subversive (from North Korea’s perspective) movie The Interview, whose comedic plot centered on two journalists who assassinate Kim Jong Un. This incident featured all three gray-zone tactics. The hacker group, whose members called themselves the “Guardians of Peace,” nominally was an independent entity, yet was acting in the
interests of the North Korean regime. The group issued a number of threats—of a digital and physical nature—aimed at preventing the public release of The Interview. Although the threats were to no avail and the movie eventually was released without any violence, the hackers did disrupt Sony’s computer systems and stole and released to the public proprietary internal company information, including embarrassing e-mails from Sony executives. The U.S. Federal Bureau of Investigation eventually traced the Guardians of Peace back to North Korea, but slowly, and never definitively. To this day, North Korea refuses to take responsibility for the Sony hack, and some (a minority) in the technology sector in the United States persist in doubting North Korean culpability.

The surreptitious intrusion into Sony’s internal information network and subsequent public revelation of stolen information was a coercive, decisive, and nonviolent fait accompli. It presented not only Sony but the U.S. government with multiple types of direct threats, and forced both into a position that favored not attempting any meaningful retaliation.

**China’s East China Sea ADIZ Declaration**

China long has contested the Senkaku/Diaoyu Islands with Japan, which the latter administers. Every year since around 2006, China has increased the frequency of its attempted air and naval intrusions into the area surrounding the disputed islands, requiring Japan to increase the frequency with which it responds by scrambling fighter aircraft to escort intruding Chinese assets out of the area. Some of these confrontations involve Chinese civil vessels and aircraft, but frequently they have involved Chinese military assets as well. Although most of these confrontations have been resolved without incident, some have escalated to militarized crises, leading to both sides issuing redline threats. Japan, for example, has threatened that any Chinese drone that unlawfully enters Senkaku airspace will be shot down, while China has counterthreatened that any shoot-down of a Chinese drone would be an “act of war.”

Despite the highly contested nature of the East China Sea, in November 2013 China’s Ministry of National Defense declared an air defense identification zone (ADIZ) over most of the area. Imposition of an ADIZ would require incoming aircraft to identify themselves to Chinese authorities and, if military, to request permission. As with all ADIZs, a Chinese ADIZ over the East China Sea would allow China to “identify, monitor, control, and react to aircraft entering this zone.” China also claims the right to take “defensive emergency measures” against noncompliant aircraft, although it has not done so—yet. Although ADIZ declarations have been common since the United States established the first zone in 1950, the United States and China’s neighbors view China’s ADIZ
as a provocative fait accompli because it was declared unilaterally, without prior consultation, over a maritime area that is heavily contested with Japan.\footnote{70}

As an act of defiance that constituted a fait accompli of its own, the United States flew a nuclear-capable B-52 bomber through China’s “ADIZ” only two days after its proclamation. The aircraft neither announced itself nor sought permission.\footnote{71} Notwithstanding the symbolism, the B-52 flight was an isolated act of signaling that changed nothing with respect to China’s ADIZ declaration. While the United States, Japan, and South Korea do not recognize the East China Sea ADIZ, they have not attempted to compel China to roll it back—which preserves China’s de facto “right” to enforce the ADIZ at will. A U.S. Congressional Research Service report assessed that China was “asserting a maximalist position, then seeming to back down, while preserving some incremental gain.”\footnote{72} Secretary of State John F. Kerry accused Beijing of “an attempt to change the status quo in the East China Sea.”\footnote{73}

The ADIZ declaration involved no intermediaries but, from the perspective of the United States and Japan, was indeed a decisive fait accompli that also avoided triggering any kind of retaliatory commitments from either the United States or China’s neighbors.

**Chinese Artificial Island Building in the South China Sea**

Although not the first country to do so, China since 2013 has engaged in a rapid process of “land reclamation”—the construction of artificial islands—in the disputed South China Sea. In less than two years, it developed more than 2,900 acres of “land” in a space of overlapping exclusive economic zones between China and other South China Sea claimants.\footnote{74} Since their construction, China has positioned weapons systems and military infrastructure—including radars, artillery, runways, and military barracks—on them despite their being highly contested, and despite Chinese claims that it is not “militarizing” the islands.\footnote{75}

China has not issued threats in relation to these artificial islands and has not used them as yet to blockade others’ freedom of navigation. However, U.S. intelligence officials openly express concern that China gradually is putting in place the physical ability to impose and enforce constraints on freedom of navigation through the South China Sea, should it choose to do so.\footnote{76} While the United States maintains a commitment to freedom of navigation and open sea-lanes, that commitment is open-ended and abstract. The U.S. redline concerning freedom of navigation is “arbitrary” and “imprecise”; the United States has issued no specific “redline” threat to resort to military force to fulfill such a commitment, particularly in the South China Sea.\footnote{77}

This makes China’s land-reclamation activity a gradualist fait accompli that does not overstep directly any retaliatory boundaries, and is not inherently coercive or aggressive—even if such actions improve China’s position should
it take aggressive actions in the future. Any direct military action to blockade or attack Chinese artificial islands would require a decisive act of aggression disproportionate to the mundane (if strategically significant) activities of engineers building artificial structures in international waters. So, while the United States has increased its “presence” in the South China Sea in response to China’s actions—including through maritime patrols, freedom-of-navigation military exercises, and enhanced security assistance to Indonesia and the Philippines—none of these actions have been aimed at, nor have they had the effect of, curbing or rolling back China’s land-reclamation activity, which effectively establishes a new status quo in the South China Sea.78

**Russian Intervention in Ukraine**

In 2014, Russia employed all three revisionist tactics in a campaign that culminated in the annexation of Crimea, formally and formerly part of Ukraine. Although the conflict had political antecedents dating back to the dissolution of the Soviet Union, what immediately precipitated it was pro-European social forces in Ukraine mobilizing to oust the country’s then president Viktor Yanukovych, who was seen as subservient to Moscow. Within days of Yanukovych’s removal, Russia capitalized on Ukraine’s domestic turmoil to insert large numbers of “little green men”—undesignated and unidentifiable yet armed forces, widely believed to belong to Russian special forces—who occupied key choke points and government buildings in Crimea, claiming to be separatists.79 Russia denied responsibility for these forces. Once the “little green men” established territorial control, a controversial referendum of secession was held in Crimea, which led to Russia’s formalized annexation of it.80

As these events evolved, in March 2014 the Donbas region of Ukraine filled with anti-Ukrainian protests conducted largely by members of an ethnically Russian diaspora. These pro-Russian, anti-Ukrainian protests quickly militarized, and separatists in Donbas unilaterally declared independence from Ukraine. As fighting continued throughout the year and into 2015, the Russian military provided arms and logistics to the separatist forces—some members of whom were Russian citizens—that were fighting against the Ukrainian government. Russia denied any military involvement in and culpability for the events.81 Thus, under the cover of mobilized separatist forces in Ukraine, Russia waged what some describe as a “hybrid war” against the Ukrainian government to secure the political independence of a region of sovereign Ukrainian territory.82

Russia’s “little green men” perpetrated a decisive fait accompli, and they did so in a manner that avoided triggering retaliation or military incursions from NATO or the United States. U.S. and European observers were quick to recognize that Russia was behind the intervention of the “little green men” in Crimea.83
Moreover, mounting evidence increasingly made Russian involvement—especially in providing logistics support to the Donbas separatists—undeniable to outside observers, although the use of such intermediaries allowed Russia to continue its narrative of denial. But the rapid ability of the West to attribute the conflict to Russia did not translate into any kind of military reaction, and Russia’s aloofness made it virtually impossible to negotiate a cease-fire. As Russian foreign minister Sergei Lavrov responded when confronted with evidence of Russia’s role in events in Ukraine and demands for a cease-fire, “[B]efore demanding from us that we stop doing something, please present proof that we have done it.”

At the end of the Cold War, the United States, along with Russia and the United Kingdom, agreed to the Budapest Memorandum on Security Assurances, which afforded Ukraine underspecified “security assurances” after the latter relinquished the Soviet nuclear weapons remaining there. But this security commitment was ambiguous in terms of what was required of the United States, and at any rate was not formalized in a treaty. In response to accusations that standing by while Ukraine was being ravaged damaged U.S. and NATO credibility, the United States was quick to point out that Ukraine was not a NATO member and that Russia’s intervention in Ukraine did not invoke NATO’s article 5 collective defense requirement; neither did the Budapest Memorandum require U.S. military commitments to Ukraine’s security.

As a former U.S. defense official observed, Russia effectively succeeded in “avoiding alliance tripwires while still subversively contributing to instability, unrest, and violence in Ukraine.” By July and August 2014, Russian rank-and-file conventional forces, including artillery units, were crossing into Ukraine. Yet even when Ukrainian forces captured Russian soldiers—a seeming “smoking gun” of Russian culpability—Moscow persisted with its denials, claiming such soldiers had crossed the border by mistake.

Subsequently, the United States and NATO, both of which were unable to do much beyond monitoring the situation from the outside, have strengthened their ties to and presence in Eastern Europe. They have attempted to make clear that a Crimea-like intervention would not be acceptable in a NATO country—even if the populations of some of them, such as Estonia, contain sizable ethnic Russian minorities.

This article has attempted to examine several underlying tactics found in what contemporary security practitioners sometimes reference as a “gray zone” of conflict. Tactics other than war that seek to revise the status quo are historically common yet undertheorized. As an initial remedy, this article has proposed that avoidance of a defender’s clearest commitments, use of intermediary actors, and
presentation with faits accomplis are indeed old tactics, long wielded by actors seeking to challenge the status quo without resorting to conventional military force.

But just because something is not new does not mean it has been conceptualized adequately. Revisionist tactics plausibly condition strategic interactions in important ways: they encourage defender inaction, strengthen aggressor threat credibility, allow aggressors to obscure culpability, and introduce proximate escalation risks resulting from aggressor misjudgments or intermediaries going rogue. As international politics becomes defined more in terms of a “diffusion of power” and increasingly complex interdependencies, motivations for revisionism are likely to endure. Such an environment may increase reliance on the tactics examined here.91

While the gray zone is not a new concept, as an area of concern to military commanders and policy makers it is understudied. This article has attempted to fill that gap by identifying and examining the role of tactics in conflicts short of conventional war, and by showing that such tactics make it possible for revisionists to secure gains while paralyzing defenders. This bolsters the claim that these tactics constitute something distinct in international security and are worthy of study, even if they are not new.

NOTES

The author thanks Mike Mazarr, Daniel Altman, Alex Vuying, Erik Gartzke, Brad Roberts, Andrew Erickson, Jon Lindsay, and Robert Ayer for their useful comments at various points in the manuscript’s progression, even when in disagreement.


initiative called Project Gray, which intends to build knowledge among academia, government, and the military about this category of warfare; see www.projectgray.org/.
5. Ibid.
8. Ibid.
11. For a contemporary discussion on redlines, see Bruno Tertrais, "Drawing Red Lines Right," Washington Quarterly 37, no. 3 (Fall 2014), pp. 7–24.
24. Austin Carson argues that covert actors—a kind of intermediary—are often employed to manage escalation risks better, in part by avoiding audience costs. See Carson, "Facing Off and Saving Face."
25. This military versus nonmilitary distinction is one of the features that separates the 2009 Impeccable incident between the U.S. Navy and China’s PLA Navy forces from the many other incidents that have occurred at sea in the twenty-first century. For a discussion, see Oriana Skylar Mastro, “Signaling and Military Provocation in Chinese National Security Strategy: A Closer Look at the Impeccable Incident,” Journal of Strategic Studies 34, no. 2 (2011), pp. 219–44.


27. For rare exceptions, see Altman, “Red Lines and Faits Accomplis”; Altman, “By Fait Accompli, Not Coercion”; and Tarar, “A Strategic Logic of the Military Fait Accompli.” The fait accompli typology developed here accounts for, corrects, and subsumes the debatable conceptualizations of Altman and Tarar.


30. Schelling, Arms and Influence, pp. 66–68.


32. Schelling, Arms and Influence, p. 68.


41. George and Smoke, Deterrence in American Foreign Policy, p. 539.


49. Ibid.


54. Ibid., p. 4.
55. Byman and Kreps discuss this benefit in the context of state-sponsored terrorism, but it is also a focal point in writings on gray-zone coercion. See Amy Chang, Ben FitzGerald, and Van Jackson, Shades of Gray: Technology, Strategic Competition, and Stability in Maritime Asia, Maritime Strategy Series 7 (Washington, DC: Center for a New American Security, 2015).
58. The chronology for both attacks is fully described in Jackson, Rival Reputations, pp. 170–90.
61. “Korea’s Military to Shift Focus from Active to Proactive Deterrence,” Dong-A Ilbo, March 7, 2014.
63. Ibid.
76. Ibid.


84. The full extent of the Russian catalog of arms and personnel in Ukraine as part of this conflict is documented in Czuperski et al., *Hiding in Plain Sight*, pp. 8–13.

85. Baczynska, "Russia Says No Proof It Sent Arms, Troops to East Ukraine."


87. Ibid.


89. Friedman, "Russia’s Slow-Motion Invasion of Ukraine."


IMPACTS OF THE ROBOTICS AGE
ON NAVAL FORCE DESIGN, EFFECTIVENESS, AND ACQUISITION

Jeffrey E. Kline

It is not in the interest of Britain—possessing as she does so large a
navy—to adopt any important change in ships of war . . . until such a
course is forced upon her . . . [T]his time has arrived.
ADMIRAL BALDWIN WALKER, ROYAL NAVY, 1860

The twenty-first century will see the emergence of maritime powers that have
the capacity and capability to challenge the U.S. Navy for control of the seas.
Unfortunately, the Navy’s ability to react to emerging maritime powers’ rapid
growth and technological advancement is constrained by its own planning,
acquisition, and political processes. Introducing our own technology advances is
hindered as well. The planning and acquisition system for our overly platform-focused
naval force structure is burdened with so many inhibitors to change that
we are ill prepared to capitalize on the missile and robotics age of warfare.

Yet by embracing the robotics age, recognizing the fundamental shift it rep-
resents in how naval power is conveyed, and refocusing our efforts to emphasize
the “right side” of our offensive kill chain—the side that delivers the packages
producing kinetic and nonkinetic effects—we may hurdle acquisition challenges
and bring cutting-edge technology to contemporary naval warfare.¹ Incorporating robotics
technology into the fleet as rapidly, effectively, and
efficiently as possible would magnify the fleet’s
capacity, lethality, and opportunity—all critical
to strategic and tactical considerations. Doing so
also would recognize the fiscal constraints under
which our present force planning cannot be sus-
tained. As Admiral Walker advised above, it is now
time to change.²

¹ Naval War College Review, Summer 2017, Vol. 70, No. 3
²
After addressing the traditional foundations of force structure planning and the inhibitors to change, this article will discuss how focusing on the packages delivered rather than the delivery platforms would allow us better to leverage new technologies in the 2030 time frame. What would a naval force architecture look like if this acquisition strategy were employed? This article will present a force-employment philosophy and a war-fighting strategy based on the tactical offensive that align with this acquisition approach. The article does not present an alternative force structure with actual numbers of ships and platforms, but suggests a force-acquisition strategy and force-design concept that provide a foundational underpinning by which a specific force architecture can be developed. Three strategic force measures—reactivity, robustness, and resilience—will be used subjectively to assess this fleet design compared with our traditional programmed forces.

STRATEGIC FOUNDATIONS OF NAVAL FORCE-STRUCTURE PLANNING AND THE GREAT INHIBITORS

Ideally, a country’s naval force structure changes with national strategy, national treasure, technological advancement, and potential adversary capabilities. National strategy provides the rationale for, purpose of, and priority among choices to be made in creating a fleet. National treasure defines the resources and constraints dictating strategic choices. New technologies provide opportunities for increasing fleet effectiveness, yet also may endanger fleet survival should potential adversaries expose and exploit vulnerabilities in these technologies. This is a complex problem even when one takes into account only these four factors; however, U.S. naval acquisition also is challenged by other influences that inhibit capitalization of new technologies.

The most powerful of these inhibitions is inertia. The existing fleet represents a capital-heavy investment by the country, one with long build times and lifetimes. Ships and aircraft cost billions to design, build, and maintain. They require a capital-intensive industry featuring heavy equipment, infrastructure, and a skilled workforce—all generations in the making. As a consequence, annual programming and budgeting decisions are marginal in nature. It is the nature of a large fleet to evolve slowly, as opposed to undergoing revolutionary changes to its composition. This is a reality the Chief of Naval Operations (CNO) faces when considering changes to the naval forces. Each CNO’s relatively short tenure restricts the ability to formulate, market, and execute any maritime strategy that would have a comprehensive effect on ship and aircraft procurement.

Since the first six USN frigates were authorized in 1794, national internal political and economic factors have been another major influence on fleet composition. As Ian Toll illustrates well in his Six Frigates: The Epic History of
the Founding of the U.S. Navy, the potential windfalls for local economies when selected to build warships generate powerful political pressures for stabilization once these selections are made. Now just as then, senators and congressmen representing districts that build ships (and aircraft) may be expected to defend existing programs and seek new ones, to the economic benefit of their constituents.

Next, the compartmentalization of fleet planning, budgeting, building, and maintenance caused by large, resource-competing bureaucracies creates a lethargic environment inefficient for change. Multiple oversight agencies and bodies, including Congress, subject every decision that program managers make to often-paralyzing scrutiny. Our agility to implement rapid change is lost when the number of stakeholders exceeds the point at which responsibility and authority can be defined clearly. This is a structural issue common to all capital-heavy investment programs—the space shuttle, large multimission warships, long-range bombers—that require bureaucracies to design and implement them.

Finally, the very nature of a fleet's strategic value engenders conservatism in a senior naval leadership faced with the options for change. This is not necessarily an unhealthy view, as loss of the fleet could mean loss of sea lines of communication (SLOCs), and therefore likely a war. Nonetheless, overvaluing what worked in the last major maritime war—which occurred in the 1940s—at the expense of recognizing that missile, robotics, and cyber technology has changed the primary conveyance of naval power may result in a fleet unprepared to combat an enemy that is not so inhibited. A less formally “capable” adversary untethered by allegiance to past precedent may be more flexible and therefore much more dangerous.

Individually, none of these influences on force structure planning can be dismissed. The danger is that in aggregate they result in a harmful escalation of commitment toward obsolete platforms, permitting only marginal changes in force structure amid opportunities for major technological changes. The result today is a brittle U.S. fleet that is susceptible to tactical surprise and slow to react to adversaries’ technological initiatives.

The United States is not unique in facing these challenges. Historically, major changes to naval force structure have resulted from war, great technological leaps, or both. Rowing, ramming, and boarding vessels gave way to the naval cannon and sail; sail to steam; armor and rifled guns to aircraft; and aircraft to missiles. Now comes the dawn of a robotics age. Missiles, robots, miniaturization, hypersonic technologies, and artificial intelligence give the advantage to many smaller, faster, and more lethal offense capabilities. Our challenge today is to not allow the restraints on current force structure planning to cede these advantages to potential adversaries.
MISSILES, ROBOTS, AND AN OFFENSIVE TACTICS—ENABLING STRATEGY

Meeting all the desired maritime strategic capabilities—all-domain access, deterrence, sea control, power projection, and maritime security—while constrained by the budget and procurement process will require new thinking in platforms, weapons, and command and control (C2). Embracing the combined capacity of missiles and robotics in this new era creates options for achieving a desired tactical end state that enables our operational and strategic goals. Strategists will regard this as a reversal of the traditional hierarchy of the levels of war; yet it is historically accurate. Technology empowers a tactical edge in maritime warfare, providing new operational and strategic choices. For example, the advances in submarine technology during the first half of the twentieth century resulted in a new form of commerce raiding and sea-lane interdiction. The reach of carrier aircraft changed the nature of naval combat in World War II. Advances in nuclear propulsion and ballistic-missile technology in the second half of the twentieth century led to a third way of offering nuclear strategic deterrence: from the sea depths. Parallel examples can be made for missile-carrying aircraft and the guided torpedo.6

Today, investing in a very “smart” long-range autonomous offensive missile that can outrange those of our adversary may permit us to build less-expensive, less-well-defended ships from which to launch them, thereby making sea combat more affordable. Shifting emphasis to the weapon’s ability and the force’s targeting capability, rather than concentrating on the platform itself, changes both the risk and cost calculus.

Take a specific example. Purchasing one fewer Burke-class guided-missile destroyer (DDG) would allow the acquisition and operation of thirty-five to forty large autonomous surface vessels (LASVs).7 If each of the latter were armed with eight antiship cruise missiles, from 280 to 320 offensive missiles could be dispersed in a contested region, as opposed to the eight missiles (canister) or at most ninety (vertical launch systems) that the DDG could bring to one location. Our potential adversaries show an appreciation for this concept by building smaller, missile-capable combatants, establishing a clear missile gap between themselves and U.S. surface forces in contested regions.8

The proposal here is not to replace all DDGs with unmanned surface vessels, but to refocus our investments on less expensive “payloads” delivered, kinetic or cyber, not the more expensive delivery platforms.9 The goal is greater affordability paired with enhanced fleet capacity and employment options, thereby creating uncertainty in our potential adversaries’ strategic calculus. A stark example is a weapon that has huge maritime influence—changing our strategic risk calculus—yet has no maritime platform: the Chinese DF-21 antiship ballistic missile.
As important as it is to focus on offensive payloads so as to provide rapid change capacity, doing so yields other benefits as well. It lessens many of the political, economic, and bureaucratic challenges associated with investing in capital-heavy platform programs. Since it is easier to modify weapons than platforms, technological upgrades to weapons systems can be accomplished quicker. The forty-year-old Mk 48 heavyweight torpedo illustrates how an offensive weapon may evolve with new capabilities, even with no major modifications to its platform. There is also less political interest invested in weapon procurement, as these systems do not require the resources associated with a new submarine or aircraft carrier. Fewer stakeholders burden weapon design, procurement, assembly, and modification. These factors enable us to modify offensive capabilities quickly as new technology emerges, or to respond better when an adversary surprises us with a new capability. The ability to test, fail, and quickly change a portion of the fleet that is less capital heavy than our traditional forces is an advantage from any perspective.

This philosophy is particularly exploitable in the electromagnetic (EM) and cyber realm. Inexpensive, disposable unmanned aerial vehicles employing radar reflectors or chirp jamming systems can be more cost-effective delivery platforms for EM packages than a single EF-18 Growler. The introduction of inexpensive, credible, and numerous decoys into the air, on the surface, and undersea also is enhanced by the robotics age’s ability to deliver confusing effects with little risk to manned systems. In defense, developing left-of-launch effects against an adversary’s surveillance systems—countertargeting—need not be expensive, and, if synchronized with the movement of actual forces, mitigates risk to sailors operating in contested areas.

In other words, when building a fleet for contested environments while operating under real financial constraints, our investments should concentrate on technologies that enhance the right side of our offensive kill chain and enable us to disrupt the left side of an adversary’s kill chain prior to his launch. Building kinetic weapons for offense and nonkinetic weapons for defense are more cost-effective options than building multimission, hardened, and therefore expensive platforms. Robotic vehicles for delivering these weapons put the focus of warfare close to the enemy and farther from us.

We are not there yet. If resource allocation is a mirror of strategic choices, in the president’s fiscal year 2017 Defense Department budget, of the $183 billion allocated for modernization (which includes procurement and research and development), about 40 percent is allocated for aircraft procurement and shipbuilding, less than 8 percent for munitions. Substantial change, involving Congress and the Navy Department, will be required to move past procuring a platform-centric force to procuring a sensor/weapon-centric force. However, we are beginning to
explore the value of naval offense in employing our current fleet, and this, combined with opportunities presented in the robotics age, provides the opportunity to affect positively both fleet architecture and fleet design.

A TAILORED MARITIME OPERATIONAL AND ACQUISITION CONCEPT

Faced with real challenges to sea control by emerging competitors, we are re-learning the basic tenet that offense is the most cost-effective form of naval warfare—in both acquisition and employment. Our surface navy is exploring distributed lethality, an offensive operational concept enabled by the missile age, and its principles are being adopted for a distributed fleet, with enhanced lethality and targeting capabilities across the force and across multiple domains. We find that the range of an offensive missile matters, but only if its reconnaissance and targeting system holds the advantage over a potential adversary’s reconnaissance and targeting system. As a result, we are reinvigorating EM warfare for surveillance, deception, and countering rival EM systems. Employing some old Cold War tricks enhanced with new technologies, we are considering seriously the use of and training in methods to find, target, and kill in an EM “night” (i.e., when advanced surveillance and targeting systems are available to neither side). These are necessary steps to provide an immediate credible threat, and therefore a deterrent, to potential adversaries’ adventurism in regions we hold to be critical to our national interest.

Yet we cannot abandon tactical and operational defense and still maintain use of the oceans. Only in an ideal Mahanian total battle fleet–on–battle fleet engagement, in which all an enemy’s sea-command capabilities are defeated in a single massive exchange, can offense achieve sea control. The twentieth century showed this idea to be limited to the age of sail, if it applied even then. Preserving SLOCs and associated logistic-hub availability will require defense against ballistic, hypersonic, and cruise missiles, and torpedoes, mines, and guns. Our countersurveillance, countargeting, and close-in soft-kill systems become as critical as our hard-kill systems. Dedicated multimission platforms still will be required to defeat an enemy’s attacks across our sea and air logistics lines.

For the past forty years, the cost-effective way to provide both offensive and defensive capabilities at sea has been to leverage economies of scale by placing as much multimission capability as possible in a ship hull. Our advanced Aegis Burke-class DDGs are the result. Once deployed to, say, the Central Command area of operations, this DDG can conduct counterpiracy activities in the morning, then relocate on short notice to mount theater ballistic-missile defense in the afternoon. It can hunt other surface ships and defend an aircraft carrier from
cruise-missile attack. It is versatile, fast, and multifunctional. Operationally, it is limited only by its draft.

But these ships also are limited by their expense. Plus, if a war starts and we begin to lose them, replacement time will be problematic. In a major war at sea, we may find that our cost-effective peacetime strategy of concentrating on economies of scale has created a situation of “too many eggs in one basket.” The loss of a DDG while conducting an independent offensive surface action becomes a loss of missile and air defense, antisubmarine warfare (ASW), and escort capacity to the fleet—as well as a highly skilled crew.

In the past we addressed economic constraints that prevented our entire fleet from consisting of advanced multimission ships by building a “high-low” mix, incorporating a few special-mission ships to conduct mine countermeasures and logistics. We envisioned the “low” ships in the mix filling the constabulary and escort duties farther from harm's way during times of conflict. But if we consider distributed lethality and the advantage of the offense, combined with advances in unmanned systems, autonomy, and longer-range, smarter missiles, a new opportunity for an economical fleet mix emerges. Its fleet design is the opposite of the traditional high-low mix: we would employ smaller, cheaper offensive platforms to operate forward, and larger sea-control ships to defend against our adversaries’ advanced sea-denial capabilities. A fleet employment of such a force results in finding and destroying the enemy with offensive systems that are more numerous, less expensive, and lower manned. They will be the sea-denial force. More-expensive defensive platforms will be deployed in areas of vital interest, or to protect high-value ships and convoys that are within the enemy’s reach. This “protection” force will be the sea-control force. The adversary cannot disregard our threat of offensive force to focus on attacking our interests while we have placed the best multimission ships to defend those interests. This is distributed lethality combined with smart defense.

As the distributed lethality concept evolves into distributed maritime operations and multidomain concepts, the offsetting of constraining budgets with opportunities in new technologies will nudge us naturally toward this mixed approach. Offensive antiship missiles are becoming smarter and our adversaries have learned to employ them in various ways: from shore, shipping containers, bombers, and missile boats. Our own offensive fleet could be just as versatile, composed of missile corvettes paired with missile-equipped LASVs working in coordination with undersea systems and long-range bombers armed with hypersonic missiles. The objective of the components of this force is to close silently and deceptively; deliver their missiles, torpedoes, mines, or cyber packages; then retire or, if unmanned, stay as a reconnaissance node, if desired.
concept leverages technological advances in missiles, unmanned systems, and countertargeting methods to provide a threat more credible, practical, useful, and economical. (In a calculus of value, a commander is more willing to risk what he or she values less; the more so when its capabilities nonetheless enjoy his or her confidence.) Our traditional fleet primarily will fill the role of the protective force, using strike when necessary to kill threats advancing toward our SLOCs.

