

7-2020

Joint Force Quarterly 98 (3rd Quarter, July 2020)

National Defense University Press
National Defense University Press

Follow this and additional works at: <https://digitalcommons.ndu.edu/jfq-full-issue>

Recommended Citation

Press, National Defense University, "Joint Force Quarterly 98 (3rd Quarter, July 2020)" (2020). *Joint Force Quarterly ARCHIVES*. 16.
<https://digitalcommons.ndu.edu/jfq-full-issue/16>

This Article is brought to you for free and open access by the Journals (Full PDF Issues) at Digital Commons @ NDU. It has been accepted for inclusion in Joint Force Quarterly ARCHIVES by an authorized administrator of Digital Commons @ NDU. For more information, please contact joanna.seich@ndu.edu.

JFQ

Joint Force Quarterly

Issue 98, 3rd Quarter 2020

The Psychology of Jointness

Accelerating Military Innovation

Paradox of Campaigning in Long Wars



Joint Force Quarterly

Founded in 1993 • Vol. 98, 3rd Quarter 2020
<https://ndupress.ndu.edu>

GEN Mark A. Milley, USA, Publisher

VADM Frederick J. Roegge, USN, President, NDU

Editor in Chief

Col William T. Eliason, USAF (Ret.), Ph.D.

Executive Editor

Jeffrey D. Smotherman, Ph.D.

Production Editor

John J. Church, D.M.A.

Internet Publications Editor

Joanna E. Seich

Copyeditor

Andrea L. Connell

Associate Editors

Jack Godwin, Ph.D.

Brian R. Shaw, Ph.D.

Book Review Editor

Brett Swaney

Art Director

Marco Marchegiani, *U.S. Government Publishing Office*

Advisory Committee

Ambassador Erica Barks-Ruggles/*College of International Security Affairs*; RDML Shoshana S. Chatfield, USN/*U.S. Naval War College*; Col Thomas J. Gordon, USMC/*Marine Corps Command and Staff College*; MG Lewis G. Irwin, USAR/*Joint Forces Staff College*; MG John S. Kem, USA/*U.S. Army War College*; Cassandra C. Lewis, Ph.D./*College of Information and Cyberspace*; LTG Michael D. Lundy, USA/*U.S. Army Command and General Staff College*; LtGen Daniel J. O'Donohue, USMC/*The Joint Staff*; Brig Gen Evan L. Pettus, USAF/*Air Command and Staff College*; RDML Cedric E. Pringle, USN/*National War College*; Brig Gen Kyle W. Robinson, USAF/*Dwight D. Eisenhower School for National Security and Resource Strategy*; Brig Gen Jeremy T. Sloane, USAF/*Air War College*; Col Blair J. Sokol, USMC/*Marine Corps War College*; Lt Gen Glen D. VanHerck, USAF/*The Joint Staff*

Editorial Board

Richard K. Betts/*Columbia University*; Eliot A. Cohen/*The Johns Hopkins University*; Richard L. DiNardo/*Marine Corps Command and Staff College*; Aaron L. Friedberg/*Princeton University*; Bryon Greenwald/*Joint Forces Staff College*; COL James E. Hayes, USA/*National War College*; Douglas N. Hime/*Naval War College*; Col Jerome M. Lynes, USMC (Ret.)/*The Joint Staff*; Kathleen Mahoney-Norris/*Air Command and Staff College*; Bert B. Tussing/*U.S. Army War College*

Cover 2 images (top to bottom): U-2 Dragon Lady pilot assigned to 9th Reconnaissance Wing pilots high-altitude reconnaissance platform at approximately 70,000 feet above undisclosed location (U.S. Air Force/Ross Franquemont); Seaman Kelly Eskew aims Beretta M9 pistol during small-arms familiarization training aboard USS *Russell*, East China Sea, February 22, 2020 (U.S. Navy/Sean Lynch); Senior Airman Christina Phillips, 57th Aircraft Maintenance Squadron crew chief, secures munitions in place on F-16 Fighting Falcon during Load Crew of the Quarter Competition, October 4, 2019, at Nellis Air Force Base, Nevada (U.S. Air Force/Joshua Kleinholz)



In This Issue

Forum

- 2 Executive Summary
- 4 Structuring for Competition: Rethinking the Area of Responsibility Concept for Great Power Competition
By Lauren A. Courchaine, Alexis G. Grynkeiwich, and Brian D. Courchaine
- 10 Accelerating Military Innovation: Lessons from China and Israel
By George M. Dougherty

- 20 Disinformation and Disease: Operating in the Information Environment During Foreign Humanitarian Assistance Missions
By Melia Pfannenstiel and Louis L. Cook

JPME Today

- 28 Evaluating Strategies: Six Criteria for National Security Professionals
By Gregory D. Miller
- 38 Operations Short of War and Operational Art
By Milan Vego
- 50 Preparing Senior Officers and Their Counterparts for Interagency National Security Decisionmaking
By Joseph J. Collins

Commentary

- 60 The "Politics" of Security Cooperation and Security Assistance
By Thomas-Durell Young
- 68 The Psychology of Jointness
By Charles Davis and Kristian E. Smith



About the Cover

U.S. Navy logistics specialist 3rd class Ivan Rojas stands by as MH-60 Sea Hawk helicopter, assigned to "Warlords" of Helicopter Maritime Strike Squadron 51, prepares to pick up pallet on flight deck aboard USS *McCampbell* during vertical replenishment training, East China Sea, March 27, 2020 (U.S. Navy/Markus Castaneda)

Features

- 74 Leveraging Return on Investment: A Model for Joint Force Campaign Plan Assessments
By M.E. Tobin, William G. Coulter, John P. Romito, and Derek R. Fitzpatrick
- 80 Balancing Competition with Cooperation: A Strategy to Prepare for the Chinese Dream
By Lloyd Edwards

Recall

- 88 The Duke of Marlborough and the Paradox of Campaigning in Long Wars
By Gordon Muir

Book Reviews

- 96 *The New Rules of War and The Dragons and the Snakes*
Reviewed by Frank Hoffman
- 97 *The Culture of Military Organizations*
Reviewed by Anthony King
- 98 *Surrogate Warfare*
Reviewed by Harry Wingo

Joint Doctrine

- 99 Update

Joint Force Quarterly is published by the National Defense University Press for the Chairman of the Joint Chiefs of Staff. *JFQ* is the Chairman's flagship joint military and security studies journal designed to inform members of the U.S. Armed Forces, allies, and other partners on joint and integrated operations; national security policy and strategy; efforts to combat terrorism; homeland security; and developments in training and joint professional military education to transform America's military and security apparatus to meet tomorrow's challenges better while protecting freedom today. All published articles have been vetted through a peer-review process and cleared by the Defense Office of Prepublication and Security Review.

NDU Press is the National Defense University's cross-component, professional military and academic publishing house.

The opinions, conclusions, and recommendations expressed or implied within are those of the contributors and do not necessarily reflect the views of the Department of Defense or any other agency of the Federal Government.

Copyright Notice

This is the official U.S. Department of Defense edition of *Joint Force Quarterly*. Any copyrighted portions of this journal may not be reproduced or extracted without permission of the copyright proprietors. *JFQ* should be acknowledged whenever material is quoted from or based on its content.

Submissions and Communications

JFQ welcomes submission of scholarly, independent research from members of the Armed Forces, security policymakers and shapers, defense analysts, academic specialists, and civilians from the United States and abroad. Submit articles for consideration to ScholarOne, available at <https://mc04.manuscriptcentral.com/ndupress>, or write to:

Editor, *Joint Force Quarterly*

NDU Press
300 Fifth Avenue (Building 62, Suite 212)
Fort Lesley J. McNair
Washington, DC 20319
Telephone: (202) 685-4220/DSN 325
Email: JFQ1@ndu.edu
JFQ online: ndupress.ndu.edu/jfq

3rd Quarter, July 2020
ISSN 1070-0692



Aviation boatswain's mate (handling) 3rd class Tainisha Hines shows encouragement on flight deck during vertical replenishment onboard amphibious assault ship *USS Makin Island*, Pacific Ocean, April 20, 2020 (U.S. Navy/Harry Andrew D. Gordon)

Executive Summary

As I write this column from my table far away from my NDU Press office during the pandemic, I am wondering about the scope of it all, as I am sure many of you are. Was COVID-19 unexpected? Unprecedented? Did we all think it would not happen? One thing I am certain about—such times bring out the need for capability and teamwork in the harshest of conditions. While not a typical environment for the military, often when we see the need to team up in ways that might not be traditional to work out a “wicked problem” like this one, I wonder if this situation is exactly what jointness is for.

Some have recently suggested we have achieved all we expected to achieve with jointness. I strongly disagree. Recently, I listened to Lieutenant General Russel Honoré, USA (Ret.), speak about how this crisis is similar to Hurricane Katrina, where he played a critical role. He knew what leaders at all levels of the COVID-19 effort are all now learning: it takes lots of people with just the right training, experience, equipment, supply lines, creative thinking, and initiative to be successful. That is what we are famous for—figuring out how to succeed no matter what the condition. At the moment, it would seem the task is indeed monumental and our frontline

responders are fully engaged. The rest of us are wrestling with what we should do, how to do it, and who and how we could help.

I suspect we will learn in the weeks and months to come about the stories of Servicemembers, first responders, health-care workers, and ordinary citizens who banded together to do what they could. I hope you will share those stories, as they may be helpful in coming years. Such efforts, in part, I am sure will benefit from the joint force’s ability to work together just like the proponents of jointness have sought over the years since World War II. As I was working on this issue, I rediscovered a speech delivered by then-General

of the Army Dwight D. Eisenhower just days before he stepped down as Chief of Staff of the Army in February 1948. He spoke to the third class of officers to attend the Armed Forces Staff College, now the Joint Forces Staff College in Norfolk. I hope to share the entire speech with you in our next issue, as I believe it is still relevant to today's situation, and Eisenhower's views on what we now call jointness are both useful as they are reinforcing.

But there was another Ike who was equally important in solidifying the concept of jointness. He was an unlikely champion of military matters, much less integration of the capabilities and talents of the Services. A relatively junior congressman from a state with military bases (but relatively few compared to others), Ike Skelton (D-MO) staked his political life in part to assuring our men and women in uniform and the civilians who serve with them are given all the physical and mental firepower that the Nation could provide. All you need to know about this aspect of his life can be found in his book *Whispers of Warriors: Essays on the New Joint Era* (NDU Press, 2004). There you will see what one man can do to improve the lot of the joint force. Others clearly contributed, but for my money, Representative Skelton had few peers in seeing the power of many combined into one. While we may shout "Beat Army!" or "Beat Navy!" or, never in my case, "Beat Air Force!" this should extend only to our collegiate athletic teams, as we all should want our joint force to excel at every task it receives.

As we grapple with the pandemic, in the Forum, Lauren Courchaine, Alexis Grynkeiwich, and Brian Courchaine suggest that now would be the perfect time to consider updating how the combatant commands work together to assure U.S. global military dominance. George Dougherty continues our long dialogue on military innovation with a focus on China's and Israel's efforts over time. While written well before COVID-19 was on everyone's mind, Melia Pfannenstiel and Louis Cook have some prescient insights on how disinformation can be dealt with while executing

humanitarian assistance missions, particularly those battling disease.

In JPME Today we offer three returning JFQ authors, each a seasoned veteran of the joint professional military education frontlines. First, Gregory Miller provides six criteria that national security professionals should consider when evaluating strategies. Next, Milan Vego provides us with an essential bridge to connect operations short of war and operational art. Finally, providing insights in how JPME might best improve their students' thinking skills, Joseph Collins focuses on decisionmaking as a key element to properly prepare them as effective participants in the civil-military relationships necessary for success in senior positions of government.

This issue's Commentary presents Thomas-Durell Young's views on how to manage the inherent political nature of security cooperation and security, which is especially important for those officers who still believe being apolitical in their duty means that they do not have to think about the "politics" of what they are involved with in carrying out their missions. Even a decade after retiring from my military career while serving at the Joint Forces Staff College, I often think about how important jointness is and why it can be so hard to sustain. From my teammates there, Charles Davis and Kristian Smith help us wrestle with what makes jointness simultaneously so necessary and so hard to do well.

Features offers three important articles on the critical issues confronting the joint force today and into the future. In an interesting take on joint planning, M.E. Tobin, William Coulter, John Romito, and Derek Fitzpatrick suggest their model for campaign plan assessment will help commanders better see the value proposition of their efforts. While the Departments of Defense and State have followed the National Security Strategy in addressing Great Power competition with China, a topic further elevated during the pandemic, Lloyd Edwards suggests a balancing of competition and cooperation would best deal with China's long-term objectives. In Recall, Gordon Muir helps us think about campaigning in long

wars from the perspective of the Duke of Marlborough. Seems this long war thing is not so new.

As always, we bring the latest in excellent book offerings with four reviews and the joint doctrine update. I hope each of you has adapted to this most difficult time and have taken the time to write down your thoughts on how the joint force might operate going forward. If you have and think others might benefit, please reach out to us. We are ready to hear what you have to say. JFQ

WILLIAM T. ELIASON
Editor in Chief

Airman changes light on wing of B-52 Stratofortress during annual command and control exercise Global Thunder 2019, at Barksdale Air Force Base, Louisiana, October 30, 2018 (U.S. Air Force/Sydney Campbell)



Structuring for Competition

Rethinking the Area of Responsibility Concept for Great Power Competition

By Lauren A. Courchaine, Alexis G. Grynkeiwich, and Brian D. Courchaine

The Goldwater-Nichols Department of Defense Reorganization Act of 1986 (GNA) implemented a revolutionary change in the organization and operation of the Department of Defense (DOD), by focusing

on empowering combatant commanders (CCDRs) to enable joint interoperability. Following GNA, the Unified Command Plan (UCP), the document used to provide operational instructions to all branches of DOD, also saw

major revisions. The UCP readjusted the balance of power from the Services to CCDRs and outlined the corresponding missions, responsibilities, and geographic boundaries. Since 1986, the UCP has evolved incrementally to support the addition of two geographic combatant commands (GCCs) and four functional combatant commands (CCMDs). Although this area of responsibility (AOR)-centric model was particularly well suited for

Colonel Lauren A. Courchaine, USAF, is Chief of Special Projects and Innovation at Joint Staff J39. Major General Alexis G. Grynkeiwich, USAF, is Deputy Commander for Operations, Joint Task Force Operation *Inherent Resolve*, U.S. Central Command (USCENTCOM). Captain Brian D. Courchaine, USN, is Commanding Officer of Navy Reserve Joint Intelligence Center at USCENTCOM.

conflicts in the industrial age, it is insufficient to address the challenges of Great Power competition in the information age.

In the 20th century, the norms of warfare included clear lines between war and peace, and technology was largely focused on building capabilities to conduct symmetric warfare. Such capabilities were generally constrained in reach to a limited geographic region. Even in the asymmetric counterinsurgency wars of the early 21st century—a prelude to further changes in the character of warfare—the tools and techniques for influencing populations and eradicating insurgent forces remained generally confined by geography and therefore had little global impact. Today, the line between war and peace is blurred, and exponential growth in technology has resulted in capabilities that are global and instantaneous, thus enabling military operations and adversarial activities to occur simultaneously across land, sea, air, space, cyber, and electromagnetic domains.¹

Even if we can create and master new tools capable of dominating today's battlespace, just having the best technology will not be enough: Winning conflicts today requires changes to the ways DOD organizes and employs forces. Ultimately, if the United States fails to take a comprehensive approach toward adapting to the challenges of the information age and adversarial competition, then we will cede our national security advantage. Therefore, if we do not deliberately couple innovative technological change with radical shifts in the way we are organized, we will fail to optimize these new technologies. This point is also noted in the 2018 National Defense Strategy Commission report, which states that “maintaining or reestablishing America’s competitive edge is not simply a matter of generating more resources and capabilities. . . . [T]he innovative operational concepts we need do not currently appear to exist.”² This is an inflection point; if this disparity is not addressed now, the cost to regain our advantage and global military superiority will be untenable on any meaningful timescale in the future.

Modern Warfare

Although the nature of warfare is enduring and largely unchanging, the growth of modern technology and shifts in the nature of geopolitical competition have altered combat in the 21st century.³ In a time of unceasing technological change, our adversaries are leveraging the nearly instantaneous and global nature of the information, space, and cyber domains to render the line between peace and war irrelevant. Former Chairman of the Joint Chiefs of Staff General Joseph Dunford has declared that both “the character of warfare and the strategic landscape have changed dramatically.”⁴ This evolution has enabled not only Great Powers such as Russia and China but also lesser powers such as Iran and North Korea, which lack the conventional power to confront the United States but have the ability to challenge us in new ways through disinformation, cyber operations, space launch, and counterspace activities.

In the 21st-century multidomain battlespace, warfare is less a conflict of annihilation between opposing military forces in a single AOR than one between opposing “operational systems.” Chinese strategists refer to this concept as *systems confrontation*.⁵ Planning for and then executing operations in a systems confrontation environment require a joint, all-domain planning and command and control system. To enable seamless integration of complex operations from sea floor to space and to enable complex collaboration from the tactical to the strategic level, both geographic and functional commanders must be able to see the same extended battlespace. Such a broad system does not currently exist. Indeed, the current CCMD structure strains to operate across geographic and functional touch points and boundaries, narrowing the scope of strategic planning and jeopardizing our ability to set a war-winning posture. Furthermore, capable adversaries are unlikely to constrain themselves only to vertical escalation within the CCMD AOR in which they reside; more likely, they will escalate horizontally, attacking across domains and

geography on a global scale. To manage these problems, prompt and aggressive action is needed to transition from an industrial age organizational structure to a model that accounts for the global adversarial rivalry, influence, and competition endemic in the information age.

Third Offset

To fully appreciate the need for an evolution in organizational structure, we must link GNA and the second offset. Offset strategies have been used twice as a means of asymmetrically compensating for a disadvantage in a military competition. In the 1950s, President Dwight Eisenhower focused the first offset on nuclear deterrence; between 1975 and 1989, the second offset focused on technology such as stealth and precision bombing. These technological changes occurred concurrently with the revision of both GNA and the UCP. In 2016, then–Deputy Secretary of Defense Robert Work started a third offset focus that combined “technology, operational concepts, and organizational constructs—different ways of organizing our forces, to maintain our ability to project combat power into any area at the time and place of our own choosing.”⁶ Today, while third offset technical capabilities such as artificial intelligence and hypersonics are being developed, there has been only a nod toward the need for a refined organizational approach and structure.

National Security and Defense Strategies

The 2017 National Security Strategy and 2018 National Defense Strategy “formally reoriented U.S. national security strategy and U.S. defense strategy toward an explicit primary focus on Great Power competition with China and Russia” and highlighted the reemergence of long-term strategic competition as a central challenge to U.S. national security interests.⁷ During testimony to the Senate Armed Services Committee in April 2018, then–Secretary of Defense James Mattis stated, “We cannot expect success fighting tomorrow’s conflicts with yesterday’s

thinking, weapons, or equipment.”⁸ Recent initiatives such as the assignment of coordinating authority responsibility to CCDRs and the codification of the Chairman as the global integrator are laudable first steps toward rectifying shortfalls in the current structure and prioritizing the development of a more agile and lethal force. Similarly, Dunford acknowledged the operational impacts of Great Power competition, and he promulgated concepts such as global integration and dynamic force employment across the joint force through a series of globally integrated tabletop exercises, wargames, and campaign plans. The concept of global integration focuses on the synchronization of activities in time, space, and purpose, across all domains and geographic boundaries, to influence our adversaries. His keen emphasis on the need to globally integrate operations was meant to drive a shift in focus from conflict to competition so that we maintain our competitive advantage.

In June 2019, the Joint Staff published Joint Doctrine Note 1-19, “Competition Continuum,” which draws on the requirement to campaign through competition below armed conflict through armed conflict. An overarching point in this document is that success in campaigning requires “the skillful application of both cooperation and competition below armed conflict.”⁹ Nevertheless, global integration is not an end unto itself. Without a deliberate focus on the more profound, systemic, and structural shortfalls of the current DOD organizational construct, these global integration concepts will fall short in their ability to drive a third offset change in organizational structure capable of addressing the current character of warfare.

Current Combatant Command Seams

Over time, the CCMD construct has expanded to adapt to new realities and challenges. The standup of U.S. Cyber Command (USCYBERCOM) as the 10th CCMD and the recent activation of U.S. Space Command (USSPACECOM) as the 11th demonstrate that

leaders recognize the need for focused attention on new warfighting geometry and on the ways we will execute military operations in the future. While well intentioned, however, this growth in CCMDs has had the undesirable consequence of concomitantly increasing the number of organizational seams across which CCMD coordination and synchronization must occur. Using Russian malign influence as an operational vignette: The Russian government has effectively applied pressure in every functional domain and across every geographic AOR over the last 6 months. Therefore, to adequately address the military objectives tied to this problem set, a staff officer would be required to coordinate with all 11 CCMDs. The resulting number of seams coupled with the inability of the joint force to sufficiently support CCMD capacity requirements dramatically increase Clausewitzian friction, causing commanders and staffs within these organizations to spend the preponderance of their time balancing cross-command equities rather than focusing on adversaries. While this friction can be overcome, it requires staff officers to spend their time developing, institutionalizing, and following time-consuming bureaucratic processes. Unfortunately, this also means they spend less time planning and executing effective operations.

Despite these shortfalls, it is important to acknowledge that geographic CCDRs can be exceedingly effective in shaping their theaters by building personal relationships and organizational partnerships. These are powerful tools for advancing U.S. national security objectives. In this role in particular, GCCs are critical to protecting what the National Military Strategy recognizes as a center of gravity for the joint force and combined operations: our structure of alliances and partnerships that provides access and influence around the globe.¹⁰ In any future organizational construct, this capability must be not only maintained but also bolstered with personnel with long-term and deep regional expertise. Equally important will be maintaining the equivalent deep expertise resident

within the functional CCMDs, especially in areas where technical competence requires a deliberate approach to force development.

It is also crucial to note that in establishing the GCCs, DOD leadership never intended to limit CCMDs to rigid geographic operating boundaries; rather, the intent was for CCMDs to be free to operate where necessary to carry out their assigned missions. In reality, however, geographic areas of responsibility have become restrictive. CCMD staffs are organized, trained, and equipped to solely manage their AORs, and their priorities within those boundaries are rigidly coveted. While some commands have made progress in coordinating along CCMD seams, few other than the functional CCMDs have managed to implement a global approach to the challenges they face. This is due not to any failure of vision or leadership, but instead to one of training and structure. Although the 2018 National Defense Strategy tasked the GCCs with global roles, their staffs have neither the capacity nor depth of expertise to execute such a scale. The daily feat of managing U.S. operations within any AOR consumes CCMD staff capacity. In the few instances where an insightful staff officer recommends a course of action for an issue with global implications (for example, intellectual property theft, ballistic missile proliferation, or adversary cognitive management), the bureaucracy of cross-CCMD coordination and consensus decisionmaking is self-defeating. These good ideas fade away unrealized because our structures are ultimately insufficient in effecting operations against agile and opportunistic adversaries. Such limitations are unavoidable in a system based on consensus among co-equal CCDRs and in the face of policy restraints requiring Secretary of Defense approval to move forces as small as a three-man dog team across CCMD boundaries.

A Reimagined Command and Control Structure

We propose to restructure the global command and control of DOD. In light of the points made above, three



MH-60R Sea Hawk Helicopter from "Battlecats" of Helicopter Maritime Strike Squadron (HSM) 73 takes off from flight deck of USS *Nimitz* (CVN 68) during simulated Strait Transit as part of composite training unit exercise, Pacific Ocean, May 14, 2020 (U.S. Navy/Sarah Christoph)

key attributes of this reimagined global command and control structure emerge: a continued focus on global integration, the ability to conduct ongoing and persistent operations, and preservation of the ability to establish and grow relationships with partners and allies.

On the first attribute, any future organizational design should build on the progress made through the global integration effort of the last 2 years and continue to challenge how we think about unity of effort, unity of command, and command authorities and responsibilities. Global integration is about taking a comprehensive and broad look across multiple adversaries and balancing global risk. While CCDRs can influence decisions at the national level, the Chairman's physical proximity and statutory authority confer the access and perspective required to advise political leadership; this comports well with the role of global integrator. As the principal military advisor to the President and the National Security Council, the Chairman is a trusted leader in the development of security policy, providing apolitical advice to leadership of the risks and costs associated with the options under consideration as well as the risk of inaction. He sits at the confluence of the civil-military divide, which allows him not only to

influence policy guidance but also to deliver clear direction, consistent with the civilian leadership's desired outcomes, to the force. Furthermore, as the principal military advisor to the Secretary of Defense, the Chairman orchestrates the global laydown of forces, recommending the movement of force elements based on both desired political endstates and the risks such moves incur. The Chairman also can influence risk-to-mission and risk-to-force by engaging the Secretary and President and advocating for additional authorities for the employment of physical power or for actions in the information, space, and cyberspace realms.

The Joint Staff is the engine that supports the Chairman as he works to accomplish these tasks, although it is not currently structured as a headquarters staff. To effectively support the Chairman as the global integrator, it should be, and de facto the staff has assumed this role to deconflict activities in time, space, and purpose across all domains and GCC boundaries during world events in Venezuela, North Korea, Syria, and Iran and to address insidious Russian and Chinese malign influence. Aligning these activities under an optimized organizational structure would require an extraordinarily uncomfortable overhaul of Joint Staff functions, internal processes,

and alignment of resources; however, as Lieutenant General Kevin McLaughlin, USAF, former deputy commander at USCYBERCOM, stated, this shift would enable the Nation to become "ambidextrous."¹¹ With the right hand, we support commanders in localized terrestrial fights requiring the integration of numerous supporting commanders. At the same time, the left hand must be capable of supporting global commanders tasked to execute operations well beyond the perspective and authority of a regional commander. Essentially, there will need to be multiple supported commanders, all aligned with the higher authority, direction, and strategy flowing from the Secretary of Defense and the Chairman.¹²

A second key attribute of a reimagined command and control structure is an ability to rapidly respond to events in the operational environment. Future conflicts are likely to commence far more quickly than wars of the past and with no regard for physical geography. Consequently, there will be little time to shift from a competition or campaign posture. Frankly, the mentality of "switching" from peacetime to wartime highlights our tendency to view warfare as a *breakdown* of politics rather than its "continuation by other means," as Carl von Clausewitz viewed it—and as do many of our



Marines with Charlie Company, 4th Tank Battalion, fire M1A1 Abrams tank during theater security cooperation exercise Cobra Gold 19, at Sukhothai, Kingdom of Thailand, February 21, 2019 (U.S. Marine Corps/Kyle C. Talbot)

adversaries. As the Joint Concept for Integrated Campaigning states, “growing instability, the erosion of international norms, and the rise of revisionist powers all suggest competition will be increasingly prevalent in the future operating environment.”¹³ As a result, the clear delineation between periods of “war” and “peace” has become impossible to discern, as our forces remain continually engaged around the globe in a complex milieu of competition. This reality has rendered many of our fundamental assumptions about the character of warfare invalid and presents a significant cultural challenge for DOD. We must recognize that the United States is engaged in daily competition and that success requires a seamless transition from a crisis response stance to one of ongoing and indefinite operations. This transition requires the organizational confidence to move from a supported to supporting relationship with agility. An effective warfighting

mission command structure must enable the joint force to proactively engage and persistently contest adversaries across a globally integrated battlespace. The success of such an organizational structure depends on the ability to minimize the discontinuity in the current environment and recognize the multifaceted nature of strategic competition.

The third and final key attribute of any new command and control structure is that it must preserve the ability to build relationships and partnerships that support U.S. security objectives. We need to leverage our partners and allies to maintain regional stability and security, advance interoperability, support robust logistics, and enable our forward presence. Although our current security cooperation efforts can sometimes feel frustrating and ineffective due to multiple competing interests and messages, a new structure that synchronizes and integrates a joint and DOD-wide approach would

empower partners to confront internal challenges while maintaining U.S. Government consistency across multiple lines of effort. Currently, cooperation activities such as foreign military sales are cumbersome and plagued with time-consuming bureaucratic and regulatory hurdles. Therefore, DOD offices that support security cooperation would also require some degree of process redesign and realignment to more efficiently engage across a global and domain-agnostic structure.

A Reimagined Unified Command Plan

What might such a reimagined UCP look like? One option we can envision would create two CCMD-like organizations called Permanent Joint Force Headquarters (PJHQ), one centered on day-to-day campaigning and the other focused on cooperation. The campaigning PJHQ would be comprised of sub-

ordinate task forces (TFs), each assigned global responsibility for specific competitors or threat actors. These TFs would conduct a range of tasks in pursuit of campaign objectives, including directing and coordinating activities during competition and managing the application of physical power should conflict erupt. Some of the subordinate TFs would be enduring (for example, Joint Task Force [JTF]-China), while others might be purpose-built to manage an emerging crisis after which they are stood down (for example, JTF-Venezuela). Ideally, the campaigning PJHQ would not only have the attributes of a warfighting command but also include interagency participation across the other elements of national power in order to redefine conflict away from “fight tonight” toward the orchestration and presentation of strategic shaping options as a means to proactively influence our adversaries.

In such a new model, USSPACECOM, USCYBERCOM, U.S. Transportation Command, and U.S. Special Operations Command (USSOCOM) remain global commands supporting the campaigning PJHQ. Perhaps they retain some “standalone” missions, but these operations would likely be executed under the authority of the campaigning PJHQ. For example, USCYBERCOM might have an element designated as the JTF for worldwide malicious cyber actors, or USSOCOM might lead the JTF to counter violent extremist organizations, but both would be in a supporting role, directed by the campaigning PJHQ.

Under this model, most of the current GCCs would devolve. While the United States could continue to fill critical positions such as Supreme Allied Commander, Europe, commands such as U.S. Central Command, U.S. European Command, U.S. Africa Command, U.S. Southern Command, and U.S. Indo-Pacific Command would probably be subsumed and reimaged in the new structure. U.S. Strategic Command would remain, but it would focus exclusively on its nuclear mission. U.S. Northern Command would probably

remain for homeland defense and defense support to civil authorities.

The cooperation PJHQ would be tightly linked to the campaigning PJHQ and include interagency, Office of the Secretary of Defense, and Service representation. The key difference between the campaigning and the cooperation PJHQs is that the latter would be threat-agnostic and focused mainly on building partnerships for partnerships’ sake, which both contributes to regional stability and can be leveraged in future conflicts. Subordinate TFs would be responsible for coordinating security cooperation activities across assigned countries, working closely with the campaigning PJHQ to set priorities for partner engagement. Under this proposed construct, the Joint Staff would assume the operational role as a headquarters staff in support of the global integrator, creating shared strategic context via a framework that brings coherence across regions and domains.

Although this vision represents a significant departure from the current AOR-centric approach and does not fully comport with the National Defense Strategy Commission’s recommendations and many senior policymakers’ viewpoints, it is necessary to posture DOD to maintain our competitive advantage. Without a revolutionary change in DOD organizational structure as audacious as GNA was in its day, the national objectives of our competitors and adversaries will soon overwhelm or render irrelevant DOD capacity to project power and achieve U.S. national objectives. We fully recognize that a paradigm shift on the scale described here would be significant in terms of the magnitude of the effort required to pull it off, the emotional toll it would take, and the resistance it would invite from those most invested in the current organizational structure. We also acknowledge that this article presents only one potential solution. Our intent is to engender a robust and candid debate about the suitability of the current organizational structure as we progress through the 21st century. We believe that the United States will need to be able to project power globally and

across multiple domains on a scale never before experienced. This conversation is challenging; however, it is a necessary one to have now if we are to posture the joint force for success in 2030 and beyond. JFQ

Notes

¹ Robert O. Work and Greg Grant, *Beating the Americans at Their Own Game: An Offset Strategy with Chinese Characteristics* (Washington, DC: Center for a New American Security, June 2019), available at <www.cnas.org/publications/reports/ beating-the-americans-at-their-own-game>.

² National Defense Strategy Commission, *Providing for the Common Defense: The Assessment and Recommendations of the National Defense Strategy Commission* (Washington, DC: United States Institute of Peace, 2018), available at <www.usip.org/sites/default/files/2018-11/providing-for-the-common-defense.pdf>.

³ Joseph F. Dunford, Jr., “Gen. Dunford: The Character of War,” *DOD Live*, April 30, 2018.

⁴ Ibid.

⁵ Work and Grant, *Beating the Americans at Their Own Game*.

⁶ Remarks by Deputy Secretary of Defense Robert Work on Third Offset Strategy, Brussels, Belgium, April 28, 2016, available at <<https://www.defense.gov/Newsroom/Speeches/Speech/Article/753482/remarks-by-deputy-secretary-work-on-third-offset-strategy/>>.

⁷ Robert O’Rourke, *Renewed Great Power Competition: Implications for Defense—Issues for Congress*, R43838—Version 50 (Washington, DC: Congressional Research Service, December 19, 2019).

⁸ Lisa Ferdinando, “Mattis Highlights Efforts to Restore Military, Fight Tomorrow’s Wars,” *Army.mil*, April 27, 2018, available at <www.army.mil/article/204461/mattis_highlights_efforts_to_restore_military_fight_tomorrows_wars>.

⁹ Joint Doctrine Note 1-19, “Competition Continuum,” The Joint Staff, June 3, 2019.

¹⁰ *Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military’s Competitive Edge* (Washington, DC: Department of Defense, 2018).

¹¹ Lieutenant General James K. McLaughlin, USAF, author email correspondence, September 25, 2019.

¹² Ibid.

¹³ *Joint Concept for Integrated Campaigning* (Washington, DC: The Joint Staff, March 16, 2018).

Simulated small boat threats pass by high-speed experimental boat *Stiletto* so Sailors assigned to Navy Expeditionary Combat Command can observe new technologies in relevant maritime environment, Atlantic Ocean, January 16, 2013 (U.S. Navy)



Accelerating Military Innovation

Lessons from China and Israel

By George M. Dougherty

The U.S. military's technological advantage is under threat. Since the end of the Cold War, the military has been largely occupied with relatively low-tech counterterrorism and counterinsurgency conflicts against non-peer adversaries. Much U.S. defense research and development (R&D) during that time focused on delivering incremental innovations

to address capability gaps in existing systems and warfighting concepts. As a result, many of today's frontline systems are upgraded versions of those used in the Gulf War almost 30 years ago.¹ Meanwhile, Great Power competitors including China and Russia have worked to quickly close the technology gap with the United States.² China, in particular, possessed almost no mod-

ern-generation military systems prior to 2000.³ Nonetheless, it has modernized so rapidly that in 2018 the Vice Chairman of the U.S. Joint Chiefs of Staff warned that China could achieve its goal of equaling U.S. military technological prowess by 2020 and surpass it by the 2030s if Washington does not react quickly.⁴

Department of Defense (DOD) and military Service leaders are making strategic-level changes to accelerate innovation. Examples include the establishment of the Office of the Under Secretary of Defense for Research and Engineering,

Colonel George M. Dougherty, USAF, Ph.D., is the Individual Mobilization Augmentee to the Deputy Assistant Secretary of the Air Force for Science, Technology, and Engineering, Office of the Assistant Secretary of the Air Force for Acquisition and Logistics, Washington, DC.

within the Office of the Secretary of Defense; the creation of the U.S. Army Futures Command; and the publication of an ambitious new Air Force Science and Technology Strategy.⁵ These changes feature a renewed emphasis on promoting disruptive innovations that can deliver leap-ahead advances in military capability, changing the character of military operations and providing sustained advantage for U.S. forces. DOD and the Services are seeking to identify and implement the supporting acquisition practices that can accelerate disruptive innovation.⁶

The United States has been in similar situations before. When Japanese companies made competitive gains against U.S. industrial firms in the 1980s and 1990s, the United States reacted in part by identifying and adapting the key practices, such as Kaizen and Total Quality Management, that were enabling the outperformance of Japanese industry. Are similar practices helping to enable the most successful U.S. global peers in military innovation? Could some of these practices be adapted within the U.S. defense establishment?

Two national case studies are particularly relevant. First, China's rapid technological rise is the main impetus behind the U.S. focus on military innovation. It has achieved its remarkable gains despite military budgets less than half the size of those of the United States.⁷ Absorption, even theft, of foreign technologies has been part of its strategy, but is only part of a much more complex picture.⁸ As the most direct peer U.S. competitor, with a similarly large and complex defense enterprise, China's practices could be applicable to U.S. defense innovation.

Second, Israel is remarkable for its ability to produce maximum military innovation with limited resources. Its defense budget is less than one-thirtieth that of the United States. Nonetheless, the ability of the tiny "startup nation" to rapidly and affordably bring unique capabilities to the field is leading the United States to import some of its novel defense products, such as the Iron Dome missile defense system and the Trophy active defense system for armored vehicles.

While not a peer in terms of size, Israel is also a free-market democracy with a private-sector defense innovation base and a commitment to military technological superiority. Practices that enable its efficiency in military innovation could be highly transferable to the U.S. defense sector.

The United States is neither a single-party authoritarian state nor a small country with universal military service. Many Chinese and Israeli practices may not be relevant in the U.S. context. In both cases, this analysis focuses on transferable best practices that could be adapted within the context of the U.S. system by leaders in the U.S. defense establishment.

China: Effectively Managing Complex Military-Technical Transformation

The Chinese defense-industrial system was built in a national system governed by centralized top-down planning. Due partly to this legacy, it exhibits several structural weaknesses that inhibit innovation, including corruption,⁹ the entrenched monopoly power of state-owned defense firms,¹⁰ weak institutions and management systems at the corporate or system integration level,¹¹ and an immature and fragmented innovative research ecosystem.¹² Despite its rapid modernization, China has not yet shown that its system can generate its own disruptive military technological innovations.¹³ However, it has shown great effectiveness in translating new technologies into military products and quickly fielding them across a large military enterprise, areas where the less centralized U.S. system has sometimes had difficulty. China's legacy of structured planning provides strengths, particularly in cross-sector coordination and the ability to link China's military strategy with its supporting military R&D and acquisition activities.¹⁴

Three transferable practices have been important to the speed and effectiveness of Chinese military modernization. These are the Chinese approaches to synchronized hierarchical strategic planning for defense R&D, a powerful

technology-enabled methodology for cross-enterprise design and decisionmaking, and the systematic use of full-scale platforms for prototyping and experimentation.

Synchronized Hierarchical Strategic Planning. China's military acquisition activities are guided by a hierarchical sequence of formal plans that are published on a regular schedule. The Weapons and Equipment Development Strategy (WEDS) is the top-level acquisition strategy document. It starts with an analysis of China's national security environment, identifies military strategic capability needs for future conflicts, assesses strengths and gaps in existing armaments, and establishes R&D priorities.¹⁵ It equates roughly to a combination of the U.S. National Defense Strategy, studies by the DOD Office of Net Assessment, and a DOD-wide acquisition strategy. The WEDS covers a planning horizon of 20 years, with a new WEDS published at the start of every decade.¹⁶

The Long-Term Weapons and Equipment Construction Plan (LWEC) defines the acquisition strategies across the entire defense establishment to address the gaps identified in the WEDS.¹⁷ It covers a planning horizon of 10 years. Supporting medium- and short-term plans are then created that describe the resource allocations and programmatic aspects for the supporting defense acquisition programs.