This concept is an operational expression of tactics that Arleigh Burke developed during the Solomons campaign. Commodore Burke championed sending the small, maneuverable destroyers ahead of the battle line to conduct coordinated torpedo attacks. Frederick Moosbrugger executed these tactics at Vella Gulf, and Burke did so at Cape Saint George. Burke's fighting doctrine of simplicity, surprise, and delegation of authority also provides the tenets for employing today's offensive force. And, like Burke's skillful employment of radar to provide a tactical edge, the offensive force will be enabled with the latest targeting, countertargeting, and killing technology as it becomes available. A characteristic of light, inexpensive delivery platforms is their ability to be upgraded quickly and cheaply through payload replacement or, if desired, whole-platform change-out.

As the sea-control force evolves through retirement of the top-end multimission platforms, it too will become more tailored by employing the latest technology to counter specific threats, although, by the nature of its purpose, it will remain multimission in character. For example, theater ASW ships still will be required to protect themselves from submarine-launched antiship cruise missiles, and escort duty will require some form of area defense from all threats.

During more-peaceful times, the offensive force can fill peacetime constabulary duties and engagement exercises in forward regions. But dividing a force into offense and protective defense elements is a war strategy, not a peacetime maritime security strategy. Building a portion of the force dedicated to offense, exercising and testing tactics using new technologies in robotics and automation in this force, and engaging allies in its employment signal serious intentions on our part to prepare for actual combat and the willingness to accept some losses. As a result, the new, offensively disposed force provides a stronger deterrence.

The evolution to a tailored fleet from our current force will be more effective and less expensive than simply adding offensive capability to each new ship built in a total multimission force. The tailored fleet will distribute offense to more-numerous platforms, while concentrating defense on areas of vital importance to maintain the true strategic end of our nation's Navy: use of the seas. Such a fleet provides a way to distribute offensive lethality economically and to distribute defense efficiently. Making the offensive force both lethal and sufficiently resilient to ensure its deterrent credibility is addressed next.
WEB FIRES, FOOTBALL, 
AND ACCELERATED CUMULATIVE WARFARE

In a 2016 report to the CNO, Strategic Studies Group (SSG) 35 identified the next “capital ship” as the network of machines and humans. It recognized that emerging technology enables a multitudinous, disaggregated force of manned and unmanned systems to challenge adversary situational awareness and targeting. It is the end vision of a sensor/weapon-centric force and describes a way to employ the offensive fleet. But, in this model, what now is a capital ship? Under the traditional definition, it is the most heavily armed and powerful warship, one of the first rank in size and armament. The capital ship is the main conveyance of naval power. The SSG implicitly selected the “main conveyance of combat power” definition to describe its network of systems and concept of employment. However, if the main conveyance of naval power is defeated, so is the Navy. Capital ships can be viewed as a naval center of gravity. In a network of manned and unmanned systems, the network becomes the naval center of gravity—and therefore a target of interest to an adversary.

Like the SSG’s network, the maturing “web fires” or “netted fires” concept is a vision of netted sensors, shooters, and communications linked together to provide multiple options in executing detect-to-engage sequences across an area of operations. Information will be ubiquitous and accessible to all sensor and weapon operators via a web construct, linked through various methods of mesh networks, burst transmissions, and traditional communication channels resistant to enemy jamming and interference. The mesh network “capital ship” is designed to survive against interference and intrusion, just as the battleship was armored to survive against rifled rounds. It will enable distributed operations or massing of fires across all domains, including the human domain. It provides the surveillance and information advantage needed to employ long-range weapons before an adversary does. This web fires concept will be enriched by the use of unmanned systems, smart weaponry, and autonomy. It is the natural technological evolution of the Soviets’ reconnaissance-strike complex. It is the realization of the third offset, as envisioned by Deputy Secretary of Defense Robert Work. It is the implementation of the SSG network of machines and humans.

Then the fighting starts. How battle resilient the web fires and distributed forces will be depends on the technology that enables them; on the C2 and intelligence, surveillance, and reconnaissance systems and tactical philosophy envisioned when the elements are built; and on the sailors who operate them. The United States cannot be assured of technological superiority in the future, so our Navy must retain war-fighting methods that do not assume assurance of continuous information to all elements of the force. It must create a force
design—defined as the way we fight—to leverage the greatest advantage of American forces: individual command initiative and innovation in the face of adversity.

Web fires and a distributed force to be used as the offensive or sea-denial force should be built from the bottom up, not from the top down, meaning that, if necessary, every manned node in the web can act independently as a scout, commander, and shooter within its own area of responsibility. This decentralized execution is not a new concept for U.S. naval forces (every submariner will recognize the C2 concept), but unless the web is built with self-reliant, capable nodes from the start, we may not be able to implement fully a command philosophy of distributed decision making, particularly if we must fight in the electromagnetic night. “Offboard” information provided by the web, or subelements of the web, is then viewed as an enhancer, but not necessary to employ weapons. The offensive force will be network enabled, not network dependent.

Employing the offensive fleet as a distributed force comprising self-sufficient weapons-launch platforms, augmented by web fires’ off-platform information when available, achieves a highly resilient force structure. In a fight, the force network leverages a strategy of accelerated cumulative warfare, relying on individual engagements to create the desired emerging operational and strategic effects. It confounds an adversary by offering a multidomain, independent, dispersed, and offensively oriented challenge to defeat. This foundational philosophy turns the focus to tactical offense, reorients acquisition from platforms to weapons (kinetic and nonkinetic), and accelerates employment of technologies in missiles and robotics. It leads to a more numerous force composed of smaller platforms, as John Arquilla envisioned in his 2010 Foreign Policy article “The New Rules of War.”

In execution, such an offensive force resembles an offensive football squad. After a play is called, each player proceeds to his assigned area, with full knowledge of his role in the called play. No communication is required after the ball is hiked. Although everyone has a role, each, if necessary, also can carry the football, run for a touchdown, or tackle. If the quarterback views new information after the play is called, a short audible at the line may change the play. Employment of the offensive fleet in a distributed force is similar. Pairs of delivery systems may move into position on the basis of commander’s intent and up-to-date intelligence; no communication is required. If an audible is called, it can be communicated through brief signals in code along short-burst, mesh-network paths. And each player, if necessary, can target and shoot independently within his or her area of responsibility.

The emergent effect of this cumulative strategy is sea denial close to the enemy’s objectives, with or without a continuous C2 network. This achieves the intent of both the web fires and manned-and-unmanned network concepts
without dependency on an actual network, thereby eliminating a possible single-point vulnerability for the enemy’s attention. This enhances force resiliency and increases each unit’s survivability.

ASSESSING THE CONCEPT
For a comprehensive quantitative assessment of a future naval force, we would need a complete force architecture with specific numbers of ships, aircraft, submarines, weapons, unmanned platforms, facilities, and basing locations. We also would need a concept of employment, operations, doctrine, and tactics for the force architecture—a force design. These types of studies are conducted cyclically, with the most recent set requested by Congress and delivered to it in 2017.28

The intent of this article, however, is to present a foundational precept on which to build both a fleet architecture and a fleet design: seeking to increase the fleet’s offensive power and ability to adapt by leveraging the robotics age’s emerging technologies in kinetic and nonkinetic warheads, missiles, and platforms to deliver them. In lieu of a detailed quantitative assessment, a subjective overview of the concepts will be discussed using more-strategic metrics. Although many metrics could be selected to assess alternative future naval force structures, as its strategic litmus tests this analysis will use reactivity, robustness, and resilience. For this purpose they are defined as follows:

- **Reactivity** is a fleet’s ability to capitalize quickly on new technology advancements and react to a “capability surprise” from a potential adversary.
- **Robustness** is a fleet’s ability to be relevant across a variety of futures that differ in national priorities, geopolitical and geoeconomic conditions, maritime strategies, and conflict scenarios.
- **Resilience** is a fleet’s ability to sustain damage in a particular future and conflict scenario while still accomplishing national objectives. Resilience is a subset of robustness, and is similar to the concepts addressed in current Navy staff analyses conducted to assess programmed fleet capabilities.

**Reactivity**
Much of the foregoing highlights the characteristics necessary for a payload-focused force to be more adaptable than the current acquisition program’s expensive, long-lived, multimission ships and aircraft. By increasing the proportion in the mix of smaller (whether unmanned or manned single-mission) delivery platforms, we increase a fleet’s reactivity. Missile seekers, sensors, software, and unmanned systems can be replaced or modified, tested, corrected, retested, and introduced into the fleet with fewer challenges than a multimission destroyer.
The former lend themselves to advantages in maintenance and repair as well, with less nonavailability time fleet-wide. For example, when a DDG is in dry dock availability, the fleet loses all its mission areas. This is an aspect of the “too many eggs in one basket” finding in our previous wartime example. In contrast, when a single-mission platform is undergoing maintenance, the fleet loses only that one mission. In addition, numerous smaller platforms allow a greater portion of the fleet to be forward deployed while the remaining force is being updated in rear areas.

Robustness
Although the ability to perform the enduring missions of strategic deterrence, protecting SLOCs (sea control), denying adversary sea communications (sea denial), and projecting power from the sea is desirable in naval forces, the capabilities and capacities of a nation’s navy to exercise these missions are influenced by the political will, economic resources, and global power aspirations of its people. These can change faster than the capital-intensive, long-lived, multimission ships and submarines of our programmed force. A comprehensive assessment of a fleet architecture’s robustness or utility across several international political and economic environments—with various competing national strategies and possible conflicts—will involve extensive future scenario planning to assess strategic risk. For brevity, only general observations are made here.

Our current programmed force is heavily invested in complex multimission platforms that employ advanced technologies, mainly in defense. It seeks to optimize the fleet’s influence in a future that is a projection of our current fiscal and political environment, with operational concepts born during World War II. Although any robust U.S. fleet will have some of these platforms, allocating too large a share consumes and locks in future fiscal resources for maintenance, manning, training, and operations. In addition, if the fleet is successful in deterring the very-high-end conflicts for which these platforms are built, those platforms may find themselves conducting missions for which they are not well suited, such as when cruisers conduct counterpiracy operations. Worse, if fiscal constraints become onerous, the expense of operating these platforms may become prohibitive, so the only affordable strategy becomes to employ them as a “fleet in being”—tied to the pier. Adding to the mix more smaller platforms, both manned and unmanned, is a cost-effective way to provide policy makers with design options for fleet employment, reconfiguration, and basing. A core portion of the fleet comprising long-lived, multimission ships remains dedicated to exercising sea control, while the offensive sea-denial force composed of smaller, less expensive systems may grow or diminish as the national strategy and available national treasure vary.
Resilience (or Toughness)

As mentioned, fleet resilience is a subset of fleet robustness. The ability of the fleet to sustain damage yet continue to operate in a contested environment against an adversary may be achieved in two major ways: build in a vigorous damage-containment design through redundancy and compartmentation in individual platforms, or have many platforms.

Advanced weaponry’s ability to inflict a mission kill makes building individual ship resilience challenging and costly. Having many ships in a fleet also imposes costs, but can be achieved if the fleet, not individual ships, is built with a redundancy of smaller, mission-specific platforms organized into task groups that are dispersed while in contested waters.

A fleet with numerous offensive sea-denial forces, as in the fleet mix proposed here, would enjoy greater resilience than the current programmed force. The latter relies more on active defense and individual platform survivability to sustain the fleet in a contested environment, but in the missile and robotics age this will remain difficult and expensive to achieve and maintain.

We are in the missile age and at the dawn of the robotics age. Cyber warfare already has arrived in peacetime and will affect combat operations in wartime. Emerging technologies give us new ways to convey naval power and may allow us to overcome the inhibitors to changing a capital-intensive, long-lived, platform-centric fleet.

We would begin this journey by tailoring the fleet into offensive sea-denial forces and protective/defensive sea-control forces. The offensive force would be built using manned and unmanned systems, in all domains, in relatively large numbers, to deliver kinetic and nonkinetic effects. This would be a “package”-centric force, with short testing, learning, and upgrading cycles. It would be employed under a netted-web-fires and distributed-fleet concept, but from the bottom up, with each manned node capable of independent weapon employment. The manned systems, such as missile corvettes, would be built in sufficient numbers to conduct the mainstay peacetime presence and constabulary duties, in cooperation with allies.

Our traditional fleet, with its advanced multimission capabilities, would have the more difficult defensive or sea-control role. It too could be upgraded with lessons learned from the offensive force and to counter new enemy technologies. With constraining budgets, our traditional fleet would have to be somewhat smaller to fund the less expensive offensive fleet, but it no longer would have to meet the presence requirements that drove up its force numbers.
This fast-evolving wartime fleet concept will challenge potential adversaries with a close-in, lethal, yet resilient threat, while providing robust defense to our nation and our own SLOCs. A fleet architecture founded on leveraging the missile and robotics age in this manner will increase its capability to be reactive, robust, and resilient.

NOTES

1. Various "kill chain" models exist to describe a tactical engagement. In one the steps are finding the enemy forces, fixing their location, tracking their movements, targeting with a weapon system, engaging them with that weapon, and assessing the damage after the attack. By advocating focusing on the "right side" of this kill chain, I mean we need to invest considerable time in maximizing our weapon’s autonomy and its other capabilities during the engagement phase, with less concern about which platform launches it. Later in this article, when we discuss attacking the "left side" of the adversary’s kill chain, we mean countering their fixing and targeting capabilities.


7. The DDG vs. LASV cost trade-off range comes from comparing a DDG procurement cost estimate of $1.5 billion with an antisubmarine warfare (ASW) continuous trail unmanned vehicle (ACTUV) procurement cost of $25 million. For the DDG, see Pat Towell and Lynn M. Williams, *Defense: FY17 Budget Request, Authorization, and Appropriations*, CRS Report 7-5700 (Washington, DC: Congressional Research Service, April 12, 2016); information for the LASV relies on Scott Littlefield, program manager, interview by author, February 14, 2017. The more bounding constraint is a daily operating cost for the DDG of seven hundred thousand dollars compared with an estimated twenty-thousand-dollar daily operating cost for the ACTUV. Littlefield interview.


9. The concept of packages over payloads was introduced by Adm. Jonathan W. Greenert, USN, in "Payloads over Platforms: Charting a New Course," U.S. Naval Institute Proceedings 138/7/1,313 (July 2012), pp. 16, 23. The present article highlights the importance of this concept to leveraging fully the missile and robotics age, and provides a venue to engender more-rapid change.

10. The foremost example of the "two-stage" system approach was the aircraft carrier. Beginning in the 1930s, the U.S. Navy kept its carrier fleet viable by upgrading carrier air wings, and later by upgrading the missiles under the wings of the aircraft. The nuclear-powered carrier and carrier air wing are now a "three-stage" system.

3. For a discussion on single-mission ships’ value in the littorals, see Wayne P. Hughes Jr. [Capt., USN (Ret.)], “Single-Purpose Warships for the Littorals,” U.S. Naval Institute Proceedings 140/6/1,336 (June 2014).

12. Electromagnetic night signifies a contested environment in which the EM spectrum is challenging and the use of global positioning systems, long-range communications, and national technical means is not assured.

13. For a discussion on single-mission ships’ value in the littorals, see Wayne P. Hughes Jr. [Capt., USN (Ret.)], “Single-Purpose Warships for the Littorals,” U.S. Naval Institute Proceedings 140/6/1,336 (June 2014).


15. Bryan Clark et al., “Alternative Future Fleet Architecture Study” (Center for Strategic and Budgetary Assessments study prepared for the Navy Department, 2016). This study presents a very similar concept, dividing forces into deterrence forces (forward tailored by region) and maneuver forces (conducting traditional fleet moves where needed).


18. Several good books cover destroyer operations and tactical doctrine in the Pacific theater, including Theodore Roscoe, Thomas L. Wattles, and Fred Freeman, Destroyer Operations in World War II (Annapolis, MD: Naval Institute Press, 1953). However, for a concise summary of Burke’s tactical doctrine and integration of radar into C2 philosophy, see the description in a Naval War College paper of the battle at Empress Augusta Bay in William H. Kimball [Cdr., USN], “Command & Control ‘Little Beavers’ Style: Arleigh Burke in the Solomon Islands Campaign” (1994), available at www.dtic.mil/.

19. This is not to say that engagement activities are less important. For a good discussion on their foundational importance, see Robert C. Rubel, “Posture versus Presence: The Relationship between Global Naval Engagement and Naval War-Fighting Posture,” Naval War College Review 69, no. 4 (Autumn 2016), pp. 19–29.


27. In his upcoming third edition of Fleet Tactics (Naval Institute Press), Wayne Hughes calls for a new “signal” book that can convey tactical information in brief, agreed-upon signals.


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ORGANIZATION AND INNOVATION

Integrating Carrier-Launched UAVs

Greg Smith

In 2015, the Secretary of the Navy asserted that the F-35 likely would be the last manned fighter aircraft the Navy would buy, and the Department of Defense (DoD) embarked on a Third Offset Strategy that plans to leverage unmanned and autonomous systems (UASs) and human-machine teams to ensure technological superiority over potential adversaries. Yet in spite of significant advances in robotics, artificial intelligence, and UAS technology, the Navy’s unmanned aerial vehicles (UAVs) remain predominantly intelligence, surveillance, and reconnaissance (ISR) assets, and none are carrier based. Effective employment of UAVs by the Navy’s carrier air wings requires more than the acquisition of new technology, and without focused efforts to accelerate integration it likely will take several more decades before carrier-launched UAVs (CL-UAVs) are optimized across the entire spectrum of carrier aviation missions.

Throughout history, organizational changes have been instrumental to enhancing the effectiveness of military technology. The integration of CL-UAVs can be accelerated by making organizational changes that facilitate the development of an internal constituency within the carrier aviation community and foster experimentation and bottom-up innovation.

It has been one hundred years since Secretary of the Navy Josephus Daniels authorized the U.S. Navy’s first investment in UAVs. During World War II, the Navy became the first service to use UAVs in combat, employing TDR-1 assault drones at Bougainville and Balalai Islands in 1944. These early UAV investments contributed...
to the development of target drones in the 1920s and ’30s, then cruise missiles in the 1950s and ’60s. However, with the exception of these two mission areas, neither of which required the aircraft to return safely after a mission, naval aviation’s manned aircraft have outperformed unmanned systems. Even when high casualty rates for reconnaissance aircraft and crews during the Cold War and Vietnam conflict led the U.S. Air Force to invest heavily in UAVs and satellites, the Navy eschewed significant investment in UAVs, especially for carrier-based operations.5

The U.S. military has operated UAVs continuously since World War II, and today all services employ UAVs in some capacity. The most extensive operational employment of UAVs during the twentieth century involved the Air Force’s derivatives of Ryan Firebee target drones, which executed more than 3,400 reconnaissance “sorties over North Vietnam and China in the 1960s and early 1970s.”6 The U.S. Navy did employ UAVs, such as the QH-50 Drone Anti-Submarine Helicopter (DASH) between 1960 and 1971 and the RQ-2 Pioneer beginning in 1986, but these were developed to meet narrow mission requirements of the surface fleet and were never integrated into naval aviation. Since the 1990s, UAVs have demonstrated increasing reliability and utility in combat, and have become integral to ISR and counterterrorism missions around the globe. The Navy has accumulated more than 26,000 flight hours in its two largest UAV programs, the MQ-8 Fire Scout and MQ-4C Triton, but neither operates from the centerpiece of naval aviation—the aircraft carrier.7

There are many reasons the U.S. Navy has not fielded a CL-UAV yet, but certainly technological immaturity long rendered tactically effective naval UAVs cost prohibitive, and the additional performance requirements for carrier aviation exacerbated the cost-capability dilemma that plagued nearly all large UAV programs in the twentieth century.8 The Navy’s dismal experience with its first unmanned helicopter, the QH-50 DASH, of which nearly 50 percent were lost in peacetime accidents, highlighted the technological shortcomings of shipboard UAVs and may have contributed to a bias for manned aircraft among both surface warfare officers and aviators.9 However, in 2004 a Defense Science Board task force concluded, “There is no longer any question of the technical viability and operational utility of UAVs,” and a 2008 study coauthored by Robert O. Work, now Deputy Secretary of Defense, observed that “the combat value of unmanned aircraft is no longer much debated.”10 A CL-UAV has been in various stages of research and development since 1999, but fiscal constraints and prioritization of other naval aviation requirements have slowed its development, even though the rise of great-power competitors and the proliferation of antiaccess/area-denial (A2/AD) capabilities pose the most significant challenges to carrier air wing operations since World War II. As DoD embarks on a Third Offset Strategy that is
based on human-machine teams, the aircraft carrier and its air wing—together, the centerpiece of U.S. power projection for nearly seventy-five years—must adapt to integrate CL-UAVs.

Optimizing the military effectiveness of CL-UAVs involves much more than the introduction of a new platform. The Navy made important organizational changes to sustain and improve UAV development in recent years and is on pace to deliver the carrier-launched MQ-25 Stingray by 2020; in a competitive fiscal environment, merely programming a CL-UAV is something of a bureaucratic accomplishment. However, it represents only one step toward realizing the potential of the CL-UAV innovation, which still faces institutional and cultural barriers. Organizing to support the development of a CL-UAV constituency within the carrier aviation community will facilitate adoption and integration of the new technology, and organizations that enable experimentation and exploit end-user innovation will accelerate the development of innovative operating concepts and follow-on requirements that will optimize its effectiveness.

TECHNOLOGY, ORGANIZATION, AND MILITARY EFFECTIVENESS
The ultimate goal of pursuing and acquiring CL-UAVs, or any new military technology, is to increase military effectiveness.11 George Raudzens observed that even significant technological advantages merely influence the way wars are fought, rather than the “outcomes of combat.”12 Stephen Biddle has argued that force employment was as much the key to the success of the U.S.-led coalition during the 1991 Gulf War as was technological superiority.13 Although there is room for disagreement with these well-defended assertions, there is little doubt that the utility of a new weapon system in combat depends as much on the training of associated personnel, the system’s interoperability with other systems, the ability to support and maintain it in sufficient numbers, and the development of appropriate doctrine, operational concepts, and tactics as it does on the system’s technological superiority. Organization greatly influences all these elements, from the unit to service levels, and therefore is integral to optimizing the effectiveness of the technology. The hoplite phalanx that optimized the shield and spear and Napoleon’s corps d’armée that enhanced employment of artillery, infantry, and cavalry illustrate the influence of organization on military effectiveness.

Furthermore, greater technological leaps may necessitate a more significant departure from traditional organizational constructs to optimize employment.14 As Edward Luttwak has argued, “If the new is a real innovation, not just a new model, . . . then the armed forces must change their structure to absorb it, usually by creating new units.”15 For example, the U.S. Air Force (and its predecessor, the Army Air Corps) and U.S. Cyber Command were created to facilitate the application of new technologies to warfare. It remains to be seen whether
CL-UAV optimization will require new units or merely the introduction of CL-UAV platforms into existing organizations. The U.S. Air Force created an entire air wing with subordinate squadrons to employ its remotely piloted aircraft, but also found it necessary to assign some remotely piloted aircraft squadrons to fighter wings. The Navy created a new squadron to operate the MQ-4C Triton as a subordinate command under an existing maritime patrol and reconnaissance wing; after originally planning independent MQ-8 Fire Scout units, it now is assigning the rotary-wing UAV to existing helicopter squadrons. These organizational decisions are driven by considerations of cost, safety, and manpower, with the unstated goal of minimally disrupting current operations, but they also should take into account how organization will influence military effectiveness over the long term.

Failing to make organizational changes or making poor organizational decisions can reduce the military effectiveness of new technology drastically. In the case of the French introduction of a carriage-mounted machine gun, the mitrailleuse, in 1870, poor organization not only prevented optimization of the weapon but completely negated its technological advantage. Prior to the Franco-Prussian War, the French secretly procured the mitrailleuse, which was capable of accurately firing three hundred rounds per minute to ranges of five hundred meters—a vast improvement over existing weaponry. However, the French army assigned the mitrailleuse to the artillery, largely on the basis of the capacity of that branch to provide the necessary logistical support (e.g., wagons and horses that could transport the weapon and its ammunition), without due consideration to how the weapon would be employed on the battlefield or how its firepower could alter fundamentally the way the infantry engaged in combat. Although the mitrailleuse provided the French with sufficient firepower to repel Prussian infantry, the weapon remained with the artillery—which, in keeping with doctrine, was positioned behind the infantry on the field of battle. In that position, the mitrailleuse rarely could be brought to bear on the enemy without fratricide until the Prussians had broken through the French infantry lines. Organizational changes would have been required to provide the necessary logistics to the infantry or to modify artillery employment doctrine. Assigning the weapon system to the “wrong” branch and failing to make organizational changes negated the firepower advantages of the mitrailleuse and drastically reduced its military effectiveness.

Effective military innovation is a continuous process that is rarely complete before the end user employs new technology in combat or realistic exercises. In the case of the mitrailleuse, the project’s extreme secrecy prevented end users from performing the experimentation and concept development that likely would have identified the need for organizational or doctrinal changes. There is
a substantial body of literature that analyzes military innovation and the factors that aid or hinder the adoption of technology. In a 2006 review of that literature, Adam Grissom highlighted a lack of analysis of bottom-up innovation. He described the U.S. Army’s experience with the Force XXI initiative to illustrate how users employed the system’s chat, e-mail, and moving-map capabilities in combat in ways the system’s designers never envisioned. He also observed that this end-user influence mirrored what was being discussed in scientific and technical literature about bottom-up innovation in the commercial sector. Since that observation, much of the innovation literature has used bottom-up innovation or adaptation to explain commercial and military changes, and it suggests an important and perhaps increasing role of the end user in technological innovation.

In an environment of rapidly changing and proliferating technology, there is a natural tendency to refine a system continuously in the laboratory, attempting to incorporate all the latest scientific and technical advances before releasing it to the operators; but definitive innovations may not occur before the end user has adopted that technology and applied it for tactical advantage. In Grissom’s words, “the impact of a new technology, doctrine, or organizational schema may not solely be in the hands of the senior officers and civilians.” Those making organizational decisions regarding the MQ-25 Stingray and future CL-UAVs should consider the likelihood that innovation will continue and may accelerate when the UAVs are introduced to the fleet.

In the past, the U.S. Navy demonstrated a willingness to explore the potential of unmanned platforms to solve unique tactical or operational challenges of the surface fleet—and a tendency to abandon UAVs in favor of competing manned platforms or more reliable and affordable alternatives as soon as those were available. The individual decisions, such as the one to cancel the QH-50 DASH, were influenced by poor reliability and technological immaturity, but they also contributed to a clear preference for manned aircraft in the Navy. Subsequent technological improvements have been insufficient to ensure adoption of UAVs by carrier aviators, so senior leaders have found it necessary to make policy and organizational changes to preserve the Navy’s UAV development and accelerate the acquisition of supporting technologies. Additional organizational changes will be necessary to optimize the military effectiveness of CL-UAVs.

ORGANIZING TO SUPPORT UAV PROGRAMS
Bureaucratic organizations such as the military services tend to preserve the status quo and resist disruptive changes. As a result, peacetime military innovation, if it occurs at all, usually is an evolutionary process. Adopting new approaches during peacetime usually requires clear recognition of a changing security environment, an outside threat, or strong top-down leadership. Even though the
United States has been at war for the past fifteen years, its air superiority has not been challenged, and therefore there has been no natural motivation for the carrier air wing to adopt disruptive innovations such as UAVs into all carrier air wing missions. Some have argued that the growing threat that A2/AD technologies pose to the survivability of the carrier air wing warrants greater prioritization of CL-UAVs. However, the carrier air wings plan to address the A2/AD threat through weapon system improvements, including next-generation manned aircraft, and new countermeasures rather than through integrating UAVs or disruptive technologies that might require a more dramatic shift in war-fighting concepts.

The introduction of CL-UAVs is essentially a peacetime innovation that is proceeding at an evolutionary pace and has required strong leadership to overcome institutional and cultural barriers to change. UAV development has benefited from technological advances in navigation, communications, autonomy, and computer processing, as well as strong support from senior DoD and congressional leaders for most of the past fifteen years; but to ensure program survival, especially in competitive budget environments, organizational changes have been necessary.

In 2015, the Navy created the office of Deputy Assistant Secretary of the Navy for Unmanned Systems (DASN UxS) and the Unmanned Warfare Systems Directorate (OPNAV N99) to coordinate better the disparate efforts to develop UASs to support naval operations in the air, land, surface, and subsurface environments. These changes reflect the commitment of civilian and military leaders to achieving a technological advantage over adversaries through UASs. The centralization of authority and accountability for immature unmanned systems under OPNAV N99 removed risky investments from the budgets and portfolios of the other warfare directorates and provided the opportunity to expedite the acquisition of UASs and supporting technology and to ensure their technological readiness prior to commencing initial production. It also facilitated the authorization of additional funding for Navy UASs in the fiscal year 2016 National Defense Authorization Act.

However, neither DASN UxS nor OPNAV N99 is adequately manned or resourced for the task of fully integrating unmanned systems. The establishment of such offices reflects the high priority senior leaders place on acquiring innovative unmanned and autonomous technology, but, as discussed previously, the acquisition of technology is only one aspect of successful military innovation. Even though the Director for Unmanned Warfare Systems will play a critical role in evaluating prototypes and ensuring the technological readiness of UASs, OPNAV N99 lacks the authority over manpower and organizational decisions.
that ultimately will determine the pace of integration and the effectiveness of the new technologies.

Prior to the establishment of OPNAV N99, the Navy found it necessary to insulate unmanned platforms from direct budget competition with manned platforms. To accomplish this, the Navy assigned responsibility for unmanned programs to the Director for Information Dominance (OPNAV N2/N6) rather than the Director for Air Warfare (OPNAV N98). This organizational construct has been reflected formally in the Navy Program Guide since 2012, when coverage of all Navy UAV programs of record moved from the Naval Aviation / Aircraft section to the Information Dominance / ISR section of the report. OPNAV N2/N6 is responsible for providing ISR capabilities to support fleet and combatant commanders, and UAVs are an effective way to do so. OPNAV N2/N6 also is responsible for the command, control, communications, and information systems that are essential to the performance of networked UASs. So it is not unreasonable for UAV requirements to be addressed by OPNAV N2/N6, even though OPNAV N98 is responsible for the majority of naval aviation programs, including aircraft carriers and most manned aircraft.

Locating UAVs organizationally in the OPNAV N2/N6 portfolio essentially reduces direct budget competition with manned aircraft (for missions other than ISR) and has facilitated UAV development and initial procurement. In spite of the challenging fiscal constraints of recent years and the need to recapitalize the majority of naval aviation's manned platforms, the decision to cut or delay UAV programs to sustain the procurement of manned aircraft could be made only at the highest levels.

However, the assignment of UAV requirements to OPNAV N2/N6 perpetuates the perception that naval UASs are “only” ISR assets. This artificially channels UAVs toward the ISR mission, inherently restricting UAV integration across the spectrum of carrier air wing missions. This raises the question whether assigning the Unmanned Carrier-Launched Surveillance and Strike (UCLASS) or follow-on CL-UAVs to OPNAV N2/N6 is analogous to assigning the mitrailleuse to the French artillery in 1870. Is the Navy limiting the military effectiveness of its UAVs by making organizational decisions on the basis of the perception that they will remain ISR platforms, without due consideration of how CL-UAVs could be employed in other carrier air wing missions?

Perceptions about the role(s) of CL-UAVs also influence decision making about organization and manpower for CL-UAVs at the unit and wing levels. Ultimately, the Commander, Naval Air Forces (CNAF), who typically is a carrier aviator from the strike fighter community, will determine the structure of CL-UAV units. CNAF balances manpower requirements to support UAVs with those
for aircraft carriers and manned aircraft units. The Director for Air Warfare is the resource sponsor for the vast majority of the naval aviation budget, including manpower, but, as noted previously, is not responsible for UAV programs. This structure, combined with the perception that UAVs are ISR-only assets, creates institutional challenges to prioritizing manpower and organizational support for UAVs, especially for missions other than ISR.\(^{31}\)

In sum, the organizational changes the Secretary of the Navy and the Chief of Naval Operations (CNO) made in recent years were designed to ensure the continuation of UAV programs and to influence the acquisition of innovative UAS technology in the face of bureaucratic and institutional resistance. By separating UAVs from other air warfare requirements, the Navy distributed financial and technical risk to (and therefore resistance from) influential parts of the Navy’s bureaucracy. These changes will continue to facilitate the introduction of new unmanned and autonomous systems for ISR missions, but the institutional separation of UAVs from much of the carrier aviation community perpetuates the perception of UAVs as external, ISR-only assets.

Therefore, integrating CL-UAVs across carrier aviation missions will require deliberate efforts to overcome institutional and cultural perceptions. Historically, optimization and integration of technological innovations have been facilitated by creating an internal constituency and conducting experimentation that encourages bottom-up innovation.

**ORGANIZING TO DEVELOP AN INTERNAL CONSTITUENCY**

In his doctoral dissertation on UAV weapon system innovation, Thomas Ehrhard explains that “although external advocates and agencies undoubtedly play an important role in weapon system development and adoption, the symbiosis between service and machine required for combat innovation depends on the mobilization of an internal constituency.”\(^{32}\) Ehrhard is referring to the inadequacies of joint acquisition programs that plagued UAV development following the enactment of the 1986 Goldwater-Nichols Act, but the same is true within the Navy as various internal constituencies vie for a portion of a finite budget. The establishment of OPNAV N99 and DASN UxS created external advocates for unmanned systems, but not constituents within the carrier aviation community. Stephen Rosen explains in *Winning the Next War: Innovation and the Modern Military* that developing such a constituency to support a technological innovation typically requires a generation—the amount of time it takes for the junior officers who operated the technology in combat to rise through the ranks to positions of influence.\(^ {33}\)

Ehrhard also argues that “full integration includes the establishment of dedicated units, the adoption of follow-on systems, and the development of a
An internal officer constituency is critical in the face of cultural or institutional resistance because it can advocate for program continuation, explain system shortcomings, identify requirements to improve the technology, develop new operating concepts, and be held accountable for success or failure. The fact that past UAV programs have failed to develop an internal officer constituency within naval aviation may have contributed to their failure to endure.

The Navy's first combat UAV, the TDR-1 assault drone that was used against Japanese targets in the Solomon Islands in 1944, did develop an officer constituency—but for guided missiles, as opposed to UAVs. After successful demonstrations in early 1942, Commander Delmar S. Fahrney was assigned as program manager of Project OPTION. Leveraging the latest television technology from Radio Corporation of America (i.e., RCA), OPTION developed the TDR-1, which was guided remotely by pilots in the rear seats of specially configured TBM-1C Avengers. The mixed combat performance of the assault drones (thirty-one of fifty struck their poorly defended targets, and fewer than half inflicted meaningful damage) encouraged its advocates regarding the viability of the concept but failed to gain the support of carrier aviators. The assault drone program was canceled in September 1944 owing to a combination of technological immaturity and competition from other platforms. However, the experience with Project OPTION developed a constituency of officers and technical experts who became the lead advocates for the development of guided missiles. Fahrney went on to command the Naval Missile Test Center at Point Mugu, California (now the Naval Air Warfare Center, Weapons Division), retired at the rank of rear admiral, and has been called the "Father of the Guided Missile."37

In spite of eight years of operationally employing the QH-50 DASH, no internal officer constituency developed. To the contrary, DASH was rejected by both the surface and aviation communities. Aviators were wary of flying in proximity to the drones and often discouraged their integration into fleet operations. The surface community was not committed to training its personnel to operate the UAVs, and ship captains who employed the unreliable drones risked being held accountable for their many failures. Overcoming DASH's technical shortcomings would have required a strong constituency to advocate for expensive improvements to its control systems or extensive training for personnel. The development of antisubmarine rockets, which gave the surface Navy the ability to attack submarines at range, and Light Airborne Multipurpose System (i.e., LAMPS) helicopters, which provided an officer constituency that integrated the manned platform into fleet operations and could be held accountable for mishaps, offered suitable alternatives to DASH, which were preferred by both aviators and surface warfare officers. Lack of technological reliability was the
most important impediment to DASH’s acceptance, but without developing an internal officer constituency the innovation would not have been integrated into naval aviation even if it had been more reliable. A quick comparison between the respective integrations of the RQ-2 Pioneer into the Navy and Marine Corps further illustrates this point.

The establishment of dedicated units contributed to development of an internal constituency for small, tactical UASs (STUASs) and enabled Marine Corps aviation to integrate the RQ-2 Pioneer and follow-on platforms. The Navy and Marine Corps acquired Pioneer in the 1980s, and both employed the system during the 1991 Gulf War. The Marine Corps established remotely piloted vehicle (RPV) companies under its surveillance, reconnaissance, and intelligence groups. Then, in the mid-1990s, the RPV companies became Unmanned Aerial Vehicle Squadron 1 (VMU-1). Integration continued as two VMUs were established and assigned to Marine aircraft-control groups, and today they are being integrated into Marine aircraft groups with other fixed-wing aircraft. The Marine Corps's stated objective for STUASs is for them to “play a key role in all USMC missions across the range of military operations, to include forward presence, security cooperation, counterterrorism, crisis response, forcible entry, prolonged operations, and counterinsurgency.” This should not imply that the integration of UAVs into Marine aviation has been seamless, but—especially when compared with the Navy’s experience with the same platform—it demonstrates the value of establishing a constituency of dedicated units to support the UAV innovation.

The Navy, which acquired Pioneer to provide reconnaissance and targeting support for its battleships, employed aviators to run Pioneer detachments but did not establish dedicated UAV squadrons. When the battleships were decommissioned, the Navy lacked an internal constituency to support follow-on models, so since the mid-1990s the RQ-2 has been used primarily as a test and evaluation platform. Certainly there were other factors, such as cost, unique mission requirements, and the post–Cold War security environment, that influenced the rate of integration of Pioneer into the Navy and Marine Corps aviation communities, but the fact that the service that developed an internal constituency with dedicated aviation units also better sustained and integrated the innovation is an important correlation.

In addition to a service's establishing dedicated units, Ehrhard argues that to explore the utility of UAVs and completely integrate them into the service, UAV operators should remain a part of their aviation subgroup and maintain “currency in manned flight operations [to] develop their aviation professionalism and give them some credibility when teamed with rated pilots on staffs.” Written more than a decade prior to the restrictions of the Budget Control Act of 2011 and the Optimized Fleet Response Plan, these sentiments represent an
unachievable ideal for the naval aviation community in 2017. However, still relevant is the need to ensure that UAV operators possess sufficient credibility to positively influence interoperability across the air wing and adequate experience to develop effective operating concepts and tactics. Attracting qualified personnel who are also competitive for future promotion will be critical to developing the internal constituency and will enhance greatly the integration of the CL-UAV.

The U.S. Air Force has taken deliberate steps to create an internal constituency for its remotely piloted aircraft—with mixed results. The Air Force originally employed pilots from other communities to operate its remotely piloted aircraft (RPA). Many who were competitive for promotion within their original communities were able to stay on track for continued promotion and command; for example, the current Chief of Staff of the Air Force, General David Goldfein, lists the MQ-9 in his official biography among the aircraft he has piloted. The number of RPA pilots in the Air Force is increasing, but there remain manpower and organizational challenges that have required significant policy adjustments, including creating an RPA pilot officer community, increasing incentive pay for RPA pilots, and authorizing enlisted airmen to serve as RQ-4 Global Hawk pilots. It is unclear whether RPA pilots will be competitive for wing command or promotion to the highest levels. It also is not yet possible to determine how separating RPA pilots from the fighter and bomber communities will influence the integration of UASs into non-IS missions. In spite of these challenges, there is little doubt about the Air Force’s commitment to UAV integration. Navy and Air Force war-fighting requirements and officer career paths are distinct, but additional analysis of Air Force organizational decisions regarding UASs may provide insights for the Navy.

Thoughtful organization can provide incentives for highly qualified naval aviators, including both pilots and naval flight officers, to pursue assignments in UAV units. In a study of military aviators published in 2007, James FitzSimonds and Thomas Mahnken found that opportunities for promotion and command were likely adequate and provided key incentives for “drawing junior officers into new operational specialties” such as UASs. Command at sea remains the primary goal and the key to continued promotion for career-oriented naval officers. Therefore, the Navy should articulate viable career paths for officers assigned to duties operating CL-UAVs.

Organizational changes, such as establishing separate CL-UAV squadrons, can provide additional command opportunities for CL-UAV aviators. As Stingray is introduced to the fleet or CL-UAV units are established, consideration also should be given to processes and career timing that will enable junior officers to complete successful tours in manned platforms, operate CL-UAVs in subsequent tours, and return to manned platforms as department heads and commanding
officers. This will both enhance integration between manned and unmanned units and ensure that officers assigned to operate CL-UAVs remain competitive for command. To accomplish these objectives so as to support the introduction of the MQ-4C Triton, which theoretically can be controlled from anywhere via satellite, the maritime patrol community intends to man its operational Triton squadrons with aircrews on shore duty so they can continue to achieve their critical sea-duty milestones in manned maritime patrol and reconnaissance squadrons. Employing officers on shore duty likely will not be an option for carrier-based units, so other solutions will be required. In any event, CL-UAV operators will need viable career paths if they are to form an influential constituency within the carrier aviation community.

If separate CL-UAV units are created, consideration should be given to establishing CL-UAV squadrons as commander (O-5) at-sea commands to attract top aviators and facilitate the development of an internal constituency whose members are competitive for promotion to captain (O-6). Another option would be to select postcommand commanders who are already competitive for promotion to fill the initial officer-in-charge or squadron commanding officer roles, to build a senior internal constituency rapidly. Thoughtful organizational decisions could attract high-quality officers and greatly facilitate the creation of an internal constituency to support the development of operating concepts and follow-on platform requirements.

In making organizational decisions, the naval aviation community should verify assumptions about the professional desires of junior officers and assess their impact on the fleet’s UAV manpower over the long term. Many have argued that aviators have not integrated UAVs readily because the systems challenge what it means to be an aviator and a warfighter. Stereotypes suggest that aviators always will avoid assignments that keep them out of the cockpit. However, neither factor emerged as the most significant barrier to UAV acceptance in the comprehensive historical review of empirical analysis of officer attitudes toward UAVs reviewed during this study. A 2006 survey of “400 officers with aviation specialties” that examined their perceptions of the impact of UAV adoption revealed that “aviators had attitudes that diverged markedly from popular stereotypes.” This does not mean there is no resistance to weapon system innovation among aviators, but it does suggest that failure to integrate UAVs into carrier aviation is not simply the result of irrational responses by carrier aviators. Therefore, organizational changes that are informed by empirical understanding of cultural and institutional barriers instead of stereotypes can be effective mechanisms for developing an internal officer constituency to support the integration of CL-UAVs. Additional empirical analysis to refine the conclusions of previous studies would provide
insights into the types of organizational changes that would facilitate best the adoption and integration of CL-UAVs by carrier aviators.

Naval aviation has the opportunity to create organizations that will facilitate the integration of the MQ-25 Stingray and future UASs. Certainly, establishing Stingray units under existing carrier air wings and assigning Stingray platforms to existing squadrons should be explored. Organizing with the goal of developing an officer constituency within carrier aviation will complement the organizational changes at higher levels that preserve funding and facilitate the acquisition of UAS technologies. An internal constituency would advocate for improvements to the MQ-25 Stingray and for increasingly effective follow-on models. The optimal constituency also would enable the integration of CL-UAVs into all carrier air wing missions. Integrating a new technology, such as the CL-UAV, and developing a constituency for it during peacetime typically require a generation. CL-UAV integration can be accelerated by encouraging experimentation and adopting bottom-up innovations.

ORGANIZING TO ENCOURAGE EXPERIMENTATION AND DEVELOP INNOVATIVE OPERATING CONCEPTS

Developing effective operating concepts involves the employment of technology in realistic conditions, typically during combat or military exercises. Initial operating concepts are developed to inform the design of new technology, but innovation continues for years (sometimes decades) after technology reaches the end user. Eliot Cohen, writing about the U.S. Army in Afghanistan in 2001 and in Iraq in 2003, observed a lag between the introduction of information technology and the related organizational and operational concept development. He argued that “[t]hroughout most of military history, to include the current period, change tends to come more from below, from the spontaneous interactions between military people, technology, and particular tactical circumstances.”54 This is entirely consistent with the observations of Grissom and others discussed previously who have explored the phenomenon of bottom-up innovation. In a similar way, integrating and optimizing the effectiveness of CL-UAVs across all carrier air wing missions will require adopting input from end users. The Navy should consider how organizational changes can expedite and facilitate experimentation and bottom-up innovation.

CNO Admiral John M. Richardson embraced the role of end-user or bottom-up innovation in explaining a recent decision to revise the requirements for the UCLASS program. The low-observable and deep-strike capabilities that were envisioned when the program was known as the Joint Unmanned Combat Air System (i.e., J-UCAS) in 2003 were removed in the latest request for proposals
for the MQ-25 Stingray. In March 2016, Richardson explained, “It will get us unmanned on deck . . . so we can start to confront those operational challenges and we can learn our way forward.” Introducing the MQ-25 as a refueling and reconnaissance CL-UAV provides the Navy with the opportunity to explore organizational, manpower, logistics, and operating challenges, while building confidence in the ability to execute closely coordinated carrier operations. It certainly will result in significant end-user innovation.

However, it would be a mistake to assume that getting the MQ-25 Stingray safely to the fleet will deliver desired advances in military effectiveness automatically. The Navy’s official goal for the UCLASS program remains an “autonomous aircraft capable of precision strike in a contested environment,” as the Secretary of the Navy described in 2014. Therefore, organizations that are sufficient for the integration of the MQ-25 as an ISR and aerial refueling platform might not be sufficient to support simultaneously the development of innovative operating concepts or to refine requirements for follow-on CL-UAVs that will be employed across the full spectrum of carrier aviation missions. To balance these competing demands, it may be necessary to create organizations dedicated to experimentation for both the Stingray and follow-on CL-UAVs.

Experimentation can be the key to developing optimal operating concepts. Senior leaders in DoD in fact have called for greater experimentation, for increased use of war games, for “failing fast,” and for innovation at every level. There are institutional and cultural barriers to such an approach, but organizational changes could facilitate overcoming these barriers. Requiring a squadron, air wing, or ship to take on the risk of experimentation and primary responsibility for developing operating concepts for CL-UAVs without alleviating other predeployment or operational requirements places an additional burden on an already overstressed force.

Today, the Navy is unable to meet combatant commander demands fully, not only for carrier strike group presence, but for ISR and maritime patrol assets, exercise participation, and the like. The need for and development of the Optimized Fleet Response Plan, the carrier gap in the Persian Gulf in the fall of 2015, and the extension of aircraft carrier deployments are all symptoms of a force stretched thin. However, failing to prioritize experimentation cannot be attributed wholly to operational requirements. The Navy also proved unable to experiment effectively during the 1990s when the fleet was much larger than it is today and faced fewer urgent threats and operational commitments. As Robert C. Rubel testified to the Seapower and Projection Forces Subcommittee of the House Armed Services Committee in February 2016, “Despite all the lip service that has been paid to innovation and concept development over the past twenty years, the Navy has not been able to free up significant forces for experimentation
This is consistent with the findings of another Mahnken and FitzSimonds study, published in 2003, which found that officers “were unwilling to support tradeoffs between force structure and readiness, on the one hand, and investment in transformation, on the other.”\textsuperscript{59} At that time, the emergence of a near-peer competitor was still a decade away, but the pressure on units to meet current missions impeded investment in or experimentation with future capabilities. Similarly, budget limitations cannot take all the blame for the lack of experimentation. The successful Fleet Problem series of exercises and experiments were begun in 1923 on a tight budget and continued during the Great Depression, albeit by a Navy with fewer obligations around the globe.\textsuperscript{60} Clearly, there is institutional or cultural resistance to diverting Navy resources to large-scale experimentation, even though such experimentation is recognized widely as required to optimize technology.

The CL-UAV provides a superb basis around which to build new organizations dedicated to experimentation and rapid adoption of bottom-up innovations. There is a strategic need to accelerate the integration of CL-UAVs and rapidly identify and articulate the requirements for follow-on UASs, such as the unmanned combat air vehicle (i.e., UCAV) envisioned in the early part of this century. There is also broad support for CL-UAV innovation from senior civilians in DoD and Congress. The Navy should explore organizational changes that encourage greater experimentation and rapid concept development.

Naval aviation’s strike fighter community already supports expedited refinement of technical requirements on a small scale by employing new technology in its aggressor squadron aircraft at the Naval Strike and Air Warfare Center (NSAWC) in Nevada. These limited efforts provide rapid feedback to systems engineers by allowing experienced aviators to employ new technology in scenarios that reflect the anticipated operating environment. Unfortunately, with UAVs seen as ISR assets that are operated by personnel outside the carrier air wing, there is little internal incentive to prioritize experimentation at NSAWC with UAVs in non-ISR roles. This experimentation also is not something a fleet squadron is organized to do, operating as it does with inexperienced aviators and the minimal required personnel, aircraft, and flight hours to meet established training and readiness standards. Therefore, dedicated experimentation units may be required.

Many will argue that such experimentation is the purview of Naval Air Systems Command (NAVAIR), and indeed NAVAIR is critical to operational and developmental testing. However, NAVAIR ensures that new technology and platforms meet minimum standards; it is not organized to conduct extensive experimentation dedicated to identifying entirely new operating concepts. Navy test and evaluation squadrons are tied to programs of record and acquisition
milestones. Engineers and test pilots have much to contribute to the acquisition of UAS technology, but expanding the role of NAVAIR could perpetuate the perception that speeding up technology acquisition is the silver bullet of CL-UAV integration. A better approach would involve new or repurposed experimentation units that are not focused on operational readiness or program acquisition.

Even if new experimental units cannot be established, the need to develop innovative operating concepts and identify requirements for CL-UAVs of the future will remain. Given DoD’s stated intention to pursue human-machine teaming for future warfare, it would be wise to include officers from all carrier aviation communities in the development of such concepts and requirements, especially if Stingray is limited to ISR and aerial refueling missions. This is contrary to the model planned for the MQ-8 Fire Scout and MQ-4C Triton, which relies primarily on one or two communities to take ownership of UAV integration; but those are both ISR platforms. CL-UAV optimization will require expertise from across the spectrum of carrier air wing missions.

Consider the likely possibility that the unmanned ISR and aerial refueling mission would be assigned to the airborne early warning (VAW) community. While the VAW community, which currently operates the E-2 Hawkeye, might absorb these missions readily and employ the MQ-25 Stingray innovatively in support of air wing datalink and battle-space management requirements, its members are less well suited to develop the CL-UAV requirements and operational concepts required for conducting unmanned deep strikes or jamming in an A2/AD environment than are the pilots and naval flight officers from the strike fighter (VFA) or electronic attack (VAQ) communities. Assigning CL-UAVs to a single community that readily accepts them likely would contribute to building an internal constituency, but it also could detract from the development of follow-on requirements for CL-UAVs integrated across all air wing missions. Stingray organizations should facilitate the participation of all aviation communities, especially the strike fighter community, to optimize the effectiveness of follow-on CL-UAVs. Units comprising officers from all carrier air wing communities would support that objective.

As the naval aviation community assesses the trade-offs of various organizational options, it should consider the effect of organizational decisions on the pace of integration across all air wing missions and how new organizations can influence experimentation and bottom-up innovation.

The U.S. Navy, which operated its first UAV in combat in 1944, is still more than a generation away from fully integrating CL-UAVs across the spectrum of carrier air wing missions. Advances in data communications, computer processing, navigation, and autonomy have overcome technological barriers to employing a
tactically effective CL-UAV, but they have done little to address the institutional and cultural barriers to innovation within the carrier aviation community. Optimizing the military effectiveness of the CL-UAV innovation will require continued top-down leadership and additional organizational changes.

The Navy already has made organizational changes and programmatic decisions to speed the development of the MQ-25 Stingray and UAS technology, but fielding the MQ-25 Stingray will be only one step toward realizing the potential of the CL-UAV innovation. The Navy should complement its pursuit of technology by organizing to develop a CL-UAV constituency within the carrier aviation community and to encourage experimentation and bottom-up innovation. Organizational decisions should be based on empirical analyses of the attitudes of carrier aviators, especially within the strike fighter community, to understand fully the cultural and institutional barriers to CL-UAV integration and experimentation. Organizations and processes also should be designed to adopt bottom-up innovations rapidly and to exploit the role of end users in refining the requirements for future innovation and follow-on CL-UAVs. Experimentation should be prioritized and, when possible, the responsibility for experimentation should be assigned to dedicated organizations that are not simultaneously responsible for operational deployments or formal test and evaluation of programs of record.

NOTES

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2. The creation here of a new acronym, CL-UAV, is intentional and done for three reasons. First, it is important to emphasize when the UAVs being discussed are designed to operate from an aircraft carrier, as opposed to shore stations or other surface ships. Second, since 1999, at least five acronyms (N-UCAV, J-UCAS, N-UCAS, UCAS-D, UCLASS) have been used to describe the Navy’s programs for a UAV designed to launch and recover from its aircraft carriers. The goal here is to discuss the technological innovation more generally, without specific reference to any of those programs. For an explanation of these acronyms and brief descriptions of the programs, see Jeremiah Gertler, History of the Navy UCLASS Program Requirements: In Brief, CRS Report R44131 (Washington, DC: Congressional Research Service, August 3, 2015). Third, a new acronym was necessary because those associated with a previous UAV program would imply inadvertently the employment applications and capabilities commonly associated with that program.

“The first successful Aerial Torpedo flight in March 1918, marked the first time a full-size automatically-controlled unmanned aircraft had actually flown.” “Curtiss-Sperry Aerial Torpedo,” Cradle of Aviation Museum and Education Center, www.cradleofaviation.org/.


12. George Raudzens, “War-Winning Weapons: The Measurement of Technological Determinism in Military History,” Journal of Military History 54, no. 4 (October 1990), p. 432. Raudzens reviews numerous cases in which technological superiority has been credited, historically or popularly, with achieving victory. From the chariot and crossbow to sailing ships and gunpowder, and from the Spanish conquest of the Aztecs to the British conquest of India, Raudzens argues that technology had limited impact on the outcomes of conflicts.


17. Luttwak argues that the tactical effectiveness of the mitrailleuse was demonstrated at the battle of Gravelotte, Lorraine, France, on August 18, 1870. When "the Prussian infantry advanced far enough to come within range of some mitrailleuses . . . the new weapons executed a massacre, accounting for many of the 20,163 Prussian casualties of that day." Luttwak, Strategy, p. 101.

18. Luttwak concludes that, "had the innovation not been aborted by the failure to adapt organizationally, it might have averted the disastrous French defeat" in the war. Ibid.


20. Adam Grissom, "The Future of Military Innovation Studies," Journal of Strategic Studies 29, no. 5 (2006), p. 920. Grissom suggests that four "schools of military innovation research" could be distilled from the contemporary literature: the civil-military, the interservice, the intraservice, and the cultural. He found that each was supported with empirical case studies that involved some level of top-down process to overcome barriers to military innovation. Grissom argues (p. 925) that bottom-up cases of innovation were not explained adequately by any of the four schools of thought, and that additional analysis might reveal a "more empirical understanding of bottom-up innovation" that would ultimately provide insights into "causality and contingency" and reveal "necessary and sufficient conditions for bottom-up innovation."


26. The Unmanned Carrier-Launched Surveillance and Strike (UCLASS) program, which is still early in the acquisition process, was assigned to OPNAV N99, but the more-mature UAV programs, Small Tactical Unmanned Aerial Systems (STUAS), MQ-4C Triton, and MQ-8 Fire Scout, remained the responsibility of the Director for Information Dominance (OPNAV N2/N6).


30. “N2/N6 is the Navy’s lead office for resourcing Intelligence, Cyber Warfare, Command and Control, Electronic Warfare, Battle Management, Oceanography, and Meteorology capabilities, among others. The office’s mission is to deliver end-to-end accountability for Navy information requirements, investments, capabilities, and forces.” Joe Gradisher, “Vice Adm. Branch Takes Charge of Information Dominance and Naval Intelligence,” America’s Navy, July 25, 2013, www.navy.mil/. The assignment of programs such as the long-endurance, high-altitude MQ-4 BAMS-D, a derivative of the Air Force’s RQ-4 Global Hawk that relies on satellite communications links for remote operations, was practical, but the real benefit to the program was taking it out of competition with programs such as the P-8, SH-60R/S, E-2D, F/A-18G, F-35C, and the Ford-class CVN. The Navy did delay introduction of the MQ-4 to avoid cuts in these programs, but the decision was made above the N2/N6 and N98 level.

31. For example, cost and end-strength considerations create a bias for introducing UAVs with the minimal number of new personnel, such as assigning UAVs to squadrons operating manned platforms. In some situations this may be feasible, as can be seen by looking at recent Fire Scout detachments that deployed with aircrew and maintenance personnel who were dual-trained in both the SH-60R and the MQ-8B. See Matthew Schnappauf [Cdr., USN], “Now Hear This—It’s Time to Push Rotary Manned-Unmanned Teaming,” U.S. Naval Institute Proceedings 142/5/1,359 (May 2016), available at www.usni.org/. This model may or may not be suitable for the MQ-25 Stingray. Trade-offs are required with the introduction of any new platform, and being aware of entering biases can facilitate sound decision making.