Defense science and technology (S&T) efforts, focused on longer term innovation, are guided by the Defense Medium- and Long-Term S&T Development Plan (MLDP). The MLDP is published at the midpoint of each decade, 5 years following the WEDS, with a planning horizon of 15 years.¹⁸ The relationship between the publication dates and planning horizons of the WEDS and MLDP are illustrated in figure 1. The LWEC and other plans synchronize within this same regular cycle.

The MLDP is developed by the Science and Technology Committee (STC) via a collaborative effort among the People's Liberation Army (PLA), civilian defense industry officials, and S&T experts.¹⁹ The STC includes over

Figure 1. Publication and Planning Timelines for Two Major Chinese Defense Acquisition Planning Documents

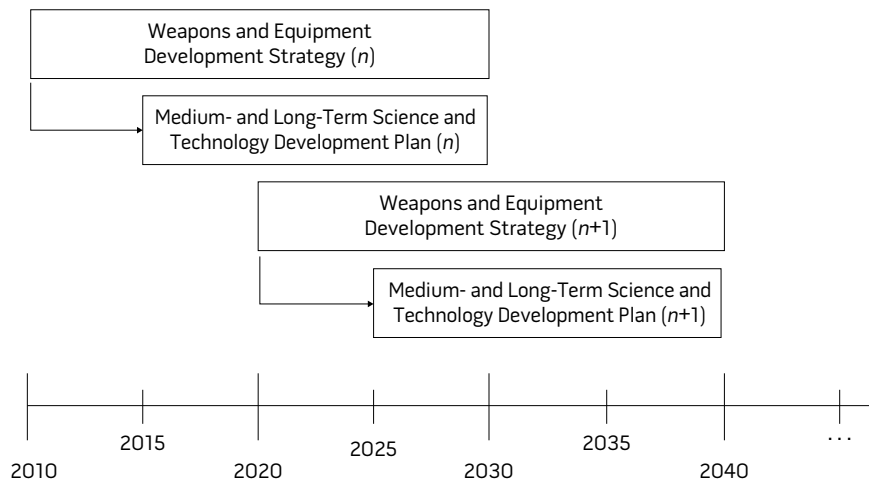
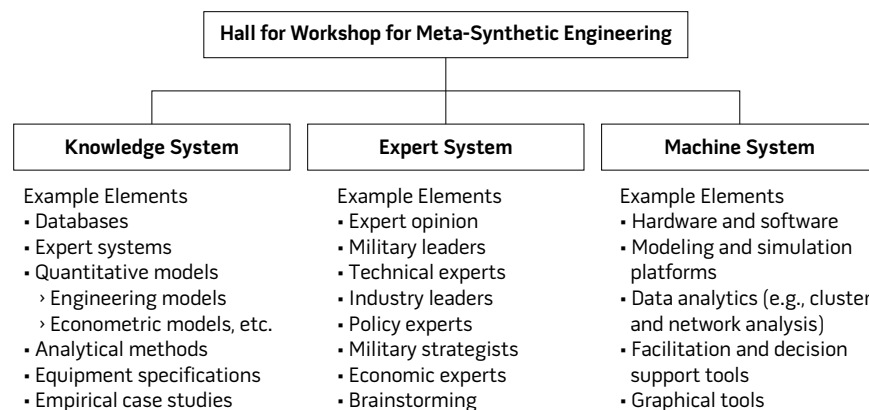


Figure 2. Structure of the Hall for Workshop for Meta-Synthetic Engineering Methodology



a dozen active PLA generals, many luminaries of the Chinese defense technology sector, and more than 40 technical panels engaging an estimated 1,000 technology specialists from across the defense S&T landscape.²⁰ The STC was historically the largest body within the Chinese General Armaments Department (GAD), which manages all military acquisition, and its director, equivalent to a U.S. four-star general, was equal in rank to the overall head of the GAD.²¹ In 2015, the STC was further elevated to report directly to the Central Military Commission, which is similar to the U.S. Secretary of Defense and Joint Chiefs of Staff, making it coequal with the GAD.²² The

STC leadership combines military and technical expertise. The STC director as of 2015, General Liu Guozhi, holds a Ph.D. in physics, spent much of his career in R&D, and is a member of the Chinese Academy of Sciences.²³

This system of regularly updated hierarchical plans with clear interrelationships rationalizes the demand for new military R&D. It helps provide the stability needed for long-term research and reduces the need for new innovations to compete against sustainment of the current force for priority and resources.

In addition, the plans employ a technological generation-based planning framework. The United States categorizes modern fighter aircraft as

fourth or fifth generation, with the fifth generation defined by the incorporation of characteristic technologies such as stealth and advanced sensor fusion and data networking. Chinese planners apply a similar construct to define technological generations for all categories of military systems, from aircraft to ground vehicles to information systems.²⁴ The expected transitions to future generations are projected on timelines in the strategic plans, enabling different parts of the defense enterprise to plan technology investments targeting those transition dates with confidence that the necessary funding, complementary technologies, and operational military transition activities have been aligned.

A Powerful Technology-Enabled Methodology for Cross-Enterprise Design and Decisionmaking. Chinese R&D strategic plans are developed with the help of a powerful problem-solving and design methodology. Solutions to large-scale, real-world planning problems can be challenging to design. There are too many variables, and while some aspects may be subject to quantitative analysis, others may rely on qualitative expert judgment. In 1990, Chinese defense technology leader Qian Xuesen proposed a new approach called meta-synthetic engineering as a framework for designing optimal solutions to such problems.²⁵ Qian's primary application was military-technical planning, and the approach has since become widespread in the Chinese defense sector, as well as in additional fields such as economic and industrial planning.²⁶

The practical implementation of meta-synthetic engineering is a process known as the Hall for Workshop for Meta-Synthetic Engineering (HWMSE). In essence, this is a workshop involving experts from the relevant disciplines, augmented by software model libraries and databases of relevant quantitative data, and a simulation engine that can integrate the expert judgment with the quantitative data to produce detailed projected outcomes.²⁷ These three parts are labeled the expert system, the knowledge system, and the machine system, respectively, as illustrated in figure 2.

The methodology has become highly developed, and modern defense applications can add multiple layers of complexity within this basic architecture.²⁸ Purpose-built software tools have been developed to support the machine system, using iteration and methods such as network and cluster analysis to help merge the qualitative and quantitative analyses and converge on solutions.²⁹ The HWMSE process has become institutionalized within China, and customized facilities have been constructed to host workshops within major agencies and institutes.³⁰

Full-Scale Prototyping Platforms. Chinese defense R&D teaching emphasizes the importance of prototyping as a critical element in defense technology development. The Chinese military R&D process specifies at least three different categories of system-level prototypes and demonstrations, aligned to different stages of technology readiness as defined by technology readiness level (TRL):³¹

- *yuanli yangji* (theoretical prototype), TRL 4
- *yanshi yangji* (demonstration prototype), TRL 5
- *gongcheng yangji* (system-level engineering prototype), TRL 6–7.

The Chinese emphasis on full-scale prototyping may be observed clearly in naval technology development. Several large PLA Navy ships are dedicated as full-scale prototyping and experimentation platforms. Two 6,000-ton vessels known as the Type 909 *Dahua*-class are dedicated to full-scale prototyping and testing.³² These ships have been used for trials of developmental missile systems, radars, and other systems that later appeared as equipment on front-line combat ships.³³ There is also a 3,800-ton Type 032 *Qing*-class submarine that is dedicated to trials of new undersea technologies, such as submarine-launched missile systems.³⁴ In addition, other full-scale vessels have been dedicated to experimentation and prototyping activities. A 7,000-ton Type 072 III landing ship was recently observed in use as a full-scale at-sea test platform for what may be a prototype electromagnetic railgun weapon.³⁵ The practice may also extend



Iron Dome battery intercepted approximately 8 rockets and BM-21 “Grad” missiles launched from Gaza Strip since its deployment on April 4, 2011, Ashkelon, Israel (Israel Defense Forces/Michael Shvadron)

to the experimental repurposing of aging vessels before their retirement, such as an older frigate that was fitted with banks of 120-millimeter rocket launchers and operated as a one-of-a-kind shore bombardment ship until its decommissioning in 2017.³⁶ Similar full-scale prototyping has also been observed in Chinese ground and air systems. As one example, the Shenyang J-31/FC-31 stealth fighter that

first appeared in 2012 was a full-scale flying prototype not associated at that time with any military acquisition program.³⁷

Israel: Achieving Maximum Innovation at the Lowest Cost

Israel is driven to be as efficient and cost-effective as possible in developing the advanced military capabilities it needs.³⁸ Despite its small size and scarce



Student researcher at University of Southern California participates in reverse science fair, part of Department of Defense STEM Experience, held during 55th National Junior Science and Humanities Symposium, in San Diego, California, April 27, 2017 (U.S. Navy/John F. Williams)

resources, Israel has for decades been committed to a defense strategy that emphasizes both military technological advantage and self-sufficiency in military technologies.³⁹ Three best practices contribute to much of its success in disruptive military innovation. These are the Israeli program for building an elite corps of military innovation leaders; the use of operational demonstrators as a key step in military R&D; and the maintenance of close relationships between the operational military, military R&D, and commercial technology communities.

Workforce Development: *Talpiot*. After Israel's near defeat in the 1973 Yom Kippur War, the nation's military leaders and academics determined they needed a highly trained body of technically educated military leaders to ensure the technological superiority of Israel's forces. The program—called *Talpiot*,

meaning “bastion” or “fortified tower” in Hebrew—was launched in 1979 as an elite training program to develop those leaders.⁴⁰ Management of *Talpiot* was given to the new Administration for the Development of Weapons and Technological Infrastructure, known by its Hebrew acronym MAFAT, established by Defense Minister Ariel Sharon.⁴¹

Israeli citizens, both male and female, have a period of compulsory military service following high school. Instead of enlisting as conscripts, the highest scoring science, technology, engineering, and math (STEM) students can apply for admission to *Talpiot* to satisfy their service requirement. The selection is highly competitive, with only 30 to 60 applicants making the cut for each year's class. Students are selected for not only STEM skills but also leadership aptitude and the ability to communicate and work as part of a team.⁴²

After selection, they complete a structured military and technical training program, regarded as “like having a Rhodes scholarship, a presidential fellowship, and a Harvard MBA all rolled into one.”⁴³ The cadets attend classes at Hebrew University, taking a rigorous but broad curriculum of math, physics, and engineering courses designed to give them the tools to address many types of technical problems.⁴⁴ They also conduct lead-in training with multiple military units from all branches of the Israel Defense Forces (IDF).⁴⁵ It is not unusual for a *Talpiot* graduate (known as “a *Talpiot*”) to have attended airborne school, learned to operate a tank, gone to sea on a naval vessel, and trained in simulators with an air force flying unit. They experience the aggregate of the military training that different types of normal conscripts would receive.⁴⁶ In addition, each student conducts a thesis

project that proposes a technical solution to a military need that he or she identified during training. For example, the Trophy Active Defense System had its origin as a Talpiot project.⁴⁷

During academic training, the cadets live together as a cohort, developing a tight network that serves them throughout their careers. Because of their cross-service military training, they also develop a network across military branches and units.

Talpiots serve for six or more years following commissioning as officers. Many extend their academic training, going on to earn specialized master's or doctoral degrees. They are then assigned individually to different military units or R&D organizations. The active-duty assignments for each Talpiot are carefully selected by MAFAT to match his or her skills, training, and interests, with many Talpiots serving initially in programs or units related to their thesis topics.⁴⁸

In service, the Talpiots serve as an elite corps of technically trained military officers who act as the glue between Israel's operational military and defense technology communities. They have a firsthand understanding of both the military requirements in the field and the applicable science and technology and are expected to take the initiative to use both to identify and solve problems.

Talpiot graduates who stay in the military beyond their service commitment tend to be promoted and often end up in senior leadership positions.⁴⁹ Many, however, are recruited by the private sector, where they are highly sought for technical and management positions. The program is perceived as a breeding ground for Israel's tech industry CEOs, as a long list of technology corporations and startups are led by former Talpiots.⁵⁰ This elite reputation, in turn, further drives the top high school candidates in the country to apply for the program. The key success factors for the Talpiot program can be summarized as follows:⁵¹

- rigorous and multidimensional selection process

- unique combination of military and academic training with emphasis on the big picture
- careful matching of graduates with follow-on assignments
- popular perception as a path to elite career opportunities.

Operational Demonstrators. Israel's need for efficiency in military development means it cannot afford to let potentially impactful advances languish in the "valley of death" between invention and adoption. Thus, operational demonstrator experiments are used by MAFAT as a key step on the military innovation pathway. They are particularly important for disruptive bottom-up innovations for which formal requirements may not yet exist.⁵²

Because Israel does not operate any government defense laboratories, all new technologies are developed by industry. MAFAT funding supports the development of new military technologies from the basic research through operational demonstrator steps. In the operational demonstrator step, working prototypes of new technologies are provided to active military units for evaluation in the field. Feedback from the operational demonstrator period is valuable, both in fine-tuning the technology to meet military needs and in developing military support for the new technology.

Because the operational demonstrators are conducted as part of R&D, and not part of a military acquisition program, they have freedom to move quickly and the ability to take risk. The applicable military branch is involved early in the demonstrator process but in terms of resources is usually responsible only for designating the participating military unit. Funding is budgeted by thrust area, not by individual demonstrator project, so MAFAT has the flexibility to allocate or reallocate funds between demonstrators as opportunities arise.⁵³ This allows for dozens of operational demonstrators to be conducted each year.

Prototype technologies are usually provided to units in training, but because the IDF are often involved in action, sometimes unexpectedly, the technology

often receives early combat experience. This was the case with the first Iron Dome antimissile batteries, two of which were deployed as demonstrator-phase prototypes to the towns of Beersheba and Ashkelon near the Gaza Strip after Hamas began a rocket offensive in March 2011.⁵⁴ Real-life missile engagement experience helped refine the system. Perhaps more important, the visible successes of the prototypes won IDF support for the technology. Following successful missile interceptions, the previously skeptical commander of the Israeli air force met the project leader in Ashkelon and announced, "You now have the biggest supporter you'll ever have! I was wrong when I didn't believe!"⁵⁵

In another example, the Trophy Active Defense System for the Merkava Mark 4 tank was first tested as a demonstrator during the 10-day IDF Joint Combat exercise in October 2010.⁵⁶ Recently, a computerized smart gunsight for infantry rifles also received an operational demonstrator evaluation during IDF infantry training. When inexperienced recruits were able to hit moving targets with the first bullet with more than 70 percent accuracy, the dramatic results led to an initial defense ministry order of 2,000 gunsights.⁵⁷

Operational Military/R&D/Industry Collaboration. Last, the Israeli defense innovation system places significant emphasis on collaboration and the building of relationships and information linkages, both between the operational military and MAFAT and between the military's R&D activities and the commercial sector.

At the top, MAFAT is headed by a three-star general equivalent who reports directly to both the IDF chief of staff and the director-general of the defense ministry. This makes MAFAT itself a bridge between the civilian and military halves of the Israeli defense enterprise.⁵⁸ At the intermediate levels, MAFAT personnel have a close relationship with their operational military counterparts. Many MAFAT staff are uniformed military, including Talpiots. R&D working plans are routinely discussed with the military branches at the O4/O5 levels. Thus,



Israel Missile Defense Organization of Directorate of Defense Research and Development and U.S. Missile Defense Agency completed successful flight test campaign with Arrow 3 interceptor missile, in Kodiak, Alaska, July 28, 2019 (Missile Defense Agency)

operational needs are not communicated by reports—the R&D personnel often understand them almost as well as their operational counterparts.⁵⁹ Operational leaders similarly have good awareness of the R&D pipeline.

Because most of the scientists, engineers, and executives in the Israeli tech industry are IDF reservists with prior military training, they are familiar with military needs.⁶⁰ However, former military service is not the only source of close relationships between the military and private sector. The translation of military advances to commercial uses is regarded as a powerful source of entrepreneurial opportunity. As Prime Minister Benjamin Netanyahu has stated, “Applying military technology to the civilian sector has become Israel’s greatest source of wealth.”⁶¹ Intermediate- and junior-level officers in MAFAT interact often with industry counterparts and do most of the initial vetting of industry inventions. Young R&D officers are encouraged to spend one to two days per week visiting technology companies, particularly startups.⁶² Prototype purchases and operational demonstrations are driven largely by these

interactions and are supported by fast and flexible contracting processes designed for engaging commercial firms.⁶³

Reaping the Benefits for U.S. Military Innovation

The six highlighted peer-country military innovation best practices suggest actionable options by which the U.S. defense innovation enterprise could accelerate disruptive innovation. The practices could benefit several areas. The table summarizes the practices and provides examples of the innovation activities and organizations that might benefit from adapting them for U.S. needs.

Strategic Planning and Future Force Design. Strategic planning is less synchronized in the U.S. system than in China’s. The National Defense Strategy (formerly the Quadrennial Defense Review) is produced approximately every 4 years. Other long-range technology forecasting studies and future force design studies within the Office of the Secretary of Defense and the military Services occur on less regular schedules and are often one of a kind. Rarely is

there a long-range (that is, beyond a 5-year budget horizon), multi-Service integrated treatment of future defense strategy, weapons system development needs, and enabling S&T priorities, as produced regularly by the Chinese planning process.

One consequence of not having a long-range strategy is that potentially disruptive U.S. technological innovations, such as unmanned aircraft and stealth technology, sometimes have had to fight an uphill battle against nearer term priorities.⁶⁴ Disruptive technologies are challenging to embrace. An authoritative “demand signal” that mandates a longer term perspective and the adoption of leap-ahead capabilities for the benefit of the future force could greatly speed the process of institutional adoption for disruptive innovations.

In addition, in the DOD planning, programming, budgeting, and execution system, it can be challenging to secure the resources to adopt future innovations that may not yet exist. Adapting the Chinese practice of applying a generation-based framework to future technologies could help overcome this.

Table. Highlighted Chinese and Israeli Best Practices and Examples of Potential Areas for U.S. Adaptation

	Best Practice	Function	Relevant U.S. Military Innovation Activities	U.S. Military Organizations for Potential Adaptation
China	Synchronized hierarchical strategic planning	Strategic planning	Planning, Programming, Budgeting, and Execution	OSD and Service Headquarters
	Hall for Workshop for Meta-Synthetic Engineering	Multidisciplinary solution development	Strategic plan development, future force design, conceptual system design	OSD and Service Headquarters, future force design organizations, Service materiel commands
	Full-scale prototyping platforms	Prototyping and experimentation	Advanced S&T and early stage acquisition programs (BA 3, 4, 5)	OUSD(R&E) and military Service laboratories and warfare centers
Israel	Talpiot	Workforce development	STEM programs, military training, and career development	Service education and training commands and materiel commands
	Operational demonstrators	Prototyping and experimentation	Advanced S&T activities (BA 3, 4)	OUSD(R&E) and military Service laboratories and warfare centers
	Operational military/R&D industry collaboration	Partnering	Industry outreach, requirements generation, technology transition	Service laboratories and warfare centers, defense R&D agencies, defense contracting, and finance functional organizations

Key: BA = research, development, test, and evaluation budget activities; OSD = Office of the Secretary of Defense; OUSD(R&E) = Office of the Under Secretary of Defense for Research and Engineering; R&D = research and development; S&T = science and technology

In the Chinese framework, the programs and funding for implementing upcoming technology generations can be effectively preprogrammed as placeholders, and the only question is which specific technologies will be selected. The commercial semiconductor industry uses a similar framework in the form of a roadmap that projects the future dates of industry-wide transitions to smaller microelectronic feature sizes.⁶⁵ By synchronizing their R&D plans with the common roadmap, firms across the industry can develop next-generation manufacturing technology in the likelihood that the necessary complementary technologies, and the demand from manufacturers, will arrive at the same time. This helps the entire industry make rapid leaps forward.

U.S. defense planners are increasingly challenged to make rigorous and defensible plans covering large mission spaces involving complex emerging technologies. For instance, the Missile Defense Review released in January 2019 was the result of almost 2 years of work but was nonetheless unable to converge on definitive recommendations in 11 major areas.⁶⁶ A more powerful methodology for addressing such complex problems involving many quantitative and qualitative factors could be beneficial. A methodology similar to the HWMSE, which could

leverage modern information technology to help converge giant sets of data and expert judgment, could help tackle many such challenges.

The U.S. system benefits from flexibility. The full Chinese system of defense planning would not be appropriate for the United States. It may also prove too prescriptive for China if the country fully catches up with the United States, requiring it to invent new military technologies instead of acting as a “fast follower.” However, adapting just enough of the Chinese planning process to provide a coordinated long-range technology-planning framework that would be built around placeholders instead of specific technologies and designed using suitably powerful modern planning methodologies could address many of the coordination challenges that slow U.S. disruptive military innovation.

Prototyping and Experimentation.

U.S. military acquisition policy encourages the use of prototyping and experimentation, but the resources to enable it, and its embrace as a critical step in military innovation, may be less robust than in the two peer countries.

Revisiting the example of naval prototyping and experimentation, there are some dedicated R&D testbed vessels in the United States, such as the 61-ton

Stiletto that is funded by the Office of the Assistant Secretary of Defense for Research and Engineering.⁶⁷ But most full-scale at-sea prototyping and demonstration relies on operational combat vessels. Opportunities are limited because of the disruption to operational ships and missions. It also can be expensive. For example, the Naval Surface Warfare Center conducted an at-sea full-scale trial of a developmental low-cost sensor system. The sensor system cost \$375,000, but it cost \$7.5 million to modify an *Arleigh Burke*-class destroyer to install the system and another \$7.5 million after the experiments were completed to restore the vessel to its baseline configuration.⁶⁸ Provision of more full-scale platforms dedicated to prototyping and experimentation, as in Chinese military practice, could reduce the time and cost to conduct such activities. In past periods of rapid innovation, the U.S. military lavished greater resources on such activities. For example, following World War II, the Marine Corps created an entire experimental flying unit, HMX-1, to explore the technical and operational potential of the newly emerging helicopters as military platforms.⁶⁹

Several U.S. programs help put emerging technologies in the hands of military personnel for evaluation in the

field, such as the Army Expeditionary Warrior Experiment.⁷⁰ However, taking prototype technologies from military R&D programs and putting them through field experiments that are totally supported by R&D funds is not standard practice as it is in Israel. Almost all the Advanced Component Development and Prototyping funding in the U.S. system is controlled by major acquisition programs. Considering the important role that operational demonstrators play in accelerating Israeli military innovation, an analogous R&D-focused practice in the United States could greatly speed disruptive innovations to the warfighter.

Cross-Sector Collaboration and Talent Development. Military technology leaders in the United States have sometimes dreamed of a situation in which the top talent in Silicon Valley dedicate themselves to military innovation for the benefit of the country's defense. That situation is the norm in Israel. The Talpiot program routes the country's rising technical and entrepreneurial stars through service in military R&D by offering a remarkable educational opportunity and a place in a cohort of elite future military and business leaders. Although the United States does not have the requirement of universal military service to route its young people into uniform, it has a vastly larger pool of talent from which to draw. Similarly, prestigious and selective cohorts, such as the astronaut corps, continue to attract patriotic-minded and highly talented American youth to STEM studies and government service. Adapting some of the success factors of the Talpiot program could deliver a new pipeline of innovation change agents to the U.S. military and potentially inspire a greater interest in solving military problems among the Nation's high-tech workforce. The Reserve Individual Mobilization Augmentee program and other existing mechanisms could help provide starting points for experimentation.

Close collaboration between private-sector innovators and forward-thinking military members has been an important ingredient in many past disruptive military technological advancements. The Israeli example suggests

simple ways this culture of collaboration can be invigorated. Relatively modest reforms to encourage open lines of communication with industry peers outside of formal source selections, in particular at the more junior grades, could yield great benefits. These could be synergistic with, and help capitalize on, commercially friendly reforms to U.S. defense R&D contracting and rapid acquisition practices that are already under way.

Every practice must be adapted and tailored to the environment in which it is applied. The effective military innovation systems of China and Israel exhibit at least six transferable best practices that could be adapted and applied to accelerate U.S. disruptive military innovation. Such constructive adaptation could help the United States recapture its advantage in innovation, as when U.S. manufacturers recaptured their competitiveness in the 1990s by adapting the key practices that enabled the rapid gains by Japanese industry. Looming technological revolutions in areas such as artificial intelligence, autonomy, directed energy, quantum science, and elsewhere make it imperative for the United States to lead in converting emerging technologies into new military capabilities. The options defined here may help inform ongoing changes to U.S. military R&D operational practices and help secure the technological advantage needed to achieve the goals of the National Defense Strategy. JFQ

Notes

¹ Kari Hawkins, "AMC-Developed Weapon Systems Remain Vital to the Army," *Army*, September 6, 2012, available at <www.army.mil/article/86839/AMC_developed_weapons_remain_vital_to_Army/>.

² *Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military's Competitive Edge* (Washington, DC: Department of Defense, 2018), available at <<https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>>.

³ Dennis J. Blasko, "'Technology Determines Tactics': The Relationship Between Technology and Doctrine in Chinese Military Thinking," *Journal of Strategic Studies* 34, no. 3 (June 2011), 355–382.

⁴ Jim Garamone, "U.S. Must Act Now to Maintain Military Technological Advantage, Vice Chairman Says," *DOD News*, June 21, 2018, available at <<https://dod.defense.gov/News/Article/Article/1557052/us-must-act-now-to-maintain-military-technological-advantage-vice-chairman-says/>>.

⁵ *Science and Technology Strategy: Strengthening USAF Science and Technology for 2030 and Beyond* (Washington, DC: Headquarters Department of the Air Force, April 2019).

⁶ George M. Dougherty, "Promoting Disruptive Military Innovation: Best Practices for DOD Experimentation and Prototyping Programs," *Defense Acquisition Research Journal* 25, no. 1 (January 2018), 2–29, available at <www.dau.edu/library/arj/ARJ/arj84/ARJ84%20Article%201%20-%2017-782%20Dougherty.pdf>.

⁷ "What Does China Really Spend on Its Military?" China Power Project, Center for Strategic and International Studies, December 28, 2015, available at <<https://chinapower.csis.org/military-spending/>>.

⁸ Tai Ming Cheung, "How China's Defense Innovation System Is Advancing the Country's Military Technological Rise," *Study of Innovation and Technology in China (SITC) Research Brief*, Series 10 (May 3, 2018), available at <<https://escholarship.org/uc/item/7c75995r>>.

⁹ Tai Ming Cheung, Eric Anderson, and Fan Yang, "Chinese Defense Industry Reforms and Their Implications for U.S.-China Military Technological Competition," *SITC Research Brief*, Series 9 (January 4, 2017), available at <<https://escholarship.org/uc/item/84v3d66k>>.

¹⁰ Tai Ming Cheung, "An Uncertain Transition: Regulatory Reform and Industrial Innovation in China's Defense Research, Development, and Acquisition System," in *Forging China's Military Might: A New Framework for Assessing Innovation*, ed. Tai Ming Cheung (Baltimore: Johns Hopkins University Press, 2014), 47–65; Cheung, Anderson, and Yang, "Chinese Defense Industry Reforms."

¹¹ Tai Ming Cheung, "U.S.-China Military Technological Competition and the Making of Chinese Weapons Development Strategies and Plans," *SITC Research Brief*, Series 9 (January 2, 2017), available at <<https://escholarship.org/uc/item/43m5m3gp>>; Eric Hagt, "The General Armament Department's Science and Technology Committee: PLA-Industry Relations and Implications for Defense Innovation," in *Forging China's Military Might*, 66–86; Andrew L. Ross, "Framing Chinese Military Innovation," in *China's Emergence as a Defense Technological Power*, ed. Tai Ming Cheung (Abingdon-on-Thames, UK: Routledge, 2013), 187–213.

¹² Jon Grevatt, "China Plans Major Restructure of Military R&D Infrastructure," *Jane's Defence Industry* (July 13, 2017).

¹³ Andrea Gilli and Mauro Gilli, "Why Chi-

na Has Not Caught Up Yet: Military-Technological Superiority and the Limits of Imitation, Reverse Engineering, and Cyber Espionage,” *International Security* 43, no. 3 (Winter 2018–2019), 141–189.

¹⁴ Tai Ming Cheung et al., *Planning for Innovation: Understanding China’s Plans for Technological, Energy, Industrial, and Defense Development* (San Diego, CA: University of California Institute on Global Conflict and Cooperation, July 28, 2016), available at <<https://www.uscc.gov/research/planning-innovation-understanding-chinas-plans-technological-energy-industrial-and-defense>>.

¹⁵ Cheung, “U.S.–China Military Technological Competition.”

¹⁶ Cheung et al., *Planning for Innovation*, 20.

¹⁷ *Ibid.*, 21.

¹⁸ Tai Ming Cheung, *Innovation in China’s Defense Research, Development and Acquisition System*, SITC Policy Brief 20, 2011, available at <<https://escholarship.org/uc/item/43v5v0nt>>.

¹⁹ *Ibid.*

²⁰ Hagt, “The General Armament Department’s Science and Technology Committee.”

²¹ *Ibid.*

²² Cheung et al., *Planning for Innovation*, 23.

²³ *Ibid.*, 23–24.

²⁴ Sun Hong and Li Lin, “On the Modes of Advancing Weapons and Equipment Development with Chinese Characteristics,” *China Military Science* 6 (2005), 55–60.

²⁵ Qian Xuesen, Yu Jingyuan, and Dai Ruwei, “A New Discipline of Science—The Study of Open Complex Giant System and Its Methodology,” *Chinese Journal of Systems Engineering and Electronics* 4, no. 2 (1993), 212.

²⁶ Jifa Gu, “The Meta-Synthesis System Approach,” in *Knowledge Synthesis: Western and Eastern Cultural Perspectives*, ed. Yoshiteru Nakamori (Tokyo: Springer Japan, 2016), 55–78.

²⁷ *Ibid.*

²⁸ Fu Xin Hua, “Hall for Workshop of Meta-Synthetic Engineering for the Demonstration of Airborne Equipment Development,” Proceedings of the Fourth International Conference on Mechatronics, Materials, Chemistry, and Computer Engineering 2015, Xian, China, December 2015.

²⁹ Gu, “The Meta-Synthesis System Approach”; Xijin Tang, “Problem Structuring Process by Qualitative Meta-Synthesis Technologies,” in *Knowledge Synthesis: Western and Eastern Cultural Perspectives*, 79–105.

³⁰ Tang, “Problem Structuring Process.”

³¹ Ma Kuan, Gong Maohua, and Zhou Shaopeng, “Application of Technology Maturity in Management of National Defense Equipment Research and Development Program: A Case of an Aerospace Project,” *National Defense Science and Technology* 37, no. 2 (2016), 73–77.

³² Stephen Saunders, *IHS Jane’s Fighting Ships 2016–2017* (Bracknell, UK: IHS Global Ltd., 2016), 161.

³³ James C. Bussert, “China Employs Ships as Weapon Test Platforms,” *Signal Magazine*, March 1, 2013, available at <www.afcea.org/content/?q=china-employs-ships-weapon-test-platforms>.

³⁴ Saunders, *IHS Jane’s Fighting Ships 2016–2017*, 138.

³⁵ David Axe, “China’s Navy Railgun Is Out for Sea Trials. Here’s Why It’s a Threat to the U.S. Navy,” *The National Interest*, January 6, 2019, available at <<https://nationalinterest.org/blog/buzz/chinas-navy-railgun-out-sea-trials-heres-why-it-s-threat-us-navy-40812>>.

³⁶ “Chinese Fire Support Frigate,” *Navy Matters*, June 16, 2017, available at <<https://navy-matters.blogspot.com/2017/06/chinese-fire-support-frigate.html>>.

³⁷ Bradley Perrett and Steve Trimble, “Avic’s J-31 Fighter Is a Winner After All,” *Aviation Week and Space Technology*, November 9, 2018, available at <<https://aviationweek.com/defense/avic-s-j-31-fighter-winner-after-all>>.

³⁸ Dmitry Adamsky, “The Israeli Approach to Defense Innovation,” *SITC Research Brief*, Series 10 (May 8, 2018), available at <<https://escholarship.org/uc/item/4t07267h>>.

³⁹ Kobi Kagan et al., “Defense Structure, Procurement, and Industry: The Case of Israel,” in *Defense Procurement and Industry Policy: A Small Country Perspective*, ed. Stefan Markowski, Peter Hall, and Robert Wylie (London: Routledge, 2010), 228–254.

⁴⁰ Abigail Klein Leichman, “The IDF Incubator for Israel’s Future CEOs,” *Israel 21c*, September 19, 2012, available at <www.israel21c.org/the-idf-incubator-for-israels-future-ceos/>.

⁴¹ Jason Gewirtz, *Israel’s Edge: The Story of the IDF’s Most Elite Unit—Talpiot* (Jerusalem: Gefen, 2016), 35–36.

⁴² *Ibid.*, 46–47; Leichman, “The IDF Incubator.”

⁴³ Richard Rapoport, “Beating Swords into IPO Shares,” *Forbes*, June 1, 1998, 92–102.

⁴⁴ Leichman, “The IDF Incubator.”

⁴⁵ Gewirtz, *Israel’s Edge*, 80–81.

⁴⁶ *Ibid.*, 81.

⁴⁷ *Ibid.*, 64, 80.

⁴⁸ *Ibid.*, 47.

⁴⁹ Amir Geva, Israeli Defense R&D attaché, interview by author, June 4, 2018.

⁵⁰ Leichman, “The IDF Incubator.”

⁵¹ Gewirtz, *Israel’s Edge*, 47.

⁵² Geva, interview, June 4, 2018.

⁵³ *Ibid.*

⁵⁴ Amos Harel, “Israel to Invest \$1 Billion in Iron Dome Missile Defense System,” *Haaretz*, May 9, 2011, 123–124.

⁵⁵ Dan Raviv, “Inside the Iron Dome,” *Momentmag*, July 17, 2018, available at <www.momentmag.com/inside-the-iron-dome/>.

⁵⁶ “Merkava Mark 4 With ‘Trophy’ (Meil Ruach) Active Tank Defense System to Be Presented in Joint Combat Exercise Demonstration for First Time,” Israel Defense Forces, October 11, 2010, available at <[https://idf-](https://idf-spokesperson.wordpress.com/2010/10/11/merkava-mark-4-with-trophy-meil-ruach-active-tank-defense-system-to-be-used-in-joint-combat-exercise-demonstration-for-first-time-12-oct-2010/)

spokesperson.wordpress.com/2010/10/11/merkava-mark-4-with-trophy-meil-ruach-active-tank-defense-system-to-be-used-in-joint-combat-exercise-demonstration-for-first-time-12-oct-2010/>.

⁵⁷ Udi Etzion, “IDF Shooters Get ‘Smart’ Gun Sight to Increase Accuracy,” *Ynet News*, January 13, 2019, available at <www.ynetnews.com/articles/0,7340,L-5444185,00.html>.

⁵⁸ Geva, interview, June 4, 2018.

⁵⁹ *Ibid.*

⁶⁰ Kagan et al., “Defense Structure, Procurement, and Industry.”

⁶¹ Rapoport, “Beating Swords into IPO Shares.”

⁶² Geva, interview, June 4, 2018.

⁶³ Amir Geva, Israeli Defense R&D attaché, interview by author, January 27, 2019.

⁶⁴ Dougherty, “Promoting Disruptive Military Innovation.”

⁶⁵ W.J. Spencer and T.E. Seidel, “International Technology Roadmaps: The U.S. Semiconductor Experience,” in *Productivity and Cyclicity in Semiconductors: Trends, Implications, and Questions*, ed. Dale W. Jorgenson and Charles W. Wessner (Washington, DC: National Academies Press, 2004), 135–150.

⁶⁶ Aaron Mehta, “The Next Six Months Could Define America’s Missile Defense for a Generation,” *Defense News*, January 27, 2019, available at <www.defensenews.com/space/2019/01/28/the-next-six-months-could-define-americas-missile-defense-for-a-generation/>.

⁶⁷ Saunders, *IHS Jane’s Fighting Ships 2016–2017*, 959.

⁶⁸ Gary Shields, director of the Disruptive Technologies Laboratory, Naval Surface Warfare Center, Carderock Division, interview by author, June 1, 2018.

⁶⁹ Chuck Lloyd and Rick Llinares, “HMX-1: The First and Finest,” *Naval Aviation News* (May–June 1997), 11–19.

⁷⁰ Dougherty, “Promoting Disruptive Military Innovation.”



U.S. Ambassador to Liberia Deborah Malac, in white, and president of Liberia Ellen Johnson Sirleaf, left, speak to reporters after touring Ebola treatment unit built to care for medical workers who become infected while treating Ebola patients, in Harbel, Liberia, November 5, 2014 (U.S. Army/Nathan Hoskins)

Disinformation and Disease

Operating in the Information Environment During Foreign Humanitarian Assistance Missions

By Melia Pfannenstiel and Louis L. Cook

Information warfare is a relatively low-cost alternative for adversaries who wish to diminish U.S. credibility and trust among allies and partners. Addressing current and future national

security threats requires adapting to actions that occur outside a traditional understanding of war and peace, in the often-referenced gray zone. A failure to anticipate information-related

challenges, ranging from rumors to malicious disinformation, in all planning, including foreign humanitarian assistance (FHA), threatens personnel and jeopardizes mission success. Previous disease outbreaks involving narrative exploitation by the former Soviet Union, Russia, and Iran highlight the consequences of failing to

Dr. Melia Pfannenstiel is Assistant Professor of Military and Security Studies at the Air Command and Staff College. Major Louis L. Cook, USA, Ed.D., is Deployable Training Division Plans Observer/Trainer at the Joint Staff J7.

identify and counter misinformation and disinformation. The expected rise in disease- and disaster-related FHA missions demands interagency community and Department of Defense (DOD) coordination to mitigate risks. This analysis illustrates the threat posed by adversaries and the necessity of building expertise to synchronize information-related capabilities for counternarrative planning.

The expansion of information warfare capabilities threatens U.S. strategic interests and demonstrates the importance of adapting to actions outside a traditional understanding of war and peace. Misinformation and disinformation produce compounding effects in that seemingly minor occurrences gradually erode trust over time and lay a foundation for subsequent narrative exploitation. A failure to anticipate information challenges across a range of operations, including FHA, endangers personnel and jeopardizes mission success.

The Joint Operating Environment 2035 anticipates that the future operating environment will be characterized by, among other things, “a rise in the incidence and severity of infectious disease outbreaks.”¹ Correspondingly, the 2017 National Security Strategy elevates the detection and mitigation of infectious disease to a priority action in the defense of the Nation’s vital interests.² Operations in the information environment play an important role in FHA but typically focus exclusively on informing the public of danger and how to access resources. This restricted approach to information leaves a relatively unchecked opening for adversaries to shape perceptions of U.S. actions.

The following analyzes Soviet leverage of disease-related information as context for the Russian and Iranian narrative exploitation during the U.S. response to the Ebola crisis in Liberia (2014–2015). These observations underscore the operational and strategic value of counternarrative planning and inform recommendations for combatant command and joint task force information working groups to better support FHA contingencies.