34. Ehrhard, “Unmanned Aerial Vehicles in the United States Armed Services,” p. 569. “The first characteristic of a mature, fully integrated weapon system is the existence of a dedicated officer corps that serves as an internal UAV constituency. UAVs lack traction in this area, for non-aviators make substandard operators, enlisted operators (common in ground forces) lack political power, and rated pilots stray when the siren song of manned flight calls them to return to the cockpit. Dedicated UAV units also contribute to the establishment of a constituency by providing command opportunities critical to advancing in rank. The second metric that should be a goal of innovation policy is the development and adoption of follow-on models.” Ibid., pp. 610–11.

35. Takeoff was conducted remotely by pilots at airfield towers, who handed off control to the Avengers in the vicinity of the targets. A pilot in the rear cockpit of the modified TBM-1C Avengers received a television video link from the TDR-1 drones and sent remote-control commands to direct the aircraft. Each TBM-1C could control two TDR-1s. See “TDR-1 Edna III,” National Naval Aviation Museum, 2016, www.navalaviationmuseum.org/. Also see Bill Lee, “TDR-1: First Operational US


41. “RQ-2A Pioneer Unmanned Aerial Vehicle (UAV),” America’s Navy, September 9, 2013, www.navy.mil/. The Navy special warfare community and the Navy Expeditionary Combat Command did employ Pioneer and follow-on STUAs, but the Navy failed to develop a follow-on that was suitable for either the aviation or surface community. In 2006, the Navy decided to procure the MQ-8 Fire Scout to meet the unmanned ISR requirements of the surface fleet.


43. The Optimized Fleet Response Plan was designed to deal with the consequences of extended carrier deployments and reduced funding for maintenance and upkeep at repair facilities following the budget reductions implemented under the Budget Control Act of 2011, also known as sequestration. For additional information on the optimized fleet response plan, see U.S. Government Accountability Office, Navy’s Optimized Fleet Response Plan: Information Provided to Congressional Committees, GAO Report 16-466R (Washington, DC: 2016), available at news.usni.org/.


48. FitzSimonds and Mahnken, “Military Officer Attitudes toward UAV Adoption,” p. 100.

49. First-tour officers in unmanned patrol squadrons (VUPs) will complete their initial operational tours in fleet maritime patrol and reconnaissance squadrons (VP or VQ) prior to serving in a VUP squadron. It will be more than a decade before the first of those officers will be eligible for command. Today, the most reliable path to command involves duty as an instructor during an officer’s first shore assignment, so the viability of the career path remains to be seen. Department head and commanding officer billets will be filled by board-screened officers on sea duty, so it may be possible to observe their promotion rates within the next five years.

50. Command ashore and special mission command are other categories of command that
Richardson said "us unmanned on deck and so we can start to future airwing—ISR and tanking have a very valid mission for the current and started, ' Chief of Naval Operations Adm. LaGrone, "Navy Wants to Shed RAQ Designation from Stingray Carrier UAV," USNI News, March 10, 2016, news.usni.org/. “There's just so much to learn about integrating unmanned carrier aviation into the carrier air wing right now and I just want to get started; Chief of Naval Operations Adm. John Richardson said. . . . [MQ-XX Stingray] will have a very valid mission for the current and future airwing—ISR and tanking. It will get us unmanned on deck and so we can start to confront those operational challenges and we can learn our way forward.” Ibid.


52. Ehrhard explains that "[t]he 'white scarf syndrome' is the colloquial name for culturally based obstruction of UAV integration by pilots . . . Like many articles of faith, the 'white scarf syndrome' tends to be tautological and anecdotal." Ehrhard, "Unmanned Aerial Vehicles in the United States Armed Services," p. 30. FitzSimonds and Mahnken specifically analyzed Ehrhard's assertion that there was "no parochial, pilot resistance standing in the way of UAV development in the Air Force." They found "no widespread or deep-seated opposition to UAVs beyond technological uncertainty." FitzSimonds and Mahnken, "Military Officer Attitudes toward UAV Adoption," p. 102.

53. FitzSimonds and Mahnken, "Military Officer Attitudes toward UAV Adoption," p. 97.


56. Sam LaGrone, "Navy Wants to Shed RAQ Designation from Stingray Carrier UAV," USNI News, March 10, 2016, news.usni.org/. “There's just so much to learn about integrating unmanned carrier aviation into the carrier air wing right now and I just want to get started; Chief of Naval Operations Adm. John Richardson said. . . . [MQ-XX Stingray] will have a very valid mission for the current and future airwing—ISR and tanking. It will get us unmanned on deck and so we can start to confront those operational challenges and we can learn our way forward.” Ibid.


58. Carrier Air Wing and the Future of Naval Aviation: Hearing Before the Seapower and Projection Forces Subcommittee of the House Armed Services Committee, 114th Cong., p. 6 (February 11, 2016) (testimony of Robert C. Rubel [Capt., USN (Ret.)]. Rubel testified that he “witnessed the failure of the Navy's Fleet Battle Experiment Program in the late 1990s and early 2000s. Among the key problems was the need to superimpose the experiments on forces that were in training for deployment.” He suggested reducing carrier deployments to make more assets available for experimentation. “The legendary success of the fleet battle experiments in the 1920s and 1930s was predicated on having the battle fleet available for exclusive focus on the exercises.”


61. Incidentally, assigning responsibility for Stingray to the VAW community also would return MQ-25 Stingray requirements from N99 to N2/N6 (as opposed to N98), perpetuating the separation of the CL-UAV from carrier aviation, as discussed earlier. This may be desirable from an institutional and cultural perspective, but inherently it will delay full integration of the CL-UAV for non-ISNR missions.
THE VIRTUE THEORETIC APPROACH TO ETHICS LOCATES MORAL VALUE PRIMARILY IN THE CHARACTER OF THE AGENT RATHER THAN IN THE RULES GOVERNING AN ACT OR THE CONSEQUENCES THAT FOLLOW FROM IT. CONCERNS ABOUT THE CHARACTER OF THE AGENT LONG HAVE BEEN A CENTRAL PREOCCUPATION OF MILITARY ORGANIZATIONS. TO BE SURE, MODERN MILITARY ORGANIZATIONS IN THE UNITED STATES AND OTHER WESTERN, LIBERAL, DEMOCRATIC STATES PAY CLOSE ATTENTION TO THE RULES GOVERNING ACTS AND THE CONSEQUENCES OF THESE ACTS. NEVERTHELESS, VIRTUE ETHICS ARE OF FIRST IMPORTANCE, INsofar AS MILITARY ORGANIZATIONS AIM TO CULTIVATE SOLDIERS, SAILORS, AND AIRMEN WITH SPECIFIC SETS OF CHARACTER TRAITS, HABITS, AND PRACTICES. THIS INTEREST IN MORAL DEVELOPMENT AND MORAL VIRTUE IS ESPECIALLY EVIDENT IN THE MISSIONS AND OPERATIONS OF SERVICE ACADEMIES, OFFICER TRAINING SCHOOLS, AND RESERVE OFFICERS’ TRAINING CORPS PROGRAMS. IT ALSO CAN BE FOUND IN THE PROGRAMS FOR TRAINING ENLISTED PERSONNEL AS WELL AS THE REGULAR, ANNUAL TRAINING PROVIDED TO OPERATIONAL FORCES.

When we consider virtue ethics as a moral theory, it is important to understand that there is no single account. Virtue ethics includes a family of theories with a rich and complex history, including ancient perspectives from the likes of Aristotle and the Stoics, as well as medieval perspectives such as that of Thomas Aquinas.1 More recently, there has been a significant uptick of interest in virtue ethics, with notable yet very different approaches offered by Alasdair MacIntyre, Rosalind Hursthouse, Michael Slote, Robert Adams, Julia Annas, Nancy Sherman, Christine Swanton, Nancy Snow, and Daniel Russell, among many others.2

Mark N. Jensen is a moral, social, and political philosopher with research interests in civil society, democracy and religion, and political freedom. He received a PhD in philosophy from the University of Notre Dame in 2006 and has taught in the Philosophy Department at the U.S. Air Force Academy since 2010. He has published papers on military decision making, the ethics of espionage, the philosophy of architecture, and political philosophy. His first book, Civil Society in Liberal Democracy, was published by Routledge in 2011.

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While military theory and practice have not been insulated from these contemporary developments, military thinkers have tended to be attracted to the Stoics. The leading voices here are James Stockdale, Nancy Sherman, and Michael Evans. The Stoics themselves do not speak with one voice, and the extant writings that we have from ancient Stoic authors do not offer the same kind of substance and depth that we find in contributors such as Aristotle and Aquinas. Epictetus’s *Handbook*, for example, is a series of loosely connected aphorisms and short reflections. The same can be said of Marcus Aurelius’s *Meditations*. Nevertheless, a close reading of Stoic texts reveals a set of themes that together outline a distinct and different approach to virtue ethics. In brief, while the ultimate good for humans is happiness, the Stoics regard the social world in which we try to attain this good as opaque, unfair, and out of our control. As a result, happiness must be achieved entirely in the inner life, as it is the only realm we can control. Emotions, insofar as they are responses to external events, must be regulated tightly or eliminated. The virtues themselves are inner, rational dispositions that contribute to self-control. Public service is valuable not for the attainment of honors or external goods, but as an opportunity to practice the virtues. Social attachments are grounded in a cosmopolitan respect for shared humanity. In the military context, the Stoic approach is thought to resonate with the international nature of conflict; the chaos of warfare; and the need for order, discipline, and bravery on the battlefield.

It seems to me, however, that military organizations’ attraction to the Stoic approach to virtue ethics is misplaced. In this article, I will argue that an approach to virtue ethics inspired by Aristotle provides a better theoretical and practical foundation for military organizations than the approach offered by the Stoics. It is not just that Aristotle offers a more sophisticated account of human flourishing and the attendant virtues; his approach has the added value of speaking to military organizations on and off the battlefield in ways that are especially relevant to the nature of modern Western militaries and their activities. I will not be arguing that the approach of the Stoics is false or dangerous; I will argue instead that Aristotle’s is simply better. In particular, the Aristotelian approach (1) is a better match for the institutional nature of modern Western military service, (2) incorporates a higher degree of flexibility, which allows the account to be adjusted appropriately to the variety of circumstances in which modern militaries operate, and (3) is better able to contend with the kinds of tragedies that are at the heart of the military experience in war.

The article is organized as follows. I begin with a comparative sketch of Aristotle’s approach and the Stoic approach. I then point out salient features of modern Western military practice, noting how they comport with the systems of
Aristotle and the Stoics. At this stage I develop in detail the three areas in which I take Aristotle’s account to be superior. I conclude with a comparative practical example: a brief sketch of how Aristotle’s ethics might provide better resources for tackling the current challenge that modern Western militaries, especially the U.S. military, face in terms of eliminating sexual assault and sexual harassment.

COMPARATIVE ETHICS: ARISTOTLE

All virtue theoretic approaches begin with an account of the excellent person, especially the habits, traits, and practices that together constitute human excellence. This focus on excellence of character contrasts with other prominent theoretical approaches to ethics, such as consequentialism, which focuses on the good that we bring about through our actions, and deontology, which focuses on the moral laws that we should obey. Among the virtue theoretic approaches, Aristotle’s account is a complex affair with many moving parts. To frame a useful comparison with the Stoic account, I will focus on each account’s answer to two questions. First, what is moral excellence? Second, what are the intrinsic limitations that we face in trying to achieve moral excellence? While there is much more that could be said, and indeed has been said, in defense of these two accounts in general, my argument here will focus narrowly on their comparative fitness for military professionals and their organizations. It is my view that our accounts’ comparative answers to these two questions will be sufficient to determine which is better for the military context.

Moral Excellence according to Aristotle

Aristotle believed that moral excellence is found in a happy human community. By happiness we mean a life of “doing well” or “being well.” Many commentators propose that the happy life is understood best as the flourishing life, to distinguish it from the various trivializations of “happiness” that seem to have taken over contemporary Western culture. The flourishing human life, in turn, is defined in terms of human function. In other words, just as we can determine what it means to be an excellent or flourishing dolphin if we have an account of the purposes, lives, and nature of dolphins, so we can determine what it means to be an excellent or flourishing human if we have an account of the purposes, lives, and nature of humans. On that score, we observe that a full account of human function will make reference to psychological and sociological contexts, as these are main contexts within which humans live.

Psychologically speaking, every human being is composed of rational and nonrational faculties, where the nonrational faculties include those that are capable of listening to reason (appetites and passions) and those that are not (involuntary bodily functions). According to Aristotle, moral excellence is found
at the intersection of the rational faculties and the nonrational faculties that are capable of listening to reason. The morally excellent person uses her reason—or, more specifically, her deliberative and decision-making powers—to regulate her appetites and passions so she can fulfill those functions specific to the appetites and passions themselves. Aristotle is not suggesting that we suppress or eliminate our appetites and passions; instead he argues that, in a flourishing person, appetites and passions will be expressed in ways that accord with right reason. Simply put, the morally excellent person is the well-regulated person.

Moving from psychology to sociology, we note that the functions of our faculties of appetite and emotion often are connected to our social roles. At the same time, part of the human function is defined in terms of the various social and political roles that we fulfill in human community. For each of these discrete faculties and roles, Aristotle maintains that we can isolate a specific moral excellence in the mean between extremes. Consider three examples. Fear is an aspect of human emotion that serves as an indicator of and a response to a threat. As Aristotle puts it, when we are fearful at the right time, toward the right people, to the right degree, and so on, we achieve an excellence with respect to fear: bravery. If one is fearful in the wrong circumstances, one has an excess of fear: the vice of cowardliness. If one fails to be fearful when the circumstances require it, one has a deficiency of fear: the vice of foolhardiness. Consider another example. In our everyday interactions with others, we find some people who are ingratiating: they never disagree and always offer praise. Others are quarrelsome: they object to everything and everyone. The mean between these extremes, according to Aristotle, is friendliness. Finally, consider the hierarchical ordering of our various social and political roles. Given the contributions that we make in our families, communities, and businesses, we should expect an appropriate response, whether that be remuneration, recognition, or gratitude. In terms of extremes, those who seek out honors that do not befit their respective places in the community we call “honor loving,” while those who are deficient fail to enjoy the honor that is their due. Aristotle does not give us a clear name for the virtue, other than to call it the virtue concerned with small honors.

Multiplied across our passions, appetites, and social roles, overall moral excellence can be captured in a catalog of the virtues. Aristotle’s own catalog names ten virtues of character; subsequent virtue theorists have provided different, often longer, lists. While Aristotle himself does not provide us with an explicit story of how we might determine which traits belong in our catalog and which do not, the theory behind his catalog suggests an account. Excellent character is a composite of excellences attached to our humanity, to our socioeconomic status, and to our social and political roles. In other words, the catalog of virtues is tied to one’s specific psychological, sociological, and political functions.
As a result, the list of virtues for each person will be slightly different. Where we share a function with everyone else, we will have common virtues. Where we do not share a function with others or share a function with only a subgroup, we will have special virtues. Common virtues, in other words, include those attached to our universally shared features. These include virtues tied to our emotional life (e.g., bravery), our appetites (e.g., temperance), and the inescapably social nature of our species (e.g., friendliness).

Special virtues are those determined by the specific circumstances of our social, economic, and political conditions. Magnificence, Aristotle’s virtue for generosity as it pertains to large gifts, will be relevant to me only if I have significant wealth. The virtue concerning small honors will be relevant to me only if I have no social and political potential for magnanimity, which is the virtue concerned with big honors. Outside of Aristotle’s catalog, we can conceive of a host of additional special virtues. The virtues associated with being the firstborn (perhaps including special responsibilities for younger siblings and for older parents) will apply only if one is in fact the firstborn. The virtues associated with democratic citizenship (e.g., being well-informed, capable of deliberating over public policy, and committed to democratic decision-making processes) will apply only if one happens to live in a democracy. And the virtues associated with officership in the military of a democracy (e.g., loyalty, honor, integrity, and courage) will be determined by one’s specific responsibilities and rank and the overall mission of the military institution.

Understood in this way, the catalog of virtues is derived from psychological and sociological facts about us. On the one hand, these grounds provide for a kind of universality and permanency in the catalog, insofar as our nature as human beings and the basic features of human life are unchanging. On the other hand, insofar as our roles and functions are defined at least in part by the particulars of our social and political circumstances, the catalog will have variations across individuals in their various social, cultural, and political circumstances. There will be lots of ways in which the specific conditions of our lives imply different roles and functions, which in turn will specify modified, and possibly novel, virtues.

It will be helpful, then, to notice the way that Aristotle organizes our various roles and functions within the broader social and political context. Moral excellence is not an individual achievement but instead the achievement of a community. Every flourishing person, in virtue of her humanity, is part of a larger social and political project. We are, as he phrases it, “political animals.” Put another way, humans are members of a species that flourishes in a particular type of community. Just like the ant, bee, wolf, or lion, the character of the individual human being cannot be understood fully apart from an understanding of her particular role or function in the community to which she belongs.
For his part, Aristotle describes a nested set of three communities: family, village, and community. Our roles and functions in each of these communities imply an account of performing specific roles and functions excellently and, in turn, define part of the catalog of virtues that apply to us. In the family we might be a son or daughter, brother or sister, father or mother, husband or wife. In the village we have roles in terms of our vocation, in terms of our property and neighbors, and in terms of our local institutions. In the community we are defined in terms of our citizenship in general as well as in terms of any specific role we might occupy in the institutions of the community (e.g., legislator, soldier, judge). With respect to each role that I occupy in my family, village, and community, we can specify what it means to flourish, and then in turn identify those virtues that contribute to, as well as constitute, my flourishing in that context. Some of these will be specialized versions of virtues of which I make use in other contexts; others will be unique to my particular roles. Insofar as our roles change over the course of our lives, our catalog will change as well. This does not mean that morality is relative; it means instead that moral excellence is context sensitive. Human life is not a static or uniform experience; any description of the excellences required for flourishing must be adjusted to fit our circumstances.

Despite the variety of catalogs of virtues that apply to individuals, Aristotle argues that we can identify an unchanging common good: the good of the community. The good of the community is the flourishing of the community qua community. This is the chief good, such that the goods of all the other components of the community are subordinate to it. We must be careful here, however: to say that the goods of the components of the community are subordinate is not to say that they simply are means to achieving the chief good. Nor are we saying that the chief good is simply the aggregate of all the goods of the components. Aristotle's account here is more nuanced. The goods of the subordinate communities are ends in themselves as well as means to achieving the chief good. It is also correct to say that they are constituents of the chief good, although the chief good cannot be defined purely in terms of the achievement of its subordinate elements. Overall excellence or flourishing is achieved not merely by my excellence as a family member and a village member; it also requires my excellence as a citizen—a role that cannot be reduced to the others.

**Moral Limitations according to Aristotle**

The excellent or flourishing community, together with the morally excellent people who constitute it, is vulnerable on Aristotle's account. Some forms of attack or corruption will be sufficient to impair excellence and flourishing both for individuals and for the community as a whole. We can distinguish two kinds of challenges to the flourishing of the community: internal challenges and external.
Consider one form of internal challenge. The moral virtues are habits that must be cultivated through a program of education that includes apprenticeship under those who have a high degree of mastery of the virtues already. For example, one learns to be brave under the tutelage of brave people. But if a sociopolitical system lacks a program of education in the virtues or lacks exemplars, moral excellence becomes very difficult to achieve. A second form of internal challenge is associated with the intelligibility of the social world. Identifying the special virtues associated with one's various social roles presupposes a clearly defined set of social roles as well as a clear understanding of what one's social roles are. Otherwise, one's account of excellence in one's various functions will be incomplete, vague, or perhaps missing altogether. But in contemporary societies, especially the large, complex, and disorganized societies that characterize the West, we find just these kinds of challenges to the clarity of social roles and our understandings of our respective places.

External threats to the flourishing of an otherwise morally excellent community are often more straightforward. External threats such as war, natural disaster, or the scarcity of natural resources can undermine the ability of a community to achieve and maintain flourishing. Sometimes, despite our best efforts, circumstances that are completely out of our control can get the better of us.

Taken together, the vulnerabilities associated with these two types of challenges imply that a people can fail to achieve moral excellence and that, in many cases, this failure can happen through no fault of their own. In other words, moral tragedy is a real possibility in Aristotle's world; human excellence or flourishing is dependent on circumstances that are, at least in part, out of our control.

COMPARATIVE ETHICS: STOICISM

Let us turn now to the Stoic account and consider the Stoic answers to these same questions. Of course, in one sense there is no single Stoic answer, insofar as Stoicism is a philosophical school with many adherents but no dominant voice. We also do not have a complete record of Stoic teachings. Nevertheless, we can detect themes that run throughout Stoic writings—themes that provide a sense of the Stoic account, and themes that have been picked up by military ethicists such as Sherman, Stockdale, and Evans. In fact, since these contemporary writers serve as the primary lens through which many military members and organizations have been introduced to Stoicism, it is their interpretation that provides the best target for our discussion here. Just as with Aristotle, we cannot hope to provide a comprehensive account, but we can present a contrasting picture that will be sufficient for discussing the relative merits of the Stoic perspective for contemporary military service.
Moral Excellence according to the Stoics

It is important to keep in mind that the Stoic approach to virtue ethics is deeply indebted to Aristotle. While virtue theory, broadly considered, is the central approach to ethics for most of the thinkers throughout the Greek and Roman world, Aristotle’s account is among the most prominent, and philosophers who come after him presuppose aspects of his view even when they attempt to depart from it. Stoic philosophers, for their part, see themselves as developing or improving on earlier accounts. One way to exercise charity in reading the Stoics is to regard their comparative lack of theoretical sophistication as a reflection of a common philosophical background and a common set of assumptions. In other words, perhaps they are understood best as taking much of Greek philosophy, including Aristotle, for granted, and then focusing their own efforts on the few places where they believe the account should be updated.

Taking this approach, we can see a variety of ways in which the Stoics modify Aristotle’s account of moral excellence. With Aristotle, we saw that my happiness is only partly under my control. Since I am a dependent and social creature, my own good is bound up with the good of others: if my community is not flourishing, then I am not flourishing. In other words, living a flourishing life depends, at least in part, on good moral luck. The Stoics find this approach entirely wrong-headed. As they see it, the excellent or flourishing life ought to be in my power, not arbitrarily subject to the choices of others. Aurelius writes, “[T]rue good fortune is what you make for yourself. Good fortune: good character, good intentions, and good actions.” In other words, my happiness should be entirely up to me: if I can develop the right kind of character, I can control my own destiny. Evans provides a summary as follows:

In the Stoic catechism there is no such category as “victimhood” because there is no moral economy outside of the workings of our inner selves. Stoicism is thus about empowerment by perception—a cultivation of an invincibility of the will through minimizing personal vulnerability by a mixture of Socratic self-examination and an emphasis on control of the emotions. Stoicism teaches concentration on what individuals can control, what Marcus Aurelius in his Meditations called the “inner citadel” of the soul.

The Stoic focus on controlling our fate changes the nature of our moral life in many ways, but for the purpose of developing an argument with application to contemporary military service I will focus on just two: individualism and interiorization. By individualism, I mean the way in which Stoics focus on the ethics of the individual rather than the ethics of the community; by interiorization, I mean the way in which Stoics focus on the mental lives of individuals rather than their actions. Both of these modifications reflect Stoic objections to Aristotle’s program.
Let us begin with individualism. Stoics agree that the flourishing person has excellent character, and excellent character is a matter of having a specific set of moral virtues. Stoic catalogs of the virtues are different from Aristotle’s: sometimes they include virtues that appear to be broader in scope, such as righteousness, honor, and dignity; at other times, Stoics hint at virtues that reflect a disengaged or aesthetic life. Aurelius, for example, lists honesty, gravity, endurance, austerity, resignation, abstinence, patience, sincerity, moderation, seriousness, and high-mindedness.

The more important contrast, for our purposes, can be found in the different aims of the Stoic virtues. On the Stoic account, the cultivation and exercise of these virtues have value primarily for the development of the character of the individual, not for the sake of the community. Aurelius writes, “[P]eople are our proper occupation. Our job is to do them good and put up with them. But when they obstruct our proper tasks, they become irrelevant to us—like wind, sun, and animals. Our actions may be impeded by them, but there can be no impeding our intentions or dispositions.”

Every action stands on its own as a measure of the character of the agent who performs it, independent of the value of the action for the community. I am not responsible for the actions of others, and they cannot be responsible for my own actions. After all, I cannot control them and they cannot control me. My own good is therefore my ultimate point of reference, as it is the only thing I truly can control. In this way, the Stoic approach to happiness is far more individualistic than the approach offered by Aristotle. Where Aristotle views the ethical life as a joint enterprise aimed at building our social and political world, the Stoics view the ethical life as an individual enterprise aimed at achieving excellence despite our social and political world.

This contrast should not be especially surprising. Aristotle’s starting point in his writing, as in his life, is the self-contained social and political unity of the Greek city-state. Stoic writers, in contrast, are lost in the vast, diverse, cosmopolitan expanse of the Roman Empire. Correspondingly, the Stoics view the social world as opaque, cruel, and arbitrary—utterly outside the control of the individual. To be sure, Stoics were not the kind of pessimists who aim at disengagement; they were not the Roman equivalent of modern doomsday preppers. Stoics call for service, kindness, and other forms of social engagement. Moreover, Stoics themselves were active for the good of their friends and their communities, whatever their stations and circumstances. Cicero and Seneca were Roman politicians; Marcus Aurelius was a soldier and emperor. But all these exercises of the social virtues reflect a much more detached approach to our social and political world, an approach centered on the character of the individual agent. At the same time,
Stoic social and political engagement did not have as its primary objective the achievement of a common good or the construction of a flourishing community. In the midst of this chaotic world, it seems fair to ask the Stoic whether moral excellence or flourishing is even possible. This brings us to the second point of contrast between the Stoic approach and the Aristotelian approach: the interiorization of the moral life. When Aristotle allows that tragedy can make an otherwise virtuous person unhappy, the Stoics recoil. They propose instead a system in which happiness is not at all dependent on one's social, political, and physical circumstances. Aurelius writes as follows:

If you do the job in a principled way, with diligence, energy and patience, if you keep yourself free of distractions, and keep the spirit inside you undamaged, as if you might have to give it back at any moment—If you can embrace this without fear or expectation—can find fulfillment in what you're doing now, as Nature intended, and in superhuman truthfulness (every word, every utterance)—then your life will be happy. No one can prevent that.20

In other words, the happy life is a matter of internal rather than external fulfillment. Whatever the state of the world around me, it is still possible for me to have excellent character. I can accomplish this, the Stoics explain, provided that I achieve the following.

First, I must come to terms with the fact that happiness has nothing to do with external successes. Epictetus writes, “Do not seek to have events happen to you as you want them to, but instead want them to happen as they do happen, and your life will go well.”21 If happiness lies entirely within my control, and the only things over which I have complete control are my internal responses and my internal life, then I must learn to master my internal life and avoid seeking happiness in external goods. External goods of wealth, fame, and power are outside my control; it would be a mistake to put my happiness in them. To be sure, this does not mean that Stoics eschew these goods. Stoicism need not imply a monkish way of life; such a way of life itself could become an object of worship. Instead, the Stoic avoids emotional attachment to external goods. Epictetus explains somewhat graphically: “It shows lack of natural talent to spend time on what concerns the body, as in exercising a great deal, eating a great deal, drinking a great deal, moving one's bowels or copulating a great deal. Instead you must do these things in passing, but turn your whole attention toward your faculty of judgment.”22 In other words, it is our attitude toward external goods that matters, not the goods themselves.

Second, I need to learn to be guided by reason alone. While our social and political world may be chaotic, the universe as a whole is guided by reason. There is a natural order or a law of nature that I discover and toward which I can orient my will. Again, Epictetus: “On every occasion you must have these thoughts...
ready: lead me, Zeus, and you too, Destiny, wherever I am assigned by you; I'll follow and not hesitate, but even if I do not wish to, because I'm bad, I'll follow anyway. Whoever has complied well with necessity is counted wise by us, and understands divine affairs.  

To do this, I must learn to control my emotions. In particular, I must recondition my emotional life so that I am not emotionally sensitive to the things that I see and the events that befall me, no matter how pleasurable or cruel they may be. Sherman explains the Stoic perspective here: “They hold that emotions, as most of us experience them, typically involve assent to false opinions. That is, the impressions we assent to have a propositional structure... and emotions typically involve false opinions of good and evil.” It is not that Stoics eschew emotions altogether; what they claim instead is that our emotional responses must be keyed solely to our mental life. We can take pleasure in our virtuous intentions, but not in the results that come from actions that accord with those virtuous intentions. After all, the results of our actions, no matter how well intended they may be, are not in our control.

Third, and in keeping with the previous achievements, I must cultivate inner strength, especially fortitude, if I am to flourish in the midst of the cruel and harsh world in which we live. Not only is my social and political context outside my control; it actually tends to pose a threat to my physical, social, and political well-being. In this way, inner happiness is something that I must achieve despite my suffering. Suffering and death are inevitable. Aurelius’s Meditations, in particular, are preoccupied heavily with reminders of the shortness of life and the inevitability of death: “[K]now this: Human lives are brief and trivial. Yesterday a blob of semen; tomorrow embalming fluid, ash. To pass through this brief life as nature demands. To give it up without complaint. Like an olive that ripens and falls. Praising its mother, thanking the tree it grew on.”

Moral Limitations according to the Stoics
From the preceding discussion, it should be evident that if the Stoic life can be achieved, there will be no limits on my happiness. Insofar as I resist the temptations of worldly goods and worldly pleasures, I can create for myself an impenetrable mental fortress—a place where I am immune to the effects of tragedy, a place in which I can be happy, though the world may fall apart. As Sherman explains, for the Stoics, “[H]appiness must be a matter of virtue alone.”

This is not to say that Stoicism is easy. Reconditioning my emotional life according to the Stoic program is especially difficult, as my emotions seem to be naturally responsive to my experience in the world and not to the particulars of my character. Stoics recognize the challenges here. They remind followers that Stoic ideals are achieved to one degree or another; one need not achieve
perfection to have made progress. Flourishing does not require the complete realization of the ideal; further achievement with respect to happiness is always possible. Whatever the world may throw at me, my happiness remains in my control, and I can take steps to achieve it all the more. Evans quotes Henley’s 1875 poem “Invictus” to make the point:

Out of the night that covers me,
Black as the Pit from pole to pole,
I thank whatever gods may be
For my unconquerable soul.

In the fell clutches of circumstance
I have not winced nor cried aloud.
Under the bludgeonings of chance
My head is bloody, but unbowed.

Beyond this place of wrath and tears
Looms but the horror of the shade,
And yet the menace of the years
Finds, and shall find, me unafraid.

It matters not how strait the gate,
How charged with punishment the scroll.
I am the master of my fate:
I am the captain of my soul.  

THE SUPERIORITY OF ARISTOTLE IN THE MODERN MILITARY WORLD
At first blush, one can see the attraction of the Stoic approach to the military context. Soldiers on the contemporary battlefield are expected to perform excellently when their lives are under constant threat, often in the midst of great suffering, and under strategic and tactical conditions that are nearly always out of their control. The fear of death can be psychologically paralyzing; the Stoic power to eliminate that fear and concentrate single-mindedly on the tasks at hand sounds like liberation for the soldier in combat. James Stockdale famously remembered thinking to himself, as he parachuted into a North Vietnamese village, that he was “entering the world of Epictetus.” Stockdale believed the Stoic approach described above was vital to his survival as a prisoner of war (POW) in North Vietnam, and vital to his effective leadership there.

On the one hand, we should not dismiss Stockdale’s experiences, or those of other soldiers who have found resilience and liberation in Stoic philosophy, with
a mere wave of the hand or a short piece of philosophical argument. Certainly under POW conditions, there is very little among our externalities that we can control, and any happiness that we find likely will be a matter of the inner character and strength that the Stoics describe. It may be that the Stoic approach to pain and suffering could be a helpful addition to certain parts of military training, especially those concerned with survival and capture.

On the other hand, the conditions in which Stoicism seems especially pertinent are not the experiences of the vast majority of soldiers in the modern military. Instead, soldiers in modern militaries are contributors to an enormous and complex social and political project, a project that requires creativity and flexibility, and a project that can and sometimes does go wrong. In my view, this is the world of Aristotle, not the world of Epictetus. In providing a detailed argument for the superiority of Aristotle's approach, I will focus on three features: the institutional setting of modern Western military service, the need for higher degrees of flexibility, and the reality of tragedy.

In the first place, Aristotle's account is better suited to the institutional conditions of contemporary military service. Unlike the Stoics, Aristotle does not view the social world as opaque and arbitrary. Aristotle's theory is not concerned with explaining how we might flourish in spite of our institutions, but more optimistically provides a road map for the creation and development of excellent institutions in which we can flourish together. The fact is, modern Western military conditions and practices are well suited for this approach, especially in those aspects that extend beyond individual psychology. Each soldier has a specific role to play associated with her unit, and the description of this role implies an account of excellence. Each unit, in turn, is part of a larger unit in the military organization, where that military organization in turn plays a very specific role in the good of the state. Thus we have a set of elements analogous to the family, the village, and the community. The chief good for the soldier is found in the good of the state, while the military itself plays a specific role in sustaining that good. As with Aristotle's other intermediate institutions, the good for the military is neither a mere means to nor a mere constituent of the good of the state. Soldiering is both an end in itself and a means to the achievement of other ends. At the same time, the achievement of the good for the military and its units is a necessary condition for the achievement of the good for the state, but in the sense that the specific good for the military organization is an end itself, a means through which other aspects of the state can achieve their good, as well as a constituent element in the complex common good by which we assess the state as a whole.

This organizational structure is not merely thrust on soldiers in modern militaries; instead they construct and sustain it. Both officers and enlisted personnel are expected to take on leadership roles gradually, using their experience,
together with the guidance of their superiors, to build and rebuild the organization in keeping with an account of its good that they are responsible for formulating and reformulating. In this way, the institution presupposes that its members will exercise control over it, despite the challenges of size and complexity. Notice that this account contrasts sharply with the Stoic approach to social and political institutions. While Stoics allow for public service and contributions to the good of the community, the Stoic must not take on the good of these institutions as her own. To do so would be to accept the existence of external goods and subject one's own happiness to the judgments and actions of others. Insofar as social trust is built on identity of interests, shared commitments, and common purpose, Stoically oriented soldiers will not be as trustworthy as Aristotelians in the project of building and sustaining modern military organizations.

In the second place, Aristotle's account allows for significantly more creativity and flexibility than the account we get from the Stoics. Aristotle's virtue of prudence is proactive: one evaluates the circumstances in which one finds oneself, identifies the goods relevant to one's circumstances and the circumstances of one's group, and then identifies practices and activities that will contribute to the accomplishment of those goods. Since the common good is always in view, Aristotle's soldiers never are preoccupied with their own individual happiness—after all, their own individual good is a constituent of and a means to accomplishing the common good, given the natures of their particular roles. By definition, the Aristotelian does not interiorize her ethical life—the common good is exterior, at least with respect to the others that compose her group.

War is, at least in one sense, a violent competition among groups with (at least) two different visions of the good. Stoics who distance themselves from the common good, and who view the external world as a place of temptation and cruelty, seem to be unattractive partners in the social and political project that is modern warfare. To be sure, it appears that Stoic detachment could be useful in a narrow range of circumstances in modern warfare, such as when captured by the enemy—Stockdale's experience. Nevertheless, it seems to me that proponents of Stoicism under these conditions miss the fact that Aristotle's virtue of prudence, with its context-sensitive adjustment to new circumstances, could prescribe an account of flourishing similar to that prescribed by the Stoics under conditions of capture. In other words, where the Stoics propose a rigid morality of detachment, Aristotle proposes a kind of adaptability that could recommend a degree of emotional detachment when circumstances call for it. When an Aristotelian finds himself in a social structure that is inimical to flourishing in the conventional way (e.g., family, village, community), he will look for ways to make the best of his circumstances. In fact, Stockdale's own experience as a POW had far more Aristotelian elements than he seems to have recognized. By accepting a leadership role
among the other captured Americans, by promulgating principles for prisoner behavior, and by finding ways to encourage others in the midst of their suffering, Stockdale remained committed to the good of the American prisoners, not just as individuals but as Americans committed to the good of the United States.  

Finally, Aristotle’s account has a better approach to error and tragedy. Where the Stoic is expected to be “astonished at nothing,” Aristotle recognizes the possibility of genuine errors, mistakes, and tragedies in the context of military service and war. Not every social structure conforms to the ideal; warfare, quite obviously, is a nonideal social circumstance. Things have gone wrong, possibly quite badly, and this is a genuine tragedy for Aristotelians—the social structures that support a life lived according to the virtues and in pursuit of joint goods have broken down, thereby reducing the amount of happiness that is possible in the moment. The Stoic response would appear to be to chide the Aristotelian for looking for happiness outside herself; the Stoics insist that it can be found reliably only within. In this way, the Stoic detaches herself from the possibility of tragedy, from the very idea that our circumstances can be described as bad or good. However, it seems to me that if we do not recognize tragedy, we will have little motivation to work to prevent it in the future. Whatever the merits of the Stoic approach as it concerns the resilience of the individual, the fact is that modern soldiers in modern militaries strive for more. Military action often aims at stopping and responding to tragedy, and even learning from it so as to put in place measures to prevent it from recurring. Tragedy cannot be eliminated from warfare, insofar as good men and women always will suffer and die; however, our response should not be to structure our mental life so we are not affected by tragedy, but instead to rejoin more forcefully the challenge of building institutions, practices, and soldiers who are adept at minimizing internal and external harms. Modern institutions like the military aim to improve performance, achieve efficiencies, and accomplish very specific common ends. More generally, our political systems and political leaders should be striving to find peace and support flourishing nations and citizens. The Stoic ethic, with its much more limited focus on the good of the individual, does not seem to be as good a fit as the Aristotelian ethic, with its focus on building a flourishing set of nested institutions.

THE SPECIAL CASE OF SEXUAL HARASSMENT
In recent years, the U.S. military has become especially concerned with incidents of sexual assault and harassment inside the organization. Leaders are looking for better ways to catch and remove those who perpetrate these crimes, as well as ways to build a culture of zero tolerance. Both are goals of long standing, but they have proved elusive. Insofar as virtue theorists are concerned with cultivating individual and social moral excellence, and a culture of sexual harassment and
sexual assault falls well short, they would seem to have something to contribute to the conversation.

Stoicism, with its virtues of righteousness and decency, offers an account of a moral soldier and a military culture consistent with the elimination of sexual assault and sexual harassment. The Stoic focus on cultivating resilience in the face of personal suffering also might prove useful to victims. However, there seem to be very few resources in Stoicism that might provide better guidance for solving the problem. As it stands, it is not as if the message of treating one's fellow soldiers with decency is absent, nor is resilience missing from contemporary military training. Quite the opposite: in the annual sexual assault prevention and response training that members (including myself) of the U.S. Defense Department of all ranks receive, respect and resilience as ethical virtues are central themes. Yet sexual harassment and assault persist.

Aristotle provides a richer theoretical framework from which to start our reflections on how to make progress on this issue. We begin with the observation that the vast majority of the sexual assault and harassment incidents involve men assaulting or harassing women. Instead of focusing on individuals qua individuals and promoting general virtues such as respect and decency, Aristotle would begin by identifying the psychological, sociological, and political conditions that give rise to the trends we observe. In other words, if there is a problem that seems to be connected to a particular demographic, it makes sense to start at the level of sociological investigation to determine root causes across the population. Why do men tend to be the perpetrators; why do women tend to be the victims?

At the same time, Aristotle would begin to think about solutions from inside the sociological circumstances. What are the social norms and virtues that we expect men and women to cultivate in the context of their relationships, both to the military and to each other? Notice that, in answering this question, Aristotle would be concerned not only with preventing bad behavior but with cultivating good behavior. Remember, in Aristotle’s virtue theoretic account, bad moral behavior occurs when a person tends toward the extreme of some feeling, appetite, or social role, rather than toward the mean. The cowardly person has too much fear, the brave person has the right amount; the overly social person is ingratiating, the friendly person is social to the right degree.

If sexual assault and harassment are actions attached to vices that are akin to cowardice, then what is the feeling, appetite, or social role that is in question? Suppose, insofar as sexuality is a psychological and sociological aspect of human beings, that there are virtues and vices associated with human sexuality. If sexual assault and sexual harassment are vices with respect to human sexuality, then it follows that there also must be virtues associated with sexual excellence and sexual flourishing. Moreover, since vices fall on the extremes and virtues fall in
the mean between the extremes, any program to reduce vice is, for Aristotle, at
the same time a program to improve virtue; we cannot help but cultivate bravery
in the process of reducing cowardice.

In other words, an Aristotelian program for reducing or eliminating sexual
assault and harassment must be, at the same time, a program aimed at cultivating
sexual excellence and sexual flourishing. The important practical implication of
this story, Aristotle would argue, is that we cannot institute programs to change
the culture and practices that encourage sexual assault and harassment until we
have a clear account of the culture and practices that cultivate sexual excellence
and flourishing. This, of course, means that we need a robust account of sexual
excellence and sexual flourishing in the first place. For Aristotelians, such an ac-
count cannot simply be a set of rules, e.g., all sex must be consensual. Although
Aristotelians are happy to include laws, rules, and principles in their social and
political schemes, they would not want their approach to be confused with or
reduced to a deontological approach. Instead, Aristotelians will search for an ac-
count of how human sexuality contributes to the excellent functioning of human
beings as individuals and in their relationships with others.

It is these two pieces of information—an account of sexual flourishing, to-
gether with an account of the social conditions that will cultivate and sustain
it best—that we need if we are to make genuine progress in eliminating sexual
assault and harassment from military organizations. On the one hand, the unfor-
tunate fact is that at present we do not possess either of them. While the second
piece of information is something we could investigate as a matter of psychology
and sociology, the first is not. An account of sexual excellence and sexual flour-
ishing is a matter of ethics, and therefore not a matter of conventional empirical
research. Certainly, ethical research, together with common and historical expe-
rience, has resulted in agreement on important issues. We reject slavery, murder,
and adultery, and we affirm the importance of equal treatment and opportunity
across distinctions of race and gender. Nevertheless, the content of sexual eth-
ics does not appear to be one of these areas of agreement. At present we do not
have a social or political consensus sufficient to serve as the basis for a program
of improvement.

Unfortunately, Aristotle's own views will not be of much help here. Among
the things on which we do agree is that Aristotle's patriarchal approach to family
relationships, grounded on his belief that women are inferior to men, is wrong.
While he does not offer an explicit theory of sexual excellence or sexual flour-
ishing, we safely can assume that any theory he would offer would be grounded on
assumptions that we reject.

On the other hand, if we are in agreement that these two pieces of informa-
tion are what we need if we are to make progress, we can devote our attention
to acquiring them. This means, in the first place, that we need to have a serious discussion about human sexuality, with an eye toward developing an account of an excellent and flourishing sexual life. Perhaps we never will agree on all the particulars, and perhaps there are groups that always will insist on their own eccentric views. But we may find that there are areas of agreement that will be sufficient to establish a counterweight to the vices of sexual assault and sexual harassment, even if we cannot agree on a comprehensive account of the ideal. With these areas of agreement in hand, we then can turn to social science to make progress in determining what types of institutional and cultural changes will achieve these ends best. Together, these two pieces of information constitute the heart of an Aristotelian approach to solving the problem of sexual harassment and sexual assault in military organizations.

Stockdale kept a copy of Epictetus’s *Handbook* on his bedside table aboard ship during the Vietnam War. Admittedly, the *Handbook* may be better suited for bedtime reading in wartime; its short paragraphs and aphorisms are pithy, memorable, and challenging, and have the appearance of offering important and profound wisdom on how an individual might find happiness amid daily mortal threat and uncertainty.

In contrast, Aristotle’s *Nicomachean Ethics* and his *Politics* do not make for good bedtime reading. They offer complicated and open-ended arguments that require serious interpretive work to be relevant to our modern conditions. In this way, Aristotle is a bit like the road less traveled. And yet the implication of the argument I have made here is that our military forces and our character-education programs would be much better off following the Aristotelian than the Stoic path. While it might be more difficult, the payoff will be much better.

**NOTES**

An earlier version of this work was presented as a paper at the annual meeting of the International Society for Military Ethics at the University of Notre Dame, South Bend, Indiana, October 13–16, 2013.


4. This is not to claim that all accounts of virtue theory begin with happiness or eudaimonia. As we will see below, this is how Aristotle's account begins, but there are other contemporary approaches that develop an account of the virtues without a connection to eudaimonia.


6. Ibid., bk. 1, chap. 7.

7. See Alasdair MacIntyre, *Dependent Rational Animals* (Chicago: Open Court, 1999), chap. 7.


9. Ibid., bk. 2, chap. 1.

10. Ibid., bk. 3, chap. 7.

11. Ibid., bk. 4, chap. 6.

12. Ibid., bk. 4, chap. 5.


14. Aristotle writes in terms of a city (i.e., a polis) rather than a community. Modern cities are quite different from what Aristotle has in mind; in the modern context, "community" implies the kind of small, unified, largely self-sufficient group that is Aristotle's focus.


19. Ibid., p. 60.

20. Ibid., p. 33.


22. Ibid., p. 25.

23. Ibid., p. 29.


29. See ibid., pp. 8–12.
Foundations of Moral Obligation

After Forty Years

Thomas J. Gibbons

In these times of ethical uncertainty, especially among senior Navy leaders amid the ongoing “Fat Leonard” fiasco, we need to look to our roots. The Foundations of Moral Obligation elective, otherwise known as “The Stockdale Course,” has been a mainstay at the Naval War College (NWC) for most of the past forty years. Vice Admiral James Bond Stockdale, USN, the fortieth President of the College, collaborated with Dr. Joseph Brennan, a professor emeritus from Columbia University’s Barnard College, to develop the elective shortly after Stockdale assumed the presidency. Little did they know how popular the elective would become and the positive impact it would have on graduates over the years. The Foundations elective has become a part of the moral fabric of both the institution and the U.S. Navy.

One indication of this is that NWC’s formal role in both leadership and ethics has expanded relatively recently. Then–Chief of Naval Operations Jonathan W. Greenert approved the first Navy Leader Development Strategy in January 2013 to “synchronize the Navy’s leadership and strengthen our naval profession by providing a common framework for leader development.”1 In early 2014, Greenert directed the President of the Naval War College to be responsible for all officer and enlisted leadership and ethics curricula for the Navy.2 A few months later, in March 2014, the Naval Leadership and Ethics Center was created at Naval Station Newport to provide leadership education and training, curriculum support, research, and assessment.3 With their Foundations elective,
Stockdale and Brennan laid the foundation for leadership and ethics instruction at the Naval War College, and their work continues to have a profound impact on leaders throughout the Navy today.

Stockdale and Brennan wrote the Foundations syllabus and cobbled together the reading list and assignments in about six months during the first half of 1978. The course was offered for the first time in the fall trimester of academic year (AY) 1978–79, then was taught again during the winter trimester that same academic year. Stockdale himself only taught the course that bears his name for one year (actually two trimesters). Brennan continued to teach the elective until he retired in 1992. Professor Paul Regan began teaching the Foundations elective in the fall trimester of 1994 while on active duty as a U.S. Coast Guard (USCG) captain. He retired from the Coast Guard the following year, but continued to teach the Foundations elective for the next sixteen years, through 2010. Dr. Martin L. Cook assumed duties as the Stockdale Chair at the Naval War College in June 2009 and cotaught the elective with the author until his retirement in 2016.

Each of these men brought passion and vigor into the classroom to make the course successful.

The purpose of this article is to highlight the history of the Foundations of Moral Obligation elective and to illustrate how it has changed over time—and yet how much it has remained the same. The article also will attempt to answer the question of why this elective has remained one of the most popular at the College. It seems deeply counterintuitive, on the face of it, that midgrade and senior military officers and government civilians—a group typically educated in technology and management and focused on the practical—would find the reading of difficult primary sources in philosophy and literature such an important part of their NWC education.

Stockdale graduated from the U.S. Naval Academy with the class of 1947. His classmates include former president Jimmy Carter; Senator John McCain; and Admiral Stansfield Turner, USN (Ret.), who later became director of the Central Intelligence Agency. While serving as President of the College, Turner made sweeping changes to improve the curriculum, based on his experience as a Rhodes Scholar. In fact, many of the improvements instituted during the “Turner Revolution” are still in effect today. Stockdale, having spent nearly seven and a half years as a prisoner of war at the infamous Hanoi Hilton, came to Newport intent on making an impact and establishing an elective course in ethics. In a letter to Brennan dated December 5, 1977, Stockdale wrote, “I have come to the conclusion that if I am to leave a legacy here it must be done from the classroom. My boss, Jim Holloway, and my predecessor, Stan Turner, and others advise against ‘getting tied down’ to a lecture schedule. I’m going to ignore their warnings—and try, by next fall, to structure an elective course in something like ethics.”
The Stockdale legacy of leadership and ethics has grown exponentially throughout the U.S. Navy over the years. As Dr. Cook highlighted, “I think the most remarkable thing . . . [is] that every major institution and activity explicitly dedicated to questions about ethics and leadership in the U.S. Navy is named after James Bond Stockdale.” Stockdale’s legacy in leadership and ethics throughout the U.S. Navy is unquestionable. However, he was not always interested in ethics.

THE INFLUENCE OF EPICTETUS

After his graduation from the Naval Academy, Stockdale pursued tough operational Navy assignments. He eventually attended flight training and became a fighter pilot and later an experimental test pilot. In 1960, he was selected to attend graduate school for two years at Stanford University to get a master’s degree. While at Stanford, Stockdale wandered over to the halls of the Philosophy Department one morning. He became enamored of philosophy, although his academic adviser tried to discourage him, telling him it was a waste of time.

We all experience moments like these, those crossroads at which we choose a path that fundamentally changes the course of our lives. This visit to the Philosophy Department was a life-changing moment for Stockdale. That morning he met a USN veteran of World War II, Professor Philip Rhinelander, who was teaching in the Philosophy Department after a long and distinguished academic career. Rhinelander took Stockdale under his wing, enrolled him in his course, and over the next few weeks tutored him privately. Stockdale thrived, and even took additional philosophy courses from other professors at Stanford.

In their last meeting together prior to his graduation, Rhinelander gave Stockdale a copy of Epictetus’s handbook, The Enchiridion. Stockdale was dumbfounded, but took the book and read it, out of respect for Rhinelander. In a letter to Brennan years later, Stockdale confessed, “I recognized nothing that applied to the career I had known. I was a fighter pilot, an organizer, a motivator of young aviators, a martini drinker, a golf player, a technologist—and this ancient rag talked about not concerning oneself with matters over which he had no control, etc. I thought to myself, ‘Poor old Rhinelander—he’s just too far gone.’”

Little did Stockdale know that this small book would be his salvation, his source of strength in the prison camps of North Vietnam. Stockdale would embrace the Stoic philosophy and make it his own. He would write essays and deliver speeches to audiences throughout the country. In fact, years later as President of the College, he often began his remarks to students with the phrase “Remember, life is not fair. Once you accept that, you can move on.”

Epictetus’s teachings and the Stoic philosophy would play a major role in Stockdale’s life, especially while he was imprisoned in North Vietnam. He wrote to Brennan, “My ‘secret weapon’ was the security I felt in anchoring my resolve to
those selected portions of philosophic thought that emphasized human dignity and self-respect. Epictetus certainly taught that.”\textsuperscript{12} While in prison, Stockdale lived in the world of Epictetus and applied the lessons and teachings from *The Enchiridion* to survive. “The Stoic philosopher Epictetus was foremost among my consolations in the pressure cooker of Hanoi.”\textsuperscript{13}

After his release from prison in 1973, Stockdale spent nearly a year in recovery healing his physical wounds—and pressing charges against fellow prisoners who had collaborated with the enemy and violated the Code of Conduct. Stockdale wrote, “To the Stoic, the greatest injury that can be inflicted on a person is administered by himself when he destroys the good man within him.”\textsuperscript{14} Stockdale argued that the collaborators had betrayed the trust of their fellow prisoners and deserved punishment under the Uniform Code of Military Justice; however, the U.S. government took no action against the collaborators and eventually allowed them to retire. In 1976, Stockdale became a national hero and received the Medal of Honor for his service in Vietnam, which included spending almost seven and a half years as a prisoner of war, much of it in solitary confinement.\textsuperscript{15}

**STOCKDALE AND BRENNAN**

In 1975, Dr. Joseph Brennan was teaching philosophy at Columbia University. He became intrigued by what he read about Stockdale and his study of Epictetus and the Stoics. He sent Stockdale a letter asking how philosophy had given him inner strength throughout his time as a prisoner of war in Vietnam. Brennan subsequently requested to add Stockdale’s lengthy response to an upcoming book he was writing. This exchange laid the groundwork for a friendship that would endure for the rest of their lives.\textsuperscript{16}

Stockdale took command of the Naval War College as its fortieth President on October 13, 1977. Shortly after taking over, he contacted both Brennan and Rhinelander to get their assistance with and feedback on his proposed philosophy course. Although they had corresponded by letter for almost two years, Stockdale and Brennan did not meet until the change of command. In a letter to Brennan dated December 5, 1977, shortly after taking command, Stockdale wrote, “What are the philosophic roots of a military profession? What are the watershed distinctions that separate bureaucrats from warriors, winners from losers? I know this is no simple matter to get a layman up to speed to teach such sensitive material—but I want my students to have something more than a few mutually contradictory slogans when their backs are against the wall. . . . I need a theme, a recommended reading list, and a lot of time to think.”\textsuperscript{17}

Brennan visited Newport and the College again over the Christmas holidays in 1977. He met with Stockdale several times during the visit to discuss the proposed ethics course. Brennan was on track to accept a position in India with the
State Department, but turned it down when Stockdale offered him a part-time job as his assistant to develop and teach the course. In a letter to a friend dated January 21, 1978, Brennan wrote as follows:

My job title is Consultant to the President, term: 11 months of 1978; my duties include preparing the course, getting up a reading list, conferring with the admiral until 17 August when my wife and I will move to Newport for the 16 weeks that the class runs. I’ll be on standby to give classes when the admiral is called away. The hardest part will be to prepare the course—it’s easy enough to do that for oneself, but when somebody, who is not a professional, is to teach it, that’s a new one for me.18

Brennan immediately went to work preparing the course. In his undated NWC journal notes, Brennan wrote, “When I suggested I’d like to visit classes and talk to other faculty, he [Stockdale] said, ’Don’t pay too much attention to those guys.’”19

As the new President of the College, Stockdale spent time reviewing the curricula for all courses. He was concerned about what he found, and decided to implement electives for all students during the following AY, 1979–80. In a letter to Brennan dated January 13, 1978, he wrote as follows:

I’ve created quite a stir with the Departments, asking for electives—not only for myself—but for Constitutional Law, Soviet foreign policy, etc. I’m telling ’em that I can drive a truck through the Gaps our three departments leave in the educational base for mid-career officers and that the option is to let me supervise a broad electives program or move over and give me 25 percent of the room for my 4th department (Philosophy & Law—or whatever). The profs Love it; the Administrators are adapting.”[emphasis original]20

Stockdale was passionate about implementing changes to make sure the curriculum and the faculty met the needs of its graduates, then and in the future. The existing curriculum did not address any of the things that Stockdale had found most valuable during his time as a prisoner of war in North Vietnam. As Stockdale noted, “No philosophical survival kits are issued’ when man goes to war.”21

Stockdale and Brennan both spent long hours trying to decide on an appropriate name for the course they would teach. As Brennan noted, “Stockdale did not like the word ethics. He thought the contemporary ’ethics explosion’ had eroded the older, nobler sense of the word. He knew that ethics courses were spreading rapidly, not only in military institutions but also in business, industry, and the professions.”22 Stockdale thought that the term moral philosophy was more suitable because it tied into the humanities.23 Stockdale and Brennan finally agreed on the course title Foundations of Moral Obligation. But they spent many additional hours deciding on the absolute best readings and lessons for the course.
In a letter to a friend dated January 21, 1978, Brennan wrote: “I do know that he is interested in anything that has to do with prison camps—he is trying to get Alex. Solzhenitsyn up to the War College for a lecture. He also wants to put some literary works on his reading list, and mentioned Camus. Since he, Stockdale, is an enemy of bureaucracy, I thought that something of Kafka might do. Even Darkness at Noon occurred to me as a possibility. . . . If you have any suggestions, I’d be grateful.”

In a letter to a friend dated February 5, 1978, Brennan wrote as follows:

I spent this last long weekend, Thursday through Saturday, with Adm Stockdale at Newport and Providence. . . . He is a very intense, very attractive man. . . . We now have a course title, “The Foundations of Moral Obligation,” as well as a tentative reading list which includes the Book of Job, the Socratic Dialogues of Plato, selections from Aristotle's Ethics, Kant's Fundamental Principles of the Metaphysics of Morals, Mill's Utilitarianism, Sartre on Existentialism, as well as fiction readings including Conrad's Typhoon, Koestler's Darkness at Noon, Kafka's Trial . . . and Solzhenitsyn's Ivan Denisovich.