Russian Disinformation and Disease in Context

Russian disinformation targeting Western institutions, with the intent of eroding trust within societies and among partners and allies, is a continuation of Soviet-era practices. The Soviet Union honed information warfare capabilities throughout the Cold War, realizing the benefits of exploiting suspicions of U.S. intentions in the developing world. Active measures—including foreign press manipulation, document forgeries, and disinformation—sought to influence world events.³ The Soviet security organization, in partnership with the East German security service, dedicated substantial resources to discrediting the United States through media manipulation and disinformation in foreign newspapers and radio broadcasts. The centralized Soviet state enabled close coordination among instruments of power, boosting the effectiveness of active measures.⁴ Constrained Soviet resources in the 1980s drove the need for cost-effective means of challenging U.S. credibility among existing or potential partners.⁵

Soviet efforts included a yearslong disinformation campaign, widely known as Operation *Infektion* (the Stasi code-name was Operation *Denver*), aimed at linking the emergence of Acquired Immune Deficiency Syndrome (AIDS) to U.S. military biological warfare research and testing.⁶ The U.S. role as a leader in scientific research provided the Soviet Union with an opportunity to begin circulating rumors that the U.S. Government manufactured and spread AIDS as part of a DOD program.⁷

In July 1983, the Soviet-funded Indian newspaper *Patriot* attempted to relate the discovery of AIDS in the United States to U.S. military research and U.S.-Pakistani research partnerships. The threat posed to India was highlighted in an anonymous editorial: “AIDS May Invade India: Mystery Disease Caused by U.S. Experiments.”⁸ In the context of the Soviet-Afghan war, the op-ed had the potential to influence the nonaligned Indian government but went relatively unnoticed because HIV/AIDS

rates on the Indian subcontinent were unreported at the time.⁹

Efforts resumed through the Soviet magazine *Literaturnaya Gazeta* in October 1985, intensifying with the dissemination of a pamphlet titled “AIDS: USA Home-Made Evil; Not Imported from AFRICA” to delegates attending the September 1986 Eighth Conference of Non-Aligned Nations, in Harare, Zimbabwe.¹⁰ To extend reach, Moscow Radio broadcast similar biological warfare claims in Kenya and Zaire, while Soviet state-run outlets TASS and Novosti Press encouraged local media to reprint these claims.¹¹ Such active measures incorporated an “ethnic weapons”¹² theme by highlighting U.S. policy toward apartheid in South Africa, invoking accounts of germ warfare against Native Americans, and alluding to population-control studies in areas of strategic interest, specifically in Zaire (present-day Democratic Republic of the Congo [DRC]).¹³

The U.S. Government’s Active Measures Working Group, created in 1981 to counter Soviet disinformation, faced a comparative disadvantage due to bureaucratic restraints and limited resources. Unaware of the AIDS disinformation campaign until the publication of the October 1985 propaganda piece, the United States did not actively counter the narrative until 1986, 3 years after the publication of the first story in India.¹⁴ Between 1983 and late 1987, approximately 200 news outlets across 80 countries referenced the AIDS narrative promulgated by Soviet and East German intelligence. Following U.S. diplomatic pressure on Soviet leaders to end the disinformation campaign, Soviet scientists held a press conference in October 1987 to specify the African origin of AIDS.¹⁵

After the Cold War, relative U.S. disengagement across much of sub-Saharan Africa allowed an uncontested information environment, contributing to persistent mistrust within some populations. The transmittal of AIDS origin myths continued throughout the 1990s and 2000s. In areas dramatically affected by HIV/AIDS, such as Zimbabwe and South Africa, political leaders in the 1990s publicly alleged that



Joint Forces Command—United Assistance commander Major General Gary Volesky, right, elbow bumps Sergeant 1st Class Roderick Davis, logistics section noncommissioned officer in charge, 129th Combat Sustainment Support Battalion, 101st Sustainment Brigade, Task Force Lifeline, during visit to Monrovia, Liberia, November 6, 2014 (U.S. Army/Mary Rose Mittlesteadt)

U.S.-sponsored efforts to combat new infections were designed to spread AIDS to Africans. Limited polling data on the beliefs of the origin of AIDS suggest the myth that it was developed by the United States as a bioweapon is still well known and accepted within certain populations.¹⁶

The foundational mistrust produced by *Infektion* serves to facilitate additional conspiracies and disinformation efforts. Rumors that a World Health Organization (WHO) polio vaccination program, established in 1988, is a U.S.-sponsored plot to spread HIV, infertility, and cancer to Muslims are perpetuated by religious leaders and local media in northern Nigeria. The decades-long transmittal of these rumors continues to cause polio outbreaks in West Africa, Pakistan, and Afghanistan and hinder disease eradication worldwide.¹⁷ The legacy of the Soviet AIDS disinformation campaign presents challenges for U.S. partners' abilities to manage disease outbreaks and complicates the operational environment

for building mutually beneficial security partnerships. This problem was evident during the U.S. response to the 2014–2015 Ebola outbreak in Liberia.

Fake News Targeting Operation *United Assistance*

Operation *United Assistance* (OUA), the DOD mission to Liberia in 2014–2015, marks the first instance of a U.S. troop deployment in support of a disease-driven FHA mission. The Ebola outbreak in Liberia began in December 2013 and led to an intensive multinational effort by summer 2014. The Centers for Disease Control and Prevention (CDC) elevated the threat level in July, followed by the Liberian president invoking emergency powers and U.S. chiefs of mission in Liberia, Sierra Leone, and Guinea declaring an emergency. In August 2014, DOD established an Ebola task force. DOD frequently supports U.S. Agency for International Development (USAID) Disaster Assistance Response Teams

with logistics, airlift, and medical capabilities, but Liberian government and U.S. State Department requests expanded the DOD role to include treatment units, medical research laboratories, and 3,000 troops.¹⁸

Lead elements of the task force began to arrive in mid-September 2014, but most forces were not in place until late October. Joint force support to the Ebola response was organized along command and control, engineering support, logistics support, and medical training assistance lines of effort. The 101st Airborne Division and additional specialized Army units deployed in support of USAID, the lead Federal agency for the Ebola response. Ongoing engagements in Liberia through U.S. Africa Command's Disease Preparedness Program, the Michigan National Guard State Partnership Program, and Marine security cooperation aided many aspects of OUA; however, limited knowledge of the operational environment, overuse of classification systems, and the inability to

communicate with non-DOD partners restricted unity of effort.¹⁹

Technological limitations between U.S. Government partners and distrust across Liberian society of the U.S. military presence in OUA accentuated the challenges of operating in information-permissive environments. Realizing the need for a synchronized narrative to convey U.S. intentions, U.S. Army Africa public affairs (PA) officers supported the Liberian government's public messaging campaign, in direct coordination with Disaster Assistance Response Teams through the U.S. Embassy. DOD PA played a minimal role in messaging during OUA because it was not a line of effort, and the Embassy did not identify an immediate need for information operations to support the Ebola response.²⁰ The joint PA support element assisted in managing international media but did not deploy until 4 weeks into the operation. White House press releases attempted to satisfy requests from American media but focused attention on informing the American people of the Ebola threat on U.S. soil.²¹ Ineffective counternarrative capabilities in OUA meant that media outlets distorted U.S. intentions in Liberia.

The first rumors appeared on the Web site of the popular Liberian newspaper *Daily Observer* in early August 2014. Initial reports suggested that Ebola was the result of secret agents poisoning the water supply with formaldehyde or that it spread through vaccines made of formaldehyde. Reports also claimed trafficking organizations might be harvesting the organs of Ebola victims.²² These and other rumors led to devastating attacks on health care workers, including the ransacking of a Monrovia hospital as Ebola patients fled.²³

Indications of a Russian disinformation campaign to discredit the United States emerged in a *Pravda* report on August 11, 2014, published weeks before the first deployment of U.S. troops. The purported scientific report suggested the Pentagon developed an effective Ebola vaccine not available to Africans, as the U.S. Government held all rights to it. Subsequent analysis posited the U.S. Government withheld the vaccine

because Ebola is a “near perfect biological weapon” or because commercial interests sought to drive panic and increase the price of the lifesaving treatment. To alleviate suffering, the report claimed that Russian scientists were on the cusp of developing a highly effective vaccine.²⁴

The *Daily Observer* mimicked this narrative throughout September and October 2014, accelerating the publication of salacious stories during the U.S. deployment to Liberia. Some claimed the Pentagon or CDC manufactured the Ebola virus and administered it through the United Nations to depopulate the planet, while others alleged CDC-enabled U.S. pharmaceutical companies spread Ebola to drive vaccine development for financial gain.²⁵

The motives behind the *Daily Observer's* reporting of Ebola rumors are unclear. The newspaper is a frequent critic of the Liberian government, but the online traffic generated by the highly interesting reports may also have been profitable. To combat misinformation, Liberian president Ellen Sirleaf requested the authority to restrict media reporting. The Liberian legislature denied the request in October 2014, but the president's attempt to manage the narrative perpetuated rumors that Ebola was a government plot to impose martial law.²⁶

The unique mission of the 101st Airborne Division in OUA fueled additional conspiracies that Russian and Iranian media then amplified.²⁷ Russian outlet *Sputnik News* published an opinion piece on October 8, 2014, that began, “The United States may be behind the deadly Ebola outbreak in Liberia and Sierra Leone, two West African countries known to host American biological warfare laboratories.” It later asked readers to consider, “Why has the Obama administration dispatched troops to Liberia when they have no training to provide medical treatment to dying Africans? How did Zaire/Ebola get to West Africa from about 3,500 km away from where it was first identified in 1976?”²⁸

Kremlin-funded *Russia Today* broadcast a series of stories criticizing the Ebola response by a “Warmongering

Washington.”²⁹ Some online articles argued that the U.S. Army might weaponize Ebola,³⁰ while others suggested the Obama administration might use the military's experience to implement martial law throughout the United States in the event of a disease outbreak.³¹ In mid-October, Iran seized the opportunity to galvanize Ebola conspiracies in response to U.S. troop deployments to Liberia. Iranian state television suggested U.S. intentions in OUA were to gain a long-term position in Liberia to advance competition with China for African resources. Iran added that the United States manufactured Ebola and HIV to benefit pharmaceutical companies and that Africans were being used as “guinea pigs.” Iranian reports spread to Turkish state television, and a depiction of the narrative reappeared in a popular Turkish newspaper cartoon.³²

The U.S. Government succeeded in providing medical support to contain the Ebola outbreak, but the operation exposed weaknesses in managing the narrative. Soviet-generated conspiracies, the dissemination of rumors, and opportunistic disinformation during OUA illustrate the need for FHA planners to anticipate risks to U.S. forces and missions by evaluating informational challenges beyond the scope of PA, including the weaponization of information.

Categorization of Activities in the Information Environment

Previous cases of infectious disease outbreaks confirm that a complex information environment slows operational responses and increases strategic risk. Threat projections on infectious disease outbreaks elevate the importance of information and cognitive maneuver in FHA missions. The United States currently faces two principal challenges operating in the information environment during FHA missions, categorized as type I (misinformation) and type II (disinformation). Distinguishing between the intent and risk of these informational challenges is the first step in understanding maneuver in the three dimensions of the information environment: physical, informational,



Malaysian peacekeepers perform traditional dance during ceremony to mark World AIDS Day at Naqoura headquarters in south Lebanon as part of United Nations Interim Force in Lebanon, December 1, 2015 (Courtesy United Nations/Pasqual Gorriz)

and cognitive. The joint force can then develop a counternarrative approach by employing appropriate information-related capabilities (IRCs)—the tools, techniques, or activities that affect any of the dimensions of the information environment.³³

Type I challenges, misinformation, include the spread of false or inaccurate information that is not necessarily intended to be deceptive but is factually inaccurate (for example, rumors).³⁴ Misinformation involves tactical- to operational-level risks, which typically present immediate short-term risk to the mission and the force. Mitigating type I challenges requires disseminating timely, accurate, synchronized information to local populations, often in austere environments, to dispel fears and encourage the populations to follow instructions for the timely delivery of aid. This effort includes countering misinformation

from local nonstate actors who threaten operational success, including risks to health care workers and forces who are frequently the subject of misinformation. According to WHO’s Pandemic and Epidemic Diseases division, “Rumors can be more devastating than the diseases. And every time you have an epidemic of diseases, you have an epidemic of rumors as well.”³⁵ Fear, mistrust, and a lack of officially released information create barriers to effective messaging in support of FHA, which threatens local populations that need access to resources and risks containment of the disease.

The mitigation of misinformation requires intensive outreach and engagement through PA. An element of the information operations cell, PA “comprises public information, command information, and public engagement activities directed toward both the internal and external publics with interest in the Department of

Defense.”³⁶ Therefore, managing misinformation to disseminate the facts about DOD activities is an active method for improving the information environment and achieving public support. Although PA serves as a foundation, it is typically not the only IRC necessary to effectively counter misinformation. Press conferences are necessary to establish a unified narrative, but this medium may reach only small portions of the population in major cities. In Liberia, misinformation spread through word of mouth and local media outlets, such as the *Daily Talk*. Deliberate planning should include a developed understanding of perceptions and mistrust in infectious disease environments; it must consider a range of capabilities to counter misinformation, tailored to the information environment.

The second category, type II, is disinformation, understood as the spread of false information meant to deliberately

deceive or manipulate a target audience. This category includes politically motivated conspiracies and propaganda.³⁷ Type II information challenges present operational risks in addition to the strategic risks that threaten the mission, force, access, partnerships, and allies. Politically motivated narratives meant to sow fear and mistrust of U.S. aims in humanitarian missions are detrimental to delivering aid and controlling disease outbreaks; threaten the lives of Americans delivering aid on the ground; and harm U.S. standing among partners and allies.

Due to the potential for long-term risk to U.S. strategic interests, type II challenges require a combination of IRCs beyond the scope of PA in order to counter malicious narratives. Military information support operations (MISO), the primary IRC focusing on countering disinformation, are “planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals.”³⁸ In disease-driven FHA missions, civil-military operations constitute an IRC with direct relevance to establishing relationships with government officials and civilian populations in friendly, neutral, or hostile operational areas.³⁹ The leveraging of MISO and civil-military operations with other IRCs allows a more effective mitigation of malicious disinformation from adversaries.

Manipulation of leaders and populations through information operations, troop movements, proxy fighters, and economic pressures are examples of Russian and Iranian efforts to challenge the United States. The suspected motivations of Russian and Iranian disinformation campaigns during the U.S. response in Liberia differed, but both illuminate the potential risks for the United States and partners providing FHA in Africa. Iran’s interest in spreading conspiracies is likely driven by the need to protect Hizballah, as Iranian proxy forces are central to its power projection. Hizballah raises funds through a global criminal network, maintaining financial

interests across West Africa, including Liberia.⁴⁰ Meanwhile, Russia seeks to dramatically expand its footprint in Africa to become the preferred partner on the continent. Aside from its 20 military agreements in Africa, Russia has growing political influence in Libya, Republic of the Congo, Chad, and DRC, as well as mercenary forces in some resource-rich areas of Sudan and Central African Republic.⁴¹ Russia’s desire to expand influence across Africa, particularly within countries at high risk for infectious disease, may complicate Western aid provision. Efforts to counter the eastern DRC Ebola epidemic that began in summer 2018 face ongoing information challenges. Misinformation hampers efforts to stop the spread of the virus and prompts violent attacks on health care workers, including the April 2019 murder of a WHO epidemiologist.⁴² U.S.-based pharmaceutical company Merck supplied the DRC with a vaccine that is over 97 percent effective in treating Ebola.⁴³ Soon after the announcement of the vaccine’s success, TASS announced Russian intentions to deliver its “revolutionary Ebola vaccine,”⁴⁴ but the Congolese health ministry then announced that only the Merck vaccine would be allowed to treat patients during the current outbreak.⁴⁵ Russia’s unease with Western influence in Africa, coupled with its pattern of exploiting disease outbreaks, suggests the United States should monitor active measures.

Recommendations and Conclusion

The traditional functions of DOD in infectious disease settings are force protection and sustainment for the interagency team, shaped largely by the perception that the Defense Department brings limited experience or tools directly applicable to the problem set. A failure to appreciate FHA from a broader context of information warfare carries risks for local populations as well as for DOD and its interagency and international partners. The joint force possesses unique information capabilities that, when coupled with interagency expertise, may achieve unified action in

countering misinformation and disinformation. As DOD typically serves in a supporting role in FHA, dedicating resources to strengthen relationships between the combatant commands, Department of State, USAID, and CDC will facilitate future planning for operations in the information environment during these missions.

Adversary abilities to wage information warfare present an intensifying threat to U.S. political, economic, and military interests. Understanding the gray zone between war and peace requires a cultural shift in thinking about operational planning. As former Chairman of the Joint Chiefs of Staff General Joseph Dunford put it, “We think of being at peace or war. . . . Our adversaries don’t think that way.”⁴⁶

The weaponization of information in FHA reveals that the benign intentions of U.S. support are not necessarily apparent to local audiences; thus, the narrative is vulnerable to manipulation. Current FHA doctrine emphasizes intelligence and information-sharing, which is a key step toward a comprehensive approach and may satisfy type I information challenges. The joint force must develop ways to address both type I and type II challenges. Instead of the traditional language of strategic communication,⁴⁷ an emphasis on narrative competition may be better suited to conveying the strategic and operational risks of disinformation and the need to integrate operations in the information environment in all planning.

The elevation of information as a joint function is a critical step toward building narrative-mindedness among operational planners.⁴⁸ To consolidate this doctrinal change over the long term, joint professional military education (JPME) must maintain an emphasis on orienting the joint force toward information challenges⁴⁹ and appropriate responses across the competition continuum. Moreover, education and training serve to grow information-enabling expertise and develop a greater appreciation for distinctions between intelligence and information functions. JPME can develop narrative-mindedness by strengthening the contextual understanding of political,



Colonel David Mounkes, USAF, commander of Joint Task Force–Port Opening Senegal, discusses unit's mission as part of Operation *United Assistance* with delegation representing U.S. Agency for International Development, at Léopold Sédar Senghor International Airport, in Dakar, Senegal, October 16, 2014 (U.S. Air National Guard/Dale Greer)

economic, or social forces that may shape local or international interactions. Planning exercises should consider cultural sensitivities and broadly explore potential areas of narrative exploitation by U.S. adversaries. Fostering diversity of thought through civilian and military educators, international officers, and interagency representatives is necessary to meet the demands of operating in the information environment.

DOD can better support FHA missions by deploying early those PA officers who can integrate with lead agencies and discern misinformation and disinformation in local and international media. The PA support element can quickly convey potential information-related threats to the lead agency for additional monitoring and suggest appropriate IRCs for consideration by the lead agency and country team. In peacetime, MISO requires interagency coordination and national-level authorization,⁵⁰ but the delineation becomes less clear in information warfare. In OUA, the limited capabilities of the single USAID PA officer and the late arrival of key DOD PA elements hampered the development of a deliberate communication synchronization plan to coordinate USAID, State Department,

and government of Liberia efforts.⁵¹ Inadequate monitoring of linkages between misinformation and disinformation in local and international media also left the Embassy with an incomplete assessment to support counternarrative authorities.

To build narrative-mindedness in the short term, combatant commanders and joint force commanders should prioritize building knowledge of the information environment in their respective theaters. As OUA illustrates, in its traditional supporting role in FHA, DOD often allocates minimal resources to perform a detailed analysis of the environment to address type I and type II challenges.⁵² The joint information preparation of the operational environment must expand its focus on understanding local perceptions, internal and external actors, and stakeholder analysis to better appreciate how adversaries might manipulate the information environment. This focused insight will enable synchronization of information across lines of effort.

To effectively plan and execute operations in the information environment in support of FHA, combatant commands and joint task forces must elevate the importance of the information operations

working group to integrate IRCs. The working group should involve planner and liaison officers who have a clear understanding of communication synchronization, representing the full range of joint and interagency IRCs, including special operations, electronic warfare, MISO, legal, cyber, and representatives from the Joint Interagency Coordination Group (JIACG). Aside from combatant commands structuring or placing variable emphasis on the JIACG, most combatant commands and joint task forces do not maintain information working groups with such robust representation.

FHA missions, such as infectious disease mitigation, are opportunities to advance regional and global campaign plan objectives. As the United States prepares for a future operating environment that includes a growing risk of infectious disease, it must develop the ability to more effectively maneuver in the information environment. *Infektion* illustrates typical active measures that reappeared decades later in *United Assistance*. To counter the information competencies of adversaries, the United States must adapt in organizing and applying its own power. Types I and II information challenges require tailored responses that give combatant command and joint task force information cells the capabilities and authorities to mitigate the damaging effects of misinformation and disinformation. JFQ

Notes

¹ *Joint Operating Environment 2035: The Joint Force in a Contested and Disordered World* (Washington, DC: The Joint Staff, July 14, 2016), 9.

² *The National Security Strategy of the United States of America* (Washington, DC: The White House, December 2017), 9, 42.

³ Department of State, *Soviet "Active Measures": Forgery, Disinformation, and Political Operations*, Special Report No. 88 (October 1981); Claudinne Mileur and Chris Kremidas-Courtney, "Weaponized Disinformation and Propaganda on Social Media: Case Study on Measles Surge in Europe," United States European Command, Open Source Element (May 2019).

⁴ The KGB tasked its Service A with active measures. See Thomas Boghardt, "Soviet Bloc Intelligence and Its AIDS Disinformation

Campaign,” *Studies in Intelligence* 53, no. 4 (December 2009).

⁵ Marc Trachtenberg, “Assessing Soviet Economic Performance During the Cold War: A Failure of Intelligence?” *Texas National Security Review* 1, no. 2 (March 2018).

⁶ Douglas Selvage, “Operation ‘Denver’: The East German Ministry of State Security and the KGB’s AIDS Disinformation Campaign,” *Journal of Cold War Studies* 21, no. 4 (Fall 2019).

⁷ The first accounts of AIDS appeared in a Centers for Disease Control and Prevention (CDC) report in June 1981, detailing cases of a rare cancer and lung infection in Los Angeles. Between April and September 1982, Congress held hearings and allocated funds to the CDC for surveillance and the National Institutes of Health for AIDS research. Global research efforts led to the 1983 discovery, by French scientists, of human immunodeficiency virus as the cause of AIDS. Sonja Schmid, “Milestones: The Discovery of HIV-1,” *Nature* (December 2018), 4, available at <www.nature.com/articles/d42859-018-00003-x>.

⁸ Boghardt, “Soviet Bloc Intelligence and Its AIDS Disinformation Campaign,” 4; David Spetrino, “Soviet Active Measures: AIDS Disinformation,” *Studies in Intelligence* 32, no. 4 (1988).

⁹ Boghardt, “Soviet Bloc Intelligence and Its AIDS Disinformation Campaign.”

¹⁰ East German intelligence enlisted Professor Jakob Segal, a retired biophysicist with no technical knowledge of AIDS, to produce the pamphlet “AIDS—Its Nature and Origins.” The revised title targeted an African audience. Boghardt, “Soviet Bloc Intelligence and Its AIDS Disinformation Campaign”; Linda Qui, “Fingerprints of Russian Disinformation: From AIDS to Fake News,” *New York Times*, December 12, 2017, available at <www.nytimes.com/2017/12/12/us/politics/russian-disinformation-aids-fake-news.html>; James Brooke, “In Cradle of AIDS Theory, a Defensive Africa Sees a Disguise for Racism,” *New York Times*, November 19, 1987, available at <www.nytimes.com/1987/11/19/world/in-cradle-of-aids-theory-a-defensive-africa-sees-a-disguise-for-racism.html>.

¹¹ Examples of news stories compiled from Brooke, “In Cradle of AIDS Theory, a Defensive Africa Sees a Disguise for Racism”; Spetrino, “Soviet Active Measures”; Boghardt, “Soviet Bloc Intelligence and Its AIDS Disinformation Campaign.”

¹² Boghardt, “Soviet Bloc Intelligence and Its AIDS Disinformation Campaign.”

¹³ Brooke, “In Cradle of AIDS Theory, a Defensive Africa Sees a Disguise for Racism.”

¹⁴ Boghardt, “Soviet Bloc Intelligence and Its AIDS Disinformation Campaign.”

¹⁵ Spetrino, “Soviet Active Measures.”

¹⁶ Nicoli Nattrass, “Understanding the Origins and Prevalence of AIDS Conspiracy Beliefs,” *Sociology of Health and Illness* 35, no.

1 (January 2013), 113–129.

¹⁷ Gabriel E. Andrade and Azhar Hussain, “Polio in Pakistan: Political, Sociological, and Epidemiological Factors,” *Cureus* 10, no. 10 (October 2018), available at <www.ncbi.nlm.nih.gov/pmc/articles/PMC6318131/>.

¹⁸ Joint Chiefs of Staff, “Operation United Assistance: The DOD Response to Ebola in West Africa,” Joint and Coalition Operational Analysis (J7), January 6, 2016, available at <www.jcs.mil/Portals/36/Documents/Doctrine/ebola/OUA_report_jan2016.pdf>.

¹⁹ Ibid.

²⁰ Ibid., 94n237.

²¹ Ibid., 93–94n235.

²² Terrence McCoy, “The Major Liberian Newspaper Churning Out Ebola Conspiracy Theories,” *Washington Post*, October 17, 2014, available at <www.washingtonpost.com/news/morning-mix/wp/2014/10/17/the-major-liberian-newspaper-churning-out-ebola-conspiracy-after-conspiracy/>.

²³ Brendan Nyhan, “Fighting Ebola, and the Conspiracy Theories,” *New York Times*, August 25, 2014, available at <www.nytimes.com/2014/08/26/upshot/fighting-ebola-and-the-conspiracy-theories.html>.

²⁴ Dmitry Sudakov, “U.S. Created Ebola Virus as Biological Weapon?” *Pravda*, August 11, 2014.

²⁵ Alan Feuer, “The Ebola Conspiracy Theories,” *New York Times*, October 18, 2014, available at <www.nytimes.com/2014/10/19/sunday-review/the-ebola-conspiracy-theories.html>; McCoy, “The Major Liberian Newspaper Churning Out Ebola Conspiracy Theories.”

²⁶ Ibid.

²⁷ Rick Noack, “What the World Thinks of the American Ebola Panic,” *Washington Post*, October 22, 2014, available at <www.washingtonpost.com/news/worldviews/wp/2014/10/22/what-the-world-thinks-of-the-american-ebola-panic/>.

²⁸ “U.S. Links to Bio-Warfare Labs in Ebola Zone: Scholar,” *Sputnik News*, October 8, 2014.

²⁹ Robert Bridge, “Warmongering Washington Hunting for Ebola, Russia and Islamic State,” *RT News*, October 16, 2014.

³⁰ “U.S. Army Withheld Promise from Germany that Ebola Virus Wouldn’t Be Weaponized,” *RT News*, October 20, 2016.

³¹ Noack, “What the World Thinks of the American Ebola Panic.”

³² Ibid.

³³ Joint Publication (JP) 3-13, *Information Operations* (Washington, DC: The Joint Staff, November 20, 2014).

³⁴ Mileur and Kremidas-Courtney, “Weaponized Disinformation and Propaganda on Social Media.”

³⁵ Reid Wilson, “Ebola Outbreak in Africa Spreads Fake News in America,” *The Hill*, June 12, 2019, available at <thehill.com/policy/international/448197-ebola-outbreak-in-africa-spreads-fake-news-in-america>.

³⁶ JP 3-13, *Information Operations*.

³⁷ Mileur and Kremidas-Courtney, “Weaponized Disinformation and Propaganda on Social Media.”

³⁸ JP 3-13, *Information Operations*.

³⁹ Ibid.

⁴⁰ “Countering Iran’s Global Terrorism,” remarks by Nathan Sales, Acting Under Secretary for Security, Democracy, and Human Rights, Department of State, November 13, 2018, available at <www.state.gov/countering-irans-global-terrorism/>.

⁴¹ Tim Lister, Sebastian Shukla, and Clarissa Ward, “Putin’s Private Army,” *CNN*, August 12, 2019, available at <<https://edition.cnn.com/interactive/2019/08/africa/putins-private-army-car-intl/>>.

⁴² Nurith Aizenman, “An Urgent Mystery: Who’s Attacking Ebola Responders in Congo—And Why?” *National Public Radio*, June 4, 2019, available at <www.npr.org/sections/goatsandsoda/2019/06/04/726139304/an-urgent-mystery-whos-attacking-ebola-responders-in-congo-and-why>.

⁴³ Stephanie Soucheray, “DRC to Stick with Just 1 Vaccine in Ebola Outbreak,” *Center for Infectious Disease Research and Policy*, July 12, 2019, available at <www.cidrap.umn.edu/news-perspective/2019/07/drc-stick-just-1-vaccine-ebola-outbreak>.

⁴⁴ “Russia Ready to Start Shipping Revolutionary Ebola Vaccine to DR Congo,” *TASS*, July 16, 2019. President Vladimir Putin claimed Russia developed a cure for Ebola on January 13, 2016. Timothy Bancroft-Hinchey, “Why Is Ebola Raging in DR Congo After a Year?” *Pravda*, June 13, 2019.

⁴⁵ Soucheray, “DRC to Stick with Just 1 Vaccine in Ebola Outbreak.”

⁴⁶ Joint Doctrine Note 1-19, “Competition Continuum,” *The Joint Staff*, June 3, 2019.

⁴⁷ Christopher Paul, “On Strategic Communications Today: Enhancing U.S. Efforts to Inform, Influence, and Persuade,” *Parameters* 46, no. 3 (Autumn 2016).

⁴⁸ Scott Thomson and Christopher Paul, “Paradigm Change: Operational Art and the Information Joint Function,” *Joint Force Quarterly* 89 (2nd Quarter 2018).

⁴⁹ Paul, “On Strategic Communications Today.”

⁵⁰ JP 3-29, *Foreign Humanitarian Assistance* (Washington, DC: The Joint Staff, May 14, 2019).

⁵¹ Joint Chiefs of Staff, “Operation United Assistance.”

⁵² JP 3-29, *Foreign Humanitarian Assistance*.



Sailors assigned to Naval Special Warfare Group 2 conduct military dive operations off U.S. East Coast, Atlantic Ocean, September 18, 2019 (U.S. Navy/Jayne Pastoric)

Evaluating Strategies

Six Criteria for National Security Professionals

By Gregory D. Miller

It is relatively easy to examine past strategies and evaluate whether they were successful; it is much more difficult to evaluate current and proposed strategies to determine whether they are likely to be effective. This article briefly discusses some of the proposals in business literature for evaluating corporate strategies and incorporates many of these ideas into six criteria for evaluating security strategies. The article

discusses each criterion and suggests several questions for the strategist to consider during the evaluation process. It also offers one novel proposal among the six criteria—the use of counterfactual reasoning to develop alternative strategies based on modifying one’s assumptions.

One of the most important skills for a strategist is the ability to gauge whether an approach is good or bad—prior to its implementation. There is a great deal of interdisciplinary scholarship on creating strategies, but few of those works address methods of evaluation.¹ Of the scholarship that does exist on evaluating strategies,

much is historical or applicable primarily to the business world, and little thought is given to current national security professionals. Even in U.S. military doctrine, there is minimal discussion of strategy evaluation, other than assessing risk. What does exist is often limited in value.²

This focus on historical evaluation means that a common metric is whether a strategy “worked.” This is a relatively simple approach—putting aside the vague, subjective nature of the term *worked*—but it is problematic because it means that we can evaluate strategies only *after the fact*. It also discounts the possibility that a good strategy can fail or

Dr. Gregory D. Miller is Associate Professor of Leadership Studies at the Air Command and Staff College.

never be implemented or that a bad strategy can succeed. Strategists need a set of criteria to help them evaluate an approach before its implementation. This article offers that a good strategy will be:

- balanced
- aware
- candid
- parsimonious
- elegant
- creative.

The framework discussed here is intended to help those who analyze and revise existing strategies, as well as those who must write new ones. Although this article is about evaluation, many of the criteria for a good strategy should also be part of the development process. In fact, if these evaluation criteria are incorporated into strategy development, then it is unnecessary to view development and evaluation as separate and discrete processes.³

The rest of this article is organized into four sections. First, it examines two of the challenges for evaluating strategies. Next, it explores some of the ways that the existing literature discusses strategy evaluation. It then addresses the six proposed criteria for evaluating strategies and offers several questions to help assess each criterion. The conclusion provides additional thoughts for advancing the development and evaluation of strategies.

Problems in Evaluating Strategy

Strategists face several challenges for evaluating a strategy, but this article focuses on the two that are potentially most confounding. One is the lack of a common definition of *strategy*; the other is the tendency to evaluate strategies only in terms of success or failure.

Defining Strategy. One problem for strategists is the lack of an agreed-upon definition of *strategy*. This issue pervades most discussions of strategy and complicates evaluation because analysts may not be evaluating the same things. Some see strategy as an idea.⁴ Many, especially within the Department of Defense (DOD), view it as the balancing of ends, ways, and means.⁵ Still others interpret it as a type of plan (or simply the *ways* part

of the ends-ways-means model).⁶ Scholars and practitioners will never fully agree on definitions, but providing clear definitions allows others to replicate research. Similarly, it is important that strategists plainly identify what is being evaluated so that others can reproduce their analysis using the same definitions.

My definition of *strategy* is a blueprint, or a set of plans, to use one's resources to achieve desired outcomes, based on an appreciation for both the environment and the goals and strategies of other actors. Because this definition applies to any actor—be it an organization, a corporation, or a state facing some type of hurdle in achieving its goals—there is value to incorporating work on strategy evaluation from other disciplines, such as business. Beyond that, the criteria discussed here are useful for evaluation, whether applied to a process, idea, plan,⁷ or some other concept of strategy. The lack of a consistent, uniform definition is indeed a problem for the field, but it should not prevent an effective evaluation of a strategy, if one uses the criteria herein.

A related issue is the tendency to equate strategy with ends, ways, and means. Most strategists do not think of strategy as simply the balance of ends, ways, and means, but that model, despite being an overly simplistic one (as all models are), is often used as a shortcut for discussing the strategy.⁸ Balancing these factors is necessary for an approach to be practicable, but it is not enough for it to succeed because a good strategy does more, and Joint Doctrine Note 2-19, "Strategy," makes this exact point.⁹

Outcomes-Based Assessments. The more difficult problem for evaluation is the tendency to treat success as the best measure of a good strategy. That same Joint Doctrine Note nicely lays out the hierarchy of strategies, including national and military strategies, but still largely treats the concept of strategy as a military function. It also provides little guidance on how to identify a good strategy but alludes to success as the primary metric: "Strategy assessments evaluate the ability of the joint force to meet the challenges defined in a strategy, focused

on attainment of its ends and ways." The note then admits that "most assessments of strategies [conducted before implementation] focus on risk."¹⁰ Although risk assessment is important—and is one of the six criteria listed herein—it is not the only important factor for success.

This emphasis on outcomes is not prevalent only in the business world, where profit drives firms, but it also applies to national security, especially when domestic populations have a voice and expect success on security matters. There are several issues with this emphasis. For one thing, failure does not mean a strategy was bad. A good strategy can be overtaken by fog and friction that its designer could not foresee; a weak state may have a good strategy that cannot succeed against a more powerful rival; or a good strategy may be beaten by a better one. Similarly, a bad strategy can be successful through sheer luck, because an actor overpowers its more strategic opponent, or by an adversary's adoption of a worse strategy.

Success is also a subjective term; one analyst might view a strategy as successful while another sees it as unsuccessful. A strategy could also achieve some success but still be less effective than an alternative strategy might have been. Analysts often cite U.S. Cold War containment as a good strategy because it helped defeat the Soviet Union. What if a different strategy would have ended the Cold War earlier, or with fewer casualties, or prevented it in the first place?¹¹ If we could prove that a different strategy would have led to a preferable outcome, then we would view containment's results differently.

Furthermore, success is not the same thing as victory. A strategy can fail to bring success but can still provide a better situation than what existed prior to the strategy. In other words, a successful strategy may not bring victory in war; it may simply create a preferable outcome or a better status quo. In some cases, even maintenance of the status quo may be a success, as was the case for the United States during much of the Cold War. Thus, success has to be measured according to the extent to which



Sergeant Jennifer Wilbur, USMC, chief instructor for College of Military Education Courses, 2nd Maintenance Battalion, was winner of second quarter's Commanding General Innovation Challenge for her introduction of Design Thinking into command-sponsored primary military education courses, Camp Lejeune, North Carolina, May 1, 2020 (U.S. Marine Corps/Scott Jenkins)

a strategy moves an actor toward its desired objectives, not just if that actor is victorious in battle.

Obviously, everyone wants his or her strategies to succeed, so outcome should be one part of an evaluation. But success or failure is useful only in retrospect—and even then may be difficult to assess without understanding the strategy's intended goals. So other criteria are necessary for evaluating a strategy before and during its implementation. Scientists evaluate hypotheses in many ways, only one of which is whether the evidence supports them. Other criteria include whether the hypothesis explains more than the theory it seeks to replace, whether it is testable, whether it is reproducible, and whether it is parsimonious (that is, simple, in that it relies on few assumptions).¹² Scientists value hypotheses that satisfy these requirements because even failed hypotheses advance knowledge. Similarly,

bad strategies can be useful for developing critical and creative thinking; the trick is to identify bad strategies before implementing them.

Scholarship on Strategy Evaluation

Strategists in the security and corporate worlds often borrow concepts from one another, and there are several similarities with respect to strategy development in the two arenas. Some might challenge the value of insights from the business literature, especially if one views corporate strategies as fundamentally different from security strategies (and if one defines *strategy* purely in military terms).¹³ But if one defines *strategy* as more than just the use of the military or the balancing of ends, ways, and means, then corporations are just as capable as states of engaging in strategy development and evaluation. Some might also

question the use of business concepts, considering the different levels of risk involved in the security domain. A company with poor strategies may lose market shares or even be forced to close; a bad security strategy can cost lives. That there is more at stake in the security realm should not detract from the utility of drawing on ideas about strategy from other disciplines.¹⁴

Just because some corporations are bad at developing strategies and many corporate leaders struggle to distinguish between strategies and goals does not mean we cannot derive important ideas from the business literature, which itself often expresses frustration at the lack of strategic thinking within corporate leadership. The business literature reflects some of the same challenges that plague security strategies, so we can draw on many of these texts to improve our evaluation of security strategies.

Because the business world is driven by profit, success is easier to define, and because many of the corporate assessment tools use statistics, corporations can perhaps more effectively evaluate strategies according to whether they were successful by their profitability. If a company's strategy produced an innovative product, increased market shares, boosted profits, improved employee retention rates, and so forth, then it was successful. But security strategies are less amenable to statistical analysis and have potentially more dire consequences, as a failed strategy can lead to the destruction of a state and the death of its citizens. While an assessment of outcomes must be part of determining a good strategy, it is helpful only after the fact and does not preclude the need to evaluate strategies before use. Even a good strategy may not be successful, but effective evaluations are more likely to produce a strategy that succeeds.