Stockdale and Brennan finalized the course readings and syllabus during the spring of 1978 and prepared to offer the elective during the fall trimester.

THE STOCKDALE-BRENNAN ERA

Neither Stockdale nor Brennan knew how well the new course would be received by students once they actually started teaching. Both worked diligently to ensure that the syllabus, reading list, and subsequent seminar discussions would provide valuable information to midgrade military officers in search of a moral compass. Brennan wrote, “Through the winter, spring, and summer of 1978, Admiral Stockdale and I met frequently for intensive discussions concerning the organization of the course.” Stockdale fervently believed the course would fill a void in the students’ careers. He told a reporter, “Today’s ranks are filled with officers who have been weaned on slogans and fads of the sort preached in the better business schools—that rational managerial concepts will cure all evils. This course is my defense against the buzz-word-nomograph-acronym mentality.”

In an address he gave at Trinity Church in Newport on Sunday, May 7, 1978, for Rhode Island’s Independence Day, Stockdale used material from the upcoming course in his remarks. Stockdale highlighted both Viktor E. Frankl's book Man's Search for Meaning and Dostoyevsky's The Brothers Karamazov to illustrate the importance of freedom to the individual.

The news of Stockdale's Foundations of Moral Obligation course spread quickly to the Navy Staff. A retired Navy captain who was in the first seminar shared the following: “By early 1978, the word on the street around DC was that this course is a 'must take' if you wanted to think deeply about the business you were
in and were lucky enough to get orders to the War College. Stockdale’s reputation as a Medal of Honor recipient, along with Brennan’s prowess as a scholar, fueled the media blitz. The fact that they were team-teaching a philosophy course for military students, many with recent combat experience in Vietnam, added to the attractiveness for the media. Brennan wrote, “Word got around that a Vietnam war hero with the Medal of Honor was teaching a course in moral philosophy at the Naval War College, and the media moved in with tape recorders, television cameras, and fast-writing reporters.”

The initial seminar, offered in the fall 1978 trimester, was capped at fifty students. The second offering was in the winter trimester; it had thirty-five students and fifteen auditors. Brennan related that the students idolized Stockdale, so there was no difficulty filling all the seats. The course was designed for Stockdale and Brennan each to deliver one-hour lectures on Wednesday afternoon, followed by a one-and-a-half-hour seminar discussion on Thursday afternoon. The elective met for ten weeks during the trimester. Stockdale intended to use original classic material along with popular novels, and he created a challenging reading list. Stockdale said, “We studied moral philosophy by looking at models of human beings under pressure, their portraits drawn from the best materials we could find in philosophy and literature.” The syllabus included the following:

- **Week One**  Introduction. The Prisoner of War and the Human Predicament. The World of Epictetus.
- **Week Two**  The Book of Job and the Problem of Evil.
- **Week Three**  The Socratic Example. Four Platonic Dialogues.
- **Week Four**  Aristotle and the *Nichomachean Ethics*.
- **Week Five**  Law: Of Conscience and the State. Kant and Hart.
- **Week Six**  Happiness as Utility; Justice and Fairness. Mill and Rawls.
- **Week Seven**  Individualism and the Collective I. Emerson; Sartre; Camus.
- **Week Eight**  Individualism and the Collective II. Lenin and Soviet Philosophy.
- **Week Ten**  Return to the Beginning. The Stoic Ideal and the Ethic of the Military.

Each student took a midterm and a final examination and submitted a short paper. The weekly readings were difficult for the students, especially those without a background in philosophy. However, the seminar discussions allowed
Stockdale and Brennan to interact with students and facilitate the learning process. Moreover, the elective gave students an opportunity to expand their horizons and to read and discuss material they never would have read on their own.

During the first academic year it was offered, the Foundations elective received high ratings from students. In fact, in a report to the President of the Naval War College, Brennan related that it “ranked highest of the 18 electives offered, topped only by FE-117, a course in advanced electronic warfare.”35 Student evaluations ranged from 6.19 to 6.58 on a 7-point Likert scale.36 Overall, the initial offering was very successful. Brennan related that one of the few negative comments was that “[t]here was not enough structure to the seminars and there was a tendency to rely too much on unprepared class discussion to carry them.”37 Stockdale and Brennan worked to improve the seminar discussions for the second offering.

Both Stockdale and Brennan were passionate about the Foundations elective because it filled a void in the students’ professional development. This passion was evident to the students, faculty, and staff at the Naval War College and throughout the Navy. Unfortunately, Stockdale retired from the U.S. Navy and left the College shortly after AY 1978–79 to accept a position as president of The Citadel. However, his interest in and influence on the Foundations course continued long after he retired. Likewise, the bond of friendship that Stockdale had forged with Brennan continued to grow and prosper over the years.

THE BRENNAN YEARS
After Stockdale’s retirement, Brennan decided to remain at the College and continued to teach the Foundations elective himself as a part-time employee for the next thirteen years. Brennan did not change the course significantly during those years. However, he limited the course to twenty-five students to make it more manageable for only one instructor. Brennan continued to offer the course for two trimesters each academic year.38

During the period 1986–91, Brennan developed and taught another elective, “Philosophy in American Values.” This course was popular at the College and allowed Brennan to dig deeper into American philosophy and literature. He also served as an academic adviser to international students at the Naval Command College. Although still a part-time employee, Brennan carried what many today would consider a full load.39

Throughout this time, Brennan’s friendship with Stockdale and his family continued to blossom and grow. In a letter to Stockdale dated September 13, 1979, Brennan wrote as follows:

Yes, Foundations of Moral Obligation did meet for the first time yesterday, but it was a little like putting on Hamlet without the Prince of Denmark. Still, the class is delighted to know that you will come to deliver the valedictory lecture at the 10th
session. . . . This academic year will show, I think, whether EL 101 (Foundations of Moral Obligation) has what-it-takes to stand on its own feet. I think it can and should, but the comparatively large audience for the course’s first trimester is still a result of your personal contribution and fame.\textsuperscript{40}

In a subsequent letter dated November 6, 1979, Brennan wrote, “Mid-term is past, course papers are being busily written, and so far all seems to have gone very well, though I do miss you. I’ve had to do a lot more restructuring [of] the course than I had thought. Not that the content or the reading has changed—no, just the way of doing the course without you.”\textsuperscript{41}

Stockdale contemplated introducing the Foundations course to students at The Citadel.\textsuperscript{42} He continued to rely on Brennan’s feedback and advice in his outside presentations and articles. But he also provided input to his successors as NWC President about Brennan’s success with the elective at the College. In a letter to Brennan dated March 19, 1982, Stockdale wrote, “Before I forget it, please let me know what you hear about the identity of Ed Welch’s successor. I’ll get on the phone with him right away and make a plea to keep the Philosophy Department (i.e., You). All I need is his name.”\textsuperscript{43}

Stockdale subsequently wrote to Rear Admiral James E. Service, Commander, Carrier Group Two, the incoming College President, on August 5, 1982:

I’m always afraid that NWC will be put under pressure to rid itself of all apparently quasi-military courses such as the Foundations of Moral Obligation which I founded with my good friend Dr. Joe Brennan.

I have no idea that you would even consider discontinuing it, but just as a precaution, let me give you my impressions of how it has gone under Joe Brennan alone since I left. I speak to his classes nearly every year. (He has added an American Values course which also draws a lot of subscribers in the spring trimester). As the classes filed out of their joint session to hear me this spring, officer after officer—particularly Marines—said “Best course, Best teacher in the place.” I think a review of the class critiques will verify this. Joe rings the bell.\textsuperscript{44} [emphasis original]

Stockdale also spoke to Rear Admiral Joseph C. Strasser, a later President of the College, about Brennan and the Foundations elective. In a letter to Brennan of January 10, 1992, Stockdale wrote:

Then at my request he buzzed the Admiral, and I told Joe [Strasser] how proud I was to be a part of your project. We shared stories about the number of Marine and Naval officers we’ve each run into, who, on mention of the Naval War College, immediately mention “Joe Brennan’s courses.” As I count it, you are now in your 14th year there, and some of our 42 year old students in ’78–79 are now 56! Some retired Admirals and Generals telling young grandchildren about their career highlights. . . . Admiral Strasser is a great fan of yours.\textsuperscript{45}
Upon his retirement in 1992, Brennan received many accolades, including designation by the Secretary of the Navy as professor emeritus of philosophy. His book *Foundations of Moral Obligation: A Practical Guide to Ethics and Morality* was published in 1992, shortly before he retired.

Brennan died in 2004, but his legacy is well established at the Naval War College. He helped to develop the Foundations elective and continued the course for thirteen years after Vice Admiral Stockdale retired. However, his legacy consists of much more than that. Brennan touched the hearts and minds of hundreds of NWC graduates and inspired them to look at things in a different light and to consider alternate paths to achieve their own *eudaimonia.*

At Dr. Brennan’s retirement ceremony, Stockdale said, “From the classics, throughout 14 years of teaching here, you have conducted what I consider to be the world’s best course in military leadership. Never after taking your course will anyone be comfortable in believing that the analytic and reasoned approach is the ‘be all and end all’ of officership.”

Perhaps that is the essence of the Naval War College education.

**THE REGAN YEARS**

Paul Regan began teaching the Foundations of Moral Obligation elective in the fall trimester of AY 1994–95 while on active duty as a USCG captain assigned to the College as the USCG adviser. There was a two-year gap in the course between Brennan’s retirement and Regan taking over.

Originally, Regan was recruited, with two other faculty members, to teach the Foundations elective to end the temporary discontinuation of the course. Regan had a background in philosophy and volunteered to assist. When both the other faculty members fell out, Regan agreed to teach the elective alone. Even after his retirement from active duty in 1995, he continued to teach the elective one trimester every academic year for the next fifteen years. He worked for the Federal Emergency Management Agency (FEMA) in Boston and drove to Newport one afternoon each week to teach.

Regan was also responsible for keeping the Stockdale name associated with the elective. Regan wrote, “About halfway through my time with the course I began to realize that many of the students no longer associated the course with him [Stockdale], so I requested the name change to include ‘The Stockdale Course.’ Enrollment figures immediately jumped up.”

Regan did not change the course significantly when he started teaching. In a statement dated June 6, 2016, Regan confessed, “I made a conscious decision to stick with the basic outline that Stockdale initiated and Prof Brennan continued. Since my degree is in scholastic philosophy, which is heavily based in classic philosophy, I say—and continue to see—the value of reading the actual works of the
great philosophers. Quite honestly, from my background in philosophy, were I to design the course from scratch I would have used much the same approach as Stockdale and Professor Brennan.51 However, when the Berlin Wall came down in 1989 and the Soviet Union collapsed in 1991, the original lesson on Lenin and Soviet philosophy became outdated and was removed.

Regan continued to use Brennan’s book Foundations of Moral Obligation as a major course text. The major change he instituted was to establish two different paths, a reading path and a writing path. Students in the reading path completed all assigned readings and the final examination; students in the writing path completed only the major readings and Professor Brennan’s book, and were required to write a ten-to-twelve-page paper on a topic dealing with ethics or moral judgment.52 Regan explained, “After a while it was clear that the workload for this course was substantially greater than that of most other electives. Indeed, even after a degree in philosophy and years teaching, I could read most of the material at about 6 pages an hour. I attempted to level out the course by letting the students choose to express their thoughts in a longer paper (the standard elective length) or devote their time to the reading.”53

Although he only taught the course for one trimester each academic year, Paul Regan’s legacy is that he kept the elective vibrant and exciting for the students. He taught the course alone longer than Brennan had. His seminars were popular and full of lively discussions. Regan admitted, “Having lived real lives, students were not afraid to (courteously) say, ‘Captain, you’re full of crap’ . . . which [led] to debate and, hopefully, the opening of minds.”54 Regan summarized it best as follows: “And finally, I think every good teacher realizes he or she learns as much as the students. Teaching the Stockdale Course was a privilege for me. I mentioned that in the last few years I taught by taking leave from FEMA every Wednesday and got no reimbursement—but really would have paid to teach for all I learned and all the fine and dedicated students I had over the years. . . . It was an honor and has become part of who I am.”55 Regan left the College after AY 2009–10.56

THE COOK YEARS
Dr. Martin Cook came to the Naval War College in 2009 as the Vice Admiral James B. Stockdale Professor of Professional Military Ethics. He cotaught the Foundations elective with Dr. Tom Gibbons. Cook came from the U.S. Air Force Academy but also had taught at the U.S. Army War College in Carlisle, Pennsylvania, for several years. His record of publication and teaching professional military ethics was unsurpassed, and he integrated quickly into the College’s leadership and ethics team.

Dr. Cook knew little about the Foundations of Moral Obligation elective before he arrived but quickly realized its value for active-duty military officers.
Accordingly, he made the decision to offer the elective during all three trimesters of the academic year. Cook also modified the curriculum to reflect contemporary issues affecting the military today. He added lessons on non-Western religion, including reading the Hindu Bhagavad Gita, and a lesson entitled “Finding Meaning in One's Life,” reading Leo Tolstoy’s short story The Death of Ivan Ilych and Elie Wiesel’s novel Night. Cook introduced Jostein Gaarder’s novel Sophie’s World, an easy-to-read history of philosophy, to help students gain a better understanding of the different philosophers they studied.57 Karl Marlantes’s book What It Is like to Go to War is one of the best accounts of modern combat ever written, and became popular with students and faculty alike. Cook sponsored Marlantes as a guest speaker at the College every year.

Cook’s syllabus included the following:

Week One  Greek and Roman Stoics. Epictetus. Stockdale’s Thoughts of a Philosophical Fighter Pilot.

Week Two  The Greek Tradition. Socrates/Plato. “Euthyphro,” “Apology,” and “Crito.”

Week Three  Plato. The Republic.


Week Five  The Western Religious Tradition.

Week Six  The Enlightenment. Immanuel Kant.


Week Eight  Finding Meaning in One’s Life. Tolstoy and Wiesel.

Week Nine  Non-Western (Hindu) Perspective. The Bhagavad Gita. Early Christian “Just War,” and Karl Marlantes’s What It Is like to Go to War.


Cook established at the Naval War College the “Great Books” method taught at his alma mater, the University of Chicago, and at St. John’s College in Annapolis, Maryland, and Santa Fe, New Mexico. The students read original-source great books and then discussed the readings in seminar, with the faculty members facilitating the discussion. In other words, the seminar discussion was the primary focus, not the faculty members’ lecturing from the front of the classroom. Cook and Gibbons sat at different ends of the classroom to facilitate and moderate the
student discussions. Students learned just as much from each other and from the readings as they did from the faculty moderators. Cook commented, “I personally believe that the modified great books method makes the students engage far better than a lecture-discussion course would.”

Cook also relied heavily on technology; he instituted use of the Blackboard learning management system. The electronic syllabus he built within Blackboard actually came alive on screen with links to podcasts, embedded videos, and contemporary lectures on relevant topics. From the readings each week, every student wrote a one- or two-page posting of thoughts, criticisms, comments, and points to be explored. Students also were required to read and comment on each other’s postings. This system had several advantages. First, students started the weekly discussions before they even arrived at the classroom, by commenting on each other’s postings. Additionally, students improved their writing skills through the weekly postings and immediate feedback, rather than writing a ten-to-twelve-page paper at the end of the course. Blackboard enabled Cook and Gibbons to jump-start the seminar discussion before they actually came to class.

Cook departed the Naval War College in 2016 to work at the U.S. Air Force Academy as a distinguished visiting professor. His fame and reputation as a leading scholar in professional military ethics had enhanced the Foundations elective and helped to establish it as one of the most popular electives during his tenure. His legacy of using technology, along with the Great Books method, improved the delivery of the course and brought it into the twenty-first century.

**STAYING POWER**

Why has the Foundations of Moral Obligation elective continued to be so popular after nearly forty years? This simple yet thought-provoking question has many answers. The easy one is that the course owes its success to a triad of the faculty, the syllabus and readings, and the students. But there is much more to answering the question than that.

The faculty members who taught the elective over the years were all qualified and competent in their discipline. Moreover, they were all gifted and talented educators. Even more than that, they were passionate about the curriculum and brought that energy and passion to the classroom. Each in his own way set the conditions that enabled the students to think about the material, apply it to their lives, and then share those experiences with others in seminar. Regan revealed, “Most tellingly, in the class students would often bare their souls and bring to light moral dilemmas they had to deal with—and most implicitly trust their classmates not to let their statements be repeated.” Rather than simply spouting information about ancient philosophers or literature in the seminar, the instructors...
empowered their students to apply what they learned to their daily lives and share this with their classmates.

The syllabus and course readings that Stockdale and Brennan originally selected almost forty years ago have remained fairly consistent across time. Of the ten lessons in the original syllabus, six are relatively similar today. In an after-action report dated January 29, 1980, Brennan wrote, “[T]he course should center on, though not be restricted to, important classical and modern readings in philosophy and the humanities. Moreover, whenever possible the readings should consist of primary, not secondary, sources.” This guidance has stood the test of time and still is reflected in the syllabus. In 1982, Stockdale noted that “[w]e studied moral philosophy by looking at models of human beings under pressure, their portraits drawn from the best materials we could find in philosophy and literature. The professional implication for military men and women followed. We did not have to draw diagrams: the military applications came up naturally in seminar discussions.”

Many of the readings are time-consuming and difficult to understand the first time through. Students often ask themselves, “Now, what did I just read?” However, the lessons and pearls of wisdom in the readings are priceless. Cook wrote, “I guess I was pleasantly surprised how many students seemed to make serious and genuine efforts to read and understand the material, even if they really didn’t get it until class.” In the seminar it is easy to see when the light goes on and a student suddenly “gets it” and really understands the text. This enables the learners to apply a text to their own lives and share it with others. One important metric of success is that, no matter how uncertain they were whether they had understood the week’s assigned reading when they arrived in class, during subsequent lessons most students would refer back unfailingly and accurately to previous readings.

Although they are difficult for many, the course readings are timeless and tend to make a lasting impression on students. In fact, many times on the last day of class the instructors provided supplementary reading lists for students to continue their studies in military ethics long after graduation. One student wrote, “I believe that I am better prepared after taking the Stockdale Course. Dr. Regan has given us a pretty impressive reading list to follow up our studies in this course. I’m making it a mission in my life to try and read all these classic works. If anything, this course has provoked a hunger in me to learn more about ethics and moral behavior. It must surely be a positive thing in a man’s life if he at least yearns to learn more about living a proper existence.”

For some, the readings opened new doors and exposed them to material they never would have selected on their own. In a letter to Brennan a student wrote, “The readings introduced me to material that I should have read a long time ago, and never had either the inclination or the opportunity.” Stockdale wanted
students to read and discuss the classics. He trusted that doing so would help them to develop a moral compass and enable them to think critically. Brennan later wrote, “Training in the humanities, Stockdale believed, would show that much of what goes by the name ‘social science’ serves up ideas expressed earlier and better in classical philosophy and modern literature.”

This course provided an opportunity for many Naval War College graduates to read and discuss classic literature, which shaped their personal and professional development and had a positive impact on their lives.

The students are the third critical element in the triad of success. For the most part, the students at the Naval War College are motivated, want to learn, and work hard. In other words, they are avid consumers of the educational experience. Many have recent combat experience and are willing to share those experiences with classmates. They bring a willingness to learn and an insatiable desire to question things that others often take for granted. Why do the students like the Foundations elective? Regan’s analysis is as follows:

Almost any military career path is technical in one way or another. Rarely is there the opportunity to answer the real questions: What makes life worth living? For the military, what is worth dying for? How should I raise my children? These fundamental questions require a certain maturity to address. The students at the NWC have reached an age where these questions are important, as are the answers. There are few times in life when one has the opportunity to look in depth at such questions.

The Foundations elective provides an opportunity for students to ask these “hard questions” in a nonthreatening environment among peers who are asking the same things. Cook opined, “I think it’s popular because I think Aristotle’s observations about the study of ethics (that it’s not useful to do it with the young, who lack experience) is borne out by the fact that after a couple of decades of adult experience they seem so eager to think about these matters.” There is a difference between studying philosophy as an undergraduate and as a graduate student: the graduate student can relate more to the lessons because of his or her greater life experiences.

Countless letters express students’ gratitude to the College for offering the Foundations elective. A USN officer and future President of the Naval War College wrote to Stockdale, “Some students questioned the course’s relevance, if you can believe it. For me it would be like questioning the relevance of oxygen. . . . I find the subjects of the course extremely useful. Thanks for the effort—it is still bearing fruit 20+ years later.” Another student wrote, “It’s a dangerous and deadly working environment we have chosen to work in. Without this foundation (pun intended) in moral and ethical behavior, when we do get in the buzzsaw, can we really be sure we’ll be prepared?” (emphasis original).
Students continue to rate the course high on their end-of-course evaluations. Recent students’ comments reflect this sentiment.

“Amazing course to only add to my tool box in becoming a better effective leader and thinker.”

“Reading and understanding certain philosophers like Aristotle, Plato, Socrates, Thomas Aquinas, Kierkegaard, etc. can be difficult. This course definitely challenged my ability to read and interpret their works. Also, the course work challenged my thinking and long-held beliefs, which was great.”

“Foundations of Moral Obligation is one of those courses that changes one’s perspectives and the lenses that we perceive events in life—both of which is [sic] important in an increasing multi-national world.”

“Had me think about why I did certain things or why I should do things differently.”

“Excellent course. Needed for anyone who considers themselves a future senior leader.”

“’The best course that I have taken.’”70

It is not just one or two things that have made the Foundations elective popular for almost forty years. It is a combination of many that contributed to making possible those magical moments in seminar when students are able to discuss controversial issues and then open their minds to a different way of thinking.

Naval War College graduates have liked the Foundations of Moral Obligation elective so well that some have proposed making it part of the core curriculum, to be taken by all students. This aspect is especially relevant given the recent spike of events questioning the moral compass of senior USN leaders.

However, it would be a mistake to require all students at the College to take Foundations of Moral Obligation. Part of the value of the course comes from the well-qualified and passionate instructors who have taught the elective in the past. It would be difficult, if not impossible, to educate enough faculty members to offer the course to all students at the same level of proficiency. Nor would the quality of student participation be as high if the course was a mandatory requirement. Those students who choose to take the course do so out of a desire to discover new ways to think about life’s fundamental questions.

Vice Admiral Stockdale understood the importance of a liberal arts education and the study of the humanities in a highly technical defense organization. “The philosophy course he took at Stanford in his thirties, said Stockdale, did him a lot more good in Hanoi than any of the Naval Academy’s technical subjects.”71
GIBBONS

Stockdale also realized that leaders need to develop more than just their technical proficiency. As Brennan noted in 1983, “The study of good philosophy and literature, he [Stockdale] held, would benefit human beings; and, since military officers were human, it would be good for them, too, not only as human beings but as military officers.”

Stockdale recognized the importance of military officers becoming lifelong learners. Officers should never stop learning and questioning. Brennan related that “[w]hat the officers liked best about the Stockdale course was the opportunity to reflect on questions they felt had always been in their own minds, but just below the surface. This course, they agreed, provided them with the chance to raise those questions to the level of mature consciousness.”

The continuing relevance and popularity of the course only serve to reinforce Stockdale’s original reason for establishing it: to develop a course for military officers, focusing on leadership and ethics, that gives them the moral tools for success, whether on the battlefield or in a staff job at the Pentagon. A reporter from the Washington Post summarized it best when he wrote as follows:

Called “Foundations of Moral Obligation,” the course that Stockdale himself will teach represents the latest attempt to help American fighting men cope with pressure, including but not limited to that inflicted by captivity.

He will try to convey to young officers what teachings got him through his 7½ years of captivity, which began on Sept. 9, 1965, when he parachuted from his damaged A-4 fighter-bomber into a tree. He will try to explain how and why a man can summon up astonishing courage if he has committed himself to integrity—“one of those words which many people keep in that desk drawer labeled ‘too hard,’” in Stockdale’s words.

Over 1,900 graduates and family members have taken the Foundations of Moral Obligation course since Vice Admiral Stockdale and Dr. Brennan introduced it in 1978. Little did the two men know at the time how this one course would impact the lives of so many over the years.

NOTES

4. In addition to Stockdale, Brennan, Regan, and Cook, Dr. Thomas B. Grassey taught the Foundations of Moral Obligation elective for one trimester during AY 2007–2008, and Dr. Timothy J. Demy cotought the elective with the author for one trimester during AY 2008–2009.

6. James B. Stockdale to Joseph Brennan, December 5, 1977, James B. Stockdale Papers, box 6, folder 1, Naval Historical Collection, Naval War College, Newport, RI [hereafter Stockdale Papers].


9. Epictetus was a famous Stoic philosopher who lived from AD 55 to 135.


21. “This Professor Learned the Hard Way,” p. 98.


27. “This Professor Learned the Hard Way,” p. 98.


29. James F. Giblin Jr. [Capt., USN (Ret.)], e-mail to author, June 12, 2016. Giblin became NWC provost after his retirement from active duty.


35. Ibid., p. 5.

36. Ibid., app. F2.

37. Ibid., p. 5.

38. Ibid., p. 6.


42. Ibid.


47. *Eudaimonia* is a Greek word commonly translated as "happiness" or "welfare";
however, “human flourishing” has been proposed as a more accurate translation.

48. James B. Stockdale to Joseph Brennan [letter to be read at his retirement ceremony], July 22, 1992, p. 3, Stockdale Papers, box 6, folder 17.


50. Ibid., p. 1.

51. Ibid., p. 2.


53. Regan to author, June 6, 2016, pp. 2–3.

54. Ibid., p. 3.

55. Ibid., p. 4.

56. However, Captain Regan’s son, Cdr. Sean Regan, USCG, took the course a few years later with Drs. Cook and Gibbons.

57. Dr. Martin L. Cook and Dr. Tom Gibbons, “Syllabus, EL-592, Foundations of Moral Obligation (The ‘Stockdale Course’).”


59. Regan to author, June 6, 2016, p. 4.


64. W. Strong to Dr. Joseph G. Brennan, November 1, 1984, Brennan Papers, box 2, folder 20.


66. Regan to author, June 6, 2016, p. 4.


73. Ibid., p. 78.

In *Thoughts of a Philosophical Fighter Pilot*, his collection of reflective essays published long after his time in Vietnam, Vice Admiral James Bond Stockdale writes eloquently about the importance of the study of philosophy in helping him to endure the prisoner of war (POW) experience. While at Stanford completing a degree in economics, he found his most important questions being deflected by the economics faculty, often with the remark, “Well, we’re getting into philosophy now.” Exasperated by that reaction, Stockdale found his way to the Philosophy Department and embarked on a course of reading in the subject, guided by Professor Philip H. Rhinelander.

As Stockdale was leaving Stanford, Rhinelander gave him a copy of the work on Roman Stoicism by the freed slave-philosopher Epictetus, which Stockdale read (he says) initially only out of respect for Rhinelander. But Epictetus’s thoughts clearly stuck with him and, in the end, helped him find the resiliency and determination to endure the POW experience honorably. The key tenet of Stoic philosophy is the distinction between what one can control (only one’s own actions and inner reactions to things) and what one cannot (the actions of others and the unavoidable circumstances life brings).

Although written well before Stockdale began his POW experience, this speech to his aircrews en route to Vietnam demonstrates the degree to which he already was thinking about and articulating what they were about to undergo in Stoic terms. His discussion about moving up bomb-release altitudes or adding...
fuel reflects exactly the Stoic notion of accepting the mission one is given, realistically and uncomplainingly. His unflinching dismissal of “Hollywood answers” and straightforward recognition that, as military officers, his listeners do not get to pick, or even to some degree judge, the war to which they are assigned are a perfect illustration of recognizing what is within one’s own powers and what is not. It recognizes that political decisions about where military force is used are “above the pay grade” of his officers.

Stockdale reminds his listeners, “[Y]ou [are] an actor in a drama that you’ll replay in your mind’s eye for the rest of your life.” In other words, you are not the playwright, but how you perform in the play rests entirely in your hands. In this remark, he is virtually paraphrasing Epictetus (Enchiridion 17): “Remember that you are an actor in a drama, of such a kind as the author pleases to make it. If short, of a short one; if long, of a long one. If it is his pleasure you should act a poor man, a cripple, a governor, or a private person, see that you act it naturally. For this is your business, to act well the character assigned you; to choose it is another’s.”