Given the nature of business, investors will view even a brilliant strategy as failing if the company does not profit in some way, and this thinking parallels the tendency to evaluate security strategies according to success or failure. Some business scholars do attempt to identify ways to evaluate strategies ahead of time, and this section discusses a sampling of the ideas from their work. Seymour Tilles suggests that successful corporate strategies involve six criteria:

- internal consistency (*balanced*)¹⁵
- consistency with the environment (*aware*)
- appropriateness in the light of available resources (*balanced*)
- satisfactory degree of risk (*candid*)
- appropriate time horizon
- workability.¹⁶

For our purposes, *workability* translates into both the willingness of leaders to support the strategy and the ability of those at the operational and tactical levels to implement the strategy (*elegant*).

Steven Wheelwright offers four questions for evaluating corporate strategy before implementation:

- How well does the strategy fit with corporate objectives and purposes?

- How well does the strategy fit with the company's resources?
- How well does the strategy fit with the company's environment?
- How committed is the corporate management to the strategy?¹⁷

As applied to security strategies, the first two questions relate to the need to balance between ends, ways, and means (*balanced*), while the third question relies on assumptions about the strategic environment and the interests of other actors (*aware*). The fourth question is more about policy, which the strategist cannot easily change but which should be kept in mind because it helps identify whether decisionmakers will support and approve an approach (*elegant*).

Richard Rumelt suggests a strategy must meet one or more of the following criteria (though a good strategy will exhibit all of these traits):

- it must present internally consistent goals and policies (*balanced*)
- it must represent a response to changes in both the market and the competition (*aware*)
- it must create or maintain a competitive advantage (*balanced*)
- it must not overtax available resources or create unsolvable sub-problems (*balanced* and *candid*).¹⁸

Competitive advantage is more a goal of the strategy than a criterion for evaluating it; nonetheless, it relates to the need to continually assess and reassess an implemented strategy. Rumelt also points out the potential for a strategy to yield unintended consequences; this is important for strategists to keep in mind and relates to several evaluation criteria below.

Brian Huffman argues that there are no methods for producing brilliant strategies, and we cannot teach strategists to be brilliant.¹⁹ He hedges a bit by suggesting that one can still produce brilliant strategies and that strategists can still learn to recognize them, so he offers criteria for identifying brilliance from a variety of arenas. From the business world, he offers five questions:

- How well does the strategy fit the environment?

- How well does it fit the industry?
- Does it consider environmental trends?
- How well does it identify key success factors and deal with their ramifications?
- How well does it take advantage of the firm's current core competencies or call for acquiring core competencies necessary for the strategy to succeed?²⁰

His first three questions are about the strategic environment (*aware*) and remind us of the importance of understanding how changing trends can alter the system and the interests of other actors. Questions four and five are about having a clear objective and then balancing ways and means to achieve that goal (*balanced*).

Ultimately, many of the approaches in the business literature inform the criteria presented below, although the profit-driven nature of corporations means that, for them, success is the bottom line. So, business literature does not provide enough tools to evaluate a security strategy. Huffman also recommends using the Army's nine principles of war to evaluate strategies. According to him, a military plan is brilliant if it has a clear objective, has an offensive orientation, masses resources at one decisive place and time, uses an economy of force, calls for maneuvers that give forces the advantage, institutes unity of command, considers the security of forces, will surprise the enemy, and is comprehensible.²¹ The Joint Staff suggests using, during the mission-planning phase, these principles along with three others—restraint in the use of force, perseverance to achieve the objective, and legitimacy of legal and moral authority—now collectively referred to as the Principles of Joint Operations.²² While all of these principles can be helpful for evaluating operational-level plans, only three are useful at the strategic level, especially when developing and evaluating strategies that do not rely exclusively on the military instrument of national power. Those three are a clear objective (*balanced*), simplicity (*elegant*), and surprise (*creative*).

Six Criteria for Evaluating Strategies

Drawing from the above literature as well as from personal experience teaching strategy for more than 5 years at the Joint Advanced Warfighting School, I suggest below six key criteria that strategists and analysts can use to assess a strategy's quality.²³ None of these criteria by themselves makes a good strategy, nor does the presence of all six guarantee success. Nevertheless, the more criteria present in a strategy, the more likely that strategy will succeed. A good strategy should balance ends, ways, and means; account for the strategic environment; properly assess risk; minimize its reliance on assumptions; be clear and executable; and be creative and capable of change. Although critical and creative thinking are important for all six criteria, the first four rely more heavily on critical thinking and analytical abilities. Criteria five and six involve more creative thinking skills and the ability to be intellectually innovative. What follows is a discussion of these criteria, including questions the strategist should ask as part of the evaluation process. The subquestions can be thought of as additional criteria, but they are intended here more to help provide metrics for the six overarching criteria.

Balanced: Does the Strategy Balance Ends with Ways and Means? One way that DOD tries to assess a strategy is by asking whether it is suitable, feasible, and acceptable.²⁴ Though these questions are intended as evaluation methods for a policymaker, analysts often apply them at the strategic level. Suitability asks whether the intended ways are adequate to achieve the desired endstate. Similarly, feasibility is about whether the existing means can accomplish the preferred endstate. Both suitability and feasibility are part of the ends-ways-means model or equation and are discussed below. Acceptability is about determining whether the benefits from implementing the strategy outweigh the costs, and it addresses the legal supportability of the strategy. Criteria three (*candid*) and five (*elegant*) discuss this further, but strategists need to incorporate acceptability into the development

and evaluation processes, even though it is not typically their responsibility. While these questions are important, they are also only part of the evaluation process.²⁵ To understand the balance of ends, ways, and means, the strategist must ask four subquestions to satisfy the first criterion.

Does the strategy clearly articulate ends? Before we know whether a strategy is suitable and feasible, it must convey precise objectives and a metric to identify when it achieves success. This too should be the provenance of policymakers, but stating a clear objective helps the strategist make the most efficient use of available resources. It is also useful when policymakers do not provide clear objectives, allowing strategists to offer their perception of the objective and to ensure that the strategist and policymaker are on the same page about the desired results.

Does the strategy propose appropriate ways for reaching the objective? In other words, is it suitable? A good strategy incorporates multiple ways to increase the likelihood of success, each of which is appropriate for attaining the desired objectives. This means the use of multiple instruments of national power and the involvement of multiple agencies or actors, depending on the type of strategy and the level at which it is written.

Does the strategy have the means to support the ways and to reach the objective? Is it feasible? A strategy that is resourced is more likely to be effective than one that is not. But it is not enough to simply have a lot of resources; they must be appropriate for the specific ways that make up the strategy. Any imbalance between these elements creates risk, which is part of criterion three (*candid*).

Does the strategy have internal consistency? Internal consistency here refers to the strategy fitting within the organization's or state's strategic interests. Even if a strategy properly balances ends, ways, and means, if it is not consistent with higher strategic guidance or does not provide a bridge to lower levels, then it is less likely to achieve the desired results. For example, if one is designing the National Military Strategy, its ends should fit with the goals outlined in the National Security Strategy and the

National Defense Strategy. Likewise, its means should provide objectives for theater-level strategies that the combatant commands write to operationalize the national-level guidance.

Aware: Does the Strategy Incorporate an Understanding of the Strategic Environment? Self-focused strategies, such as those that look only at a state's ends, ways, and means, lack awareness of the role that the environment and other actors play in supporting or opposing the strategy. This criterion involves three subquestions. At the national level, this type of analysis is done as part of the Joint Strategy Review, which is an assessment of the strategic environment and contributes to the National Military Strategy. This type of information may be useful for strategists at the national level but may be insufficient for evaluating the strategic environment at other levels.

Does the strategy properly evaluate the state's place in the international system? A good strategy is realistic about the state's capabilities and partnerships and does not set unattainable goals or create exaggerated expectations of success. It also incorporates how other actors may perceive the state, including its ability to achieve its goals. As such, this part of the evaluation includes views of the state's reputation, which can be important for deterring adversaries and reassuring allies.²⁶

Does the strategy incorporate other actors' interests and potential strategies? A good strategy will attempt to anticipate how other actors will respond to the strategy, based on their goals and capabilities. The literature on strategic culture may provide one useful approach for understanding the likely responses of other states.²⁷ Some of this will, by necessity, be assumptions (related to *parsimony*), but bringing in subject matter experts from academia and the Intelligence Community can reduce the number of necessary assumptions.

Does the strategy assess trends in the strategic environment? A good strategy accounts for changes under way, such as shifting balances of power or economic growth that could alter the status quo in ways that assist with or hinder a strategy's



Angels of the Battlefield award recipient Senior Airman Linda M. Wilson, who risked her own life to save lives of others during deadly mass shooting at Route 91 Harvest Festival in Las Vegas, Nevada, stands onstage during 2018 Armed Services YMCA Angels of the Battlefield Award Gala, in Arlington, Virginia, October 2, 2018 (DOD/James K. McCann)

implementation and success. These changes may even precipitate the need to revise the strategy, in which case it is important for the strategist to understand these trends. Perceptions of change may be more important for understanding other states' behaviors than real trends but will also be more difficult to identify. The key is to pay attention to trends and changes in the system, be cognizant of the power of perceptions, and reevaluate the strategy when trends appear to shift.

Candid: Does the Strategy Properly Assess Risk? There are several ways to assess risk.²⁸ One common DOD approach is to identify the imbalances between ends, ways, and means.²⁹ If the ways are appropriate for the ends but there are not enough resources, that imbalance creates risk—to the strategy itself and potentially to personnel. A different way to think about risk is that it is the likelihood of failure, and the potential cost of that

failure, compared with the cost of doing nothing. This criterion can be tested using three subquestions, all of which suggest that good strategies will address extant risk in the environment, whether from internal factors, such as sudden budget reductions, or external issues, such as unanticipated military action by a rival.

Does the strategy identify risk and provide options for addressing it? It is not the job of the strategist to determine how to address that risk—to mitigate it, ignore it, alter the objectives, increase the resources, and so forth. It is the strategist's job to identify risk in the strategy, propose steps to lower the risk, and caution against the use of any strategy that does not address that risk. Some approaches to risk, such as changing the objectives, will necessitate revision of the strategy but should increase the likelihood of a strategy's success.

Does the strategy identify the risk of doing nothing? Policymakers have a tendency to want to do something or to ask what can be done to solve a problem. Sometimes the best course of action is to do nothing—or at least to wait and allow better opportunities for action to arise. The best strategy, therefore, may sometimes be one that simply preserves the status quo. The strategist should always evaluate inaction as an option because doing nothing may pose less risk to the state or its personnel than doing something.

Does the strategy account for dramatic success? A good strategy incorporates options for dealing with greater than expected, or faster than expected, success. The speed with which the Soviet Union imploded after the fall of the Berlin Wall surprised most people, and no plan was in place for how to deal with the demise of a superpower.³⁰ A good strategy will



Marines with 2nd platoon, Combat Assault Company, 3rd Marine Regiment, plan their strategy before military operations in urban terrain training exercise, Marine Corps Training Area Bellows, June 19, 2019 (U.S. Marine Corps/Jose Angeles)

compel its authors to ask questions about what comes next if the strategy works. Thinking about risk in this way also helps strategists anticipate, or at least account for, some of the unintended consequences that arise even with a successful approach.

Parsimonious: Does the Strategy Minimize Its Reliance on Assumptions?

A parsimonious theory is one that relies on a minimal number of assumptions. Analysts always have to make some assumptions concerning unknown or incomplete information. The challenge is not to rely on too many assumptions or on assumptions about critical information but to get the assumptions correct. One way to reduce the number of assumptions and improve their accuracy is by bringing in subject matter experts from both government and academia. Three sub-questions can help the strategist determine whether an approach is parsimonious.

Does the strategy identify its assumptions? A good strategy clearly states the

assumptions on which it relies. The clearer the strategy is about its assumptions, the more likely it is to be effective, as long as the strategist can revise the approach if new information invalidates these assumptions (this flexibility is part of criterion six). A clearer discussion of assumptions also allows for easier revision of the strategy as new information either confirms or disconfirms the assumptions.

Does the strategy have to make assumptions about these six evaluation criteria?

It is important to minimize the types of assumptions that are most dangerous for a strategy. In particular, the more of these six criteria that one must assume, the less likely the strategy is to succeed. The strategy that must make assumptions about the desired objectives is likely to fail. The strategy that makes several assumptions about the strategic environment or an adversary's intentions is also problematic. Ideally, assumptions will be limited to anticipated reactions to the strategy. One

cannot know how a leader or state will respond, but one can make assumptions about reactions, based on what the strategist knows of that state's intentions and goals. Again, subject matter experts can provide additional insight about other states or the strategic environment that reduces reliance on these types of assumptions and enhances the likelihood that a plan will succeed.

Does the strategy make accurate assumptions? The more accurate a strategy's assumptions, the more likely it is to be effective. Accuracy will be difficult to determine before implementing a strategy, but it need not wait until a strategy succeeds or fails. Flawed assumptions are not necessarily fatal to a strategy if the strategy is adjustable (*creative*) and if the strategist addresses them in a timely manner.

Elegant: Is the Strategy Clear and Executable?

The previous four criteria require the strategist to be a critical thinker—to analyze the strategy and its

component parts. The next two require the strategist to be more of a creative thinker. Any strategy should be clear enough for leaders to understand it and for operators to put it to work—but the plan need not be simple, so I prefer the term *elegant*.

Clarity is an important characteristic of scientific theories and corporate strategies and should be an important feature of a good security strategy. Strategy, as Colin Gray suggests, is “the bridge that relates military power to political purpose.”³¹ Therefore, a good strategy will communicate with two audiences,³² providing us with two subquestions. The third subquestion relates to an assessment of the strategy’s need for either publication or secrecy.

Does the strategy offer clear choices to decisionmakers? A good strategy is clear enough for decisionmakers to grasp the necessary assumptions, the proposed ways and means, the risks involved, and the available options to address that risk. The strategist must also consider the willingness of decisionmakers to commit to a strategy. Although a good strategy may not be implemented for a variety of reasons, it is up to the strategist to design a plan that is acceptable to those who ultimately make the decisions.

Does the strategy provide clear direction to those who will implement it? A good strategy is clear not only for decisionmakers but also enough those at the operational and tactical levels to know how to implement it and to understand the conditions under which they achieve success in their portion of the strategy. Just as communicating with subject matter experts can help increase awareness of the strategic environment and minimize assumptions about other actors, communicating with the planners who will be responsible for operationalizing a strategy can be valuable for helping to assess a strategy’s elegance.

Does the strategy require secrecy? Secrecy is not always a requirement for success, and one could argue that a superior strategy is one that everyone knows but still cannot defeat; however, failing to properly identify whether a strategy must be kept secret or needs to be revealed can

affect its success. Secrecy may be important for success, depending on the nature and purpose of the strategy, but it could also hinder success. Deterrence strategies and those that rely on the actions of other states require some level of publication for maximum success. The key for the strategist is to understand what the organization will gain and lose by publicizing the strategy or portions of it. Secret strategies allow a strategist to provide more details to those who implement them.³³ Secrecy also removes the signaling and communication value of a strategy and reduces the number of outside analysts whose input could contribute to a more effective strategy.

Creative: Is the Strategy Innovative and Capable of Change? A successful strategy need not be creative, but greater levels of creativity will produce better strategies, all else being equal. Ideally, a strategy is surprising to others while still being internally clear to those who make the decisions and execute the steps. That is why none of these criteria should be used by themselves; rather, they should be treated as part of a holistic framework for evaluating a strategy. It is also possible to get too creative and design a strategy that is too complex and thus not executable.

Is the strategy creative? A creative strategy, defined as one that is unexpected, will have a greater chance of success than one that is uncreative. One challenge is that strategists may not be able to evaluate their own work as being surprising. Having other analysts examine a strategy will increase its chance of success, as they not only assess the degree to which the strategy is surprising but also evaluate the other elements of the strategy, such as its assumptions. Another challenge is achieving balance so that one does not sacrifice clarity, or practicability, for the sake of novelty or innovation.

Is the strategy adaptable? The most adaptable strategies are those that include several alternative possibilities. One method for increasing adaptability is to perform counterfactual analysis on the assumptions. Counterfactual analysis is a critical part of intelligence analysis and has been suggested for use in strategy

development.³⁴ Planners might think of these alternative possibilities as branches and sequels.³⁵ Political scientists sometimes use counterfactuals to test their hypotheses because they provide additional observations to cases with few decision points.³⁶

If we think of strategy as a hypothesis to be tested when it is implemented, then counterfactuals can be an effective tool for evaluating one’s hypothesis about proper actions given an actor’s desired outcome and within the current environment. This part of strategy development and assessment requires the greatest level of creative thinking for the strategist; because of that effort—and the time constraints often placed on strategists—this method is rarely used.

The simplest approach is to ask how changes to the assumptions would alter the strategy and then to use these six evaluation criteria to derive an alternative strategy. If the strategist has thought about how changes to assumptions will influence the strategy, then these contingencies can be written into the strategy, increasing its adaptability.

There is also a tradeoff here between elegance and adaptability. Greater numbers of assumptions, especially vague assumptions, create more potential counterfactuals and thus either a more complex strategy or one that is not adaptable. A strategy that has to make few assumptions will be simpler and more adaptable to changes in both the strategic environment and the actor’s interests or resources. This factor should compel the strategist to minimize the number of assumptions on which the strategy relies, while also evaluating the extent to which different assumptions would alter the strategy.

Is the strategy flexible? Although we often treat these last two criteria—adaptability and flexibility—as synonyms, there is an important distinction between them. *Adaptability* refers to a strategy’s inclusion of alternate possibilities, while *flexibility* means that a strategy can adjust when confronted with unexpected change.³⁷ In general, a flexible strategy will be more effective than one that cannot change once implemented. That does

not mean an inflexible strategy cannot be effective; it just has a lower chance of success than a strategy with high levels of flexibility, especially if anything in the environment changes. The challenge is that one may not be able to assess the flexibility of a strategy until it is already implemented, and at that point it may be too late to alter the approach. That scenario illustrates the importance of consistent reevaluation of a strategy, but there are a few red flags that indicate a lack of flexibility.

A strategy is less likely to be effective if it creates dead ends, or points at which there are few opportunities to change direction. For example, beyond the balancing of ends, ways, and means, a strategy that commits too many resources to one area or effort loses potential flexibility. Likewise, a strategy that explicitly prohibits certain courses of action (that is, for political, legal, or ethical reasons) is less flexible than a strategy that is open to all courses of action. A less flexible strategy may be more acceptable to decisionmakers because they retain more control over its implementation. This highlights another tradeoff—this time between leadership control and strategic success.

Conclusion

The six criteria discussed in this article are intended to evaluate the likely success of a strategy prior to and during its implementation. It is meant to be a thorough list of critical criteria, but that does not mean other factors cannot also contribute to a strategy's success or failure. For instance, one element of a good strategy may be whether it is consistent with the values of the state or corporation that develops it. Every organization possesses certain values, and a strategy that is inconsistent with those values may not be acceptable to decisionmakers (either to their own values or to those they perceive to be held by the public); that important consideration should be part of the evaluation of a strategy in several places for understanding the influence of one's own values on a strategy (*candid* and *elegant*) and for understanding how

others' values might affect the strategy (*aware*). There is limited space here for an extensive discussion of the influence of values on strategy, and because values change over time and across borders, they are highly subjective. The broader point is that no single strategy is ideal for every actor in every time, so the strategist must understand the right and left limits of what leaders will allow and incorporate other evaluation criteria as required or when doing so is useful.

One question not yet addressed is when one should evaluate a strategy. A strategist should use these six evaluation criteria throughout the strategy development process. In addition, strategies should be reevaluated whenever some critical element changes. If the ends, means, or ways change; if the adversary alters its behavior, indicating a shift in its goals; if there is new leadership that views risk differently; if an assumption is disconfirmed; or if there are indications that the strategy is not understood at lower levels, then the strategy must be reevaluated and revised.

One common theme in several of the criteria is the need to communicate with outsiders, whether they are subject matter experts or planners. Designing a strategy in a vacuum will fail in several key criteria, so the best approaches will make use of the knowledge that exists outside the strategist's office.

This article is intended as a guide for strategists and analysts to help in the development and evaluation of strategies, by identifying the most important factors of success along with some key questions to ask as part of the evaluation process. Although the corporate literature identifies some important factors for evaluating strategy, many businesses have the same challenge as national security professionals: They devote more energy to thinking about how to make strategy and implement it than how to evaluate strategy. When they do conduct evaluations, they tend to focus on the *outcome* of a strategy. These are flawed approaches because the evaluation of a strategy is critical *before* and *during* implementation; otherwise, the strategist is simply hoping the ideas will work. And while hope can be a strategy, it is typically not a very good one. JFQ

Notes

¹ Benjamin Friedman and Justin Logan argue, "Ambitious analysts avoid evaluating strategy and focus instead on operational analysis." See Benjamin Friedman and Justin Logan, "Why Washington Doesn't Debate Grand Strategy," *Strategic Studies Quarterly* 10, no. 4 (Winter 2016), 15. Likewise, Michael Porter suggests that businesses focus more on concrete ideas, such as operational effectiveness, and have less time for strategy. See Michael Porter, "What Is Strategy?" *Harvard Business Review* 74, no. 6 (November–December 1996), 61–78.

² For example, the 1995 version of Joint Publication (JP) 3-12, *Doctrine for Joint Nuclear Operations*, includes a table that lists evaluation criteria for nuclear forces and strategy. Its four points (survivability, credibility, safety, and security) are important factors for deterrence and nuclear safety but have limited applicability beyond that domain. See JP 3-12, *Doctrine for Joint Nuclear Operations* (Washington, DC: The Joint Staff, December 15, 1995), I-3.

³ See Derek Reveron and James Cook, "From National to Theater: Developing Strategy," *Joint Force Quarterly* 70 (3rd Quarter 2013), 113–120. The authors discuss the development of theater strategies but spend little time on evaluation, focusing in that section on the domestic fiscal and political constraints on the ability of any strategy to get implemented.

⁴ The Joint Chiefs of Staff define *strategy* as "a prudent idea or set of ideas for employing the instruments of national power in a synchronized and integrated fashion to achieve theater, national, and/or multinational objectives." See JP 3-0, *Joint Operations* (Washington, DC: The Joint Staff, January 17, 2017).

⁵ Arthur Lykke, "Defining Military Strategy = E + W + M," *Military Review* 69, no. 5 (May 1989), 2–8. B.H. Liddell Hart refers to strategy as "the art of distributing and applying military means to fulfill the ends of policy." See B.H. Liddell Hart, *Strategy* (New York: Meridian, 1991). According to Air Force Doctrine Document (AFDD) 1, *Air Force Basic Doctrine, Organization, and Command*, "Strategy is the continuous process of matching ends, ways, and means to accomplish desired goals within acceptable levels of risk." See AFDD 1 (Washington, DC: Headquarters Department of the Air Force, October 14, 2011), 4.

⁶ Joseph Wylie defines *strategy* as "a plan of action designed in order to achieve some end; a purpose together with a system of measures for its accomplishment." See Joseph Wylie, *Military Strategy: A General Theory of Power Control* (Annapolis, MD: Naval Institute Press, 2014). Everett Dolman defines *strategy* as simply "a plan for continuing advantage." See Everett Dolman, *Pure Strategy: Power and Principle in the Space and Information Age* (London: Frank Cass, 2005).

⁷This suggests the possibility that the criteria here might also be useful in assessing operational-level plans, though I do not want to overstate the purpose of this article, and there are likely to be additional important evaluation criteria when planning military action.

⁸Jeffrey W. Meiser, "Ends + Ways + Means = (Bad) Strategy," *Parameters* 46, no. 4 (Winter 2016/2017), 81–91; Gregory D. Miller et al., "On Strategy as Ends, Ways, and Means," *Parameters* (Spring 2017), 125–126.

⁹Joint Doctrine Note 2-19, "Strategy," The Joint Staff, December 10, 2019, I-1.

¹⁰*Ibid.*, VI-1.

¹¹Despite George Kennan's opposition to the militarization of containment, the Harry S. Truman administration's version of containment contributed to the creation of the North Atlantic Treaty Organization and U.S. involvement in the Korean War. An alternate containment strategy authored by Kennan would have involved greater emphasis on economics and diplomacy and perhaps brought different results. See "X" (George Kennan), "The Sources of Soviet Conduct," *Foreign Affairs* 25, no. 4 (July 1947), 566–582.

¹²Karl Popper, *The Logic of Scientific Discovery* (New York: Routledge, 1992 [1959]); Arthur Bachrach, *Psychological Research: An Introduction* (New York: Random House, 1972); Gary King, Robert Koehane, and Sidney Verba, *Designing Social Inquiry: Scientific Inference in Qualitative Research* (Princeton: Princeton University Press, 1994).

¹³When military theorists such as Carl von Clausewitz and B.H. Liddell Hart wrote of strategy, they referred to what many today would define as *operations*. Clausewitz defined *strategy* as "the use of an engagement for the purpose of the war," while Liddell Hart defined it as "the art of distributing and applying military means to fulfill the ends of policy." See Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976); Liddell Hart, *Strategy*. These definitions focus only on the military instrument of national power and are thus narrower than many more contemporary definitions of strategy.

¹⁴Several international relations scholars already draw parallels between corporations and states and between markets and the international system. Kenneth Waltz, *Theory of International Politics* (New York: McGraw-Hill, 1979), 89–99; Robert Gilpin, *War and Change in World Politics* (New York: Cambridge University Press, 1981); Robert Keohane, "The Demand for International Regimes," *International Organization* 36, no. 2 (Spring 1982), 325–355; Gregory Miller, "Hypotheses on Reputation: Alliance Choices and the Shadow of the Past," *Security Studies* 12, no. 3 (Spring 2003), 49.

¹⁵Words in italics indicate a connection to one of the six evaluation criteria suggested in this article.

¹⁶Seymour Tilles, "How to Evaluate Corporate Strategy," *Harvard Business Review* 41, no. 4 (July 1963), 111–121.

¹⁷Steven Wheelwright, "Strategic Planning in the Small Business: The Procedure in Three Corporations," *Business Horizons* 14, no. 4 (August 1971), 51–58.

¹⁸Richard Rumelt, "The Evaluation of Business Strategy," in *Business Policy and Strategic Management*, 3rd ed., ed. William Glueck (New York: McGraw-Hill, 1980).

¹⁹Brian Huffman, "What Makes a Strategy Brilliant?" *Business Horizons* 44, no. 4 (July–August 2001), 13–20.

²⁰*Ibid.*, 17.

²¹*Ibid.*, 18, referenced most recently in Field Manual (FM) 3-0, *Operations* (Washington, DC: Headquarters Department of the Army, February 2008), appendix A, "Principles of War and Operation." The Army removed discussion of these principles in later versions of FM 3-0.

²²JP 3-0, appendix A.

²³These ideas were not presented as part of the formal Joint Advanced Warfighting School curriculum but were developed during my time as a professor and strategy department chair.

²⁴Gerry Johnson, Kevan Scholes, and Richard Whittington, *Exploring Corporate Strategy*, 7th ed. (London: Prentice Hall, 2005); Lykke, "Defining Military Strategy = E + W + M," 3–8; JP 5-0, *Joint Planning* (Washington, DC: The Joint Staff, June 16, 2017).

²⁵Alan Stolberg, "Making National Security Policy in the 21st Century," in *U.S. Army War College Guide to National Security Issues*, vol. 2, *National Security Policy and Strategy*, 5th ed., ed. J. Boone Bartholomees, Jr. (Carlisle Barracks, PA: Strategic Studies Institute, 2012), 41–62.

²⁶Not all scholars are convinced that a reputation is worth fighting for, but many argue for the benefits of having positive reputations: Paul Huth, "Reputations and Deterrence: A Theoretical and Empirical Assessment," *Security Studies* 7, no. 1 (Autumn 1997), 72–99; Michael Tomz, *Reputation and International Cooperation: Sovereign Debt Across Three Centuries* (Princeton: Princeton University Press, 2007); Doug Gibler, "The Costs of Reneging: Reputation and Alliance Formation," *Journal of Conflict Resolution* 52, no. 3 (June 2008), 426–454; Gregory Miller, *The Shadow of the Past: Reputation and Military Alliances Before the First World War* (Ithaca, NY: Cornell University Press, 2012).

²⁷Alastair Iain Johnston, "Thinking About Strategic Culture," *International Security* 19, no. 4 (Spring 1995), 32–64; Yitzhak Klein, "A Theory of Strategic Culture," *Comparative Strategy* 10, no. 1 (1991), 3–23; Colin Gray, "Comparative Strategic Culture," *Parameters* 14, no. 4 (Winter 1984), 26–33.

²⁸James Holcomb, "Managing Strategic Risk," in *U.S. Army War College Guide to National Security Policy and Strategy*, vol. 1,

Theory of War and Strategy, 1st ed., ed. J. Boone Bartholomees, Jr. (Carlisle Barracks, PA: Strategic Studies Institute, 2004), 119–131; Michael Mazarr, *Rethinking Risk in National Security* (New York: Palgrave Macmillan, 2016); Chairman of the Joint Chiefs of Staff Manual 3105.01, *Joint Risk Analysis* (Washington, DC: The Joint Staff, October 14, 2016).

²⁹Lykke, "Defining Military Strategy = E + W + M"; Harry Yarger, "Toward a Theory of Strategy: Art Lykke and the U.S. Army War College Strategy Model," in *U.S. Army War College Guide to National Security Issues*, vol. I, *Theory of War and Strategy*, 4th ed., ed. J. Boone Bartholomees, Jr. (Carlisle Barracks, PA: Strategic Studies Institute, 2010), 45–51. One problem with Lykke's approach to risk is the logical step that even too many resources will lead to risk (using his three-legged stool illustration, when the one resource leg is longer than the other two). While this might be true in the sense that an abundance of resources will increase the laziness of the strategist or increase the risk of wasted resources, it is not necessarily a risk to the success of the strategy.

³⁰Other examples of being unprepared for victory include the North American colonies gaining their independence and the rapid fall of Baghdad during the U.S. invasion.

³¹Colin Gray, *Modern Strategy* (Oxford: Oxford University Press, 1999).

³²A strategy may also communicate to other audiences, such as the domestic population or other states, but that is not a necessary condition for effective strategies because it requires the strategy to be public, and some strategies may require secrecy.

³³This was one reason Secretary of Defense James Mattis chose to classify the *2018 National Defense Strategy*.

³⁴Noel Hendrickson, "Counterfactual Reasoning: A Basic Guide for Analysts, Strategists, and Decision Makers," *Proteus Monograph Series* 2, no. 5 (October 2008).

³⁵JP 5-0, especially IV-38, V-33–V-49.

³⁶James D. Fearon, "Counterfactuals and Hypothesis Testing in Political Science," *World Politics* 43, no. 2 (January 1991), 169–195; Jack Levy, "Counterfactuals, Causal Inference, and Historical Analysis," *Security Studies* 24, no. 3 (July 2015), 378–402. One application of this is Barry R. Posen, "U.S. Security Policy in a Nuclear-Armed World or: What If Iraq Had Had Nuclear Weapons?" *Security Studies* 6, no. 3 (Spring 1997), 1–31.

³⁷William Craig, "8 Skills Leaders Will Need in Tomorrow's Workplace," *Forbes*, March 26, 2019.

Soldier assigned to 182nd Transportation Company fires M240B machine gun as part of Operation ROM, hosted by 79th Theater Sustainment Command, at Fort Hunter Liggett, California, December 2, 2017 (U.S. Army Reserve/Heather Doppke)



Operations Short of War and Operational Art

By Milan Vego

In peacetime, one's military forces are predominantly involved in conducting diverse and low-intensity actions, arbitrarily called operations short of war. Focus in these operations is almost entirely on strategy and tactics, while operational art—that critically important intermediate field of study and practice of the art of war—is

given short shrift. One reason for this unsatisfactory situation is the belief that operational art is applicable only to a high-intensity conventional war, but this is indisputably false. Operational art can, and should, be applied across the entire spectrum of conflict. Yet because of the more complex and restrictive strategic environment, operational art is much more difficult to apply than it is in a high-intensity conventional war. Comprehensive knowledge and understanding of theory of operational warfare are absolutely

necessary for the most effective use of one's combat forces not only in a high-intensity conventional war but also in operations short of war.

In generic terms, *operational art* can be understood as the theory and practice of planning, preparing, and conducting major operations and campaigns aimed at accomplishing operational or strategic objectives in a theater. The theory of operational art is universal because it is based on experiences of all wars, regardless of the era in which they were conducted. However, the application of

Dr. Milan Vego is Admiral R.K. Turner Professor of Operational Art in the Joint Military Operations Department at the U.S. Naval War College.

operational art is largely an art, not a science. Operational art reflects a particular national or Service way of warfare and often the personality and command style of the commanders. The main components of operational art are:

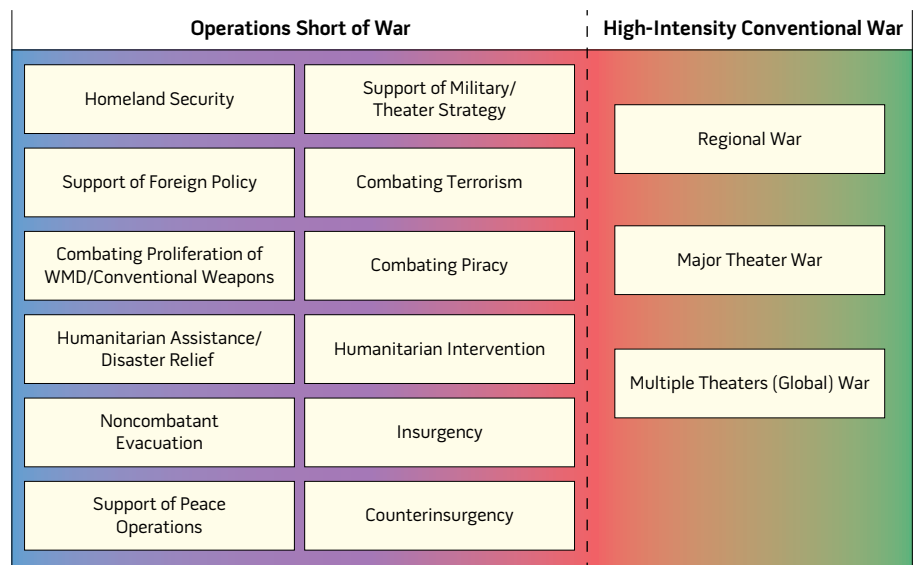
- the operational/strategic objectives
- the levels of war
- operational factors of space, time, and forces
- methods of operational employment of combat forces
- operational support
- operational command structure/ command and control
- operational design
- operational decisionmaking and planning
- operational leadership
- operational thinking
- operational doctrine
- operational training.

Various terms were used in the past in referring to the employment of combat forces short of high-intensity conventional war. Some of them were either too broad, others too narrow in scope. None of them were entirely satisfactory. For example, the term *operations other than war* was used in referring to all military operations other than combat and garrison activities. Related terms are *low-intensity conflict*, *irregular warfare*, *stability and support operations*, *global war on terror*, and *stability, security, transition, and reconstruction operations*.¹ The term *operations short of war* used here is a variant of *operations other than war*. It encompasses many diverse operations, ranging from homeland security to counterinsurgency (see figure 1).

Strategic Environment

The future security environment will be characterized by increased Great Power competition. Rising regional powers will resort to intensified use of proxies to avoid direct conflict, minimize risk of escalation, and provide plausible deniability. By doing so, they will extend their capabilities beyond their respective region. In the future, some rising powers will be unwilling to support international organizations that

Figure 1. Spectrum of Conflict



underpin stable and secure international order. The international order could be put under great stress because many weak states might become failed states. Some rising regional powers might embark on a policy of “fracturing” weak neighboring states. Weak states might be internally further weakened because of poor governance and increased unrest by dissatisfied segments of the population. Future trends could also include proliferation of weapons of mass destruction by terrorist, insurgent, or criminal groups.²

In the future, ideological conflict will continue to evolve. Legitimacy of state authority in many weak states will steadily decline. Group identities will change rapidly. Advanced information technologies will generate new and more creative ways to build and maintain cohesion and common purpose among members of a group.³

The population in developed countries is generally stagnating or decreasing, while in developing countries it is rapidly increasing. The majority of people in developing countries are young.⁴ The increasing urbanization in many parts of the world poses great challenges for the employment of forces. By 2025, about 60 percent of the world’s population will live in cities. About 80 percent of all countries border the sea and approximately 95

percent of the world’s population lives within 600 miles of the sea. Some 60 percent of the politically significant urban areas around the world are located within 62 miles of the coast and 70 percent are within 300 miles.⁵ The lack of economic opportunity, civil strife, and regional wars could greatly increase mass migration from weak and failed states to developed parts of the globe.⁶

In operations short of war, the strategic situation can be quite complex. It is often diffuse and ambiguous. The security environment is volatile and unpredictable. The military situation is characterized by a great variety of both conventional and unconventional threats. Threats to one’s interests emanate from both state and nonstate actors. The true character of these threats is often hard to define. Some threats do not materialize, while others morph into different types of threats. In the future security environment, large states will have increasing difficulty maintaining a monopoly on violence. Individuals and groups will socialize globally. Nonstate and private groups will increasingly turn to violence. Commercial technologies will be further weaponized. Advances in computerization, miniaturization, and digitization will be exploited by transnational terrorists and criminal groups.⁷ These groups will have little or no respect for commonly



Two Air Force B-52H Stratofortresses assigned to 96th Bomb Squadron fly in formation during Bomber Task Force Europe 20-1, October 23, 2019, over Baltic Sea (U.S. Air Force/Duncan C. Bevan)

accepted principles of the law of armed conflict, and the effects of their actions will be felt not only internally but often also externally.⁸ Off-the-shelf advanced technologies will be available to potential enemies.⁹ Poor infrastructure could greatly complicate the deployment and logistical sustainment of forces.¹⁰

Media and public opinion have a much greater role in operations short of war than in a high-intensity conventional war. The perception of reality is often much more important than reality itself. Public perception of military actions may matter more than the correlation of forces on the ground, as the examples of Somalia in 1994, Bosnia in 1992–1995, and insurgencies in Iraq in 2003–2007 and in Afghanistan since 2001 illustrate. In a media-intense environment, politicians and the public have become unforgiving of even minor mistakes and transgressions; therefore, even the

smallest aspect of military operations should now be planned with sensitivity to public perception of the situation.¹¹

Political vs. Military Objectives

Policy and strategy have a dominant role in both high-intensity conventional war and in operations short of war. One of the major responsibilities of the highest political leadership is to determine *political strategic objectives* prior to the employment of combat forces. The scope and content of a political objective in a high-intensity conventional war and operations vary greatly. In a high-intensity conventional war, a political strategic objective is accomplished by obtaining for oneself, or denying to the enemy, political or economic control of an area of vital importance for the security and well-being of a nation or alliance/coalition. It can be offensive, defensive, or a combination of the two.

Offensive political strategic objectives can be gaining political dominance in a strategically important part of the theater, overthrowing the enemy's political and social system, gaining a dominant economic position in a strategically important area, and obtaining a more favorable geostrategic position. Defensive political strategic objectives are just the opposite of these.

In contrast, political strategic objectives in operations short of war usually have a critical (not vital) importance for the country's interests. Their accomplishment could often be more important for a weaker friendly country than for its protector or supporter. They are much more diverse but mostly limited in scope. Political strategic objectives can be limited or unlimited. The accomplishment of a limited political strategic objective might require unlimited military objectives; the opposite is not necessarily true. Carl von

Clausewitz wrote that the most essential factor in trying to bend the enemy to one's will is the political object (objective) of war. The latter, in turn, determines both the military objective to be accomplished and the amount of effort it requires. Clausewitz wrote, "The political object cannot, however, by itself provide the standard of measurement. The same political object can elicit differing reactions from different peoples and even from the same people at different times."¹²

In contrast to a high-intensity conventional war, political strategic objectives in operations short of war often are poorly defined and articulated. Perhaps one reason is that politicians prefer not to be too specific for fear that publicly stated objectives will not be accomplished, which in turn would reflect on their prestige and influence. Yet if a political strategic objective is expressed in ambiguous and unclear terms, it is of little use to operational planners.¹³ Senior policymakers often request military options before they determine policy objectives. Decisions by senior political leaders are often made untimely because of the supposed need to get more military options or operational details.¹⁴

In operations short of war, the accomplishment of a political strategic objective would normally require limited use of lethal force. The exceptions to this are insurgencies/counterinsurgencies and humanitarian interventions. Political and legal limitations significantly and adversely affect one's use of lethal force. Decisiveness of military actions is relatively rare. Consequently, the accomplishment of a political strategic objective requires much more time and patience than in a high-intensity conventional war.

Experience shows that U.S./Western political leaders often change or even radically alter their political strategic objective in the course of an operation. For example, in the North Atlantic Treaty Organization (NATO) conflict over Kosovo (Operation *Allied Force*, March 24–June 10, 1999), the strategic objectives of both the Alliance and the United States were unclear and poorly articulated. Moreover, there was a serious mismatch between the ends to be

accomplished and the means political leadership was willing to use to achieve those ends. These objectives also underwent several changes as the air offensive progressed. For example, in March 1999, the U.S. administration publicly stated that the objectives of NATO action against the former Yugoslavia were to "demonstrate the seriousness" of the Alliance's opposition to Belgrade's aggressiveness; deter the Serbian strongman Slobodan Milosević from continuing and escalating his attacks on helpless civilians; create conditions to reverse his ethnic cleansing; and damage Serbia's capacity to wage war against Kosovo in the future or to spread the war to neighbors.¹⁵

Sometimes, political leadership does not provide a political strategic objective, so the operational commander has to deduce the objectives from other sources. For example, in the U.S./NATO humanitarian intervention in Libya from March 19 to October 31, 2011, the initial U.S. involvement (Operation *Odyssey Dawn*, March 19–31) was intended as a short-term U.S.-led multinational effort to protect Libya's civilians. President Barack Obama made it clear that the United States wanted to transfer leadership responsibilities to its allies and coalition partners quickly.¹⁶ Because of the lack of clear guidance from the administration, U.S. planners were left to deduce a political strategic objective from the United Nations Security Council Resolution (UNSCR) 1973 of March 11, 2011.¹⁷

The Combined Joint Task Force in Naples stated that the objective was to help protect civilians or population areas under threat of attack. Obama also used a statement from UNSCR 1973 to employ "all necessary means" as guidance on the use of lethal force.¹⁸ The biggest problem and concern were difficulty in getting a definite and consistent message from the White House and State Department.¹⁹ By March 27, when the United States handed over the responsibilities to NATO (Operation *Unified Protector*, March 23–October 31, 2011), the U.S.-led mission had secured several limited objectives (protecting Libya's civilian population, setting the conditions for a no-fly zone, and establishing and maintaining a naval

embargo), yet it did not set the conditions for NATO to win the war.²⁰

One of the most important responsibilities of the operational commander is to convert political strategic objectives into achievable military strategic objectives. Sometimes, this can be difficult to do. In a high-intensity conventional war, a military strategic objective can be defined as one whose destruction, annihilation, neutralization, or control would have a drastic (or radical) effect on the course and outcome of a war as a whole. Clausewitz observed:

*Sometimes the political and military objective is the same. In other cases, political objective will not provide a suitable military objective. . . . [A] military objective that matches the political object in scale will, if the latter is reduced in proportion. This will be all the more so as the political object increases in proportion.*²¹

Generally, the smaller the importance of the political objective, the easier it would be to abandon it.²² Sufficient resources should be provided to ensure the given strategic objective is accomplished. If the resources are inadequate, the scale of the strategic objective must be reduced, or resources must be increased in quantity or effectiveness. If this cannot be done, then a certain degree of risk must be accepted by the top political leadership.²³

If a country has strategic interests in two or more theaters, then a military strategic objective is divided into two or more theater strategic objectives. The accomplishment of military or theater strategic objectives should lead to a drastic change in the situation in a given theater of war or theater of operations. In determining a military/theater strategic objective, a balance must be found among often contradictory requirements regarding which sources of military power should be used to accomplish all aspects of a political strategic objective. Generally, the more nonmilitary aspects of strategic objective predominate, as is often the case in operations short of war, the less need there would be for use of one's lethal force.



Air Force Special Operations Surgical Team members check gear on MC-130H Combat Talon II from 15th Special Operations Squadron, Hurlburt Field, Florida, during rapid infiltration flight operations as part of exercise Emerald Warrior 19, January 16, 2019 (U.S. Air Force/Gregory Brook)

The political leadership often issues unclear, ambiguous, and open-ended military objectives to the operational commander. This, in turn, creates considerable difficulties for the operational planners. For example, during the Kosovo conflict of 1999, both President Bill Clinton and NATO officials stated that one of the objectives was to *degrade* (the same term was used in Operation *Desert Fox* in the 4-day bombing of Iraq in December 1998) Serb capabilities “to attack Kosovo civilians.”²⁴ In the second week after the start of bombing, Secretary of Defense William Cohen stated that the “goal of the air campaign was to demonstrate resolve on the part of the NATO alliance” or “to make [Milosevic’] pay a substantial price.”²⁵ This was a weak statement. British defense secretary George Robertson stated, “Our military objective, our clear, simple military objective will be to reduce the Serbs’ capacity to repress the Albanian population and thus to avert a humanitarian disaster.”²⁶ In mid-April, the Department of Defense stated that the military strategic objective was “to degrade and damage the military

and security structure that President Milosevic’ was using to depopulate and destroy the Albanian majority in Kosovo.”²⁷

Obviously, terms such as *demonstrate*, *deter*, *help*, and *contribute* are too general and open-ended. Likewise, the terms *damage* or *degrade* imply that literally even the smallest percentage of damage or degradation inflicted on the Serbian forces or infrastructure would satisfy the stated strategic objectives. Unless classified orders to subordinate commanders were more specific, publicly stated NATO objectives were essentially useless for planners. The fact was that NATO did not have a plan B. The United States and its allies viewed the use of force simply as a tool of diplomacy intended to push negotiations one way or another. They were not prepared that it might have been necessary to actually accomplish their stated objectives on the battlefield.²⁸

Normally, a military/theater strategic objective cannot be accomplished by a single action; several intermediate (operational) objectives must be accomplished to achieve the entire military or theater

strategic objective. The accomplishment of each operational objective should lead to drastic or radical change in the situation in a given theater of operations. In most operations short of war, operational objectives are rare. The exceptions are counterinsurgency campaigns and humanitarian intervention operations. In operations short of war, most tactical combat actions are major or minor in scale. This is especially the case in insurgency and counterinsurgency and in combating piracy and terrorism. The accomplishment of a major tactical objective would lead to a drastic or radical change in the situation in an area of operations. The accomplishment of a minor tactical objective would directly contribute to accomplishing the respective major tactical objective and also result in a drastic change in the situation in a given combat zone/sector.

Methods of Combat Forces’ Employment

A given military objective determines the employment method of one’s forces. The principal methods of combat

employment are tactical actions, major operations, and campaigns. Tactical actions are aimed at accomplishing a single major or minor tactical objective. According to their main purposes, offensive and defensive tactical actions are differentiated. They can be conducted with or without the use of weapons. The principal tactical actions with the use of weapons are attacks, counterattacks, strikes/counterstrikes, raids, engagements, and battles. In operations short of war, most actions by far will be tactical in size. This is especially the case in insurgency/counterinsurgency, combating piracy, and terrorism.

The operational objective is normally accomplished by planning and executing major operations on land, at sea, and in the air. They are planned and executed by a single commander and according to a common idea (or scheme). In contrast to a high-intensity conventional war, major operations are rarely conducted in operations short of war because the great majority of objectives are tactical in size. The exception is humanitarian intervention operations. For example, NATO's *Allied Force* was a major offensive air/combined operation (not an air campaign, as airpower enthusiasts claimed). It consisted of a large number of air strikes and attacks conducted over 78 days that cumulatively accomplished a partial strategic objective. NATO's naval forces supported these operations by conducting missile strikes against selected Serbian targets and establishing and maintaining a naval/commercial blockade in the southern Adriatic.

The accomplishment of a single military or theater strategic objective in a given theater normally requires the planning and execution of a campaign, consisting of a series of major operations conducted on land, at sea, and in the air and numerous minor and major tactical actions. It is planned and executed according to a common idea (scheme) and by a single commander. In contrast, a campaign in operations short of war, such as the counterinsurgency campaign in Iraq in 2003–2008 and in Afghanistan since 2002, consists of numerous tactical actions and only rarely includes major operations.

Operational Command Structure/Command and Control

In operations short of war, the existing operational command structure should be used or a new one established to ensure centralized command and control and the most effective operational support. The lack of such a command structure will have a negative impact on the effectiveness of planning and execution of operations. This is particularly true in the case of a counterinsurgency campaign. In command and control, the German-style mission command is generally applicable in all situations, except where errors by subordinate commanders might escalate the crisis and lead to open hostilities. The operational commander's authority and responsibilities are complicated because of the presence of various international, government, nongovernment, and private organizations and contractors.

Operational Support

In a high-intensity conventional war, the success of an operation plan would be wanting unless fully supported by operational intelligence information operations, operational fires, logistics, and protection. These components are part of what is called operational support (*joint functions* in U.S./NATO terms). The operational commander is solely responsible for properly sequencing and synchronizing not only joint forces but also operational support.

The role and importance of operational support in operations short of war are different than in a high-intensity conventional war. For example, human intelligence generally has much more importance than in a high-intensity conventional war. This is especially the case in combating terrorism and counterinsurgency. The volume and type of information required in engaging a less sophisticated opponent are far less demanding than those needed in fighting a relatively strong and more skillful enemy.

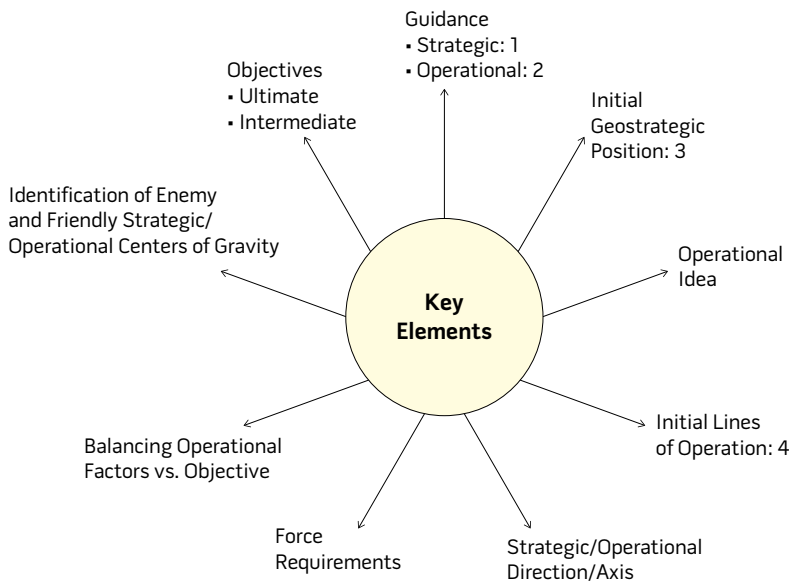
In operations short of war, the focus in most cases is on tactical versus operational logistics in providing support and sustainment to one's combat forces. The

exception is counterinsurgency campaigns and humanitarian interventions. Operational logistics would be primarily focused on satisfying the needs of the civilian population rather than those of fielded forces. Broadly defined, the term *operational protection* pertains to a series of actions and measures conducted in peacetime, crisis, and war that are designed to preserve the effectiveness and survivability of military and nonmilitary sources of power deployed or located within the boundaries of a given theater. This task is considerably more difficult in operations short of war than in a conventional high-intensity war because the enemy forces might operate throughout a large part of a given theater. Full protection of key installations and facilities and one's forces is an especially difficult problem in the urban environment.

Operational Design

The framework for operational planning is provided by what is commonly referred to as operational design, a collection of selected elements of operational art directly related to operational decision-making and planning. Only a few of these elements would be incorporated into the operation plan. The elements of operational design should be discussed by the commander and staff in some detail prior to operational decisionmaking and planning. Generically, operational design in a high-intensity conventional war encompasses the desired strategic endstate, ultimate/intermediate objectives, balancing of operational factors with the objectives, forces' requirements, strategic/operational axis (direction), geostrategic positions (central vs. exterior), interior vs. exterior lines of operations, identification of the enemy and friendly centers of gravity, and operational idea. Operational design for campaign and major operations in operations short of war would include most of these elements; however, their importance would vary greatly depending on the type of operation. For example, geostrategic positions play a small or no role in peace operations. The strategic/operations axis is not part of any counterterrorism or counterinsurgency campaigns (see figure 2).

Figure 2. Operational Design



Notes

1. Issued by the Highest Political-Military Leadership
2. Issued by the Operational Commander
3. For a Campaign
4. For a Major Operation

In preparing for the use of military force, one of the principal responsibilities of the highest political-military leadership is to determine and articulate strategic guidance. Properly formulated strategic guidance should spell out the desired strategic endstate and political strategic objectives.²⁹ It should also specify which military and nonmilitary sources of power are available or will become available, the limitations (constraints and restraints) where one's forces can and cannot be employed, the use or nonuse of certain weapons, and the rules of engagement.

The desired strategic endstate consists of broadly expressed political, military, diplomatic, economic, financial, social, ethnic, religious, informational, and other nonmilitary effects that the highest political-military leadership wants to see in a given theater after the end of hostilities. Expressed differently, the desired strategic endstate is in fact a strategic "effect." In terms of the factor of time, the desired strategic endstate can be described for short, medium, or long term. Obviously, the longer the timeline, the more difficult it is to plan for and

achieve a desired strategic endstate. Also, the more ambitious the desired strategic endstate, the more resources and time are required to accomplish it. The process of determining the desired strategic endstate in operations short of war is far more complex and elusive than in a high-intensity conventional war, yet senior political and military leaders must give some thought to the strategic situation they want to exist after the end of hostilities. This is especially critically important in a counterinsurgency campaign and in humanitarian intervention operations.

The examples of the Kosovo conflict of 1999, the invasion of Afghanistan in 2001–2002 (Operation *Enduring Freedom*), the Israeli attack on Lebanon in July–August 2006, and the U.S./NATO intervention in Libya in 2011 showed little, if any, understanding for stating clearly the desired situation in the aftermath of the hostilities. Israeli political leadership decided to attack Lebanon on July 11, 2006, without any clear idea of how the hostilities were to end.³⁰ During the U.S./NATO humanitarian intervention in Libya in 2011,

U.S. military planners did not receive from the White House the expected clear desired strategic endstate.³¹ The military mission changed from mostly "humanitarian and mobility operations to the use of lethal force with associated changes in objectives and endstates."³² Guidance from the White House and the Pentagon was confusing. Many staffers at U.S. Africa Command (USAFRICOM) were unsure as to whether regime change was an intended option as stated by the President or whether operations had to be focused solely on protecting civilian life and providing humanitarian assistance to refugees.³³ Also, the political advisors at USAFRICOM never received any clear direction from the Department of State.³⁴

After the strategic (for a campaign) or operational (for a major operation) objective is determined, the next step is to balance it with the operational factors of space, time, and force (source of power). Each of the operational factors should be harmonized individually and collectively. This balancing is more difficult in operations short of war because in the factor of space, the human space—not geography—predominates. Also, the factor of "force" is often nonmilitary in its character. Any major disconnect between operational factors and the objective should be resolved; otherwise, the objective has to be either scaled down or abandoned. This process is largely an art, not a science. Additionally, the operational commanders should evaluate the influence of information on each of the operational factors.

The regressive planning method is fully applicable in planning campaigns or major operations in operations short of war, as it is in a high-intensity conventional war. The ultimate objective (strategic or operational) is divided into a number of intermediate (operational or major tactical) objectives. These, in turn, can be accomplished in succession and/or simultaneously. The operational commanders and planners should also fully consider desired military and nonmilitary effects generated after a given operational or strategic objective is accomplished.

Central and exterior geostrategic positions (for a campaign) and interior and



Cavalry scouts with 1st Battalion, 16th Infantry Regiment, 1st Armored Brigade Combat Team, 1st Infantry Division, maneuver toward cover after air assault during exercise Platinum Lion 19, at Novo Selo Training Area, Bulgaria, July 9, 2019 (U.S. Army/True Thao)

exterior lines of operation (for a major operation) have relatively less importance in operations short of war than in a high-intensity conventional war. Again, the exception is humanitarian interventions and counterinsurgencies.

One of the most important elements of combat employment of one's forces is center of gravity: a source of massed strength—physical or moral—or leverage whose serious degradation, dislocation, neutralization, or destruction will have the most decisive impact on one's own or the enemy's ability to accomplish a given military objective. Expressed differently, a center of gravity is the enemy's or one's own greatest strength that represents the single greatest obstacle in accomplishing a given military objective. Any center of gravity is directly related to the corresponding objective to be accomplished.

Military objectives invariably dominate the corresponding center of gravity, not the other way around. Any time a military objective is radically changed, the entire situation must be evaluated and the new center of gravity should

be determined. Normally, in operations short of war, centers of gravity are strategic or tactical in size; operational centers of gravity rarely exist. For example, in combating piracy, the strategic center of gravity is usually the top leader and his inner circle. Sometimes, hostages might become the center of gravity because they would be a source of leverage. At the tactical level, there is a multitude of centers of gravity—usually leaders of individual pirate bases and groups of pirate boats.

In combating terrorism, the strategic center of gravity is the leader and his inner circle and the secular- or religious-based ideology at hand. For example, the strategic center of gravity in combating al Qaeda was Osama bin Laden and his inner circle plus jihadist ideology. Elements of the inner core of the strategic center of gravity also included consultative councils (*shura majus*) and various committees (military, finance and business, religious, and media and publicity). The tactical center of gravity in fighting al Qaeda was individual terrorist cells. Today's al Qaeda is similar in its

organization as it was under bin Laden. Its organizational structure is a combination of hierarchy and networks, which consists of numerous terrorist cells that are self-organized and self-enrolling.³⁵ The amir holds a direct responsibility over all religious, operational, and logistical activities.³⁶ The command council (Majlis al Shura) is the highest decision-making body; its members are selected by the amir. The command council is responsible for planning and supervising all al Qaeda activities. It consists of 7 to 10 members chosen every second year. It convenes twice a month.³⁷ Al Qaeda uses a vast logistical network to support worldwide activity. The networks are responsible for recruiting new members and safely transferring them to training camps and jihad areas.³⁸

Centers of gravity in an insurgency or counterinsurgency differ considerably in content and number from those in a high-intensity conventional war. For both insurgents and counterinsurgents, there is a single strategic center of gravity. Because of the great number of tactical objectives,



USS *Barry* launches Tomahawk missile in support of Operation *Odyssey Dawn* on March 19, 2011 (U.S. Navy/Roderick Eubanks)

there is also a large number of corresponding tactical centers of gravity. Operational centers of gravity are normally rare because insurgents would rarely deploy large forces at a certain area and thereby risk their destruction by the government forces. The lack of operational centers of gravity is the main reason insurgencies and counterinsurgencies are a protracted effort. For example, the Moro rebellion in the Philippines lasted 14 years (1899–1913). The first communist insurgency in the Philippines (the Hukbalahap rebellion) lasted 12 years (1942–1954). The ongoing communist insurgency (by the coalition of the Communist Party of the Philippines, the New People’s Army, and the National Democratic Front) started in 1969. It took some 21 years (1968–1989) to defeat the communist insurgency in

Malaya. The communist Revolutionary Armed Forces of Colombia–People’s Army insurgency lasted for some 53 years (1964–2017). The ongoing Taliban insurgency in Afghanistan started in 2002.

For the insurgents, the government’s legitimacy and its armed forces would normally represent a strategic center of gravity that needs to be degraded, weakened, and ultimately destroyed. Legitimacy is a condition based on the perception of the justness of the actions of the government. It is bestowed by the population. Without being widely accepted as legitimate, the government is unlikely to survive a determined insurgency. It is the governments’ lack of legitimacy in many of the current and future trouble spots that provides the various hostile factions with the power to operate in the manner they do. For an

insurgency to succeed, it must concentrate a major part of its efforts on drastically undermining the legitimacy of the government, and this usually takes a lot of time. Legitimacy must be seen in the context of conflicts resulting from an increasing reliance on violence by a minority attempting to impose its will on the majority. This is where efforts must be focused to bolster the legitimacy of legal authority.³⁹ For example, during the 20 years of the insurgency in El Salvador (1970–1990), the strategic center of gravity for the Farabundo Marti National Liberation Front rebel coalition was the legitimacy of the Salvadoran government itself.⁴⁰ A similar situation existed in Colombia, where the government forces were engaged in a protracted counterinsurgency effort against Marxist-led guerrillas.

In Somalia in 1993, the United States allowed itself to be in a situation where its vital interests were not at stake, but the survival of the Somalian clan leader Mohamed Farah Aideded was. This dangerously asymmetrical situation allowed Aideded to indirectly attack the U.S. strategic center of gravity—the will to fight—by exploiting a well-known U.S. critical vulnerability: an aversion to suffering high casualties. With no survival at stake, the Clinton administration was unwilling to take actions aimed at sustaining popular and political support, while Aideded’s desire for independent power could be sustained indefinitely.⁴¹

In counterinsurgency, again, the enemy’s strategic center of gravity is usually a charismatic leader and his inner circle, a religious or secular ideology, and the will to fight. The tactical center of gravity is small units in the field and the morale and will to fight. In an insurgency, antigovernment forces usually operate in small groups and use hit-and-run tactics. Government forces rarely have the opportunity to destroy or neutralize them, unless they make the mistake of prematurely operating in larger formations. For example, in Afghanistan, the Taliban’s structure is highly decentralized and thereby hard to defeat. In mid-2017, the Taliban was organized in four main shuras: Quetta Shura with two subordinate shuras (Miran Shura, based in Miran Shah, north Waziristan [composed almost entirely of the Haqqani network], and Peshawar Shura, based in Peshawar); Shura of the North, with headquarters in Balkhistan and composed of several fronts; Mashhad Shura, based in Mashhad, Iran, and composed of one large central front; and Rasool Shura, based in Farah, Afghanistan.⁴² Territorially, the Quetta Shura claims responsibility for all Afghanistan except Loya Paktia and Logar, where Miran Shura is responsible, and eastern Afghanistan, where Peshawar Shura operates as the regional command. To complicate matters, the Shura of the North and Rasool Shura do not recognize the authority of Quetta Shura and its shadow governors, military leaders, and courts.⁴³ The strategic center of gravity

for counterinsurgents is probably the Quetta Shura’s forces combined with the top leadership and the Salafist ideology. Each of the four Taliban forces with its ideology and leadership deployed in Afghanistan can be considered an operational center of gravity.

In providing humanitarian assistance/disaster relief (HA/DR), the concept of center of gravity is not applicable. The exception is when forces delivering HA/DR face active opposition of insurgents or terrorists. The concept of weight of main effort or line of effort should be generally applied in HA/DR operations. In peace operations, the concept of center of gravity is not generally applicable, except in peace enforcement operations when the peacekeepers must use lethal force against the side violating the agreement.

The operational idea is the heart of the design for any major operation or campaign. It should describe in broad and succinct terms the operational commander’s vision for accomplishing the assigned operational or strategic objective.⁴⁴ A sound operational idea should be simple and creative. It should pose a multidimensional threat to the enemy. It should try to deceive the enemy. It should ensure high speed in execution. However, the operational idea for counterterrorism or counterinsurgency campaigns cannot be executed quickly; it might take weeks or even months, as the example of the initial Baghdad surge (February–June 2007) in Iraq shows, even in the case of a major/joint operation. The operational ideas for humanitarian intervention operations, as the examples of the Kosovo conflict of 1999 and Libya of 2011 illustrate, were unsound. In Kosovo, NATO’s operational idea posed a single-dimensional threat. Only the use of airpower was contemplated. To make the situation worse, U.S. and NATO political and military leaders stated publicly and repeatedly that no use of ground troops was planned.⁴⁵ The lack of a ground option greatly eased the problem for the Serbs, who were able to use their regular troops freely in support of security forces and paramilitaries in Kosovo instead of being forced to dig

in and fortify border areas for defense against a possible invasion. Mainly for political reasons, the operational idea did not envisage the most optimal use of airpower—that is, in mass to overwhelm and shock the opponent early in the operation. Initially, NATO did not have an all-encompassing plan to prepare and “shape” the Kosovo area of operations by simultaneously cutting off the potential flow of reinforcements and supplies over land routes and establishing a sea blockade off the Montenegrin coast.

In the NATO intervention in Libya in 2011, the major flaw was that no conventional forces were deployed on the ground; emerging rebel forces were disorganized, with limited equipment and communication capability. Coalition special forces were helping the rebels on the ground, and there was limited ability to coordinate the ground and air efforts. Actions by NATO’s commanders were limited to the use of precision airpower to shape the operational environment, yet they did not have control over the rebel forces. They also had unrealistic expectations that the rebels would be able to take advantage of the effects on Muammar Qadhafi’s forces.⁴⁶

In operations short of war, methods of destroying or neutralizing the enemy’s centers of gravity are different from those applied in a high-intensity conventional war. The main reason is the different content of a strategic objective. This, in turn, severely restricts the use of lethal force. The focus is on weakening or controlling rather than on destroying the enemy’s strategic center of gravity. For example, in a counterterrorism or counterinsurgency campaign, the main efforts should focus on countering the ideological appeal and support among the populace. This would include effective measures and actions aimed at delegitimizing enemy leadership and disrupting or cutting off the insurgent or terrorist support networks (political, financial, propaganda, arms supplies, and so forth). At the same time, the legitimacy of the friendly government as a strategic center of gravity must be continuously enhanced.



Marine with Kilo Company, 3rd Battalion, 5th Marine Regiment, runs through scenario during Marine Air Ground Task Force Integrated Experiment, August 5, 2016, at Marine Corps Air Ground Combat Center at Twentynine Palms, California (U.S. Marine Corps/Thor J. Larson)

Operational Decisionmaking and Planning

Traditional methods of operational decisionmaking and planning are largely applicable in most operations short of war. Combating terrorism and insurgency would require planning and execution of respective campaigns. Major/joint operations should be planned if operational objectives must be accomplished. This is usually the case in humanitarian intervention operations and occasionally in a counterinsurgency campaign. The most effective method in combating piracy is not antipiracy or counterpiracy tactical actions but planning and executing counterpiracy major/joint operations. In contrast to a high-intensity conventional war, the effect of the nonmilitary aspects of the situation on planning is generally much greater. This is particularly true in combating terrorism, counterinsurgency, and peace operations.

Operational Leadership

Operational leadership has the same importance in operations short of war as in a high-intensity conventional war. One of the main requirements

for success at the operational level of command is to think broadly and have a broad vision. The term *operational thinking* is not easy to define concisely because it encompasses many diverse elements. However, operational commanders cannot be successful in exercising their numerous responsibilities without having an operational rather than tactical perspective. In purely physical terms, the operational perspective encompasses the (formally declared or undeclared) theater of operations plus an arbitrarily defined area of interest. This means the commander should use a reductionist method to reduce the complexities of the situation to the essentials. Afterward, holistic methods should be used to link disparate elements and events (“connecting the dots”) to see patterns and project trends in the situation for some time in the future. Thinking operationally does not come naturally to commanders. Among other things, operational thinking is acquired by having experience in commanding large forces and taking part in exercises and wargames. It also requires solid professional education and self-education in international poli-

tics, diplomacy, geopolitics, ethnicity, culture, religion, international law, and military/naval history.

Application of operational art in operations short of war is much more complicated than in a high-intensity conventional war. The main reasons for this are the highly diverse and unpredictable operational environment and the dominant role of nonmilitary aspects of the situation in determining objectives for the employment of combat forces. This, in turn, requires more judicious use of one’s military power. Opponents present relatively few opportunities to use one’s forces decisively. Hence, almost all operations short of war that require use of lethal forces are inherently protracted. The use of one’s combat forces is often restricted due to the content of the political strategic objectives, more restrictive rules of engagement, public perceptions, and the extraordinary influence of social media in shaping the strategic environment. Success in operations short of war requires sound use of both nonmilitary and military sources of power. The single greatest advantage in applying tenets of operational art to operations short of war

is in providing an operational versus a tactical perspective by operational commanders and their staffs. Finally, skillful application of tenets of operational art would preclude “tacticization” of strategy—that is, when tactical considerations dominate strategy. The single biggest problem is the lack of sound theory of operational art for operations short of war. Without it, no sound operational doctrine can be developed or realistic operational training be conducted. JFQ

Notes

¹The major error was to group stability and support operations with operations other than war because these operations properly belong to the post-hostilities phase of a land campaign. The term *low-intensity conflict* referred to localized hostilities between two or more states or nonstate groups conducted below the intensity of a conventional war. A stronger side uses lethal forces selectively and with restraint. The term *military operations other than war* (MOOTW) encompasses the use of one’s military sources of power across the range of military operations short of war. Yet for some reason, the focus in MOOTW was on arms control, strategic deterrence, conflict resolution, promoting peace, and supporting civil authorities in response to domestic crises. Clearly, arms control, strategic deterrence, and conflict resolution belong to the domain of policy and strategy, which is the responsibility of the highest political, not military, leaders. The phrase and acronym were coined by the U.S. military during the 1990s but have since fallen out of use. The British military uses an alternate term, *peace support operations*. Both MOOTW and peace support operations encompass peacekeeping, peacemaking, peace enforcement, and peace-building. The most recent term used by the U.S. military is *contemporary operational environment*, defined as “the entire set of conditions, circumstances, and influences that U.S. Armed Forces expect to face when conducting military operations to further the national interests of the United States, its friends, and allies.” See Field Manual 7-100, *OPFOR: Opposing Force Doctrinal Framework and Strategy* (Washington, DC: Headquarters Department of the Army, 2003), viii.

²*Joint Operating Environment (JOE) 2035: The Joint Force in a Contested and Disordered World* (Washington, DC: The Joint Staff, July 14, 2016), 6–9.

³*Ibid.*, 12.

⁴NATO HUMINT Centre of Excellence, *Human Aspects of the Operational Environment—Final Report* (Oradea, Romania: CNI Coresi SA, 2014), 14.

⁵Marine Corps Doctrinal Publication (MCDP) 3, *Expeditionary Operations* (Washington, DC: Headquarters Department of the Navy, April 16, 1998), 21.

⁶*JOE 2035*, 10–11.

⁷*Ibid.*, 14.

⁸Milan Podhorec, “The Reality of Operational Environment in Military Operations,” *Journal of Defense Resources Management* 3, no. 2 (May 2012), 44.

⁹*Ibid.*, 41.

¹⁰*Ibid.*, 45.

¹¹Jeremy Shapiro, “Information and War: Is It a Revolution?” in *Appraisal: The Changing Role of Information in Warfare*, ed. Zalmay M. Khalilzad and John P. White (Santa Monica, CA: RAND, 1999), 124–125.

¹²Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (New York: Knopf, 1993), 90.

¹³*Ibid.*, 98.

¹⁴William E. Rapp, “Civil-Military Relations: The Role of Military Leaders in Strategy Making,” *Parameters* 45, no. 3 (September 2015), 19.

¹⁵President Bill Clinton, press statement, March 24, 1999; “Cohen, Shelton Joint Statement on Kosovo After Action Review,” *NATO Security Digest*, no. 198 (October 14, 1999), 6.

¹⁶Cited in *Libya: Operation Odyssey Dawn (OOD): A Case Study in Command and Control* (Washington, DC: The Joint Staff, October 4, 2011), 8; Joe Quartararo, Sr., Michael Rovenolt, and Randy White, “Libya’s Operation *Odyssey Dawn*,” *PRISM* 3, no. 2 (2012), 150.

¹⁷Gregory K. James, Larry Holcomb, and Chad T. Manske, “Joint Task Force *Odyssey Dawn*: A Model for Joint Experience, Training, and Education,” *Joint Force Quarterly* 64 (1st Quarter 2012), 25.

¹⁸Todd R. Phinney, “Reflections on Operation *Unified Protector*,” *Joint Force Quarterly* 69 (2nd Quarter 2014), 89.

¹⁹Quartararo, Rovenolt, and White, “Libya’s Operation *Odyssey Dawn*,” 150.

²⁰John Stewart Williamson, “Through the Libyan Looking Glass” (Master’s thesis, Joint Advanced Warfighting School, 2012), 46.

²¹Clausewitz, *On War*, 91.

²²Otto Groos, *Seekriegslehren im Lichte des Weltkrieges. Ein Buch für den Seemann, Soldaten und Staatsmann* (Berlin: Verlag von E.S. Mittler & Sohn, 1929), 22–23.

²³Donald E. Kirkland, “Rommel’s Desert Campaigns, February 1941–September 1942: A Study in Operational Level Weakness” (Master’s thesis, U.S. Army Command and General Staff College, 1986), 14–15.

²⁴Ivo H. Daalder and Michael E. O’Hanlon, *Winning Ugly: NATO’s War to Save Kosovo* (Washington, DC: Brookings Institution Press, 2000), 105.

²⁵*Ibid.*

²⁶*Ibid.*, 116.

²⁷Prepared statement of William S. Cohen, Secretary of Defense, to the Senate Armed

Services Committee, April 1999.

²⁸Daalder and O’Hanlon, *Winning Ugly*, 105.

²⁹Bruce B.G. Clarke, “Conflict Termination: What Does It Mean to Win?” *Military Review* 11 (November 1992), 85.

³⁰Scott Wilson, “Israeli War Plan Had No Exit Strategy,” *Washington Post*, October 21, 2006, A1.

³¹Williamson, “Through the Libyan Looking Glass,” 45.

³²James, Holcomb, and Manske, “Joint Task Force *Odyssey Dawn*,” 26.

³³Quartararo, Rovenolt, and White, “Libya’s Operation *Odyssey Dawn*,” 150.

³⁴*Ibid.*

³⁵Rohan Gunaratna and Aviv Oreg, “Al Qaeda’s Organizational Structure and Its Evolution,” *Studies in Conflict & Terrorism* 33, no. 2 (November 2010), 1045.

³⁶*Ibid.*, 1054.

³⁷*Ibid.*, 1056.

³⁸*Ibid.*, 1050.

³⁹J.M. Petryk, “Legitimacy—A Center of Gravity for the Information Age” (Master’s thesis, Canadian Forces College, 2000), 13.

⁴⁰Max G. Manwaring and Court Prisk, *A Strategic View of Insurgencies: Insights from El Salvador*, McNair Paper 8 (Washington, DC: NDU Press, 1995), 18.

⁴¹Timothy J. Keppler, “The Center of Gravity Concept: A Knowledge Engineering Approach to Improved Understanding and Application” (Master’s thesis, U.S. Army Command and General Staff College, June 1995), 6–7.

⁴²Antonio Giustozzi, *Afghanistan: Taliban’s Organization and Structure* (Oslo: LANDINFO, Country of Origin Information Centre, August 23, 2017), 6.

⁴³*Ibid.*

⁴⁴The meaning of this term is similar to that of *concept of operations* used in the U.S. military. The term *operational idea*, however, is commonly used to make a distinction between the concept of operations at the operational level and actions at the tactical level.

⁴⁵Benjamin S. Lambeth, *NATO’s Air War for Kosovo: A Strategic and Operational Assessment* (Santa Monica, CA: RAND, 2001), 27.

⁴⁶Williamson, “Through the Libyan Looking Glass,” 45.

General Martin E. Dempsey, then Chairman of the Joint Chiefs of Staff, center, listens to briefing from U.S. and Afghan special operations forces at Camp Morehead, Afghanistan, April 23, 2012 (DOD/D. Myles Cullen)



Preparing Senior Officers and Their Counterparts for Interagency National Security Decisionmaking

By Joseph J. Collins

Colonel Joseph J. Collins, USA (Ret.), Ph.D., has served on the Army Staff, the Joint Staff, and in the Office of the Under Secretary of Defense for Policy; was Deputy Assistant Secretary of Defense for Stability Operations from 2001 to 2004; and taught for 25 years, first at West Point's Department of Social Sciences, and then at the National War College and in Georgetown University's Security Studies Program.

One of the most essential areas of civil-military relations is the cooperation among senior military officers, Cabinet officers, and the President to make national security decisions. It is also one of the most problematic. In 2015, a team

from National Defense University's (NDU's) Institute for National Strategic Studies was tasked to analyze the strategic lessons of the wars in Iraq and Afghanistan.¹ In many cases, the authors found senior military officers, their civilian counterparts, and even the President in dysfunctional struggles. Friction, misunderstanding, and trust deficits ruled, often resulting in a "broken dialogue."²

Friction in civil-military decisionmaking is not always dysfunctional, so the aim here is not to stop or even lessen friction, but simply to analyze some ways in which educators and executives can further understanding between senior military officers and their civilian counterparts. In the end, America will be better off if uniformed officers know more about interagency decisionmaking and their civilian colleagues understand more about the military and how it is schooled. The answer to the problems at hand is education writ large, but the critical part will be in determining how, when, and where this education takes place.

At the highest levels of the Department of Defense (DOD) and in the White House, politics, policy, strategy, and often military operations come together like strands of the same rope. Players in this drama can be nonpartisan, but no one is apolitical.³ At the highest levels, everything is political. Generals must be generals, first and foremost, but simultaneously they must also be statesmen.⁴ At the same time, senior civilian decisionmakers must be current on military-related issues.

Defense decisionmaking is already contentious well before it gets to the interagency community and the situation room of the White House. Not only are generals and admirals notoriously strong-willed personalities, but there are inter-Service rivalries as well as problems among the "communities" inside the Services, between forces at home and those abroad, and between the urgent concerns of the present and the important demands of the future. Procurement fights with research and development, and current operations compete with readiness spending. Somehow, the

Pentagon brings order to this chaos and participates in the interagency national security battle with both civilian and military officials at multiple levels of the National Security Council (NSC) process. In my experience, the Secretary of Defense and the Chairman of the Joint Chiefs of Staff or their deputies typically come to the White House with a single position, but disputes within the Pentagon may occasionally complicate decisions across the river.