So, in this short address, we see Stockdale the Stoic warrior attempting to impart Stoic wisdom to his aircrews. It is the perfect illustration of the “operationalization” of the importance of philosophy that he will write about years later with such eloquence. But already, here, he is attempting to help his aircrews steel themselves mentally to accept the war and the missions assigned to them unflinchingly, realistically, without illusions. He is, as the Stoics would say, leading them to live “in accordance with Nature” (kata phusin) by calling things what they are and calmly facing what lies before them.


Having reviewed for you the terrain of Vietnam, the enemy’s order of battle, the rules of engagement, and to some extent the modern history of the conflict and the evolution of America’s strategy, I think I owe you in addition a straight-from-the-shoulder discussion of pilots’ mental attitudes and orientation in “limited war” circumstances. I saw the need for this last summer aboard Ticonderoga—after the start of the war had caught us by surprise and we had gone through those first, exciting days pretty much on adrenaline. In the lull that followed, as we prepared for a next round, I could sense that those fine young men who had measured up so well in the sudden reality of flak and burning targets wanted to talk and get their resources and value systems lined up for the long haul. Like
most of you, they were well read, sensitive, sometimes skeptical—those educated in the American liberal tradition to think for themselves—those who are often our most productive citizens and, just as often, our best soldiers. They realized that bombing heavily defended targets is serious business and no game—that it is logically impossible, in the violence of a fight, to commit oneself as an individual only in some proportion of his total drive and combative instinct. It has to be all or nothing; dog eat dog over the target. I think they were asking themselves, as you might—Where do I as a person, a person of awareness, refinement, and education, fit into this "limited war," "measured response" concept?

I want to level with you right now, so you can think it over here in mid-Pacific and not kid yourself into imagining "stark realizations" in the Gulf of Tonkin. Once you go "feet dry" over the beach, there can be nothing limited about your commitment. "Limited war" means to us that our target list has limits, our ordnance loadout has limits, our rules of engagement have limits, but that does not mean that there is anything "limited" about our personal obligations as fighting men to carry out assigned missions with all we’ve got. If you think it is possible for a man, in the heat of battle, to apply something less than total personal commitment—equated perhaps to your idea of the proportion of national potential being applied—you are wrong. It’s contrary to human nature. So also is the idea I was alarmed to find suggested to me by a military friend in a letter recently: that the prisoner of war’s Code of Conduct is some sort of a “total war” document. You can’t go halfway on that, either. The Code of Conduct was not written for “total wars” or “limited wars,” it was written for all wars, and let it be understood that it applies with full force to this air wing, in this war.

What I am saying is that national commitment and personal commitment are two different things. All is not relative. You classical scholars know that even the celebrated “free thinker” Socrates was devoted to ridiculing the sophist idea that one can avoid black and white choices in arriving at personal commitments; one sooner or later comes to a fork in the road. As Harvard’s philosophy great, Alfred North Whitehead, said: “I can’t bring half an umbrella to work when the weatherman predicts a 50 percent chance of rain.” We are all at the fork in the road this week. Think it over. If you find yourself rationalizing about moving your bomb-release altitude up a thousand feet from where your strike leader briefs it, or adding a few hundred pounds fuel to your over-target bingo because “the Navy needs you for greater things,” or you must save the airplane for some “great war” of the future, you, you’re in the wrong outfit. You owe it to yourself to have a talk with your skipper or me. It’s better for both you and your shipmates that you face up to your fork in the road here at 140 degrees east rather than later, two thousand miles west of here, on the line.
Let us all face our prospects squarely. We’ve got to be prepared to obey the rules and contribute without reservation. If political or religious conviction helps you do this, so much the better, but you’re still going to be expected to press on, with or without these comforting thoughts, simply because this uniform commits us to a military ethic—the ethic of personal pride and excellence that alone has supported some of the greatest fighting men in history. Don’t require Hollywood answers to “What are we fighting for?” We’re here to fight because it’s in the interest of the United States that we do so. This may not be the most dramatic way to explain it, but it has the advantage of being absolutely correct.

I hope I haven’t made this too somber. I merely want to let you all know first of all where this wing stands on “Duty, Honor, Country.” Secondly, I want to warn you all of excessive caution. A philosopher has warned us that, of all forms of caution, caution in love is the most fatal to true happiness. When that Fox flag is two-blocked in the Gulf, you’ll be an actor in a drama that you’ll replay in your mind’s eye for the rest of your life. Level with yourself now. Do your duty.

Footnote: No one came forward with reservations. By the time Oriskany returned to San Diego in December 1965, its pilots had earned a record total of military decorations for Vietnam carrier deployments. Of the 120 pilots addressed in this talk, thirteen did not return to the ship: eight were killed in action, one is still unaccounted for, and four—including the speaker—spent seven and a half years as POWs in Hanoi.
DIRECT FROM GENDA PRIMARY-SOURCE EVIDENCE FROM GENDA BEARING ON PARSHALL-BENNETT EXCHANGE REGARDING FUCHIDA AT PEARL HARBOR

Norman Polmar

In a Research & Debate (R&D) item in the Winter 2013 issue of the Naval War College Review, Martin Bennett authored a scathing—and correct—attack on Jon Parshall’s R&D item “Reflecting on Fuchida,” which had appeared in the Spring 2010 issue of the Review. A key point of the original article and the subsequent commentary was Fuchida’s alleged “demands” that the Japanese carrier task force that attacked Pearl Harbor on December 7, 1941, undertake a third strike—primarily to destroy the fuel tanks.

As Bennett states, there was no such discussion or debate on the flag bridge of the carrier Akagi. My sources for this contribution are my lengthy correspondence and personal discussions with Minoru Genda, who was on the flag bridge as the carrier force’s air operations officer and had been one of the two initial planners of the Pearl Harbor strike. (After the war, with the rank of general, he commanded the Japan Air Self-Defense Force.)

I recently found a letter from Genda to me from September 1965, at which time he was assisting me with my book Aircraft Carriers: A History of Carrier Aviation and Its Influence on World Events. In the letter Genda stated:

There were no hot discussions on board the Akagi. Commander Fuchida might [have] expressed his opinion about the further attacks, I do not know. The only thing I know is “If they come out [of Pearl Harbor], we will strike again,” Commander Fuchida said just after he landed on the deck.
Anyhow, Adm. Nagumo [the task force commander] and Rear Admiral Kusaka (chief of staff, 1st Air Fleet) made up their minds, “No Second Attack,” long before we started the attack.

Genda later confirmed these recollections in personal discussions with me in Annapolis in May 1969. A specific concern he mentioned to me was the unknown locations of the three U.S. aircraft carriers in the Pacific. With search planes from Oahu seeking the Japanese carriers and the U.S. carriers possibly in the area, Admiral Nagumo (1) was concerned about being surprised by the U.S. carriers, and (2) feared that the surviving aircraft on Oahu could mount strikes against his ships if they remained in the area.
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PLUS ÇA CHANGE, PLUS C’EST LA MÊME CHOSE


In the literary mountain of scholarship, research, and writing devoted to World War II, the story of Operation TORCH, the Allied landings in North Africa in November of 1942, is presented often as something of an overture to the massive amphibious symphonies that followed. Accounts may include some discussion of Eisenhower’s growing facility for strategic leadership, the byzantine nature of Vichy and Free French politics, and the gradual emergence of Charles de Gaulle as the leader of Free France. The landings themselves all too often have been presented as hinting of a Kabuki production, if not of opéra bouffe, with a few desultory shots fired to assuage Gallic honor, followed by capitulation. Then, it seems, the real war begins, moving down dusty roads to Kasserine, the initial blooding of the U.S. Army, the rise of Patton and Bradley, and the inexorable sweep of operations to Sicily, the Italian mainland, and eventually the beaches and hedgerows of Normandy.

Vincent O’Hara has done much to correct this impression and to give TORCH the attention it deserves. Readers will come away with a much better understanding of the difficulties faced by both the French defenders and the Allied invaders and the political currents that swirled about the operation from the very beginning—and with an appreciation for how the results could have been very different.

As O’Hara points out, 1942 was a parlous time for the Allies. Axis armies were cutting deep into the Soviet Union, and fear that it would drop out of the war was palpable. U.S. leaders, particularly George Marshall, eschewed what might be considered military sideshows and argued for a rapid buildup of force in Great Britain, followed by a cross-channel invasion at the earliest opportunity. The British, led by Churchill and scarred by their experience in World War I, preferred less direct approaches, avoiding the U.S.-favored direct attack until victory was assured. TORCH represented a victory for British planners and a setback for Marshall. This is among the better-known elements of the North African campaign, and O’Hara does it justice without dwelling overlong on the topic.
In contrast, French politics usually are, for the most part, underexamined, and O’Hara provides a valuable understanding of French actors and motives. His examination of Marshal Pétain’s efforts to end the German occupation and restore France to something approaching its former status is both convincing and useful. So too is O’Hara’s meticulous description of French forces, plans, and readiness in North Africa on the eve of invasion.

O’Hara’s discussion of invasion planning and preparation and the movement to the various landing beaches is excellent. Although dwarfed by later invasions, TORCH required a major effort at a time when Allied amphibious resources were extremely limited. Scheduling convoys, arranging for carrier-based air support, and coping with potentially lethal surf conditions all foreshadowed difficulties that would have to be overcome in later amphibious operations. The plan was audacious. Allied forces were to carry out five simultaneous and geographically separated landings on the Atlantic and Mediterranean shores of North Africa, then race to Tunis to trap German forces in Africa and deny those forces additional support from Europe. Accomplishing this would bring the Mediterranean under much greater Allied control, and the Axis might have to take some pressure off the Soviet Union to deal with the new threat to the south.

As O’Hara makes clear, French resistance, while affected by conflicting orders on whether to take Allied troops under fire, was not a token effort, although the loss of only 1,700 Allied wounded and killed may have contributed to this impression. Although ill equipped and often outnumbered, French forces, including colonial auxiliaries and units of the Foreign Legion, fought well. While some French units offered no resistance, they did so in obedience to orders from their commanders. O’Hara details the action on each of the five invasion beaches in detail.

The naval battle of Casablanca was, as O’Hara describes it, “the largest surface, air, and subsurface naval action fought in the Atlantic Ocean during World War II.” The battle, which lasted six hours, featured naval gunfire duels between USS Massachusetts and the disabled French battleship Jean Bart. French shore batteries engaged U.S. warships and French combatants shelled Allied landing craft en route to the invasion beaches. French officers handled their ships with courage and daring, and they came close to engaging the Allied troop transports. Maps are provided, greatly aiding the reader’s understanding of how the battle was conducted. There was also a naval engagement off Oran, and Italian and German aircraft and submarines conducted significant antishipping actions as the campaign wore on. O’Hara illustrates that, far from being an Allied walkover, the possibility of TORCH resulting in a disaster at sea was much more likely than is normally acknowledged.

A greater appreciation of TORCH by students of amphibious warfare is warranted. Many of the problems associated with projecting power from the sea were identified during this campaign. The role of beachmasters, the timing and coordination of shore bombardment, and the logistical difficulties associated with landing supplies on an open beach in high surf all were factors. At
times the lessons learned were small, such as the discovery that landing net rungs spaced too far apart posed a significant danger to debarking troops. Some elements of the TORCH landings touch on current questions. For example, although the Saint-Nazaire and Dieppe raids had demonstrated previously the inherent difficulty in conducting an amphibious assault on built-up areas, TORCH would feature several efforts along these lines. The most dramatic of these was an attempt to land U.S. troops from HMS Walney and HMS Hartland (the former U.S. Coast Guard cutters Sebago and Pontchartrain, respectively) directly onto the moles of Oran Harbor. Both vessels quickly were identified as hostile and ran an intense gauntlet of French fire until sunk. In contrast, an attempt was made to sail USS Dallas, a vintage destroyer carrying seventy-five specially trained assault troops, six miles up Port Lyautey’s Wadi Sebou waterway to carry out an attack on a critically important all-weather airfield. The effort, despite experiencing significant delays, succeeded. In an ever-urbanizing world, the viability of direct amphibious assaults may be open to debate once again.

O’Hara rightfully points out that TORCH, in the main, failed to deliver hoped-for results. It would take five months to achieve victory in North Africa, not the three weeks anticipated. The operation did nothing to ease the plight of the Soviet Union and the Mediterranean remained contested waters. The African campaign drew men, matériel, and shipping away from efforts to support a direct invasion of Europe. TORCH resulted in the total occupation of France by Germany and the intentional scuttling of the French fleet at Toulon.

None of these results, according to O’Hara, inflicted real loss on Italy and Germany. However, in the opportunity to identify and resolve amphibious challenges and as a beginning to the development of a truly combined strategic command, TORCH was of value. If, as O’Hara claims, TORCH also ensured that France would not become a true ally of Germany, the strategic benefit may have been significant. TORCH sheds some welcome light on a campaign that too often is passed over. Scholars and lay readers alike will find the book useful. While O’Hara has performed yeoman service in providing this detailed account of the amphibious portion of the campaign, perhaps his greatest contribution is to restore the reputation of naval forces that, far from offering token resistance, fought with courage and tenacity, often against superior odds.

RICHARD J. NORTON


This book provides a detailed reexamination of the main contributory factors leading to Allied victory in World War II. In many ways the book’s argument is not so much new as it is a revision of the revisionists. During the Cold War the narrative was largely that the Western Allies had triumphed over Germany and Japan with some help from the Soviet Union. That narrative was challenged at the time, and with more success after the end of the Cold War.
War by revisionist historians who placed an increased emphasis on the role of Soviet ground and air forces in the defeat of Germany. The Russian front, it was argued, was where the bulk of Germany’s forces was engaged and, as far as the revisionist narrative went, defeated by the Soviet Union. Dr. O’Brien, a reader at the University of Glasgow, challenges that argument with a wealth of data and looks at the war in more global terms. He argues that the air and sea forces of the United States and the British Empire played the decisive role by preventing “the Germans and Japanese from moving” (p. 16).

*How the War Was Won* provides a broad array of detailed information discussing the enormous industrial contribution of all sides. Indeed, the author’s analysis of all this information makes a compelling case for his argument. Yet there is something missing: it is difficult to see the link between cause and effect. One can see such a link better regarding the war against Japan, but in the case of the war in Europe the author does not show clearly the link he claims between air and sea power causing immense damage to Germany’s war economy and Soviet troops wandering around Berlin in 1945. I suspect that the Soviet forces’ killing and wounding of millions of German combat troops might have something to do with this, for without the physical removal of German soldiers from the Soviet Union’s route to Berlin Hitler might not have felt the need to commit suicide. Now, there is no denying that Allied air and sea power contributed to Allied victory in Europe; the argument seems to be to what extent they did so. Thus, this book is welcome for the depth of detail it provides as fodder for such a debate. That this reviewer is not entirely convinced of the author’s arguments does not make this a bad book; it is in fact a very good book, and an extremely welcome addition to the literature on World War II. It provides an enormous amount of information and analysis about the role of air and sea power, which furthers our understanding of the reasons for Allied success. That it causes the questioning of the current orthodoxy is to be applauded, as greater understanding often results from challenges to the status quo.

This book should prove of great benefit to advanced students of World War II, and it is particularly pertinent for specialists interested in current U.S. national security needs. Given the friction that exists among the United States, China, and Russia, the book provides an opportunity to think about how the U.S. armed services should structure their forces for any future conflict with these potential adversaries. Dr. O’Brien’s book should be read by any sailor, marine, or airman invested in a budget fight, because “the only way to ‘win’ a war is to stop your enemy from moving” (p. 488). That argument seems a particularly pertinent one when looking at the problems of Southeast Asia or the Baltic or Black Sea regions.

NICHOLAS MURRAY

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Japan is at an inflection point. Depending on how particular peoples and nations view this enigmatic country, it...
now either is turning away from rightly enforced demilitarization and back toward the more martial and expansionist policies of its past, or is working to become a security provider concomitant with its economic power. *A Military History of Japan* is therefore a timely work that will add studied moderation and critical analysis to the argument regarding the path on which the country is located now and down which it is likely to progress in the future.

This book goes well beyond a traditional historical narrative. The author follows Japan from its origin myths up to the present time, adding elements of geographic determinism and cultural anthropology as well as his own experiences. The military and warfare aspects obviously receive the most focus, but they are not, and perhaps cannot be, separated from the overall history of the country and culture.

In the first chapter, "From Sun Goddess to Samurai," the author helps explain Japan's nature by telling its creation story and examining how landscape, climate, outside influences, and internal competition shaped Japanese development and societal worldview. Around the eighth century CE, when that first chapter concludes, the seminal samurai culture, and an overall Japanese culture distinct from those of neighboring Korea and China, is in place, one the author argues still manifests itself in Japanese society. The following chapters chronicle the subsequent maturation of Japan's political and military power structure. The many accounts of royal machinations and specific battles may confuse or lose those not well versed in Japanese geography or language, but those the author includes do add to the story of how and why Japan's military evolved as it did. These middle chapters also shed light on the Japanese military's actions during the first half of the twentieth century, and on the still-tense relationship between Japan and its neighbors, much of that distrust predating World War II. The Sino-Japanese and Russo-Japanese Wars get ample attention and analysis, as does the very calculated, top-down manner in which Japan's post-samurai military attempted to imitate the best militaries of contemporary Europe.

The "Great East Asian War" chapter may not cover much new ground for those readers with more-than-standard knowledge of World War II. But in "After the Samurai," the book's final pages tie in themes present in Japan for at least 1,200 years. They provide an excellent argument that Japan's future will be determined by the same geographic, cultural, and geostrategic influences that have shaped its past.

The author is a retired naval aviator and a professor at the Army Command and General Staff College. He spent time living in Japan both as a dependent child in the mid-twentieth century and later as a Navy officer. These experiences give him insights different from those expected from either a pure academic analyst or a strategist viewing the country simply as an unsinkable aircraft carrier. He effectively interlaces personal and family recollections with more-standard history to give better descriptions of cultural norms and practices, as when he writes about Japanese rioters sending teams ahead to warn citizens, including his parents, to stay indoors for their own safety.

For the casual reader, *A Military History of Japan* functions as a needed update
to Ruth Benedict’s much-maligned yet still-influential 1946 work *The Chrysanthemum and the Sword*, a general primer on the seemingly contradictory forces driving this global power. For those with a professional interest in the country and its region, this book is a must-read, an enlightening facilitator in the current debate over Japan’s place in Asia and the world.

J. OVERTON

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*Flash Points* is both an elegant and a disturbing book. Not simply elegant in its writing style, which is direct and clear, but also in its initial discussion of the age of discovery and enlightenment that propelled the European nations into becoming world powers—you rarely find a more cogent and concise explanation of the roots of European social, cultural, political, and economic development. Yet the book is also very disturbing because it details how the factors that allowed Europe to transform the world—faith, individualism, scientific inquiry, ideas of self-determination and legal rights, and nationalism—also contributed to the almost unfathomable destruction of the two world wars that tore it apart. George Friedman details the region’s history, current events, and potential future in a way that makes an admonishment from his father, a Hungarian Jewish survivor of both the Nazis and the Soviets, seem very true: “Europe will never change. It will just act as if nothing happened” (p. 23).

Friedman, the well-known founder of Stratfor.com, one of the first private intelligence firms to be a major presence on the web, and an author of prescient books on the future security environment, begins with the personal history of how and why his family escaped Hungary in 1949. Having survived the horrors of World War II and the Communist takeover in a weak, dependent, and occupied nation, Friedman’s father wanted his family to go to America and “live in a strong country with weak neighbors and, if possible, no Nazis, communists, or anyone else who believed in anything deeply enough to want to kill him and his family over it” (p. 17). His view—that a humane peace in Europe always would be a mere interlude—sets the scenario for the rest of the book.

This fear is, of course, what spurred the creation of the European Union (EU). Friedman analyzes the weaknesses of the EU and the sources of conflict throughout Europe, particularly in a situation in which NATO’s perceived importance has diminished, and concludes that the centripetal forces of geopolitics are just too strong. It is not just the potential collapse of the euro; it is the fact that national identities cannot be supplanted by a European identity without destroying a cultural diversity established over millennia. The fact that the EU appeared to achieve some small success in cultivating a cosmopolitan Europeanness is, in Friedman’s view, merely a veneer that a U.S. commitment to defending a cold peace under unique historical circumstances made possible. Those circumstances have devolved. With the controlling pressures removed, Yugoslavia—perhaps the
greatest attempt at fusing otherwise hostile nationalities—exploded into violence until all sides were exhausted by fighting or concluded that opposing NATO’s wishes was too costly. But that was before a resurgent Russia could intervene on behalf of the Serbs. Friedman’s book tours the other potential flash points of Europe within a background where Russia is back, and the geopolitical question of who will be the hegemonic leader of Europe—France, Germany, or Russia—has returned. It is not ambition that drives; it is fear of the power of the others (as Thucydides described so many centuries ago). By all measures, Germany would remain the dominant power in economics, as it is the economic engine of the EU today. But it also is the power most easily invaded from both east and west. And it is growing impatient with the seeming impossibility of creating an EU that conforms to its view of necessary order. The Germans, according to Friedman, view themselves as the victims of the EU/euro economic crisis. What would it mean to the EU, NATO, and specifically eastern Europe if Germany were to cut a deal with Russia to secure its own “permanent” peace—secure to be the export power it already is beyond Europe?

In Friedman’s view, the question of Germany, Russia, and European peace is one of national culture as well as geopolitics: “For the Germans, success and disaster are intimately linked, so they are simultaneously afraid of what they have achieved and tremendously proud of it. . . . They do not aspire to lead a new Europe. They fear that they cannot escape the role. The rest of Europe harbors suspicions that Germany’s public fears and modesty are feigned, that in the end the old Germany has never died but has merely been asleep” (p. 153). Add in Russian pressure and the fact that post–Cold War Germany is united, and the European foundation seems a lot less stable.

Even if the European powers never are moved to conflict with each other, Friedman’s conclusion is that the situation can make the continent safe for ethnic breakups, with all the resulting potential for wars—or perhaps hybrid wars and gray-zone conflicts—to occur. Russia will be the first to take advantage of that, prompting others to do the same. He predicts that “Europe’s history of conflict is far from over. . . . In many places Europe’s anger against other Europeans is still there” (p. 251).

Ultimately, Friedman sees the future still controlled by Europe’s “Faustian spirit” that “haunted its greatest moment, the Enlightenment,” defined as “the desire to possess everything even at the cost of their souls,” and today “everything at no cost” (p. 257). By “everything,” he means national sovereignty without the exercise of national sovereignty; wealth distribution without work distribution; a world in which they can feel like the hegemon but not have to be it; a world in which wars would stop without intervention; and, perhaps worst of all, ethnic nationalism without its implications.

What can be done to prevent growing conflicts? Friedman flirts with the fact that America today is still as powerful as it was when it put out “the European fire in 1918 and 1945” and contained it during the Cold War. But can it do so in the future? Should it do so in the future, or do the fires need to burn?
themselves out? Friedman is not sure, but he does give us a disturbing prospect about which we need to think deeply.

SAM J. TANGREDI


The signature foreign policy move, and greatest strategic insight, of Barack Obama’s presidency was “the pivot”—later renamed “the rebalance”—to the Asia-Pacific region. President Obama’s initiative grew out of his conviction that Asia had become the most important region in terms of economic dynamism, explosive demographic growth, and growing military tensions. And if one broadens the geography and semantics to include India—yielding the “Indo-Pacific”—this makes utter sense, since the region claims 60 percent of the world’s population, nearly 40 percent of total global economic output, some of the fastest-growing and most capable militaries, and three nuclear states. No surprise, then, that the Obama White House argued in a November 2015 fact sheet that this region “is increasingly the world’s political and economic center of gravity.” Or, as top Asia expert and diplomat Kurt M. Campbell astutely wrote in The Pivot: The Future of American Statecraft in Asia, “[T]he lion’s share of the history of the twenty-first century will be written in Asia” (pp. 1, 344).

While the Obama administration made a compelling case for the logic of pivoting to Asia—that is, elevating the time, attention, and resources given to the region relative to other parts of the world—the results were uneven. Washington reinvigorated its diplomacy in the region, strengthened commitments with U.S. treaty allies, forged relationships with new partners such as Burma, began shifting military assets to the region, and negotiated a far-reaching trade deal intended to deepen economic integration. But it also failed to ratify that trade deal, suffered significant political setbacks with treaty allies Thailand and the Philippines, was unable to counter Pyongyang’s rush toward acquiring nuclear weapons capable of reaching the United States, and did little to restrain Chinese maritime assertiveness and economic and political coercion in the region.

How then should one understand and evaluate the myriad factors contributing to Asia’s future? And are the risks to the continued growth and stability of the region now eclipsing the region’s promise? These are the questions that Michael Auslin, scholar in residence at the American Enterprise Institute, asks in his judicious, sobering, and compelling new book The End of the Asian Century. Auslin argues that Asia’s future is significantly less assured than is commonly held. As a longtime scholar of, frequent traveler to, and trenchant observer on the geopolitics of Asia, he is positioned well to make such a case. This book is far from a polemic; in fact, Auslin approaches these questions as a skeptic, describing how he in fact originally held the opposite belief—that the twenty-first century inevitably looked to be an Asian century. Yet through repeated trips to the region and multiple meetings with senior policy makers, businessmen, and military
officers, he became convinced that risk rather than opportunity was the most salient feature of the Asian political, economic, and military landscape. He argues that U.S. policy makers have been overly optimistic about opportunities in the region and insufficiently attentive to risks, thereby warping U.S. perception of regional trends and causing the United States to pursue misguided policies.

This book is Auslin's attempt to introduce a framework to assess risks in Asia properly, across five major categories. These include threats to Asia's growth from the end of its economic miracle and the failure to implement structural macroeconomic reforms; demographic pressures that will place increasing strain on rapidly modernizing and urbanizing political and economic systems; unfinished political revolutions that will address these large-scale economic and social dislocations; long-term historical antagonism among various Asian states, the lack of effective regional political community among them, and the dearth of effective institutions to mitigate crises; and, most alarming, the growth of power politics and the increasing potential for war.

The book's organization follows these categories, with chapters mapping risk in each thematic domain. A final chapter both summarizes and concludes with a series of policy recommendations. Auslin posits that as risk increases, prudent investors take out more insurance. This advice is as relevant to nations as to individual investors, and applies across all the categories of risk contained in the earlier sections of the book. In the security realm, he argues for a concentric triangular approach, with an inner core of states—Malaysia, the Philippines, Indonesia, and Singapore—working closely with an outer core of the region's liberal-democratic heavyweights, Australia, India, and Japan, to counter an increasingly aggressive China.

Economically, he advocates for structural reforms within Asian nations and trade liberalization among them. To alleviate political instability, he pushes a realistic democracy-promotion program. To avoid isolating China, he promotes an agenda for enhancing contact with ordinary Chinese citizens. Linking all these recommendations is a belief that long-term stability in Asia is most likely to flow from increased liberalization and democratization, and that the United States should have an indispensable role as partner and catalyst in that process. Absent American involvement, investment, and leadership, short- and long-term instability are likely to rise.

Auslin issues the caveat that his book is not intended as a comprehensive guide to all the countries in the region or all the issues affecting them. And yet in just 222 pages his book manages to serve not only as an excellent introduction to the region but as an incisive guide to understanding the contemporary risks roiling the most consequential region of the world. Extremely useful for national security professionals, investors, and interested observers alike, this book moves beyond headline news to analysis and advice in navigating the region's shifting geopolitical, demographic, and economic landscape. Some will find his recommendations too aggressive, although his policy prescriptions explore both costs and benefits. Others perhaps will allege that Auslin is too bearish, too gloomy on what many are expecting to be the dawn of the Asian century. But, given the acceleration of tensions in
Asia, the demise of trade liberalization, the erosion of democracy and advance of autocratic rulers, and the doubts the Trump administration has cast on its commitment to alliances, we may find that he was in fact too sanguine.

CHARLES EDELMAN


Ranji Rai and Joseph Chacko’s book, Warring Navies, is a welcome addition to the scant coverage of the naval history of South Asia. The authors are a retired Indian navy commodore and a defense journalist, respectively, and the book draws heavily on Commodore Rai’s experiences in the navy. The book itself crosses the boundaries between memoirs and popular history, covering the history of the Indian navy’s operations from independence through the end of the Cold War. It also includes several stand-alone essays on various topics related to maritime and regional security by prominent retired Indian military leaders, such as former army chief Ved P. Malik, former navy chief Vishnu Bhagwat, and Lieutenant General C. Satish Nambiar. One of the major strengths of the book is its coverage of the many lesser-known uses of the Indian navy (e.g., the liberation of Goa in 1961 and the interventions in the Maldives, Seychelles, and Sri Lanka in the 1980s). It is particularly useful for both Indian and non-Indian readers to be aware of these past actions today, as both India and its international partners debate India’s role as a security provider in the Indian Ocean region.