Contentious interagency disputes often break out into the media, which is always hungry for stories of bureaucratic infighting. Worse than adverse publicity, excessive friction can cause suboptimal decisions, sowing mistrust between Cabinet departments and the Executive Office. In matters of war and peace, vast amounts of resources and thousands of lives are also at risk. Bad decisions can result in casualties, which undoubtedly constitute the greatest incentive for making improvements to decisionmaking.

Some Case Illustrations

A wide variety of cases demonstrate where interagency national security decisions took a bad (or unusual) turn. The decision to invade Iraq was one example where the uniformed military resisted (partly successfully) attempts by Donald Rumsfeld, an activist Secretary of Defense, to use a small, lean ground force. At the same time, the military and our diplomats did an inadequate job both on post-conflict planning and, later, on adapting to what became a counterinsurgency campaign. On the civil side, national goal selection was faulty, and dissident experts in the State Department and at the Central Intelligence Agency did not receive a fair hearing. Intelligence was hyped by some in the civilian leadership for political gain.⁵

In the Iraq War Surge decision, President George W. Bush overruled his military and defense advisors, sought military advice outside the chain of command, and decided on a military and diplomatic surge that was highly successful for the next few years: The Surge dampened societal violence in Iraq

and set conditions for the withdrawal of coalition combat forces. The policy was a success, but the contribution by the Joint Chiefs and the generals in theater was neither imaginative nor decisive. It would be easy to see this lack of contribution as a failure on the part of military leadership, but one experienced strategist who served on the NSC staff at that time stated,

A fair rendering of this episode might conclude that at bottom, the system worked as it should. For his part, President Bush was careful to solicit the views and inputs of his most senior military and civilian advisors and weighed them carefully. . . . Yet he also went outside the circle of formal advisors to ensure that all points of view were brought forward. . . . Against strong opposition in Congress and much criticism in the media, he displayed a persistence and determination that proved most helpful to the theater commander and chief of mission charged with implementing his strategy. . . . By any standard, and the ultimate outcome in Iraq notwithstanding, this decision and its implementation must stand as a high point in President Bush's administration and a successful example of civil-military interaction.⁶

In the Barack Obama administration, there was no such good fortune. The 5-month run-up to the decision for a surge in Afghanistan was fraught with civil-military tensions in a contentious, drawn-out decisionmaking process, where the President felt boxed in and ill-served by his military advisors.⁷ This problem was compounded by an unfortunate breach of military decorum that resulted in the relief of a talented commander, General Stanley McChrystal, just as the surge was starting. His successor, General David Petraeus, at the end of his tour as commander in Afghanistan had the unpleasant experience of having his troop-level recommendations overturned by a President eager to reduce U.S. troops in Afghanistan. The Obama administration ultimately reduced U.S. troop presence in Afghanistan from 100,000 men and women in uniform in 2011 to 8,400 by the end of the second term, some 5 years later.⁸



General Stanley McChrystal, commander, U.S. Forces Afghanistan, and General David Petraeus, commander, U.S. Central Command, at Bagram Air Base, Afghanistan, during Operation *Enduring Freedom*, October 29, 2009 (DOD/Bradley A. Lail)

The Donald Trump administration began with the anomalous condition of a recently retired general being appointed Secretary of Defense. With a very close relationship between Secretary of Defense James Mattis and General Joseph Dunford, the Chairman of the Joint Chiefs of Staff and a former subordinate commander of then-Major General Mattis, some observers believed that civilian experts in the Office of the Under Secretary of Defense for Policy lost much influence in DOD decisionmaking.⁹ As time progressed, friction increased between the Secretary, who closely guarded his Department's prerogatives, and an often impetuous and impatient President.¹⁰

In December 2018, the Secretary of Defense resigned in the face of a surprise decision by President Trump to withdraw U.S. troops in Syria.¹¹ Eight months later, the President executed that decision,

which precipitated the abandonment of our Kurdish allies and a Turkish invasion. The fate of the so-called Islamic State hangs in the balance, as does the fate of democratic insurgents and the continuing safety of a small U.S. stay-behind detachment in Syria.

President Trump disdains long meetings and formal briefings; as a result, the complex, multilevel national security decisionmaking process that inspired this article has been hobbled in his administration. Hopefully, it will one day rise and regain its past effectiveness. Contentious and plodding as that complex, time-consuming process may be, it is essential to effective national security policy.

The remainder of this article focuses first on the general sources of civil-military friction and how DOD and others can shape the managerial and educational enterprises to help keep friction at an appropriate level.

Sources of Civil-Military Friction

Many factors come into play to create civil-military friction in the interagency decisionmaking process. First, we have a Constitution that features separation of powers and checks and balances.¹² A quick review of Articles 1 and 2 shows that the commander in chief is not the only powerful player in national security affairs. In addition to the mighty power of the purse, Congress's Article 1, Section 8 powers—to raise and support armies, to provide and maintain a Navy, and to “make Rules for the Government and Regulation of the land and naval Forces”—ensure that every Cabinet officer looks over his or her shoulder toward Capitol Hill when making every key decision.¹³

Even the simplest things in national security affairs are subject to a vast set of laws. While Congress often bows to the Executive Office in national security

affairs, the Constitution and national security law frustrate and complicate streamlined, top-down decisionmaking—even in crisis moments. The Constitution is rarely center stage in the situation room, but it always lurks in the background, affecting the position and behavior of many of the players in the drama. Again, in the first 2 years of the Trump administration, congressional resistance to the executive branch in national security affairs was generally low but not nonexistent. Indeed, the Turkish invasion of Syria and the impeachment of President Trump may in the next few years breathe new life into the legislative check on foreign policy.

A second factor is the contending approaches to civil control of the military. Many scholars (and war college students) argue the merits and vitality of Samuel Huntington's objective control, which assigns policy to civilian leaders and offers the military freedom of action in plans and operations. This stands in contradistinction to the modern "hands-on" notion, associated with Eliot Cohen, dean of the Paul H. Nitze School of Advanced International Studies at Johns Hopkins University, which features tighter civilian control, intense management by questioning, and an "unequal dialogue" where the President (or the Secretary of Defense) reserves the right to get down into the weeds of the planning and execution of military operations.¹⁴

The merits of each theory may matter less to an individual case than to the policymaking style of the President or his/her Cabinet officers. These officials may be unfamiliar with Huntington or Cohen, but they bring to the table differing management styles from their past lives. Some, like Donald Rumsfeld, prefer hands-on, detailed management, while others favor more delegation of authority or even an approach akin to mission command. Another key factor here will be the agility of the military in adapting to the style of civilian control in a given case. Past events suggest that the start of a new administration can create a difficult transition for a sometimes tone-deaf military. Conversely, new civilian leadership teams

are often ill-informed about past decisions and not aware of the costs incurred in changing policies. Ignorance about the military and the art of the possible is commonplace, as are steep learning curves about the chain of command.

In any case, the President and the Secretary of Defense will determine where the line is drawn between Executive prerogative and military freedom of action. There have been great successes and failures in the various styles, but in every case the President retains the right to be wrong (or right) and to use the unequal dialogue as he or she sees fit.¹⁵

Third, there are cultural differences. A Council on Foreign Relations team comprised of Janine Davidson, Emerson Brooking, and Benjamin Fernandes wrote:

*Career military personnel now exist in a world apart from 99.5 percent of American society: they go to different schools, live and work in a specialized system of promotions and deployments, and often belong to successive generations of the same families. While subordinate to civilian leaders, military leaders are taught that their professional judgment should be respected once the fighting starts.*¹⁶

At the highest levels of decisionmaking, civilian counterparts often go to more prestigious schools, have advanced degrees, and know more about foreign affairs, but they have little knowledge of day-to-day life in the military, of how military planning works, or of military capabilities in general. While they often respect military professionals in their role of the management of violence, they often see military leaders as doctrinaire or narrowly focused. For example, Douglas Feith, a former Under Secretary of Defense for Policy, opined,

Military officers are ill-prepared to contribute to high policy. Normal career patterns do not look toward such a role. . . . Half-hearted attempts at irregular intervals in an officer's career to introduce him to questions of international politics produce only superficiality and presumption and an

*altogether deficient sense of real complexity of the problems facing the nation.*¹⁷

President John Kennedy, like Carl von Clausewitz, expected a lot from his senior-most generals. Disappointed by the Joint Chiefs of Staff's performance in the run-up to the Bay of Pigs fiasco, Kennedy instructed the Nation's top military officers:

*While I look to the Chiefs to present the military factor without reserve or hesitation, I regard them to be more than military men and expect their help in fitting military requirements into the overall context of any situation, recognizing that the most difficult problem in Government is to combine all assets in a unified effective pattern.*¹⁸

Sadly, under President Lyndon Johnson, with active interference by Secretary of Defense Robert McNamara, the Chiefs failed to live up to Kennedy's charge to give effective advice.¹⁹

Compounding the collision of new players with differing cultures is the inherent uncertainty of national security affairs. Clausewitz wrote that "war is the realm of uncertainty; three quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty."²⁰ This high level of uncertainty carries over into national security decisionmaking in war and peace.

Military planning data often comes from doctrine and past experiences. Military staffs can recommend and analyze, but they can rarely prove their positions, which are often accompanied by complex assumptions. Political opponents can and will poke holes in even the best available analysis. From time to time, even the greatest generals may be flummoxed by the sharp questioning of civilian staffers. In NSC deliberations, generals soon learn that they are no longer in the realm where proper tactics is the opinion of the senior officer present.

Fourth, major differences in scope of authority can create friction. DOD representatives speak for more than 3 million people and control a budget far in excess of \$740 billion per year, but

those responsibilities pale in the face of Presidential authority and the entire Federal Government budget. The leader of a political party, the Nation, and the free world may well have different perspectives from civilian and uniformed DOD officials trying to contribute to the solution of a national security problem. DOD pays little attention to the fiscal needs of the Nation. Future Presidents, weighed down by the national debt and growing entitlement spending, can be forgiven for wincing when DOD officials again (and again) call for 5 percent real growth per year.²¹

Fifth, and certainly related to the previous factors, are the different ways to make decisions. The military is wedded to an objectives-based, deliberate decisionmaking process that is taught to junior officers and utilized by staffs in ascending levels of complexity at every echelon of command. It is at its heart a commander-directed process and unlike participative decisionmaking in civilian enterprise. This process is organic to military men and women, essentially tattooed onto their collective consciousness. It features mission analysis, course of action development, analysis, comparison, and approval. Relentlessly logical, it is focused on an objective or endstate.

Generals are often surprised that civilians do not follow this system. General Martin Dempsey, the 18th Chairman of the Joint Chiefs of Staff, felt that he had to learn an alien system to the one he grew up in. He noted an influential article by Janine Davidson that described how military and political leaders talk past one another.²² In preparation for his duties, he studied Bob Woodward's book *Obama's Wars* to get firsthand knowledge of the ins and outs of civilian argumentation and decisionmaking. He concluded that civilians and military officials are "just hardwired differently." He said in an interview in 2015,

In the military culture . . . we spend decades learning how to do campaign planning, and we start with a well-stated and clear objective. Then we build a campaign to achieve that objective, with intermediate objectives and milestones

*along the way. Then we come up with three courses of action: high risk, medium risk, and low risk. We pick the middle risk option and execute. If you are an elected official, the likelihood of your conceiving a well-crafted and well-defined objective at the beginning is almost zero. Rather, as an elected official, your first instinct is to seek to understand what options you have.*²³

The Chairman concluded that the military has to adapt to the civilian system, not vice versa. Dempsey observed that, rather than the Chairman or even the President playing a commander's deciding role, "the person at the table with the most persuasive argument tends to prevail in those environments."²⁴

In any case, the tension between civilian and military participants in the interagency community can get tense and result in a "broken dialogue." Rosa Brooks wrote about one case in which the military appeared to stonewall a potential operation in Africa:

*The White House staff members considered their military counterparts rigid, reductionist, and unimaginative. At worst, they were convinced that the Pentagon was just being difficult—that the military didn't care about Sudan. [The military representatives] were equally exasperated. What was wrong with these civilians? Didn't they know what they wanted? [Didn't they realize that such a large operation] required greater specificity in terms of assumptions, constraints, and desired end states?*²⁵

Indeed, the military interlocutors in Brooks's example had a point. As then-Brigadier General Bill Hix noted, there are "simple laws of physics" in military planning.²⁶ It tends toward the slow and ponderous because at the end of it, people's lives will be on the line and huge amounts of fiscal resources may be in play. Not just time and space, but logistics, force availability, and the detailed planning process and course of action evaluation all come into play.

Option development is not brainstorming. Courses of action are thoroughly evaluated for suitability (Will it get the job done?), feasibility (Do we

have the wherewithal to carry it off?), and acceptability (Will the option be accepted by the people and allies?).²⁷ DOD can be reluctant to offer options that have not been vetted or do not meet those tests. Dempsey said that the task must be proportional to the force required: "We will not ask a brigade to do a division's worth of work."²⁸ Still, he would insist that a set of creative options cannot be limited to the size of the force involved, a lesson that DOD has hopefully absorbed after the problems in military input to the Obama administration's planning of the surge in Afghanistan.

Finally, there is the issue of trust. The Nation's top decisionmakers—the President, the NSC, and the members of the principals and deputies committee—are teams that must function on high degrees of trust and understanding, which does not come easy with such disparate groups. Trust, understanding, and empathy take time and effort to develop. Couched as advice to his successor, Dempsey said that "you have to demonstrate a certain gravitas. You have to be able to have a conversation about grand strategy, not just military strategy." He characterized as "job number one in terms of being influential inside decisionmaking boardrooms [is] that relationships matter most of all. If you can't develop a relationship of trust and credibility . . . then you won't be successful in contributing to our national security strategy."²⁹

By way of summary, the most significant problems fall under the heading of a lack of knowledge and misunderstanding. Civilians do not understand the requirements of military decisionmaking and the physics of the process, while military officers are unfamiliar with civilian decisionmaking and may well have the tunnel vision that comes with an expertise honed over three decades of being surrounded by experts and comrades in the same field. Compounding the "fixable" problems is the fact that we are all human. Senior civilians and generals face high standards and often do not meet them. National security decisionmaking will never be easy, but it can be better.



Peshmerga soldier discusses day's mobile checkpoint training with fellow soldiers at Black Tigers Training Camp, Iraq, January 19, 2017, as part of Combined Joint Task Force—Operation *Inherent Resolve* (U.S. Army/Josephine Carlson)

Improving National Security Decisionmaking

Some of the factors that impede decisionmaking are hard to fix. The Constitution will remain as it is. The essential theories of civil-military relations are generally set. Executive decisionmaking in national security affairs will continue to vary according to law, personality, and style. Executives who favor delegation will succeed micromanagers, and vice versa. Presidents will have broader and more differentiated views than those of generals or Secretaries of Defense. Cabinet officers will also carry organizational water. Decisionmaking among civilians will not resemble military decisionmaking processes. The personalities and mental agility of civilian and military participants in the interagency national security decisionmaking

process will be neither better nor worse than those in the past: The situational variables and personalities will change, but education in the broadest sense of the word can increase understanding among all participants.

There are no silver bullets or cookie-cutter lessons here. Military and civilian participants must ultimately learn from history. As Henry Kissinger wrote, “History teaches by analogy, shedding light on the likely consequences of comparable situations.”³⁰ It is a delicate process that offers no guarantees. The only insurance you can buy is to know many “comparable situations” over long periods of time. For civilians and military participants in decisionmaking at the highest level, there is no substitute for reading widely and studying deeply. This applies to all senior officials, military and civilian alike.³¹

At the top of our national security establishment, especially in the early days of a new administration, there may be greater ignorance and less empathy than one might hope. At the highest levels, more experienced civilian players could help, but, sadly, the electorate’s demand for many years of on-the-job experience and demonstrated competence at senior-level jobs appears to be very low. Our last three Presidents at the start of their terms have all been national security neophytes, and their experience in national-level affairs ranged from “a bit” to “none at all.”

We can do a better job of preparing senior military officers, too many of whom have been groomed only for senior tactical billets such as division, naval, or wing battle group commands. Senior generals complain of their “weak bench” for strategic affairs and that they had a general officer corps with too many



Sailor assigned to Assault Craft Unit 5 watches over departure of Landing Craft Air Cushion from Red Beach in preparation for San Francisco Fleet Week, featuring unique training and education program that brings together civilian and military forces, September 27, 2018 (U.S. Marine Corps/Jacob Farbo)

officers fixated on gaining division command.³² Command at the tactical level in all Services is the path to general or flag rank. Talent managers and promotion boards can fix this over time, but institutional resistance will be fierce; generals tend to choose future generals in their image and likeness.

For the senior-most military officers and the field grade officers who support them, civilian graduate education is an important foundation for strategic decisionmaking. It would be helpful for all the Services if more senior officers had graduate degrees in economics, international relations, history, or any other relevant discipline. It is even more important for each of the Services and combatant commands to ensure that assigned field and senior officers and senior noncommissioned officers become lifelong learners. All too often, new war college students reveal that their last

serious study or reflection took place a decade ago, when they were in staff college. If unit or ship life is an intellectual wasteland, the best staff or war college will be frustrated and its educational efforts will go unreinforced.

In an interview with the author, Petraeus recommended that future chiefs, combatant commanders, and theater commanders be groomed through graduate education as well as key assignments (executive officer to a combatant commander, a Service chief of staff, Chairman of the Joint Chiefs of Staff, J5s, and so on) that will enable them to act as understudies during the current leadership and witness how decisions are made. He said, “Those key assignments really matter. They are the vantage points which give you the experience to develop . . . the guiding principles and ideas that help you when you’re under stress in tough situations with imperfect information.”

Petraeus also recommended experiences such as internships, term membership in the Council on Foreign Relations, or teaching at West Point to create “entrée effects” for future senior officers to interact with public intellectuals, senior officials, and Members of Congress.³³

In the end, we want officers who can balance the roles of warfighting and national security decisionmaking. Petraeus believed that field or theater commanders must

Have the skills to be both statesman and general. As a commander, he has to be a warfighter. He has to have confidence in that. . . . You cannot do that as on the job training. . . . Having said that, there is no question that the individual also has to have the skills of a statesman. . . . The [field or theater] commander has to focus on providing military advice based on the facts on the ground . . . and informed by

*an awareness of the realities with which the President has to deal. . . . If one allows political considerations to drive a recommendation, I think you erode the integrity of military advice.*³⁴

Petraeus saluted the Army's strategist program but observed that most of its participants will serve only to the rank of colonel. He believed that it is more important to have generals who are both competent field commanders and strategists. Right now, we have many excellent field commanders, but we severely lack senior officer strategists. So where should we focus our educational institutions?

We have to avoid the temptation to recommend the restructuring of American higher education. It would be lovely if every holder of a bachelor's degree had a fulsome understanding of history, geography, economics, and national security affairs, but that is not the case. What we can do is to focus on educating key members of the attentive public and then design publications, exercises, and simulations for those who may soon become officials.

There are some indirect, long-term, and specific measures that could have immediate utility and are worth considering. In the long term, to make better, more strategically minded generals, we should start with smarter, better educated lieutenants. The Armed Forces should examine how they teach what the Army calls tactics, operations, and strategy. In most training, tactics (and techniques and procedures) occupies the first decade of Service. Staff college introduces the officer to higher level staff work and takes the officer beyond the ship, the squadron, and the brigade level into higher echelons of command. For ground officers, the upper limit of that progression usually focuses at the Corps/Marine Expeditionary Force level. At each of these first two levels, and especially at staff college, there are excursions to strategy, the direction of higher units, and Service roles and missions.

Rather than seeing tactics, operations, and strategy as different stops in a linear program, we should approach curriculum planning by thinking of them as a nesting doll, like the Russian *matryoshka*

dolls—with tactics embedded within major operations, and operations in a theater embedded in a strategy that, in turn, is embedded in a national effort.

To see the whole “doll,” the cadet, the lieutenant, and the captain should know more about the operations and strategy that drive their immediate tactical missions. This would not only contribute to more fulsome learning about strategic affairs but also further mission command. By the time an officer is a company or battalion/squadron/ship commander, he or she should know the intent and plan of his or her four-star commander and have a basic understanding of military and defense strategy. Corps/fleet/numbered Air Force staff should understand the national intent and the role that their force and the theater plays in an entire conflict. They should be masters of strategy who understand the national security strategy and their unit's role in it.

Today, strategic affairs dominate the war colleges, with the Service war colleges focused on military strategy and the NDU colleges focused on national security strategy. Students—military and civilian—often arrive with a deficient knowledge of strategy development as well as many of the contextual factors that are well known to economists, political scientists, and experts in international affairs or the history thereof.

For the future, the Nation's war colleges—whose graduates become ambassadors, generals, and the officers who support them—should pay more attention to national security and interagency decisionmaking. The war colleges need to assess their efforts at understanding national security strategy and deliberations at the highest levels. All the war colleges must have a goal to prepare future colonels and generals to design and command the military aspects of a theater campaign, but they should also be able to shape the strategic plans needed for interagency decisionmaking. Focused instruction on the dynamics of decisionmaking and its pitfalls, such as groupthink, should begin in staff college and accelerate in the war colleges. War college students should learn from numerous cases of interagency national security decisionmaking.³⁵

The colleges need to do more outreach with local universities and organizations, such as the Council on Foreign Relations. Two worthwhile efforts would be to share case studies on important decisions and then conduct simulations with civilian and military students. The end-of-year exercises, common to war colleges, could include local colleges and graduate schools in the exercise play.

Closer to the Washington cockpit, NDU and its colleges could institute certificate programs for future (or serving) national security officials in decisionmaking, strategy, joint doctrine, and force development. Empty seats could go to local junior officers eager to improve their strategic knowledge. NDU once had a master's degree program for non-DOD government civilians, but it became too expensive to maintain. Extra funding for NDU and the other colleges would be necessary to restart this effort. Although NDU should be expanding its remit, it seems to be continually hamstrung by a lack of resources; it is reducing its scope and closing some of its colleges. With a defense budget of more than \$700 billion, it is shameful that we have to make deep cuts in our most prestigious war colleges.

These indirect activities will help enlarge the educated attentive public, but more must be done directly for those who are or will soon be direct participants in the interagency decisionmaking process. One way to do that has been to publish issue-oriented books for new office holders. Brookings has long been a standout in this area. Another important national security book, written by DOD experts at NDU and published by NDU Press, is *Charting a Course: Strategic Choices for a New Administration*, which covers issues from weapons of mass destruction to Arctic strategy.³⁶ It is useful for experts in any one policy area but even more so for managers who have to “get smart” in a hurry on numerous issues.

Knowledge of issues is important, but understanding the dynamics of decisionmaking and developing trust are even more essential. Crises often come early in an administration, and it would be dangerous if the members of a deputies



Soldiers from 1st Armored Division search for insurgents in houses located across street from Outpost 293 in Ramadi, Iraq, after mortar attack and gunfire were received on outpost July 24, 2006 (U.S. Air Force/Jeremy T. Lock)

committee first met on the eve of the crisis. In a Presidential election year, NDU or RAND (or, alternatively, major non-Federal think tanks) should offer a series of weekend seminars and simulations for potential participants or their principal assistants from either party. The weekends should leave plenty of time for informal conversations, team-building activities, and social events.

Joint doctrine, force planning, the contingency planning process, and issue histories, among other important topics, would be appropriate subjects to cover in these seminars. Guest lectures from the Nation's leading authorities could kick off the seminar. For 2020, these lectures would include threats being presented by

China, Russia, North Korea, Iran, and the global counterterrorist campaign. Panels and seminars on case studies of successful and unsuccessful decisionmaking events should also form an important part of the program.

In conclusion, and at the risk of restating the obvious, we can have more fruitful civil-military dialogues and better interagency national security decisionmaking. If learning from the last decade is possible, the year 2021 will see a rebirth in interest in coordinated, systematic decisionmaking at the national level. Hope is not a strategy, but it springs eternal when necessity must become the mother of strategic reinvention. JFQ

This article is based on a paper presented at the biennial Inter-University Seminar on Armed Forces and Society International Conference, in Reston, Virginia, November 8–10, 2019. The author thanks Lieutenant Colonel Ben Fernandes, USA, for his scholarship and comments on the original manuscript.

Notes

¹ Richard D. Hooker, Jr., and Joseph J. Collins, eds., *Lessons Encountered: Learning from the Long War* (Washington, DC: National Defense University Press, 2015).

² The phrase *broken dialogue* was popularized by Janine Davidson in an article, in a monograph, and at a Council on Foreign

Relations conference. Janine A. Davidson, "Civil-Military Friction and Presidential Decision Making: Explaining the Broken Dialogue," *Presidential Studies Quarterly* 43, no. 1 (March 2013), 129–145; and Janine A. Davidson, Emerson T. Brooking, and Benjamin J. Fernandes, *Mending the Broken Dialogue: Military Advice and Presidential Decision-Making* (New York: Council on Foreign Relations, 2016).

³ I acknowledge discussions with James Golby in early October 2019. His formulation on apolitical versus nonpartisan is spot-on in my view. Military personnel can strive to be nonpartisan, but at the highest levels nearly every issue is political.

⁴ Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), 111–112.

⁵ See Hooker and Collins, *Lessons Encountered*, 21–88, 165–276.

⁶ *Ibid.*, 410.

⁷ One of the best and most popular accounts is Bob Woodward, *Obama's Wars* (New York: Simon & Schuster, 2010). For a more militarily analytical account, see Frank G. Hoffman and G. Alexander Crowther, "Strategic Assessment and Adaptation: The Surges in Iraq and Afghanistan," in *Lessons Encountered*, 89–164.

⁸ The dispute over troop numbers was first covered in Paula Broadwell, *All In: The Education of General David Petraeus*, with Vernon Loeb (New York: Penguin Press, 2012), 291–303. Petraeus gives a short account of this topic in Joseph Collins and Nathan White, "Reflections by General David Petraeus, USA (Ret.), on the Wars in Iraq and Afghanistan," *PRISM* 7, no. 1 (Washington, DC: Institute for National Strategic Studies, September 2017), 163–164.

⁹ Loren DeJonge Schulman, Alice Hunt Friend, and Mara E. Karlin, "Two Cheers for Esper's Plan to Reassert Civilian Control of the Pentagon," *Defense One*, September 9, 2019.

¹⁰ Former Secretary of Defense James Mattis has not spoken out about these problems in depth, but a former speechwriter and assistant wrote about them extensively in an unauthorized memoir. See Guy M. Snodgrass, *Holding the Line: Inside Trump's Pentagon with Secretary Mattis* (New York: Sentinel, 2019).

¹¹ See James Mattis's resignation letter to President Trump, December 20, 2018, available at <<https://d3i6fh83clv35t.cloudfront.net/static/2018/12/mattis-letter2.pdf>>.

¹² Publius (James Madison), "The Structure of the Government Must Furnish the Proper Checks and Balances Between the Different Departments," *Federalist Papers*, no. 51 (1788).

¹³ U.S. Constitution, art. 1, sec. 8.

¹⁴ The relationship between the views of Samuel Huntington and Eliot Cohen is examined in Davidson, "Civil-Military Friction and Presidential Decision Making," 133–134, and

Eliot A. Cohen, *Supreme Command: Soldiers, Statesmen, and Leadership in Wartime* (New York: Free Press, 2012), 4–14, 225–248.

¹⁵ For Cohen's approach to civil-military relations, see Cohen, *Supreme Command*, 1–14, 173–224. This approach is echoed in Peter Feaver, "The Right to Be Right: Civil-Military Relations and the Iraq Surge Decision," *International Security* 35, no. 4 (Spring 2011), which is an excellent guide to the Iraq Surge decision from the White House perspective.

¹⁶ Davidson, Brooking, and Fernandes, *Mending the Broken Dialogue*, 10.

¹⁷ As quoted in John F. Reichart and Steven R. Sturm, eds., *American Defense Policy* (Baltimore: Johns Hopkins University Press, 1987), 724.

¹⁸ National Security Action Memorandum 55, "Relations of the Joint Chiefs of Staff to the President in Cold War Operations," June 28, 1961, John F. Kennedy Presidential Library and Museum, available at <www.jfklibrary.org/asset-viewer/archives/JFKNSF/330/JFKNSF-330-005>.

¹⁹ On the failure of the Chiefs in the war in Vietnam, see H.R. McMaster, *Dereliction of Duty: Lyndon Johnson, Robert McNamara, the Joint Chiefs of Staff, and the Lies That Led to Vietnam* (New York: HarperCollins Publishers, 1997).

²⁰ Clausewitz, *On War*, bk. 1, chap. 3, 101.

²¹ Aaron Mehta, "DOD Needs 3–5 Percent Annual Growth Through 2023, Top Officials Say," *Defense News*, June 13, 2017.

²² It was clear from the back and forth in the interview that the Chairman was referring to Davidson, "Civil-Military Friction and Presidential Decision Making."

²³ R.D. Hooker, Jr., and Joseph J. Collins, "An Interview with Martin E. Dempsey," *Joint Force Quarterly* 78 (3rd Quarter 2015), 5.

²⁴ *Ibid.*

²⁵ Rosa Brooks, "Thought Cloud: The Real Problem with the Civilian-Military Gap," *Foreign Policy*, August 2, 2012.

²⁶ Davidson, "Civil-Military Friction and Presidential Decision Making," 136.

²⁷ This is also a standard war college approach. For an example from the National War College, see Steven Heffington, Adam Oler, and David Tretler, eds., *A National Security Strategy Primer* (Washington, DC: NDU Press, 2019), available at <<https://nwc.ndu.edu/Portals/71/Documents/Publications/NWC-NDU-Primer.pdf>>. The notion of assessing options for suitability, feasibility, and acceptability—echoed in the Primer—was cited by Dempsey, a National War College graduate, in Hooker and Collins, "An Interview with Martin E. Dempsey."

²⁸ Hooker and Collins, "An Interview with Martin E. Dempsey," 7.

²⁹ *Ibid.*, 9.

³⁰ Henry Kissinger, *Diplomacy* (New York: Simon & Schuster, 1994), 27.

³¹ For a detailed examination of using

history to inform decisions, see Richard E. Neustadt and Ernest R. May, *Thinking in Time: The Uses of History for Decision Makers* (New York: The Free Press, 1986).

³² Conversations between General Carl E. Vuono and the author, 1987–1989, and briefing to and discussion with General Eric Shinseki, by Walt Ulmer and the author, fall 1999. Division command is almost mandatory for promotion to four-star rank, but it is a tactical-level, single-Service command. The Active-duty Army has 231 major generals, but only 10 divisions. Because of its salience, many maneuver combat arms officers manage their careers to become competitive for division command.

³³ David Petraeus, interview by Joseph Collins and Nathan White, Washington, DC, March 27, 2015.

³⁴ Collins and White, "Reflections by General David Petraeus, USA (Ret.), on the Wars in Iraq and Afghanistan," 166. The concept of "best military advice," a favorite of the last two Chairmen of the Joint Chiefs of Staff, has been attacked in a number of places. See, for example, James Golby and Mara Karlin, "Why 'Best Military Advice' Is Bad for the Military—and Worse for Civilians," *Orbis*, January 18, 2018. While Karlin and Golby's rationale is cogent, the senior-most military officers always want to characterize their "best military advice" as a reflection of military factors, not political preferences. Realities are often more complex, and "best military advice" is sometimes not best and not purely military. Still, on occasion, Presidents have reprimanded senior officers for offering advice that was clearly not military in nature.

³⁵ A useful new text comes from a team at the Naval War College. See Nikolas K. Gvosdev, Jessica D. Blankshain, and David A. Cooper, *Decision-Making in American Foreign Policy: Translating Theory into Practice* (Cambridge, UK: Cambridge University Press, 2019). This book has excursions to the Trump era and covers numerous models and approaches to national-level decisionmaking.

³⁶ R.D. Hooker, Jr., ed., *Charting a Course: Strategic Choices for a New Administration* (Washington, DC: NDU Press, 2016).



Members of Nigerian armed forces participate in visit, board, search, and seizure drill aboard Nigerian training vessel during U.S. Africa Command-sponsored exercise Obangame Express 2019, in Lagos, Nigeria, March 18, 2019 (U.S. Navy/Kyle Steckler)

The “Politics” of Security Cooperation and Security Assistance

By Thomas-Durell Young

In 1955 a book titled *The Politics of the Prussian Army, 1640–1945* was published; it would soon become a

landmark study of civil-military relations.¹ Gordon Craig’s unassuming tome became widely influential within and outside the civil-military relations field and spurred the publication of what has become a wide literature on the politics of armies (particularly those

of the United Kingdom, Italy, Russia, and France) that takes a different approach to our conventional understanding of civil-military relations.² What makes these latter books prescient in their instruction is that they disabuse readers of the erroneous assumption

Dr. Thomas-Durell Young is a Senior Lecturer at the Naval Postgraduate School.

that armies are somehow subservient to their political masters and eschew involvement in domestic politics or in any system of governance. As the historical record demonstrates (and, dare one suggest, a reflection of the U.S. Armed Forces in a contemporary setting³), armies are all but inherently political and need to be recognized as such if their effect on civil-military relations is to be properly assessed.

The intrinsically political nature of military organizations is no less true when it comes to armies' efforts in the education, training, and equipping of foreign partner nations' armed forces, known as security cooperation (SC) and security assistance (SA). Yet much of the American bureaucracy and legal framework for these activities treat them as fundamentally technical problems that are susceptible to improvement through better *procedures*. This *technicism*, to purloin a term from Samuel Huntington,⁴ is arguably at the heart of many of our failures and disappointments in building partner security forces (for example, those of Afghanistan,⁵ Iraq,⁶ and Mali⁷) or in reforming defense institutions in Central and Eastern Europe.⁸ Virtually every fix proposed to partners is yet another technical or bureaucratic adjustment rather than an acknowledgment of the fundamentally political nature of these activities, both within a partner nation as well as among U.S. agencies responsible for planning and carrying out the assistance programs.

The objective of this article is to argue that administration officials and Congress face two different political challenges related to improving SC and SA. Unless and until U.S. officials formulate solutions to these political problems, both branches of government will struggle to achieve more effective means of reforming partner nations' key governmental institutions. First—and perhaps the easiest challenge to address—is that SC and SA have unintended political consequences in the government institutions of recipient countries and are not solely technical tasks. No one has expressed this point better than Mara Karlin, albeit she was speaking in reference to weak states:

Past experience offers two key lessons for U.S. officials as they seek to strengthen the security sectors of weak states. First, like all state-building endeavors, these are political, not technical, exercises. Instead of focusing narrowly on training and equipment, U.S. policymakers responsible for implementing such programs must address the purpose and scope of the U.S. role and the mission, leadership, and organizational structure of the partner's military.⁹

Second, SC and SA are highly politicized; both are inefficient, because of the lack of coordination between the Department of Defense (DOD) and Department of State, and ineffective, because of lack of alignment with national security goals (and/or foreign policy objectives). This important reality needs wider appreciation by these departments, as well as by Congress, if the U.S. Government is to improve its ability to find value for money by improving partner nations' ability to defend their sovereignty, let alone contribute to expeditionary operations. Recent reforms initiated by Congress, most notably in the fiscal year (FY) 2017 National Defense Authorization Act (NDAA), constitute a good first effort at addressing these longstanding problems; however, a review of the evidence shows that this legislation should be augmented to define the problem as largely political in nature, as opposed to accepting the traditional default assumption that it is solely technical, which would have enabled it to call for even deeper reforms within these bureaucracies.

This article argues that, due to internal DOD politics and the inter-organizational politics within the U.S. Government, suboptimal results ensue from the way the United States plans and executes SC and SA. It then suggests legislative and policy changes that might better take this reality into account. The stakes are high. If U.S. strategy is to bring troops home from the so-called endless wars overseas and let others do the fighting, then its success must be a core priority. But only by reforming the way the United States organizes itself to build allies' and partners' armed forces are we

likely to meet with any greater success than we have in the past.

Dramatis Personae

Many organizations throughout DOD have long conducted SC and SA. Key roles are played by the military departments (MILDEPs) in execution of these activities, which are in turn managed and coordinated by the combatant commands and the Defense Security Cooperation Agency (DSCA). Arguably, a deeper understanding of the inherent *political* nature of SC and SA is necessary to ensure that these programs are planned, managed, and executed in a more effective and efficient manner. Ensuring that these activities actually “build” sustainable defense capacity must be a high priority, given recent congressional dissatisfaction with DOD failures to create institutions capable of managing, controlling, and sustaining their armed forces.

In terms of SC and SA, the proverbial elephant in the room is DOD. But this has not always been the case. This is one of the externalities of the George W. Bush administration's response to the global war on terror; at the time, DOD found that existing U.S. training and particularly equipping programs funded by the Department of State's appropriations and authorizations (Title 22, *U.S. Code*) simply were insufficiently responsive and nimble to meet operational commanders' requirements. Congress responded to DOD's entreaties for more authority to build partner forces in the FY 2006 NDAA, which authorized DOD (with the concurrence of the Secretary of State) to use its authorizations and appropriations (Title 10, *U.S. Code*) to build capabilities and capacity in partner armed forces in order to conduct counterterrorism operations. The perhaps predictable, if not inevitable, result of DOD rapidly trying to create capacity within partner armed forces was an embarrassing lack of attention paid to the financial niceties and details that are of great importance to Congress. As a RAND report observed, “DOD lacks the detailed financial data necessary to respond to new congressional reporting requirements. Moreover,



Lieutenant Laura Burzenski, assigned to “Wildcards” of Helicopter Sea Combat Squadron 23, demonstrates unmanned aerial vehicle MQ-8B Fire Scout capabilities and configurations with Royal Brunei armed forces during Cooperation Afloat Readiness and Training Brunei, South China Sea, October 30, 2019 (U.S. Navy/Christopher A. Veloicaza)

DOD leaders are unable to compare SC spending across countries, regions, and programs, which is critical to future prioritization and resourcing decisions.”¹⁰

Perhaps it is inaccurate to characterize DOD as an elephant (in any room); in reality, it is more like a herd of independently minded creatures. Title 10 makes it clear that the individual MILDEPs exist in splendid political if not geographical isolation from each other, let alone from the Office of the Secretary of Defense. The MILDEPs’ Major Force Programs reflect the clear objective of Congress that the former retain a high degree of autonomy from the Office of the Secretary of Defense, notwithstanding largely ignored verbiage in the law that explicitly states in the preamble to the three departments’ sections that the exercise of their functions are “subject to the authority, direction, and control of the Secretary of Defense.”¹¹ The record demonstrates that the intent of Congress’s

annual appropriations and authorizations easily trumps this provision of the law. The canonical source of the MILDEPs’ autonomy is found in the 12 roles and missions assigned to them in Title 10.¹² It is the particular authority of training under which the MILDEPs’ authority to conduct SC and SA reside (for example, continental U.S.-based professional military education and all forms of training).

Other key players in the planning and execution of these programs include the Office of the Secretary of Defense, which provides policy guidance and priorities; DSCA, with its newly enhanced powers granted to it via the FY 2017 NDAA (discussed below); the combatant commands, which act as planners and coordinators of these activities (under the authority of the Unified Command Plan); the Service components that execute many of the in-country training events; and finally, as extensions of the combatant commands, defense cooperation

offices resident in-country that manage and direct both training programs and equipment transfers. Given the number of stakeholders, the politics of agreeing priorities, approaches, timing, scope, and so forth, the execution of SC and SA activities can be frightfully untidy.