The book is pitched toward a general audience interested in military and naval affairs in South Asia. The prose is engaging and humorous, which makes the book a quick read. For example, the title for the chapter on the 1965 war—in which the Indian navy was not particularly active—is “The Navy Does Sweet Fanny Adams in 1965.” One of the more interesting aspects of this book is its use of various Indian, Pakistani, and American autobiographies and memoirs to interject vignettes from people involved in the conflicts, ranging from Indian naval officers to Pakistani leaders and even to Henry Kissinger. These provide insight into the perspectives of participants in the events. The book’s main strength is that it gives an insider’s view on the challenges of joint operations for the Indian military. There are some excellent examples, ranging from air force and naval aviation in the 1965 war to amphibious operations in 1971 and smaller operations in the 1980s.

A couple of minor points detract from the book. Given that it is a popular history based on personal observations and the memoirs of participants, some of the general history of the conflicts does reflect older interpretations and narratives that are now debatable. The book is not academically sourced and does not have citations, so the reader is left wondering whether the book would have been improved if the authors had engaged more with the work of recent historians, such as Srinath Raghavan’s excellent work on the 1971 war, or even the classic histories of the Indian navy done by Admirals Singh and Hiranandani. Similarly, the book could...
have given greater attention to formatting and editing to improve its structure and eliminate typographical errors that distract the reader. In particular, the intersection of long quotations from other authors sometimes confuses the narrative; perhaps some of these longer passages could have been placed in an appendix so the authors’ narrative would not be interrupted. Last, some of the additional essays by other authors do not seem to fit within the theme of the book.

However, these shortcomings need to be taken in context, given the nature of the book and its intended audience. Readers should keep in mind that the work is intended to be neither a definitive history nor an academic book, so they should not expect it to engage with the academic literature or offer extensive footnoting. But for its intended audience and modest ambitions, it does succeed in bringing a valuable perspective with a great deal of personal experience to the reader in an approachable and readable format. It will be of use to readers who want more anecdotal details of the history of naval operations and the naval cultures of India and Pakistan, and those who want a short overview of the naval aspects of the conflicts in question.

PATRICK BRATTON


More than forty years after the last U.S. combat troops departed Vietnam in 1973, the conflict looms large in American popular culture and memory. Vivid depictions of guerrilla warfare, antiwar protests, and psychologically troubled veterans proliferate in print and film. This was not always the case, however. Silence followed in the immediate aftermath of the Vietnam War as veterans and civilians alike grappled to forge meaning from the long, costly intervention and ultimate American defeat. The arrival of veteran-authored memoirs in the late 1970s and the 1980s reignited popular interest in the war and inspired numerous others to follow suit. In subsequent decades, the gritty authenticity of these best-selling narratives, written by “those who were there,” profoundly shaped American collective memory and historical discourses about the war.

John A. Wood’s Vietnam Narratives and the Collective Memory of the Vietnam War aims to expose myriad misconceptions that have developed as a result. Undertaking a comprehensive analysis of the best-known Vietnam veteran memoirs, Wood delineates the accuracies, omissions, and miscues inherent in the genre to ascertain its overall influence on American understanding of the war. His methodology centers on the collective analysis of fifty-eight Vietnam veteran memoirs and oral histories published between 1967 and 2005. He supplements this primary set of texts with films, newspapers, U.S. government studies, historical scholarship, and personal accounts from Vietnamese civilians, African Americans, women veterans, and other less prominent authors. Wood’s primary argument is that veteran narratives are subject to the properties and limitations of memory. Based on personal recollection usually written long after the events in question, memoirs necessarily provide a fragmentary and biased perspective.

https://digital-commons.usnwc.edu/nwc-review/vol70/iss3/13
Seven chapters ranging in topic from author demographics to race, sex, and postwar life illustrate this point. Examining the backgrounds of the most prominent authors, chapter 1 generates a demographic profile for the typical Vietnam-veteran memoirist: a college-educated, white, male officer. Although enlisted personnel tended to be younger and more-diverse working-class men, Wood astutely notes that most veteran-writers were low-ranking officers whose combat experiences were not only similar to but representative of those of the men they commanded. Chapter 2 delves into the authorial ambivalence common to many veteran narratives, which simultaneously disparage the military mission and condemn Vietnamese civilians as duplicitous enemy collaborators and greedy opportunists. Wood attempts to rehabilitate popular perception of the Vietnamese by justifying their behaviors as the desperate actions of the inhabitants of a war-ravaged nation. Observing a conspicuous absence of racial tensions in the best-known Vietnam memoirs, chapter 3 foregrounds the narratives of nonwhite veterans as a race-centric “countermemory” of the Vietnam War. Wood’s analysis reveals two competing paradigms: authors either highlight racial cooperation and pride in the combat performance of their particular ethnic groups or they underscore incidents of white racism and express a separatist racial ideology derived from the Black Power movement. Women and sexuality are the focus of chapter 4, which concedes that male soldiers generally behaved in a sexist manner in their interactions with Asian and American women in Vietnam. Wood attributes the prevailing misogynist attitude of American servicemen to mainstream and military cultures that emphasized sex and promoted a general hostility toward women. Chapter 5 debunks prevailing myths about veterans’ homecomings and postwar lives: first, that Vietnam veterans suffered from post-traumatic stress disorder at a greater rate than soldiers who survived earlier wars; second, that Vietnam veterans literally were spat on by an ungrateful American public on their return home. Chapter 6 underscores the ambivalent political sentiment common to Vietnam veteran memoirs and concludes that such characterizations accurately reflected the views expressed in U.S. government opinion polls. The final chapter tracks numerous similarities between Vietnam memoirs and narratives produced by veterans of other American wars, arguing that cross narrative parallels reflect a consistent demographic among authors as well as the fact that “combat soldiers’ wartime experiences have not changed in many fundamental ways since at least the 1940s” (p. 109).

Wood’s desire to present a comprehensive analysis of the genre has produced a volume that is both more superficial and more repetitive than necessary. Wood also overlooks the ways that memoirs as a genre guide veterans’ selection of stories to include. Memories are at once distilled to a carefully curated collection, embellished with expository detail and context, and stitched together to form a compelling narrative arc. Vietnam veteran narratives not only inspired and made acceptable “uncensored” accounts but provided a model and template for the types of stories that should be featured. Noncombatant veteran memoirs, for example, represent a potentially rich, untapped vein of information for scholars but almost
certainly lack the high-intensity combat usually considered “worthy” of retelling. Although Wood’s research is voluminous, it relies heavily on published materials. Archival records and Vietnamese-language sources would strengthen an already insightful analysis of American veteran narratives and their imprint on popular perception of the war. Moreover, Wood’s reliance on previous scholars’ works undercuts his oft-repeated claim that the book offers an overdue corrective to existing scholarship. Indeed, this slender volume is directed not only to the casual reader but to the professional historian. According to Wood, Vietnam veteran memoirs have received “inadequate treatment” by literary scholars and historians, who generally consider only a small sample of texts and fail to distinguish fiction from nonfiction narratives. He further charges that few military historians scrutinize veteran-authored texts. Yet Wood’s fundamental premise that this book “is a work of history, but it does not treat veteran memoirs as sources that can be straightforwardly mined for information” belies a naïve understanding of professional historical practice (p. 5). Any responsible scholar approaches her sources—archival and secondary—with a professionally critical eye.

Even so, this book would be an excellent addition to an undergraduate military history curriculum. Wood’s clear and impressive synthesis of historical and literary scholarship provides a useful introduction to the critical study of Vietnam veteran memoirs. Interested readers will want to supplement Wood’s book with fine-grain examinations such as David Kieran’s *Forever Vietnam: How a Divisive War Changed American Public Memory*, Thomas Myers’s *Walking Point: American Narratives of Vietnam*, and Jerry Lembcke’s *The Spitting Image: Myth, Memory, and the Legacy of Vietnam*.

BREANNE ROBERTSON

*The Role of the Royal Navy in South America, 1920–1970*, by Jon Wise. London: Bloomsbury, 2014. 288 pages. $122. Although arguably not a very enticing title for American naval professionals, this small, hardback book is nonetheless well worth their time. The author’s aim is to illustrate the contribution that the maritime service can make to a nation’s foreign policy in peacetime, and in particular to the health of its shipbuilding and defense exports. While the book obviously showcases the fortunes of twentieth-century Great Britain, the points it makes are broadly transferable and increasingly relevant in this era of growing emphasis on seamless inter-governmental cooperation. Besides, the subject matter is refreshing: How often among naval monographs do you find a top-notch scholarly investigation into that most mundane and yet ubiquitous naval mission of “presence” or “showing the flag”? Naval officers are quick to extol the virtues of these activities in conversation, but few actually can substantiate their claims. This book goes some way toward filling that gap. The book has its origins in a PhD dissertation on the history of the relationship between the Royal Navy and its Chilean counterpart. As such it limits the focus to a manageable analysis of the presence
mission in a particular theater at a given time, while at the same time allowing a useful extension into the broader topic of naval diplomacy throughout the Americas as a backdrop. The work begins with a survey of the extant scholarship on *showing the flag*—a term that the author explains is really too broad to be useful—before moving chronologically through the decades of the last century. By and large the chapters flow logically into one another, although the comparative chapter on U.S. postwar defense plans (chapter 6) seems something of an outlier, particularly in view of the title. The research is excellent and uses a wide variety of contemporary official sources and established scholarly works. The author is an academic researcher and does not appear to have had any naval experience, although he has done his homework in gathering the appropriate naval opinions. The work forms a concise and usable package. (However, from a publishing point of view, the physical ink used in the printing leaves a lot to be desired. In the reviewer’s copy, even the action of fingerling a page lifted the print right off the paper!)

The book’s overall message is that, while the Royal Navy was suffering through a stretch of undeniable decline throughout the period, even in its heyday the service never really enjoyed a position of complete, influential dominance on the South American continent. Furthermore, by being proactive and focusing its efforts on areas where success was more likely, it managed to maintain a surprising level of influence for far longer than one might have imagined in what was, after all, very much a secondary theater for the United Kingdom. To this end, the book showcases the importance of the attaché in linking naval and diplomatic efforts, as well as the enormous value of offering educational experiences and exchanges to foreign officers, thereby sowing the seed corn for future cooperation.

Interestingly, it also demonstrates that even in the absence of such schemes, the Royal Navy leadership could and did lead the impetus for change, with surprising success—as evidenced by the impact of the 1970s “Group Operating” concept, which enhanced the prestige value of the navy’s visits ashore while at the same time sustaining its skills and capabilities at sea. The navy benefited in that its “blue-water” skills were preserved far longer than would have been possible otherwise, and defense sales benefited from the showcasing of those skills. It truly was a “win-win” development. In conclusion, this is a worthwhile read for anyone interested in the broad topic of naval diplomacy overseas or defense sales in particular.

ANGUS ROSS


Pauline Kaurin is associate professor of philosophy at Pacific Lutheran University, specializing in the just war tradition and military ethics. For this volume, Kaurin developed her research during time at the U.S. Naval Academy and U.S. Military Academy and in dialogue with academic colleagues in the International Society for Military Ethics. This volume examines the ethical
complexities facing the modern warrior engaged in asymmetrical warfare (AW).
In the introduction, Kaurin begins with a thorough discussion of the term warrior, giving it a meaning distinct from soldier, sailor, airman, or any other military operator. To give meaning to the warrior concept, Kaurin reaches back to ancient Greek mythology: she finds Achilles, of Homer’s Iliad, to be the “touchstone” for the ethical warrior. Kaurin does not see Achilles as the perfect example of a warrior; instead, Achilles exemplifies the military professional’s existential essence in war and personifies warrior virtues, resilience, and prowess.

Even though Achilles fought his wars in antiquity, Kaurin sees Achilles as relevant to the AW of the current era. Examined through the lens of jus in bello, how do we fight like Achilles and how do we fight against Achilles? The volume addresses the moral education of the warrior to engage and interpret better the unconventional conflicts that present ethical challenges, as well as ethical impediments that are contrary to jus in bello. How do we equip the warrior to engage ethically complex weapons technology and changing asymmetrical conflict?

Kaurin argues for a systematic examination of the ethical challenges posed by autonomous weapons and AW. What are the ethics of the strategies and tactics of each of the two sides in AW? One side may use torture against captives, whether combatants or noncombatants, while the other side chooses not to reciprocate owing to countervailing moral norms, contrary public opinion, and lack of political will. How does the warrior question, think, and respond to such moral dichotomies faced in AW? Kaurin’s premise is that moral education must address AW within the scope of jus in bello.

The focus on AW stems from two points. The first is a mind-set fixed on a conventional-war theory that understands asymmetrical conflict as part of conventional warfare. A second point is that AW requires new challenges to ethical thinking that are counter to that associated with conventional war. When will serious ethical thought be given to the changing nature of war, which confronts the norms of traditional war between nations?

Kaurin’s thoughts and observations go beyond AW. She identifies the deeper nuances of moral asymmetry, as defined by Michael Gross and Rob Thornton. The adversary’s failure to practice reciprocity undermines the moral norms, strategy, and tactics of the generally stronger opponent. With disproportional impact, the effect represents a symbolic and ideological stance against the stronger opponent.

Of the ethical questions Kaurin poses throughout the book, some are being contemplated already, while others are harder to engage because the moral scope involved cannot be brought into focus yet. She contends that understanding the full scope of the ethical issues requires getting into the hearts and minds of the adversary; yet often it is the adversary who artfully gets into the hearts and minds, and the social fabric, of the opponent.

Kaurin contends that if warriors are to engage in asymmetrical moral conflict, they must have courage. Yet the technological development of weapons means that the physical distance between
opponents is growing, so it takes less courage to go to war. Achilles had the courage to fight face-to-face, taking risks and facing danger directly. For many, distancing oneself from danger—even the risk of danger—by using technology imposes a fundamental weakness on the modern warrior amid the challenges he faces. Kaurin presents a detailed analysis of courage in an asymmetrical context, with a prescription for developing courageous warriors.

Another moral attribute that Kaurin sees as essential to the warrior ethos is loyalty. This loyalty is built on leadership and trust and is a foundation of the profession of arms. Referencing the *Iliad*, she compares the loyalty of Achilles, the traditional warrior, with that of Hector, the contemporary, professional warrior. A strategy for training warriors for loyalty is laid out. In addition to excellent military ethics literature references, Kaurin uses film to illustrate key ethical points.

The combatant/noncombatant distinction must be made clear for the soldier considering *jus in bello*. Kaurin proposes a five-level gradation of power and threat, from highest to lowest:

- uniformed combat personnel
- unconventional belligerents
- those provisionally hostile
- neutral or nonhostile noncombatants
- vulnerable noncombatants

Discerning the appropriate category of combatant/noncombatant would determine the appropriate level of force. Such a moral model of ascertaining the threat level would equip the soldier better in the ethics of *jus in bello*.

Kaurin’s thoughts are a contribution to the literature on the higher level of moral thinking for military leaders. She does not shy away from the conundrums the warrior faces. To maintain an ethical edge in asymmetrical warfare, military ethics must be embedded into the culture of the profession of arms.

THOMAS E. CREELY


The relief of General of the Army Douglas MacArthur by President Harry S. Truman remains one of the most controversial and debated wartime command decisions made in the military history of the United States. By April 1951, Douglas MacArthur was at the peak of his game as a military leader. His public pressing to widen the war in Korea, in direct contradiction to the intent of his president, and his public statements to that end that led to his dismissal still fuel debate today.

H. W. Brands gives depth to the tale of MacArthur versus Truman by including the complexities that existed in the Korean conflict and its Cold War context, when a U.S.-led “free world” was engaged in a global struggle against Soviet-led Communism (and especially Soviet interest in Central Europe). As the fighting in Korea continued, official Washington, and the Pentagon in particular, worried that the war effort was tying down more and more U.S. military resources—worries that fueled further concerns that Moscow might see the United States stretched militarily and unable to defend Central Europe adequately.
Brands highlights another lesser-known aspect of the Korean War: MacArthur's desire to bring Chinese Nationalist forces into the fight. Truman and the Joint Chiefs, knowing how this could antagonize Mao's China and possibly widen the war, did not view the idea favorably. Truman and the Joint Chiefs were not convinced that Chiang Kai-shek's corrupt and recently defeated forces would prove more of an advantage than a burden to the fight in Korea.

MacArthur also clearly chafed at what he perceived to be Truman's hesitancy in fighting Communism. Truman, in turn, remained focused on the Communist threat to Central Europe and U.S. commitments to its European allies, all while trying to balance resisting Communist aggression in Korea against preventing the conflict from widening.

Yet the conflict in Korea did widen when Chinese forces entered the fray in November 1950—an escalation that caught MacArthur off guard. Only a month earlier, in his famous meeting with Truman at Wake Island, he categorically had dismissed Chinese intervention as a concern.

The central element of the MacArthur-Truman controversy proved to be the persona of Douglas MacArthur himself. Having lived and fought in the Pacific since 1937 (and not having returned to the United States until his relief in 1951), MacArthur had a self-described faith in his understanding of the "Asian mind." By 1951 MacArthur, then seventy-one, had lost touch with his country, which had changed considerably in the thirteen years since he had been there last. Believing he could speak for the American people, MacArthur allowed a draft effort to go forward for the 1952 Republican presidential nomination. Yet, not desiring to campaign and growing ever more shrill in his speeches, MacArthur quickly doomed his potential candidacy to oblivion. His seeming advocacy for the use of nuclear weapons in Korea gave civilian and military leaders further pause, particularly when he suggested "sowing of fields of suitable radio-active material" in theater. Interestingly, it was President-elect Eisenhower who later broke the peace talk deadlock by intimating his openness to using nuclear weapons against the Chinese.

Perhaps the most damning part of the MacArthur story is the general's testimony before the Senate Armed Services and Foreign Relations Committees upon his relief of command and forced return from Japan. The testimony, which Brands recounts in great detail, makes for some of the best reading. MacArthur tries to live up to his reputation, yet appears to be out of his league before inquisitive senators. He ultimately loses what support he had from Republicans, who, while no fans of Truman, in the end opted not to cast their lots with MacArthur.

A few aspects of the book did prove distracting. Detailed maps of the Korean Peninsula showing the many stages of the Korean War would have added to the reader's understanding of the conflict but are absent. Further, a glitch in binding resulted in the Korean Peninsula map that was included on the inside cover being upside down. The reviewer contacted the publisher via e-mail and, although acknowledged, was not responded to. And on page 329 the author's passage "MacArthur's prediction that by January 1950 the victory would be so complete" is clearly
a misprint, because North Korea did not invade South Korea until June 1950. These items are minor and easily corrected in a future edition. What remains still is a powerful book that goes into great detail, benefiting from the storytelling ability of H. W. Brands. We hope that a civil-military conflict between a towering figure like MacArthur and a sitting U.S. president is unlikely to reoccur. Yet the story remains a valid one today, with its lessons on the reach of military power in a democracy, the role of the president in setting national policy, and the role of civilian oversight of military power.

DAVID L. TESKA

The Pacific War and Contingent Victory is “an exercise in the elucidation of terms”—an exercise necessary to determine whether the Empire of Japan could have avoided defeat at the hands of the United States and its allies. The focus on “terms” is important, as precision and clarity are vital to Professor Michael Myers’s effort to challenge the near-universal acceptance of the idea that Japanese defeat was inevitable. On the contrary, Myers argues that there were several points in the war where the arc of history was subject to change, given a different mix of luck, skill, will, or strategy. Myers’s book takes aim at British historian H. P. Willmott—a leading proponent of the inevitability school—and Willmott’s assertion that since “the defeat of Japan was assured” no single battle or campaign can be considered “decisive.” The Pacific War and Contingent Victory challenges this conventional view that inherent industrial, financial, and demographic shortcomings all but guaranteed Japanese defeat.

Myers is also careful to argue that, while the Japanese could have avoided defeat, this does not mean necessarily that they ultimately could have gained victory. Rather, Japan might have realized outcomes short of actual defeat, such as an armistice preserving some of the gains made early in the war, a return to the status quo ante bellum, or even a negotiated surrender that left Japan more intact than it would be when it ultimately did surrender in 1945.

Myers’s challenge to Willmott and the rest of the proponents of inevitable Japanese defeat is built on an insistence on precise terms: as he explains, all that is required is to show that there was the slightest chance of a Japanese victory, however long the odds or improbable the required chain of events. If, even under the most remote of conditions, a different outcome could have occurred, then the inevitability argument is defeated. Myers then argues that if defeat was not a certainty, then one or more events—be they battles or campaigns or just a moment of good or ill fortune—had to be decisive. It is difficult, perhaps even impossible, to argue with Myers’s logic. His position is somewhat similar to that of a lawyer defending the owners of a carnival who offer a commonly found midway game involving tossing softballs into milk cans for prizes. All the lawyer has to do is show that it is possible for the softball to
go into the can, even if the likelihood of that happening is as close to zero as one can get, and no one ever wins a prize. Myers produces ample evidence to prove his point. He notes that even Willmott himself acknowledges that a German victory in Europe could have enabled Japan to achieve something other than defeat in the Pacific. If the avatar of inevitability admits the possibility of an alternative outcome, what else is needed to carry the argument? However, the clarification that Japanese defeat was nearly inevitable versus simply inevitable is a distinction without a difference. If this were all there was to Myers’s book, it would be scant reward for the cost of purchase or the time spent reading it. Luckily there is more.

_The Pacific War and Contingent Victory_ identifies a number of ways by which Japan might have avoided defeat. These include a United States willing to settle for a negotiated conclusion in the face of mounting casualties and war weariness. Greater success against Australia, which Myers argues could have been achieved, perhaps combined with a successful invasion and occupation of Hawaii, might have been another means to a different end. In sum, Myers’s book—which has been used in the Naval War College’s curricular case on the Pacific theater in the Second World War—by focusing on war’s contingent nature, illustrates well the oft-noted maxim that in war the enemy truly does “get a vote.”

RICHARD J. NORTON

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Our Reviewers

**Patrick Bratton** is an associate professor of national security and strategy studies at the U.S. Army War College. He graduated with a BA in history from the University of Alaska Fairbanks, completed graduate studies at the University of Wales, Aberystwyth (U.K.) and the Université de Rennes 2 (France), and received his PhD from the Catholic University of America.

**Thomas E. Creely** is associate professor of leader development and ethics in the College of Operational and Strategic Leadership at the Naval War College. He received his PhD from Salve Regina University. A retired Navy chaplain, his Navy career included sea, shore, and Marine Corps assignments, as well as service as an enlisted sailor.

**Charles Edel** is an associate professor of strategy and policy at the Naval War College. He recently served as a strategic adviser to the Secretary of State on northeast Asia, the South China Sea, and the western Pacific region in the State Department’s Office of Policy Planning. He received a BA in classics from Yale College and holds a PhD in history from Yale University. An intelligence officer in the Navy Reserve, he is the author of _Nation Builder: John Quincy Adams and the Grand Strategy of the Republic_ (Harvard Univ. Press, 2014).

**Nicholas Murray** teaches in the Strategy and Policy Department of the Naval War College. He received his doctorate in modern history from the University of Oxford. He is the author of _The
*Rocky Road to the Great War* (Potomac Books, 2013), and he advises the Under Secretary of Defense for Personnel and Readiness on professional military education.

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 the *Marine Corps University Journal*.

J. Overton is the writer/editor for the Naval Undersea Warfare Center, Division Keyport. He was previously an adjunct instructor in the Naval War College Fleet Seminar Program and the Marine Corps Command and Staff College Distance Education Program. He served in the U.S. Coast Guard, and has worked in other public affairs and historian positions for the Navy and Army.

Breanne Robertson is a historian with the Marine Corps History Division at Marine Corps University. She has published articles on Marine Corps activities in the Dominican Republic between 1916 and 1924 and on U.S. efforts to cultivate Pan-Americanism through the visual arts during World War II. She is currently editing a volume on the history and meaning of the Iwo Jima flag raisings, entitled *Investigating Iwo: The Flag Raisings in Myth, Memory and Esprit de Corps*.

Angus Ross is a retired Royal Navy officer and professor of joint military operations at the Naval War College. He is a graduate of the College, received a second MA from Providence College, and is 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.

Sam J. Tangredi is a professor of national, naval, and maritime strategy at the Center for Naval Warfare Studies, Naval War College. He is the author of *Anti-access Warfare: Countering A2/AD Strategies* (Naval Institute Press, 2013) and two earlier books on the future security environment.

David L. Teska is a retired captain in the U.S. Coast Guard Reserve. He is a graduate of Texas Tech and Kansas Universities. He works for the Federal Emergency Management Agency, U.S. Homeland Security Department.
REFLECTIONS ON READING

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

In late February 2017, the Chief of Naval Operations (CNO) launched his more comprehensive and digitally focused CNO Professional Reading Program (CNO-PRP). The revised program comprises over 140 books, which are arranged in categories that align with the “Design for Maintaining Maritime Superiority.”

CNO Admiral John Richardson, USN, launched the website with these words:

Warfare is a violent, intellectual contest between thinking and adapting adversaries. The team that can think better and adapt faster will win. As we prepare for operations and war with an increasingly complex set of potential adversaries, we must do more to sharpen our thinking, learn the lessons from history, and expand our minds. The books on this list are those that have influenced my leadership development. It is our responsibility as leaders to continue to grow and to always question the status quo. These books have helped me do just that. If you find just one book on this list that challenges you as a leader, then it has been a success. I encourage you to discuss what has challenged you as a leader in our new forum. Remember to never stop striving to expand your mind.

The site provides book summaries aligned with the lines of effort and attributes identified in the Design. They include the following:

Naval Power. These books provide a strong foundation of knowledge on classic and modern maritime strategy, emerging issues, and new threats and opportunities. Historical works in this category span from the age of sail to the many naval battles of World War II and beyond; studying the history of naval power deepens the context and offers precedent for the challenges of the present.

Fast Learning. Books in this category address the challenges of creating a flexible and adaptive learning environment, from the deck plates to the Pentagon, which is critical to the success of our fleet. Applying the best concepts, techniques, and technologies accelerates learning for individuals, teams, and organizations. Clearly knowing the objective and the theoretical limits of performance comes
through practice and education. We must adapt processes and thinking to be inherently receptive to innovation and creativity.

**Navy Team.** These books recognize that we are one Navy team comprising a diverse mix of active-duty and reserve sailors, civilians, and families, with a history of service, sacrifice, and success. Mariners who read these titles will be better prepared to build on this history to create a climate of operational excellence that will keep us ready to prevail against all future challenges.

**Partnerships.** Books in this category speak to the need for our Navy to deepen operational relationships with the other services, agencies, industry, allies, and partners who operate with us to support our shared interests. Partnerships include those with joint service and interagency partners, with international partners, and with research-and-development labs and academic institutions.

**The Canon.** These books provide core knowledge that is fundamental to the naval profession. Understanding the causes of conflict, the dynamics of power, and the intersections of politics, diplomacy, economics, and military power is part of the core knowledge each sailor should have.

**Core Attributes.** Books in this category address the four core attributes of our professional identity—integrity, accountability, initiative, and toughness—that help to serve as guiding criteria for our decisions and actions. By embracing these attributes, our core values of honor, courage, and commitment should be clearly evident in our actions.

In addition to the books and documents that comprise the CNO-PRP, several movies and documentaries have been identified to support the learning objectives of the program.

To be more responsive to changes and to reduce procurement and distribution costs, the CNO-PRP is now limited to electronic/digital versions of books (e-books); hard copies no longer will be distributed automatically to Navy commands afloat and ashore. Many of these e-books are available as downloadable files that can be borrowed (for limited periods but at no cost) from the MWR digital library. Most titles in the reading program also are available for free at My Navy Portal or directly through a log-in from the Navy General Library Program. Security restrictions at your work site may preclude downloading these books via Navy-owned computers, so downloading them to personally owned devices may be necessary. More-detailed instructions on how to access the available books can be found on the program website at www.navy.mil/ah_online/cno-readingprogram/.
Reading books of consequence can be an interesting and effective way to become more professional sailors and informed citizens. This tradition goes back nearly two hundred years, to Secretary of the Navy Samuel Southard’s order that every Navy ship be outfitted with a professional library of thirty-seven books on topics that included mathematics, history, and philosophy. Two centuries later, we should follow in the footsteps of our predecessors and “Read, Write, and Win!”

JOHN E. JACKSON