Since 2006, the previous position of the Department of State, which originally had the lead in funding (and therefore some influence in controlling) these activities, has been eclipsed. While it continues to control funding for its many Title 22 programs, they are largely executed via DSCA and the MILDEPs. Although Congress has recognized that it has, in effect, created the basis for confusion via the two departments’ dual congressionally mandated authorities and authorizations, a *political* decision to create a clear lead agent for these activities remains missing. One will return to the U.S. Government’s well-used practice of “fudging” when it comes to identifying who’s in charge.

It is instructive at this point to cite the example of the FY 2016 NDAA, which mandated that the “Secretary of Defense, in consultation with the Secretary of State, shall develop and issue to the Department of Defense a strategic framework for Department of Defense security cooperation to guide prioritization of resources and activities.”¹³ Absent from this legislative language is any reference to “who decides,” *consultation* being a rather misleading turn of phrase because it implies a relationship of equals (that is, *inter pares*), as opposed to any suggestion of a hierarchy of authority—not even *primus inter pares* in this case. In effect, successive legislation since 2006 has changed radically the entire pre-2001 political calculus of how U.S. defense-related advice and assistance are planned and executed. To appreciate the magnitude of this shift, congressional testimony in 2017 acknowledged that DOD’s Title 10 programs had tripled since 2001. For comparison, prior to 2001, the Department of State managed approximately 80 percent of the U.S. Government’s security assistance, whereas by 2017, this figure had dropped to about 50 percent.¹⁴ Thus, Congress continues its preference for DOD over the State Department in matters related even to the latter’s core responsibility—that is, diplomacy. It is little wonder, then, that such moves have opened the U.S. Government to criticism that it has militarized its foreign policy.¹⁵

The MILDEPs, in various forms and different organizations, largely carry out SC via two different business models: either designing projects from inception to meet specific requirements or training foreign personnel in existing professional military education and training centers funded on an incremental cost basis. In some cases, the invoiced costs of personnel might not even be grounded on such a financially disciplined basis, thereby implying an unintended subsidy by DOD.¹⁶ Two aspects of training of foreign personnel by the MILDEPs and defense entities often go unreported. First, data analysis highlights an unpleasant externality: Training partner military personnel doubles the likelihood of a military-led

coup d’état.¹⁷ Evidently, the recent cases of Field Marshal Abdel Fattah al-Sisi of Egypt and Captain Amadou Sanogo of Mali are far from rare.¹⁸ That said, it must be clarified that correlation does not imply causation—but admittedly, these troubling data do raise questions. Second, both DOD and the State Department reported in a 2011 Government Accountability Office audit that neither collects data on SC and SA programs to evaluate their effectiveness.¹⁹ It is disappointing that reliance on these programs of spreading Western democratic defense governance concepts is undermined by the damning admission that *neither SC nor SA is designed to change behavior.*²⁰ This fact is disconcerting but, sadly, not surprising. Marybeth Peterson Ulrich all but excoriates the DOD disconnect between policy intent and program performance regarding U.S. assistance that she saw provided to the Czech Republic in the 1990s during a critical phase in its democratization. By her analysis, some 80 percent of defense and military contacts did not contribute to U.S. policy objectives intended to further the democratization of Czech armed forces.²¹

That there has been an apparent disconnect between congressional expectations that SC and SA encourage the adoption of democratic norms abroad is hardly subtle and suggests a political causation for these inconsistencies. After all, if there is no government requirement to produce concrete results, no one can ever be held accountable for failure to meet congressional intent. This inherent weakness to the U.S. Government’s approach to assisting its partners is no more glaringly obvious than in its experience in Afghanistan. For instance, who bears ultimate responsibility for the failure of DOD to re-create the Afghan air force: the originating policymaker, Headquarters Air Force, North Atlantic Treaty Organization (NATO) Training Mission–Afghanistan, or U.S. Air Force Central Command?²² A recent (and quite damning) Special Inspector General for Afghanistan Reconstruction’s lessons-learned report on that lack of progress in the country was unsubtly titled *Divided Responsibility*.²³

The Politics of Causation

In defense of her fetching appearance, the sultry character Jessica Rabbit in the 1988 film *Who Framed Roger Rabbit?* claimed, “I’m not bad; I’m just drawn that way.” This *cri de coeur* has resonance in that all of these SC and SA programs, the officials overseeing them, and the many individuals who make up the workforce are not “bad.” Rather, they are simply operating within the intent and spirit of their specific congressional appropriations and authorizations. That a RAND report could find in 2016 some 140 core and supporting authorities that applied to DOD security cooperation paints a rather dissolute tableau prior to the passage of the FY 2017 NDAA, which consolidated these authorities.²⁴ But just as political considerations impeded reforms prior to 2016, subsequent congressional intent apparently has strong political support to redraw DOD’s version of its own Jessica Rabbit, and critically, where politics allow, including the Department of State’s security assistance programs.

Congress’s intent to address these shortcomings was made clear in the FY 2017 NDAA, which contained language that has significantly rationalized authorities to make conducting SC less complex in the following:²⁵

- Policy oversight and resource allocation have been centralized in the Office of the Secretary of Defense, while unifying administration and execution of Title 10 SC programs within the Defense Security Cooperation Agency.
- DOD must now provide Congress with a consolidated budget justification for Title 10 activities.
- DOD must also develop an assessment, monitoring, and evaluation (AM&E) framework to create a disciplined and objective method of assessing program effectiveness.
- DOD is required to create an SC workforce development program²⁶ to ensure personnel engaged in these activities have the required levels of education and training to execute these activities (this is to be fulfilled,

in part, by the creation of a Security Cooperation University²⁷).

This legislative intent to reform how DOD plans, manages, and executes SC and SA could be interpreted as largely technical and seemingly apolitical. Other than a forlorn plea in key DOD policy statements for “greater coordination” among stakeholders, these new policies that govern security cooperation²⁸ and related Defense Institution Building²⁹ activities of the DOD do not acknowledge, let alone address, the inherent political nature of these activities—save a long-overdue recognition for the need to assess a partner nation’s political appetite to accept assistance.³⁰ Fortunately, this legislation has opened paths to finding solutions to these vexatious conundrums, but there are some other options that should also be considered.

Congress’s call for a disciplined ability to measure whether SC programs are actually effective, in the form of the adoption of an AM&E methodology, is a positive development, but there are some policy nuances that must be addressed. The call for an AM&E methodology should end the previous DOD approach of largely relying on anecdotal evidence (at best) to justify these activities. A common Defense Department-wide method must be created that will enable Congress to determine which programs and approaches are effective and which are not.³¹

While a positive step, the development and approval of one methodology is likely to be fraught with challenges. One can identify two specific issues: one methodological and the other political. Regarding the first point, one needs to ascertain in the creation of the methodology whether it is to assess solely inputs or to concentrate on outputs, or, conceivably, both.³² This is an extremely important decision point with wide policy implications. Heretofore, SC has been almost exclusively input based in management and execution. That is to say, DOD can claim that it possesses a world-class toolbox of expertise and formal programs from which to select when assisting a partner nation. Essentially missing from

assessments to date has been a formal analysis of ascertaining whether these inputs have had any effect on a partner in the most meaningful measurement conceivable: Did the activity enable, or improve, a partner nation’s armed forces to deliver lethality and remain survivable in the modern battlespace?

This is an important point and is offered as an observation that if an AM&E method looks exclusively at inputs, there is a likelihood that it could find that SC programs are planned and executed in accordance with law and policy. But such an observation would be missing the bigger picture: how to determine if partner nations’ defense outcomes have been improved/expanded or, conceivably, whether they have been diminished, as the programs have had, in fact, an unintended, deleterious effect. This is arguably the case with both SC and SA programs executed in Central and Eastern Europe since the 1990s, a reality that arguably has yet to be fully internalized by the U.S. Government.³³ It should be clear that if the method does not answer the simple question of whether defense outcomes have been improved/expanded, then the method could produce false positives. Perhaps the easiest method is simply to return to the Cold War logic used by NATO countries when assessing each other’s respective national force goals as part of the then-integrated defense planning system. It was not important, or appropriate among sovereign states, to examine how nations create their armed forces, but rather to concentrate on whether the money claimed to be spent on national defense actually contributed to the ability of countries to meet their force goals. Thus, regardless of the method finally proposed and approved by DOD (and accepted by Congress), the implications of its effectiveness in determining whether SC concepts and programs are appropriate and cost-effective will be, in the end, quite political. A methodology limited to inputs versus determining if a partner nation’s defense outcomes have improved (measurably) could lead to the continued funding of programs that are ineffectual

but that enjoy institutional (political) support within DOD, or Congress.

Perhaps one of the ultimate manifestations of political considerations apropos the efforts to create an AM&E methodology is the strange (but understandable from a political perspective) fact that the Department of State’s SC programs that are not executed by DOD are exempt from any such scrutiny.³⁴ In another political “fudge,” Congress’s appetite for greater transparency and data analysis of DOD security cooperation does not extend to all Title 22 programs. This is understandable (in a political sense) in that to subject all Title 22 programs to the AM&E data analysis would be to de facto designate DOD as senior to the Department of State in assisting partner nations in defense and security programs. That said, because Title 10 and Title 22 programs address essentially the same issues, there can be little methodological argument for both *not* being subjected to a common AM&E methodology; however, there are political considerations aplenty that argue against even attempting to square this hardened circle.

Another challenge that must be faced is for Congress and DOD to acknowledge that politics play a major role in security cooperation’s execution in a partner nation. As argued, there is an inherent institutional prejudice in most SC programs to define problems in foreign defense institutions as being technical, rather than political, in nature. Because the MILDEPs and combatant commands control the vast majority of SC funding via their planning and management, this prejudice should come as no great surprise. The problem with this reality is that few, if any, within these institutions are experienced in conducting an informed assessment to develop an accurate diagnosis of the actual *causation* of the problem being addressed, let alone appreciating the inherent political-military nature of these challenges.³⁵ One posits that essentially any shortcoming in an armed force has, ultimately, a policy (and therefore political) shortcoming, and equally fundamental is the need for a *policy solution*. For security cooperation to be effective, it is crucial that DOD



Partner-nation students from Nigeria and Sierra Leone conduct land navigation and reconnaissance tactics at John C. Stennis Space Center, November 20, 2019 (U.S. Navy/Michael Williams)

focuses its efforts on understanding political context when assisting a partner nation and its armed forces.

Understanding political context would appear to be clearly within the provisions of the FY 2017 NDAA language regarding the need for greater attention to be paid to institutional capacity-building. Inherent in this intent is the need for DOD to inculcate within its planning, management, and execution of SC activities the political nature of these activities at the beginning of any effort and thereby ensure that any follow-on activities include a crucial understanding of the political nature of the problem being addressed. The open and persistent acknowledgment of this factor would go a long way in reinforcing to the political leaders of a partner nation that *they* have a critical policy role to play before, during, and after a seemingly technical SC event is undertaken. Whether such a sea change

in policy can take place in a bureaucracy the size of DOD will, unsurprisingly, depend on politics.

A final but important point is a desperate need for policy that makes the provision of SC and SA conditional. All too often, SC events and programs are programmed years in advance (as if they were an exercise or a training event) and are effectively immune from the political commitment of the partner nation's senior leadership to make needed changes to enable the implementation in the defense institution of SC efforts. Again, Karlin is quite prescient in making this case:

The biggest problem with Washington's efforts to build foreign militaries is its reluctance to weigh in on higher-order questions of mission, organizational structure, and personnel—issues that profoundly affect a military's capacity but are often considered too sensitive to touch. Instead,

*both parties tend to focus exclusively on training and equipment, thus undercutting the effectiveness of U.S. assistance.*³⁶

Conclusion

In an era of extreme political divide in the United States and in many democracies across the Western world, it may seem odd that the solution proposed to improve the planning and deliverability of SC and SA is to be found in introducing greater awareness of the many political realities present. This article has argued that on closer examination, politics permeates all aspects of security cooperation, and trying to escape from accepting this reality has proved counterproductive. Arguably, it is politics that has impeded what is likely the most important reform that would make DOD's SC efforts most effective and efficient. By design and law, security



Peshmerga soldier climbs through window during building assault training at Bnaslawa, Iraq, on February 2, 2017, as part of critical training provided by Combined Joint Task Force—Operation *Inherent Resolve* (U.S. Army/Ian Ryan)

cooperation (and security assistance) are disaggregated in their planning, management, and execution. In effect, the greatest impediment to the U.S. Government providing partner nations with more effective advice and assistance is the singular lack of one focal point overseeing a partner's defense reform efforts. The lack of such a needed epicenter has enabled institutions and individuals conveniently to ignore the political nature of their efforts, let alone designating officials personally vested in the success of these efforts. Currently, as seen manifested in language and actions, SC and SA are governed by committees, managed by coordination, and executed in the alleged spirit of professed amicable cooperation.³⁷ Is it little wonder, then, that hard political (partner and U.S.) choices and decisions are eschewed, and in the end, all stakeholders are judged as equally deserving?

If Congress cannot address this key weakness in DOD (for political reasons), it should be stated as such and the politically nuanced nature of these activities expressly acknowledged in policy. At least, in such a circumstance, the likelihood of failure will be known to all, and perhaps DOD and Congress will be more realistic in their expectations. Or, faced with this reality, Congress could assign responsibility for reforming partner defense institutions to the National Security Council, thereby elevating responsibility and accountability for success/failure above DOD and the State Department. After all, it is in the national interest of the U.S. Government that a partner nation should create new, or reform existing, public institutions; thus, the highest *political* level of an administration needs to be involved to ensure that roles, missions, authority, and performance expectations are clearly established and accepted. By

making security cooperation and security assistance the apotheosis of politics, providers finally will be better led and politically supported when delivering advice and assistance to partner nations. JFQ

Notes

¹ Gordon Craig, *The Politics of the Prussian Army, 1640–1945* (London: Oxford University Press, 1955).

² Hew Strachan, *The Politics of the British Army* (Oxford: Clarendon Press, 1997); John Whittam, *The Politics of the Italian Army, 1861–1918* (London: Croom Helm, 1976); Brian D. Taylor, *Politics and the Russian Army: Civil-Military Relations, 1689–2000* (Cambridge: Cambridge University Press, 2003); Alistair Horne, *The French Army and Politics, 1870–1970* (New York: Peter Bedrick, 1984).

³ No less an authority than Admiral William J. Crowe stated, “Like all other important decisions, those made about the Nation’s defense are fundamentally political.” William J. Crowe, Jr., *The Line of Fire*, with David Chanoff (New

York: Simon & Schuster, 1993), 234.

⁴ Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge, MA: Belknap Press of Harvard University, 1985), chap. 8.

⁵ See *National Defense Authorization Act for Fiscal Year 2017*, Public Law 114-328, 130 Stat. 2481, 114th Cong., 2nd sess. (December 23, 2016), § 1217, “Improvement of oversight of United States Government efforts in Afghanistan.”

⁶ See Kevin Sullivan and Greg Jaffe, “Collapse of Iraqi Army a Failure for Nation’s Premier and for U.S. Military,” *Washington Post*, June 12, 2014.

⁷ Denis M. Tull, “Rebuilding Mali’s Army: The Dissonant Relationship Between Mali and Its International Partners,” *International Affairs* 95, no. 2 (March 2019), 405–422.

⁸ As I argue in Thomas-Durell Young, *Anatomy of Post-Communist European Defense Institutions: The Mirage of Military Modernity* (London: Bloomsbury Academic, 2017).

⁹ Mara Karlin, “Why Military Assistance Programs Disappoint: Minor Tools Can’t Solve Major Problems,” *Foreign Affairs* 96, no. 6 (November–December 2017).

¹⁰ Beth Grill et al., *Follow the Money: Promoting Greater Transparency in Department of Defense Security Cooperation Reporting* (Santa Monica, CA: RAND, 2017), iii.

¹¹ I discuss this point in great detail in Thomas-Durell Young, “The United States: Planning and Managing Control and Effectiveness,” in *Civil-Military Relations: Control and Effectiveness Across Regimes*, ed. Thomas C. Bruneau and Aurel Croissant (Boulder, CO: Lynne Rienner Publishers, 2019), 55–68.

¹² (1) Recruiting; (2) organizing; (3) supplying; (4) equipping (including research and development); (5) training; (6) servicing; (7) mobilizing; (8) demobilizing; (9) administering (including the morale and welfare of personnel); (10) maintaining; (11) the construction, outfitting, and repair of military equipment; and (12) the construction, maintenance, and repair of buildings, structures, and utilities and the acquisition of real property and interests in real property necessary to carry out the responsibilities specified in this section. Note that the three military departments’ functions are the same but stated separately in law. See 10 U.S.C. § 3013 (U.S. Army), 10 U.S.C. § 5013 (U.S. Navy), and 10 U.S.C. § 8013 (U.S. Air Force).

¹³ 113 U.S.C. § 1201, “Strategic Framework for Department of Defense Security Cooperation.”

¹⁴ Tina S. Kaidanow, Acting Assistant Secretary of State, “Opening Statement to the Senate Committee on Foreign Relations,” 115th Cong., 1st sess., September 26, 2017, available at <www.foreign.senate.gov/imo/media/doc/092617_Kaidanow_Testimony.pdf>.

¹⁵ Andrew Bacevich, *The New American Militarism: How Americans Are Seduced by War* (Oxford: Oxford University Press, 2005).

¹⁶ Thomas Manacapilli et al., *Optimizing the Defense Language Institute English Language Center*, TR-1152-AF (Santa Monica, CA: RAND, 2012).

¹⁷ See Jesse Dillon Savage and Jonathan D. Caverley, “When Human Capital Threatens the Capitol: Foreign Aid in the Form of Military Training and Military-Backed Coups,” *Journal of Peace Research* 54, no. 4 (July 2017), available at <<https://journals.sagepub.com/doi/full/10.1177/0022343317713557>>.

¹⁸ David Trilling, “U.S. Trained Militaries More Likely to Overthrow Their Governments,” *Journalist’s Resource*, August 30, 2017, available at <<https://journalistsresource.org/studies/government/security-military/american-trained-militaries-outright-governments/>>.

¹⁹ Charles Michael Johnson, Jr., *International Military Education and Training: Agencies Should Emphasize Human Rights Training and Improve Evaluations*, U.S. Government Accountability Office Report 12-123 (Washington, DC: Government Printing Office, 2011).

²⁰ Duncan L. Clarke, Daniel B. O’Connor, and Jason D. Ellis, *Send Guns and Money: Security Assistance and U.S. Foreign Policy* (Westport, CT: Praeger, 1997), 20–22.

²¹ Marybeth Peterson Ulrich, *Democratizing Communist Militaries: The Case of the Czech and Russian Armed Forces* (Ann Arbor: University of Michigan Press, 2000), 156–157.

²² David Zucchini, “The U.S. Spent \$8 Billion on Afghanistan’s Air Force. It’s Still Struggling,” *New York Times*, January 10, 2019.

²³ Special Inspector General for Afghanistan Reconstruction (SIGAR), *Divided Responsibility: Lessons from U.S. Security Sector Assistance Efforts in Afghanistan*, SIGAR-19-39-LL (Washington, DC: SIGAR, June 2019).

²⁴ David E. Thaler et al., *From Patchwork to Framework: A Review of Title 10 Authorities for Security Cooperation* (Santa Monica, CA: RAND, 2016).

²⁵ Charles W. Hooper, “Opening Statement: Managing Security Assistance to Support Foreign Policy,” Senate Committee on Foreign Relations, 115th Cong., 1st sess., September 26, 2017.

²⁶ “Implementation of the Department of Defense Security Cooperation Workforce Certification Program,” memorandum for Secretaries of the Military Departments, Defense Security Cooperation Agency, December 23, 2019.

²⁷ Aaron Mehta, “A ‘Virtual’ Security Cooperation University Is Coming Soon,” *Defense News*, October 10, 2010, available at <www.defensenews.com/digital-show-dailies/ausa/2018/10/10/a-virtual-security-cooperation-university-is-coming-soon/>.

²⁸ Department of Defense Directive 5132.03, *DOD Policy and Responsibilities Relating to Security Cooperation* (Washington, DC: Office of the Under Secretary of Defense for Policy, December 29, 2016), available at

<www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodd/513203_dodd_2016.pdf>.

²⁹ Department of Defense Directive 5205.82, *Defense Institution Building* (Washington, DC: Office of the Under Secretary of Defense for Policy, January 27, 2016), available at <www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodd/520582p.pdf>.

³⁰ Department of Defense Instruction 5132.14, *Assessment, Monitoring, and Evaluation Policy for the Security Cooperation Enterprise* (Washington, DC: Office of the Under Secretary of Defense for Policy, January 13, 2017), 14.

³¹ Jefferson P. Marquis et al., *Developing an Assessment, Monitoring, and Evaluation Framework for U.S. Department of Defense Security Cooperation* (Santa Monica, CA: RAND, 2016), iii.

³² “Assessment, monitoring, and evaluation of security cooperation programs will foster accurate and transparent reporting on the outcomes and sustainability of security cooperation, improve returns on DOD security cooperation investment, and identify and disseminate best practices and lessons learned to inform decisions on security cooperation policy, plans, programs, and resources.” See Todd Harvey, Acting Assistant Secretary of Defense for Strategy, Plans, and Capabilities, “Opening Statement to the Senate Foreign Relations Committee,” 115th Cong., 1st sess., September 26, 2017.

³³ A point the author argues in Thomas-Durell Young, “Impediment to Reform in European Post-Communist Defense Institutions: Addressing the Conceptual Divide,” *Problems in Post-Communism* 65, no. 3 (2018), 161–174.

³⁴ DOD Instruction 5132.14, *Assessment, Monitoring, and Evaluation Policy for the Security Cooperation Enterprise*.

³⁵ Thomas Bruneau, “Challenges in Building Partner Capacity: Civil-Military Relations in the United States and New Democracies,” *Small Wars & Insurgencies* 26, no. 3 (March 2015), 435.

³⁶ Karlin, “Why Military Assistance Programs Disappoint.”

³⁷ “This has made it all the more important that we work closely with our partners at DOD to ensure a unified approach,” in Kaidanow, “Opening Statement to the Senate Committee on Foreign Relations.”



Staff Sergeant Amanda Elsenboss, U.S. Army Marksmanship Unit Service Rifle Team Soldier, won Interservice Individual Championship High Service Woman Title, Interservice 1,000-yard Individual Match (Open Division), and Interservice Individual Long-Range Match during 2017 Interservice Rifle Championships, held from July 26 through August 2 at the Calvin A. Lloyd Range Complex on Marine Corps Base Quantico, Virginia (U.S. Army/Julius Clayton)

The Psychology of Jointness

By Charles Davis and Kristian E. Smith

Jointness is more than a word, it is a mindset.

—GENERAL JEAN-PAUL PALOMÉROS, COMMANDER
NATO Allied Command Transformation

No military in the world can employ the forces of different services in such an integrated and interdependent manner as the U.S. military, and we can attribute this hard-won level of competence, accumulated over decades, to reforms stemming from the Goldwater-Nichols Department of Defense Reorganization Act of 1986 (GNA). These changes led the U.S. military to become the most powerful force

Dr. Charles Davis is an Associate Professor in the Joint Advanced Warfighting School (JAWS), Joint Forces Staff College, at the National Defense University. Colonel Kristian E. Smith, USA, is the Strategy Chair at JAWS.

in the world by compelling it to become the most *joint* force in the world.

The joint force is predicated on the condition of jointness, which is a distinctly mental phenomenon manifest in members of the different Services who not only are practiced in operating jointly but, more important, also believe that doing so will lead to more effective application of military force. Officers embracing such knowledge and willingness are said to possess a “joint attitude and perspective.”¹ Jointness necessarily and rightly builds atop Service culture, and achieving a joint perspective and attitude means officers must prepare to look beyond powerful Service indoctrination if they are to successfully cooperate and collaborate with others from different Service cultures.

Service-centric attitudes and perspectives are antithetical to jointness, and they are overcome through joint education and subsequent experience in joint assignments. Officers must become socialized to the different Service cultures if they are to develop the joint attitudes and perspectives necessary to operate collaboratively and interdependently. Joint acculturation, a central component of joint professional military education Phase II (JPME II), is the process by which officers are taught both the merits and the practice of working effectively within a joint context. This process seeks to transcend Service biases and prejudice by cultivating understanding and appreciation in officers for the cultures, competencies, and capabilities of other military Services and their members. It is also intended to ready officers for subsequent joint duty. Envisioned by GNA and established by law, joint acculturation is the prescribed way officers are called on to transcend Service-centric views and embrace a more unifying joint ethos.

In the 21st century, jointness also reflects a realm for strategic competition. Although the U.S. military ranks as the most capable force in the world, strategic competitors seek to erode this advantage by building greater jointness in their own militaries. The challenging security environment portrayed by the 2018 National Defense Strategy calls for

greater competencies in jointness—not only in theaters at the operational level but also in integrated operations globally from tactical to strategic levels. Yet efforts to create greater jointness have taken a backseat to other initiatives, and the importance of joint acculturation, seems forgotten. We must reverse this trend if the joint force is to achieve the lethality and flexibility demanded by the National Defense Strategy and to maintain military superiority over adversaries into the foreseeable future.

Jointness Is a State of Mind

Jointness is a psychological state characterized by the willingness of members of each branch of Service to trust, collaborate, and operate interdependently with each other to accomplish a shared mission. In this way, joint force commanders can employ the forces and capabilities of the different Services in an integrated and optimal manner, unhindered by Service parochialism. Desires to attain the highest level of military jointness are born of providence. Crises rarely lend themselves to the forces and capabilities of any single Service, and history attests that a force that can operate more jointly can more effectively respond to threats to national interests.

Since the end of World War II, the United States has sought a military force that can operate more jointly. At that time, General Dwight D. Eisenhower presciently observed that “there no longer exists any separate land, air, and sea warfare. It is all one.”² In the decades that followed, efforts to inculcate jointness in officers from the different Services were modest and stumbling, but legislation under the GNA represented a watershed. Following a string of military operations beset by Service parochialism, Congress imposed reforms on a reluctant Department of Defense (DOD) to create a force that would operate more jointly. To say these reforms enabled the U.S. military to become the most joint force in the world is both inarguable and an understatement, and invoking new laws was the only way to overcome the provincialism of the Services. More than

simply clarifying the roles, responsibilities, and processes of DOD, the Services, and the combatant commands, the legislation aimed to foster greater jointness in military officers through joint education. Congress astutely recognized that effective joint operations are possible only if officers can surmount deeply instilled Service-centric attitudes and perspectives to value and consider those of others. Such officers demonstrate the highest level of trust and appreciation for—and interdependence among—those belonging to a different branch of the Armed Forces.

Jointness derives from the trust and understanding Servicemembers place in their fellow Service colleagues as experts in their core competencies, and the psychological realm is where trust and understanding exist and operate.³ Jointness is nothing if not recognized and accepted in the minds of Soldiers, Marines, Sailors, and Airmen working together to achieve a common mission. As such, a force is joint only to the degree its members internalize jointness; it is this state of mind that enables the effective planning and employment of Service forces operating as an integrated and interdependent whole. Neither unity of command over forces nor a mere collection of platforms and capabilities from the different Services can accomplish this outcome.

Creating jointness relies on lasting and positive psychological change that liberates officers from a Service-parochial mindset to cultivate the joint attitudes and perspectives envisioned by the GNA reforms.⁴ Service culture, like any organizational culture, imparts Service-centric attitudes and perspectives that foster ethnocentrism among members and biases against cultural outsiders.⁵ Such close-minded attitudes and perspectives stand in opposition to jointness and must be supplanted. Instilling joint attitudes and perspectives is the principal outcome of JPME II and results from the structured socialization process that is joint acculturation.⁶

Cultivating Jointness Through Cultural Change

The condition of jointness is contingent on substantive and positive change to



Marine Corps UH-1Y Venom with Marine Light Attack Helicopter Squadron 773 lands to pick up simulated casualty during live-fire exercise with Special Warfare Airmen from 227th Air Support Operations Squadron on Joint Base McGuire-Dix-Lakehurst, New Jersey, October 24, 2019 (U.S. Air National Guard/Matt Hecht)

the Service cultural foundation of military officers, because jointness—enabled by intercultural trust and understanding—transcends the core values and beliefs of any specific Service culture. Beginning with initial entry training, each Service indoctrinates its members into a powerful organization, imbuing in them bedrock values and beliefs. These ideals give members a sense of shared mission and purpose and unquestionably enable the supremacy of each Service within its principal domain; however, strong organizational culture also promotes ethnocentrism among its members, and this often produces antipathies toward members of other cultures. In fact, social group membership remains a principal source of harmful bias and prejudice that is often manifest in members' attitudes toward cultural outsiders.⁷

Achieving the intercultural understanding, appreciation, and trust necessary for jointness is difficult, if not impossible, in the presence of Service-centric attitudes and perspectives. So pronounced were the distinct cultures and rivalries at the time of the GNA reforms that each Service expended great effort and formidable resources to sustain and protect its respective missions and capabilities.⁸ Indeed, congressional reform was necessary because DOD found itself paralyzed in its ability to force reform from within.⁹ In 1989, a congressional panel on military education headed by Congressman Ike Skelton, D-MO (commonly referred to as the Skelton Panel), sought to strengthen jointness within the U.S. military; the panel proposed JPME II as the mechanism to achieve “nothing short of a change in the culture of the officer corps,” through an acculturation

process requiring both time and emphasis.¹⁰ The means for achieving the cultural change sought by the Skelton Panel, *joint acculturation* is defined as “the process of understanding and appreciating the separate service cultures resulting in joint attitudes and perspectives, common beliefs, and trust, which occurs when diverse groups come into continuous direct contact.”¹¹ This process enables officers to transcend Service biases and prejudice by instilling in them an understanding of and appreciation for the cultures, competencies, and capabilities of other military Services and their members. Joint acculturation overcomes the hazard of Service cultural rigidity in the joint environment, where military officers remained predisposed to solutions involving only the forces and doctrine of their particular Service.¹² Only in this way can officers rise above Service-centric views

to internalize joint values and beliefs and embrace a more unifying ethos.

The acculturation of officers must also occur well before forces of different Services come together, ideally ahead of initial joint duty, but especially in advance of crisis. The role JPME II plays in this regard is critical. Effecting timely joint acculturation is important and should optimally precede an officer's initial joint assignment that serves to instantiate and reinforce jointness. But this alone is not enough: Each Service should also seek to inspire joint attitudes and perspectives in officers earlier in their careers, to begin sowing the seeds for an eventual reckoning with jointness. Building esprit de corps is essential, but the Services must endeavor to engender this pride without instilling detrimental biases that must later be overcome.

Just as jointness builds atop Service culture rather than displacing it, the aim of joint acculturation is cultural integration rather than assimilation. Its purpose is not to displace one cultural foundation with another.¹³ Cultural integration is where officers avidly seek to participate and contribute in the joint arena yet also strive to maintain their original Service cultural foundation.¹⁴ As well, acculturation stands distinct from enculturation. Where acculturation is the process of adopting the cultural traits or social patterns of another group, enculturation is the process whereby individuals learn their culture through experience, observation, and instruction. The purpose of this distinction is to say that JPME II aims to *acculturate* while subsequent joint assignments aim to *enculturate* officers through reinforcing experiences with fellow joint officers in environments that demand joint approaches.

Achieving Optimal Joint Acculturation

Joint acculturation is an interpersonal education experience that relies on structured, purposeful, and meaningful contact between members of different Service cultures. In this way, officers gain increased understanding of and appreciation for the capabilities and

the contributions of the other Services, resulting in constructive modification of their Service's cultural beliefs and values. As officers learn, they gradually disabuse themselves of Service-centric attitudes and perspectives, leading to positive behavioral change toward members of other Services.¹⁵ Intercultural understanding and appreciation grow, and the trust between members of Service cultures on which jointness relies increases.

Joint acculturation requires structured intercultural exposure—a deliberate and calibrated “contact” experience. Acculturation approaches must carefully and thoughtfully expose officers to the different Service cultures and their members. For example, wearing uniforms in an academic setting directly exposes other students to some of the most visible artifacts of Service culture, and this diversity invites curiosity and further investigation and query by others to understand. Intermixing students from different Service cultures at every opportunity maximizes intercultural exposure, and joint curriculum must necessarily include material devoted to the discussion and understanding of the different Service cultures and capabilities. The development of this basic intercultural understanding must logically precede the more advanced joint collaborative and team-building portions of a contact experience; officers must engage each other from a common basis of intercultural knowledge and understanding as they work to integrate the different Service forces and capabilities to solve joint problems.

From a scientific perspective, joint acculturation approaches must establish the conditions under which structured intercultural contact is most effective in producing positive psychological change. Social science theory describes four facilitating conditions that, when established, substantially improve acculturation outcomes.¹⁶ The first is that each officer must perceive *equal status* within his particular seminar. This means every officer perceives she has the same opportunity to participate, contribute, and express her views. Social hierarchies hinder

meaningful intercultural engagement by stifling frank and honest discussion through which Service-centric views and approaches are identified and challenged. Therefore, joint acculturation approaches must minimize, if not eliminate, hierarchies of all types among officers in the seminar, to include rank, supervisory relationships, and Service cultural dominance. Seminars should comprise officers of similar rank and reflect compositional balance by Service competency, military specialty, and joint command to the greatest degree.

The next two conditions are *common intergroup goals* and *intergroup collaboration*, which together establish a circumstance of interdependence under which officers from different Services must rely on one another to succeed. These two conditions stipulate that JPME II curricula should provide abundant opportunities for officers to work in balanced joint groups focused on joint problem-solving, writing, and presenting. Officers from different Services must collaborate with, rather than compete against, each other. Exercising interdependence in this way advances mutual intercultural understanding and appreciation. More important, it nurtures the development of interpersonal trust between members of different Service cultures.

Finally, *institutional support* represents an indirect but important condition that influences the effectiveness of acculturation venues. Students must view the JPME II venue as credible and authoritative from joint organizational, faculty, and curricular standpoints. This means having a mission requiring the development of joint attitudes and perspectives, a compositionally balanced faculty team possessing substantial joint experience and credentialed as Joint Qualified Officers, and a curriculum oriented on achieving the level of joint education and training prescribed by statute and policy.¹⁷ Acculturation approaches that eschew these four social conditions risk producing uneven acculturation outcomes at best and reinforcement of harmful Service attitudes and perspectives at worst.

Two essential considerations accompany the discussion of these four social conditions. The first is that the psychological attitude has both cognitive and affective dimensions corresponding to what one thinks and to what one feels, respectively.¹⁸ While joint acculturation involves both cognitive and affective outcomes, the emphasis is on affective change.¹⁹ It is important for officers to *think more positively* of the members of other Services, but it is much more important that they *feel more positively* about them. The difference is the same as knowing what to do in a joint context and wanting to do it, and it reflects the importance of positive affective change.²⁰ The second consideration is that genuine acculturation approaches must balance sufficient duration, intensity, and quality of intercultural contact to enable the development of meaningful personal relationships among members of different groups. Such relationships directly reflect the greater trust existing among officers, and this trust generalizes to others in subsequent joint environments.²¹ Simply put, there are no shortcuts—joint acculturation cannot be rushed or obtained cheaply.

Meaningful and lasting joint acculturation is necessary if officers are to rise above Service-oriented beliefs to embrace a more broadly unifying ethos and effectively contribute to a joint team. Without such socialization, jointness will be muted by Service parochialism when convenient—whether on the field of conflict or in a joint staff.²²

A Realm for Strategic Competition?

To assure national security in an age of Great Power competition, the National Defense Strategy calls for the joint force to become more lethal and flexible; to succeed, it must become more joint. Broader and deeper jointness can result only through greater positive attitudinal change by Servicemembers toward those from different Service cultures, not through investment in advanced capabilities and additional platforms. Jointness minimizes the effect of Service cultural rigidity that

can undermine the efficacy of different forces operating together within a joint context. Joint acculturation is indispensable to achieving a more lethal and flexible joint force because it enables officers to overcome powerful ethnocentrism ingrained in them by their respective Service.

Although the U.S. military enjoys a decades-long head start in building and maintaining operational interdependence between the different branches of Service, strategic competitors such as China are increasing their emphasis and investment to foster greater jointness within their militaries. Their efforts bear witness to the efficacies of jointness that the U.S. military has demonstrated for the past three decades. Through aggressive reforms to the People's Liberation Army, China seeks to create a force capable of "complex joint operations," by focusing greater attention on joint training and joint education to improve the planning and execution of joint operations.²³ Although China faces many obstacles in its pursuit of jointness, its commitment is worthy of note, and DOD should be mindful of moving forward. Likewise, Russia has restructured and made targeted investments in its military over the last decade, producing a force that is much more capable and ready—and this trend is expected to continue.²⁴ Given the changing character of war and the increased investments in asymmetric technologies by strategic competitors, the ability of the joint force to underwrite national security increasingly depends on an officer corps that can develop joint strategies and plans that not only effectively leverage military capability but also are more cogently aligned with other instruments of national power.

In this age of strategic competition, DOD must not squander the lead currently enjoyed over our potential adversaries in the arena of jointness. While potential adversaries have stepped up emphasis on increasing jointness, the U.S. military appears to have stepped backward. The congressional reforms to joint education in 1991 rejuvenated DOD's attitude and approach to

preparing officers for joint duty; however, in the three decades since these landmark reforms, DOD's efforts to achieve a deeper and broader jointness are proving to be a Sisyphean endeavor. Rather than investing in greater jointness, DOD has strayed from the intent of the earlier reforms and remains largely oblivious to joint acculturation and its importance to creating a force that can operate more interdependently. This is evident in the accreditation of myriad programs for the delivery of JPME II, with little regard for their ability to achieve substantive and substantial positive psychological change in the officers attending them.²⁵

Neither is JPME II seen by the Services as preparatory education, and therefore few officers are acculturated before serving in joint duty assignments.²⁶ This means the combatant commands are increasingly manned by officers who remain beholden to the Service-centric attitudes and perspectives detrimental to jointness. Another telling indicator is DOD's repeated attempts in recent years to diminish capacity for joint acculturation by reducing or eliminating the JPME II principal course of instruction at the Joint Forces Staff College.²⁷ These actions signify an institutional devaluation of JPME II—and that an understanding of and appreciation for joint acculturation, its purpose, and the attendant social science remain elusive in DOD. Existing law and military policy neither describe nor define *joint acculturation*, despite many congressional and DOD publications that reference the term.²⁸ This dearth of understanding is harmful to the goal of creating a force that is more joint. Jointness is perishable and must be cultivated continuously.²⁹

The National Defense Strategy testifies that the United States risks losing its military advantage if it does not redouble efforts to create a more lethal force. As long as the Nation possesses separate military Services with distinct organizational cultures, there remains an enduring need to cultivate joint attitudes and perspectives in military officers.³⁰ The psychological realm is a critical domain

for strategic competition. DOD must rediscover the imperative of joint acculturation by creating the level of jointness demanded by the defense strategy and thus preserving the U.S. military's advantage in the 21st century. JFQ

Notes

¹ See House of Representatives, Committee on Armed Services, *Report of the Panel on Military Education*, 101st Cong., 1st sess., 1989. This report extensively describes the importance of officers serving in joint duty assignments to possess a joint attitude and perspective.

² General of the Army Dwight D. Eisenhower, "Remarks at Armed Forces Staff College Opening Exercises," February 2, 1948.

³ Lawrence B. Wilkerson, "What Exactly Is Jointness?" *Joint Force Quarterly* 16 (Summer 1997), 66.

⁴ This is the language used in Title 10 *U.S. Code*, "Armed Forces."

⁵ Harrison M. Trice and Janice M. Beyer, *The Cultures of Work Organizations* (Englewood Cliffs, NJ: Prentice Hall, 1993), 10–11; see also James M. Olson and Mark P. Zanna, "Attitudes and Attitude Change," *Annual Review of Psychology* 44, no. 1 (1993), 125.

⁶ *Report of the Panel on Military Education*, 4.

⁷ Gordon Willard Allport, *The Nature of Prejudice* (New York: Addison-Wesley, 1979), 41.

⁸ James R. Locher III, *Victory on the Potomac: The Goldwater-Nichols Act Unifies the Pentagon* (College Station: Texas A&M University Press, 2004), 14.

⁹ For more information on the inability of the Department of Defense to implement reforms, see General David C. Jones, *Testimony Before the House Armed Services Committee*, House of Representatives, House Armed Services Committee, 97th Cong., 1st sess., February 3, 1982.

¹⁰ *Report of the Panel on Military Education*, 57.

¹¹ This definition was formulated by the Joint Forces Staff College Joint Acculturation Working Group, whose purpose was to formulate a common definition of *joint acculturation* for use by the joint professional military education (JPME) establishment. The Military Education Coordinating Council Working Group approved this definition in October 2017.

¹² *Report of the Panel on Military Education*, 57–59.

¹³ It is beyond the scope of this article to argue whether a joint culture exists. Some argue such a culture would lack many important organizational mechanisms necessary to ensure compliance of Servicemembers with joint norms and values. See David T. Fautua, "The Paradox of Joint Culture," *Joint Force Quarterly* 26 (Autumn 2000), 81–86.

¹⁴ *Integration* means that the original cultural foundation is maintained while one seeks to participate in a larger multicultural social network. See John W. Berry, "Immigration, Acculturation, and Adaptation," *Applied Psychology* 46, no. 1 (1997), 5–34. See also Rupert Brown and Hanna Zagefka, "The Dynamics of Acculturation: An Intergroup Perspective," *Advances in Experimental Social Psychology* 44 (2011).

¹⁵ This is the basis of Intergroup Contact Theory advanced by social psychologists Thomas F. Pettigrew and Linda Tropp. See Thomas F. Pettigrew and Linda R. Tropp, *When Groups Meet: The Dynamics of Intergroup Contact* (New York: Psychology Press, 2011).

¹⁶ *Ibid.*, 63–65; see also Allport, *The Nature of Prejudice*, 281.

¹⁷ See Title 10 *U.S. Code* § 2155, "Joint Professional Military Education Phase II Program of Instruction," for the required curriculum content of JPME II programs. Also see Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 1800.01E, *Officer Professional Military Education Policy* (Washington, DC: The Joint Staff, May 29, 2015).

¹⁸ Pettigrew and Tropp, *When Groups Meet*, 92–95; David R. Krathwohl, Benjamin S. Bloom, and Bertram B. Masia, *Taxonomy of Educational Objectives: The Classification of Educational Goals, Book 2: Affective Domain*, vol. 2 (London: Longmans, Green and Co., Ltd., 1964), 6–7; see also *Report of the Panel on Military Education*, 195.

¹⁹ Pettigrew and Tropp, *When Groups Meet*, 64, 105.

²⁰ Krathwohl, Bloom, and Masia, *Taxonomy of Educational Objectives*, 60–61; Intergroup Contact Theory, which addresses intergroup prejudice, specifically recognizes the greater importance of affective attitudinal change over cognitive when it comes to improving intergroup relations.

²¹ *Ibid.*, 39–40.

²² Fautua, "The Paradox of Joint Culture," 86.

²³ *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2019* (Washington, DC: Office of the Secretary of Defense, May 2019), ii, 22.

²⁴ Anton Lavrov, "Russian Military Reforms from Georgia to Syria," Center for Strategic and International Studies, Washington, DC, November 2018.

²⁵ Charles M. Davis and Frederick R. Kienle, "Toward a More Lethal, Flexible, and Resilient Joint Force: Rediscovering the Purpose of JPME II," *Joint Force Quarterly* 92 (1st Quarter 2019), 25–26. See also Paul W. Mayberry, William Waggy II, and Anthony Lawrence, *Producing Joint Qualified Officers: FY 2008 to FY 2017 Trends* (Santa Monica, CA: RAND, 2019), xv. This study notes that some constituencies now question the consistency and quality of educational outcomes across the various accredited JPME II programs due to differences in structure, timing, and student composition.

²⁶ Title 10 *U.S. Code*, § 2152, "Joint Professional Military Education: General Requirements," specifies that JPME programs should focus on preparing officers for joint duty assignments.

²⁷ The Joint Staff has repeatedly sought legislative change to reduce or eliminate the prescribed duration of the JPME II principal course of instruction in Norfolk. Before being blocked by Congress, the Joint Staff also attempted in 2019 to eliminate the opportunity for O4s and junior O5s to receive JPME II at all.

²⁸ See the *Evaluation Report on Joint Professional Military Education Phase II*, no. 98-156 (Washington, DC: Department of Defense, Office of the Inspector General, June 16, 1998); *Independent Study of Joint Officer Management and Joint Professional Military Education* (Washington, DC: Booz, Allen & Hamilton, 2003); House of Representatives, Oversight and Investigations Subcommittee, Committee on Armed Services, *Another Crossroads? Professional Military Education Twenty Years After the Goldwater-Nichols Act and the Skelton Panel*, 111th Cong., 1st sess., May 20, 2009; and CJCSI 1800.01E, *Officer Professional Military Education Policy*. These studies and instructions use the term [*joint*] *acculturation* but never describe or define it, and in some cases appear to conflate the process of joint acculturation with its outcome: joint attitudes and perspectives.

²⁹ General Martin E. Dempsey noted that jointness, as enabled by joint-minded officers, remains perishable and must be cultivated. See Martin E. Dempsey, *America's Military: A Profession of Arms* (Washington, DC: The Joint Staff, February 23, 2012).

³⁰ See S. Rebecca Zimmerman et al., *Movement and Maneuver: Culture and the Competition for Influence Among the U.S. Military Services* (Santa Monica, CA: RAND, 2019).

Soldiers assigned to 213th Psychological Operations Company observe reaction after playing announcement over loudspeaker out of Joint Security Station Oubaidy, located just outside Sadr City, Iraq, after series of rocket and mortar attacks, March 29, 2008 (U.S. Air Force/Jason T. Bailey)

Leveraging Return on Investment

A Model for Joint Force Campaign Plan Assessments

By M.E. Tobin, William G. Coulter, John P. Romito, and Derek R. Fitzpatrick

Lieutenant Colonel M.E. Tobin, USMC, is a Military Planner in the Europe-Eurasia Regional Center at the Defense Intelligence Agency. Commander William G. Coulter, USN, is the Joint Wargaming Experimentation Division Branch Chief at the Joint Staff J7. Major John P. Romito, USA, is the Fires Planner and Targeting Officer for Special Operations Command South. Major Derek R. Fitzpatrick, USA, is a Civil Affairs Officer in U.S. Southern Command J7/9.

On August 2, 2019, Secretary of Defense Mark Esper informed the military Services of a department-wide fiscal program review to better align the future joint force toward a near-peer threat environment, a process similar to the “night court” proceedings he held during his tenure as the Secretary of the Army. The direc-

tive memo states, “No reform is too small, too bold, or too controversial to be considered.”²¹ Concurrently, in anticipation of the government-wide fiscal tightening due to impending budget cuts, combatant commanders (CCDRs) are attempting to do more with less and critically analyzing all efforts focused on results. CCDR staffs are meeting the commanders’ intent by reviewing combatant command (CCMD) campaign plan efficacy via the current military assessment process while taking new, innovative approaches to assessment and accounting. The increased scrutiny of budgets and fiscal tightening require CCDRs to optimize investments; however, the current joint military assessments process is inadequate for evaluating campaign plans.

Assessments are inherent to both the joint operations process and the commanders’ decision cycle. But at the strategic level, assessments are often an afterthought and, even when applied,

frequently lack structure and methodology. Assessment doctrine provides clearly articulated guidance on why assessments are crucial to the success of the joint force, but the same doctrine provides little insight into when and with what data assessments are most effective. With this minimal guidance, commanders and their staffs develop command-specific assessment methods that lack consistency from command to command, and decisionmakers are unable to see where investments are or are not fruitful. Including the concept of data-driven assessments is far from novel to the Department of Defense (DOD) and the joint force, as U.S. failures in Vietnam attest.

Data-driven corporate concepts such as return on investment (ROI) come from private-sector methodologies that do not directly translate to the military. Yet when those limitations are recognized, such concepts do have relevance and value when used to determine the most efficient use of limited resources for theater security cooperation (TSC) operations as elements of the CCMD campaign plan. Therefore, by examining the failures of data-driven analysis from Vietnam and reviewing private-sector methodology, the joint force can improve the model by which it conducts assessments.

Vietnam: Failure of Metrics-Driven Assessment

Concepts such as ROI and the implementation of assessments in DOD carry quite a bit of historical baggage; they are deeply associated with failures such as the quantitative assessments used in Vietnam. Data-heavy and computer-based quantitative analysis brings U.S. history to the forefront in the failures of highly technical military assessments of the Vietnam era. The Hamlet Evaluation System (HES) used in the Vietnam War was the gold standard for quantitative counterinsurgency assessment.² HES was developed in 1966 by the Central Intelligence Agency and subsequently implemented by DOD in 1967 as part of the Pacification Evaluation System under the Office of Civil Operations and Rural Development Support (U.S. Military Assistance Command, Vietnam).

Designed to be an automated system, the Pacification Evaluation System evaluated and determined, through data analysis, who controlled the Vietnamese populace. The core of HES was a questionnaire that rated six measures of performance and effectiveness, with associated indicators similar to those found in Field Manual 5-0, *The Operations Process*. According to Ben Connable:

*By the end of the Vietnam war, it was clear that HES had not successfully informed policy. Since the data was presented as scientifically accurate, the quantitative results with their false precision misled the executive branch, Congress, and the American public as to how the United States was actually performing in Vietnam.*³

Vietnam illustrates the limitations of data-driven analytics as the dominant factor in determining policy and strategy.

As Mark Twain famously stated, “Facts are stubborn, but statistics are more pliable.”⁴ During Vietnam, analysts in Washington, DC, “employed what were then cutting-edge computer programs to tabulate millions of reports of all kinds. . . ; the sheer amount of data collected in Vietnam is probably unparalleled in the history of warfare.”⁵ Backed by hard numbers collected from the field, the analysis resulted in assessment statistics presented as unassailable facts. No matter how comprehensive the process may be, the data and models are fallible, resulting in questionable assessments. Based on the U.S. history in assessments, one would assume there would be doctrine to address identified shortfalls nearly 45 years later; however, data-driven analytics are not the only shortfall in the current assessments process.

Joint Doctrine: Assessments

Current commanders and staff officers at all echelons of DOD appreciate the need to analyze the effectiveness of their operations. A recent Joint Doctrine Analysis Division special study found that “current assessment doctrine does not provide sufficient guidance and procedures on how to evaluate progress

toward achieving objectives, creating desired conditions, and accomplishing tasks during joint operations.”⁶ Those gaps in guidance and evaluative processes essentially fall under three categories: lack of a prescribed process, heavy focus on “art” elements, and inadequately addressing noncombat operations.

Joint doctrine provides broad guidance on a subjective process but falls short in providing the CCDR and staffs the required tools to make an accurate assessment. Joint Publication (JP) 3-0, *Joint Operations*, focuses on the *why* of assessment but leaves the *how* largely undefined. JP 5-0, *Joint Planning*, warns planners that assessment models may be fallible and that “the presence of numbers or mathematical formulae in an assessment does not imply deterministic certainty, rigor, or quality.”⁷ The guidance to avoid a “solely numbers” approach toward assessment is a hard lesson learned from the Vietnam War. A handbook dedicated to assessments, *Commander’s Handbook for Assessment Planning and Execution*, is a pre-doctrinal handbook that is entirely descriptive, not prescriptive; it also contains overviews on the *what* and *why* of assessments, but again, the *how* is left to practitioners to determine. The most recent assessment publication is *Multi-Service Tactics, Techniques, and Procedures for Operation Assessment*, but it largely regurgitates *Commander’s Handbook*, failing to explain how to assess effects against expenditure of resources. Doctrine is only a starting point; it requires improvement to assist CCMDs in optimizing operations, because it cannot assess steady-state campaign plan investments that application of a methodology such as ROI would address, thus bringing assessments into the 21st century.

Return on Investment

Business frameworks and methodologies for analyzing DOD operations could be a potential bridge to the current doctrinal assessment gap. Recently, joint doctrine and multiple senior leaders have begun using the terms *investment* and *return on investment* to describe DOD actions and outcomes within the operational environment. The June



Army Reserve psychological operations specialist with 13th Psychological Operations Battalion calls out medical information to her partner during combat lifesaver course at Fort McCoy, Wisconsin, July 18, 2019 (U.S. Army Reserve/David Graves)

16, 2017, version of JP 5-0 introduced the phrase *operations, activities, and investment* (OAI) to describe joint actions globally. The phrase replaced the previous term *operations, actions, and activities* in the 2011 version of JP 5-0. In 2017, a Government Accountability Office report similarly highlighted DOD's increasing shift toward business models, noting, "According to DOD and CCMD officials we interviewed, readiness is their key performance measure and they have ongoing efforts to develop more tangible, quantifiable measures to determine . . . return on investment."⁸ In 2018, a Chairman of the Joint Chiefs of Staff Instruction noted how evolving "analysis of alternatives methodologies . . . [seeks to] consider all alternatives for . . . meeting validated capability requirements . . . [while] determining the 'point' of diminishing return on investment with acceptable risk."⁹ Likewise, *ROI* has

recently entered the lexicon of senior leaders within U.S. Southern Command (USSOUTHCOM) and U.S. Africa Command (USAFRICOM). During hearings before the Senate Armed Services Committee, leaders from both commands used the term *ROI* to describe the assessed effectiveness of the congressionally funded operations of their commands.¹⁰ The addition of this new terminology to the joint lexicon has inspired joint planners to develop pilot programs to test the usefulness of data-centric assessment, modeled from the private sector, and the technical architecture necessary to manage data and execute various functions.

The How of Operational Assessment

ROI is associated with corporate finance, and there are several different methods of calculation, each with a different purpose. Businesses that

must achieve productivity and profit goals use a defined assessments process. For example, human resources-based *ROI* formulas determine the value of increased performance by taking the increased productivity and/or output of the organization and dividing that by the cost of employee training.¹¹ The formulas are deceptively simple to calculate, but the data collection can be much more difficult. Formulas to track progress and measurable results provide industry with analyzed information to plan and adjust; however, corporate finance equations, in their pure form, do not logically translate to military operations. The military does not make money; it spends it.

Financial costs captured can accurately calculate total resource investment in an operation but only insofar as it can be correlated to nonfinancial rates of return. Therefore, calculating "operating return" may be most applicable to

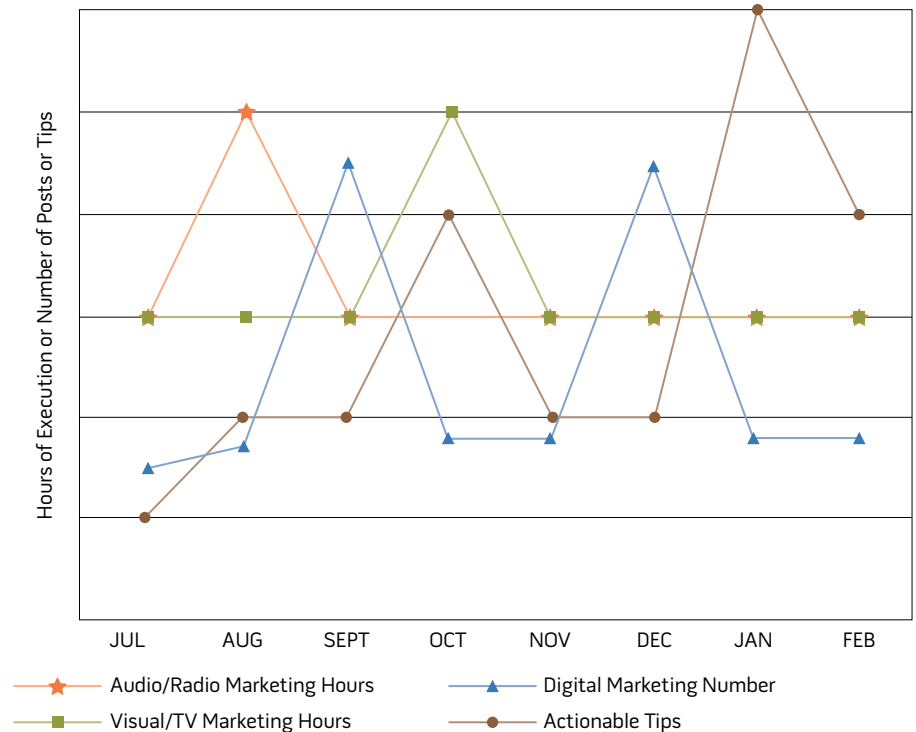
military-related uses, wherein operating efficiency is a ratio between operating profit and assets committed toward earning that profit.¹² Although ROI typically uses quantitative values, methods exist to incorporate qualitative and intangible elements into the calculations.¹³ Additionally, while there is not a mathematical substitute in military operations for operating profit, the principle is clear. Resources and assets committed are quantifiable, providing data to calculate achievement of military objectives or measurable change in the environment as the “profit” in the analysis.

When Is ROI Applicable?

Describing ROI through a data-centric, quantitative method may serve two important purposes: to enhance the commander and staff’s ability to understand the effects that committed resources are creating and to enable the commander’s decisionmaking process. ROI and its subordinate concepts are most applicable to geographic combatant commanders conducting TSC activities in their areas of responsibility. The U.S. Government invests sizable amounts of money, manpower, and time in an effort to build partner capacity (BPC), strengthen key relationships, and secure national interests.¹⁴ In these situations, it is both necessary and prudent to develop an understanding of the resources committed to U.S. objectives and evaluate the actual progress toward them. A commander can make the best resource-informed decisions when there is a more complete view of the resources applied to a problem and the outcomes achieved from and effects of those resources.

Joint planners have a variety of tools at their disposal to address wartime assessment. In general, ROI is not applicable as a basis for strategic or operational planning during wartime. In total war and limited conflict, the Relative Combat Power Assessment (RCPA) provides an evaluation of comparative friendly and enemy combat power, based on tangible and intangible factors at the onset of conflict. Throughout the conflict, combat effectiveness is determined through

Figure 1. Hypothetical Resource Optimization



Source: Danae Bowen, Data Scientist, Special Operations Command South, email to John Romito, October 9, 2019.

battle damage assessments, updated order of battle calculations, and other inputs to feed and update the initial enemy strength estimates and RCPAs for subsequent operational engagements. The combat assessment and RCPA provide the commander and staff with concrete data on enemy force assessment; these assessment tools contribute to measuring the achievement of overall campaign objectives related to the destruction of the enemy’s war-making capacity.

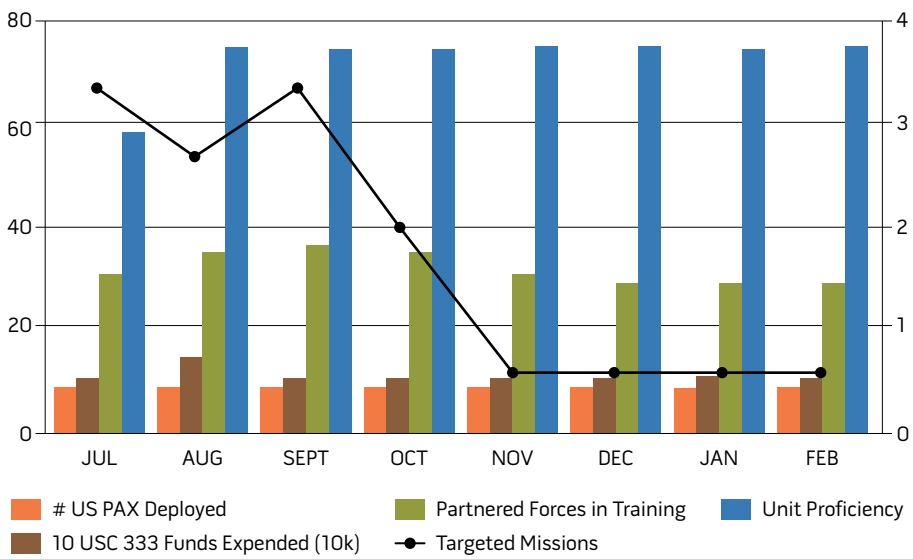
What Kind of Data?

Although ROI is a tool well suited for assessing geographic combatant commander security cooperation activities and operations to BPC, critical to its application is an understanding of what data are required and relevant for an estimation of returns. Half the data for this equation, the investment, is readily quantifiable through funding and appropriations—how much money DOD has spent on any given activity or program. The other half of the

equation, the return, has endlessly frustrated joint planners. DOD Instruction 5132.14, *Assessment, Monitoring, and Evaluation (AM&E) Policy for the Security Cooperation Enterprise*, offers a framework for returns on data selection, collection, and assessment in support of ROI: “AM&E indicates returns on investment . . . and will help DOD understand what security cooperation methods work and why, and apply lessons learned and best practices to inform security cooperation resources and policy decisions.”¹⁵

The first step of the AM&E framework is a baseline assessment leveraging qualitative, quantitative, and perceptual data sets that detail “the extent to which an allied or partner nation shares relevant strategic objectives with the United States, . . . [the] partner’s current ability to contribute to missions to address such shared objectives, [and] a detailed holistic analysis of relevant partner capabilities.”¹⁶ The AM&E framework baseline provides outputs and outcomes as key qualitative

Figure 2. Hypothetical Decision Support



Source: Danae Bowen, Data Scientist, Special Operations Command South, email to John Romito, October 9, 2019.

and increasing investment in more effective platforms. Furthermore, collection and analysis of data over time would allow the analysts to identify the point of diminishing returns, where further investment no longer corresponds to an increase in desired behaviors.

The second hypothetical example deals with decision support regarding resources applied to BPC operations. For background, in USSOUTHCOM, Central and South American nations and specific units benefit from multiyear persistent engagements. SOCSO participates in partner nation engagements, forward-deploying elements for training in various countries. To validate training program effectiveness, SOCSO conducts tactical unit assessments, largely along warfighting functions. The tactical unit assessments offer an excellent trend analysis of unit capability and capacity, and while the data are enormously valuable, they provide only an understanding of the training’s effectiveness. Without sufficient data and analysis, it is impossible to describe the ROI of U.S. Government OAI in the region in real terms.

Therefore, staff members have little data or specified analysis on which to base a recommendation to the commander when choosing to shift from persistent to periodic engagement or recommending complete termination of the engagement. The lack of data places an unnecessary burden on the commander to rely on instinct or to avoid a decision, resulting in ongoing engagement far past the point of efficacy. The current assessment process fails to provide a holistic understanding of the resources invested, the activities conducted, and the real-world application of the capabilities made possible by U.S.-led training.

In the hypothetical scenario depicted by figure 2, SOCSO captured additional data about resources invested and then compared them against broader categories of improvements to partner capability and capacity. The resulting data indicate that although resources invested (number of U.S. personnel deployed, funds expended, and partner forces trained) and partner nation unit proficiency remained the same from August to February, the

and quantitative data sets. Outputs are the actions taken by a developed partner nation’s military forces after the application of DOD resources, such as training, equipping, and so forth, which can be both qualitative and quantitative, such as the number of operations conducted by a newly trained partner force. More important, yet more difficult to quantify, are outcome data sets tracking the employment of partner nation capabilities toward the achievement of objectives. In relation to initial assessments, outcomes focus on changes in the operational environment resulting from the application of enhanced partner capability.¹⁷ Taken together, these kinds of data—baseline assessment, investment, outputs, and outcomes—supply the framework for calculating ROI within DOD BPC and security cooperation activities.

Practical Examples with Hypothetical Data Sets

Two sets of hypothetical data from a psychological operation to influence behavior and BPC operations from USSOUTHCOM Special Operations Command South (SOCSO) provide a better understanding of how ROI

analysis can inform a commander’s decisionmaking. In the first example, figure 1 represents an analysis of a hypothetical psychological operation that used multiple media platforms to advertise the existence of a tip hotline for local communities to report criminal activities and the resulting actionable tips received.¹⁸ The targeted messages were broadcast across digital, radio, and television platforms. The operational headquarters captured the number of broadcast hours per month and the amount of actionable information generated by the tip hotline. The resulting graphed data help to identify correlations between activities and the observable outcomes.

Figure 1 shows a clear correlation between digital media and elevated tip hotline activity; increased digital marketing efforts in September and December resulted in elevated tip hotline activity in October and January, respectively. Digital advertisement is more effective than television/visual or radio/audio to promote a desired behavior; therefore, the ROI for digital is greater than that for other media. Staffs can use such data to optimize use of resources—reducing investments across less effective mediums

quantity of unilateral targeted raids sharply decreased from September to November and remained consistently low through February. Therefore, even though unit proficiency is of particular importance when assessing progress in relation to partner nation units that enjoy a persistent, long-term engagement plan with U.S. forces, unit proficiency alone may be misleading. Based on this hypothetical example, SOCSO should look at shifting investments or changing to periodic engagements, as the current investment no longer produces as much return as it did in the months of July and September.

Conclusion

As staffs face the fiscal realities of constrained military budgets and the scrutiny of reshaping OAI to focus on near-peer adversaries, CCDRs must ensure that they are making the best possible investments in their campaign plans to posture themselves for success. Joint doctrine does not provide adequate guidance to the joint force on campaign plan assessments, resulting in a less than optimal understanding of the resulting impacts. Informed decisions in this regard require data and focused analysis, especially when dealing with a complex operating environment. The objective of data-driven ROI analysis is to provide the commander with a tailorable decision support matrix that guides resource commitment and enables optimization. Just as the 2017 National Security Strategy emphasized the importance of economics in Great Power competition, increasingly CCDRs are incorporating ROI into their lexicons. Subsequently, USSOUTHCOM and USAFRICOM commanders are discussing activities and results in terms of investments and returns.

The use of ROI represents a shift in how the joint force measures results, forcing a reevaluation of the methods through which it conducts assessments. There is no doctrinal approach that guides ROI inclusion in the assessment process; however, current doctrine describes important considerations that inform those conclusions and recommendations. First, and perhaps most

fundamental, assessment needs to begin with clear and measurable objectives. Joint doctrine describes theater-strategic and operational-level assessments as focused on effects, objectives, and progress toward the endstate.¹⁹ Therefore, absent clear and measurable data sets—developed from the beginning and aligned with clear and measurable objectives to drive creation of reporting requirements—accurate assessment is not feasible. Throughout the process, staffs should note that CCMD campaign plans are the target of the assessment process; war and kinetic operations have existing methodologies that provide enemy assessments as a part of an operation.

Next, the CCMD will need to refine the collection requirements to tailor the ROI analysis. CCMDs have at their disposal volumes of historical and current data as well as robust collection mechanisms that will need fine-tuning to collect the required data. The likely problem for most staffs will be the data collection and management for application of ROI, which will require being able to identify and manage the types of data necessary for ROI calculations. Once applied, data-driven analytics in combination with commander and staff experience will yield greater clarity for making task organization and mission assignment decisions. In terms of decision support, data-centric analysis may provide the commander a useful tool for assessing progress toward CCMD campaign plan TSC operations. Therefore, application of ROI principles through the collection of specified data for select problem sets is likely to provide CCMDs with tailored assessment data that will assist campaign assessment, prepare for the Secretary of Defense's anticipated fiscal austerity measures, and focus on maximizing leverage of available resources. JFQ

Notes

¹ Aaron Mehta and Joe Gould, "Night Court Comes to the Pentagon," *DefenseNews*, August 28, 2019, available at <www.defense-news.com/pentagon/2019/08/28/night-court-comes-to-the-pentagon/>.

² Ben Connable, *Embracing the Fog of War:*

Assessment and Metrics in Counterinsurgency (Santa Monica, CA: RAND, 2012), 113.

³ *Ibid.*, 131.

⁴ "Mark Twain Quotes," *Brainy Quote*, available at <www.brainyquote.com/quotes/mark_twain_163414>.

⁵ Connable, *Embracing the Fog of War*, 95.

⁶ Joint Doctrine Note 1-15, "Operation Assessment," The Joint Staff, January 15, 2015, i.

⁷ Joint Publication 5-0, *Joint Planning* (Washington, DC: The Joint Staff, June 16, 2017), VI-13, VI-20.

⁸ U.S. Government Accountability Office (GAO), *Joint Exercise Program: DOD Needs to Take Steps to Improve the Quality of Funding Data*, GAO-17-7 (Washington, DC: GAO, 2017), 10.

⁹ Chairman of the Joint Chiefs of Staff Instruction 5123.01H, *Charter of the Joint Requirements Oversight Council (JROC) and Implementation of the Joint Capabilities Integration and Development System (JCIDS)* (Washington, DC: The Joint Staff, August 31, 2018), D-17.

¹⁰ Posture Statement of Admiral Kurt W. Tidd, USN, Commander, U.S. Southern Command, Senate Armed Services Committee, 115th Congress, February 15, 2018; Statement of General Thomas D. Waldhauser, USMC, Commander, U.S. Africa Command, Senate Armed Services Committee, 116th Congress, February 7, 2019.

¹¹ Tia Benjamin, "What Is a Return on Investment in Human Resources?," *Houston Chronicle*, available at <<http://smallbusiness.chron.com/return-investment-human-resources-45590.html>>.

¹² Edward A. Ravenscroft, "Return on Investment: Fit the Method to Your Need," *Harvard Business Review* 38, no. 2 (March–April 1960), 1.

¹³ Judith A. Gebhardt, "Correlates of 'Return on Investment' and Organizational Factors: A Study of High and Low ROI Strategic Business Units and Intangibles" (Ph.D. diss., California School of Professional Psychology, 2001), xvi.

¹⁴ Angela O'Mahony et al., *Assessing, Monitoring, and Evaluating Army Security Cooperation: A Framework for Implementation* (Santa Monica, CA: RAND, 2018), available at <www.rand.org/pubs/research_reports/RR2165.html>.

¹⁵ Department of Defense Instruction 5132.14, *Assessment, Monitoring, and Evaluation Policy for the Security Cooperation Enterprise* (Washington, DC: Office of the Secretary of Defense, January 13, 2017), 12.

¹⁶ *Ibid.*, 14.

¹⁷ *Ibid.*, 15.

¹⁸ Christopher Telley, Special Operations Command South, email to John Romito, September 22, 2019.

¹⁹ *Commander's Handbook for Assessment Planning and Execution* (Suffolk, VA: The Joint Staff, September 9, 2011), vii.

Sailor directs MH-60 Sea Hawk helicopter assigned to “Warlords” of Helicopter Maritime Strike Squadron 51 as it takes off on flight deck aboard USS *McCampbell* during vertical replenishment training, East China Sea, March 27, 2020 (U.S. Navy/Markus Castaneda)



Balancing Competition with Cooperation

A Strategy to Prepare for the Chinese Dream

By Lloyd Edwards

Commander Lloyd Edwards, USN, is a SEAL and an Operations Officer at Joint Interagency Task Force–National Capital Region.

The United States has no more pressing national security imperative than formulating and implementing an effective strategy about the People’s Republic of China (PRC).

While tightening his authoritarian control at home, General Secretary Xi Jinping has leveraged China’s rising economic strength to challenge the U.S.-led liberal international order.¹ China’s growth and actions under Xi pose a threat to U.S. prosperity in the short term and its national security in the long term. For example, the PRC is leading in the development of 5G technology. This technology is expected to be the “the central nervous system” of the global economy and provide increased surveillance capacity for the PRC.² To best counter these threats and China’s reemergence, the United States needs to better position itself for long-term strategic competition that is open to cooperation on shared interests, shift back to a multilateral mindset in the Indo-Pacific region, and prepare to exploit the PRC’s vulnerabilities. This article considers these three objectives to best position the United States

to deal with an increasingly ambitious and authoritarian China and outlines the ways and means needed to achieve that end.

Although the National Security Strategy has correctly prioritized Great Power competition, it invests too heavily in building military capability now in order to fight a near-peer adversary, when it should be investing more in the technologies that can deter a powerful PRC government at the cusp of achieving its “Chinese Dream” in 2049. For example, from fiscal year (FY) 2018 to FY 2019, the U.S. Army’s total budget increased by \$13 billion, while the budget of the U.S. agency responsible for discovering and developing the disruptive and emergent technologies that will determine the outcome of future wars—the Defense Advanced Research Projects Agency (DARPA)—realized a budget increase of just one-third of a billion dollars.³ This article identifies shortfalls in current policies like this one and provides recommended steps to improve U.S. long-term strength relative to the PRC.

The art in executing this strategy will be in balancing competition with cooperation and knowing when to apply or relieve pressure. As the PRC’s post-Mao leader Deng Xiaoping once stated when defending gradual market-oriented reforms viewed unorthodox by some of his peers, “cross the river by feeling the stones.”⁴ With each incremental step, the United States should reassess the situation and its objectives, while maintaining dialogue with the PRC.

Gauging China’s Strength

The PRC’s rapid economic growth over the past 30 years has led to its reemergence as a global power, eroding U.S. relative strength and challenging the international rules-based order. The latest National Security Strategy has recognized the threat that the Chinese Communist Party (CCP) government poses to U.S. interests, but it lacks a long-term competitive strategy to prevent the PRC from becoming the leader of an illiberal international system shaped by the CCP.⁵ Moreover, the PRC and companies affiliated with the

state have become a more prominent force in the Indo-Pacific region as the CCP government, state-owned enterprises, and quasi-private entities have expanded the PRC’s influence and footprint abroad by leveraging newfound economic and technological power.

Although there seems to be bipartisan and public support for the Trump administration’s change in tone toward the PRC’s economic and geopolitical ascendance, U.S. policymakers diverge as to how urgent a threat the CCP government is across a range of issues and how the United States should respond. Is the PRC destined to be the preeminent global superpower? Has its military’s modernization turned it into a peer capable of joint operations like those of the United States? Or is China’s slowing gross domestic product (GDP) growth, demographic downturn, and state-owned debt indicative of an economy destined for a debilitating crisis, justifying a wait-and-see approach? The answers to these questions are critical to understanding how the United States should respond to the PRC’s globally oriented actions, such as the Belt and Road Initiative (BRI).

China’s economic and technological strength is readily apparent, and the sheer size of the country and scale of its development are staggering. The subways are efficient, clean, and easy to use. Public transit rails in China cover almost five times as much land as those in the United States, and its high-speed trains travel more than 100 kilometers per hour faster than U.S. models.⁶ Teslas, Lamborghinis, and other luxury cars jam the litter-free highway to the Beijing airport, and orderly trees flank this pristine road. Cameras posted everywhere watch everything; videos show how the monitoring leads to a quick state reaction, from bringing a mugger to justice to saving a person from a heart attack.

Of course, there is the flipside. Those same cameras loom over Tiananmen Square, where tour guides warn their patrons as they get off the bus not to ask questions about 1989. The local news station goes black when a reporter suggests that some recent protests were organized via WeChat. Faces noticeably

dropped when I asked about the Social Credit System. Countless finished apartment buildings from Beijing to Guangzhou have no laundry outside their windows or lights on inside their rooms, indicating a potential future housing crisis. The poverty and income inequality in the countryside—institutionalized by an internal passport *hukou* system that prevents rural citizens from buying land or sending children to schools in wealthier cities—is readily apparent, even from China’s high-speed rails.⁷

This dichotomy is one of the two challenges to formulating a cohesive national security strategy toward the PRC and its ruling CCP. First, widespread corruption makes it difficult for us to gauge the true strength of the PRC economy; in place is a system that incentivizes provinces to inflate their reported GDP, and this obscurity includes factors such as pollution and strength of the housing market.

The second key challenge is that the U.S. and world economies are interdependent with the PRC economy. Any strategy must consider how a negative impact on the PRC economy would impact the United States and its allies and partners. Underlying all the below recommendations is this concern and a need to proceed incrementally while maintaining dialogue with the PRC leadership to resolve issues and seize opportunities that arise.

In addition to these challenges, there are five crucial assumptions to the following strategy. First, as the PRC gains strength, Xi and the CCP will seek greater influence to lead in the region and in the world, including shaping the international order in the PRC’s illiberal mold. Second, although the PRC’s GDP growth has slowed, the strategy assumes that China will have continued growth and avoid a debilitating economic crisis. Third, the strategy assumes that the PRC does not want to start a war with the United States today but that it will become increasingly aggressive toward the United States, with direct confrontation possible around 2049. Fourth, although some restrictions on trade policy may be implemented, the United States and its



Sailor utilizes stadimeter on bridge wing aboard USS *McCampbell* prior to replenishment-at-sea with USNS *Carl Brashear*, South China Sea, March 12, 2020 (U.S. Navy/Markus Castaneda)

allies and partners will continue to rely on the stability of China's economy and markets. Finally, this strategy assumes that the Congressional Budget Office's projections of U.S. fiscal health and outlook are accurate, constraining means to compete with the PRC economically, militarily, and influentially.

Threats and Opportunities

The PRC's efforts to advance unfair trade practices, undermine the U.S. dollar's strength, support intellectual property theft, engage in debt diplomacy, coordinate cyber attacks, and conduct aggressive actions in the South China Sea pose near-term threats to American prosperity. However, it is the long-term threat to U.S. security through hybrid warfare and direct confrontation that needs a viable strategy. Although the

CCP's intentions are closely held, the aim of Xi's Chinese Dream for 2049, marking the 100th anniversary of the founding of the People's Republic of China, is evident in his speeches and policies, such as the BRI. Xi's goal is a rejuvenated, modernized, and fully developed nation that shapes the global system—just as China did throughout much of the first millennium CE.⁸ Then China considered itself to be “the Middle Kingdom,” in which its emperor, as the divine head of a sovereign world government, was responsible for “All Under Heaven.”⁹

Whether Xi intends to replace, displace, or accept the U.S.-led international order is debatable; however, in addition to building militarized islands in the South China Sea and threatening Japan's territorial claims in the East China Sea,

the PRC's BRI efforts to establish overseas military bases and use state-owned enterprises to build and maintain ports and infrastructure throughout Europe, the Middle East, and Africa signal that Xi clearly has growing global ambitions. The United States cannot afford to fall for China's historical subtlety anymore and should assume that, given further economic growth, the CCP will continue to seek greater global influence.

A PRC-led order would favor the CCP government in terms of agenda-setting power, leading investment rules, technology standards, and market access. It would weaken U.S. alliances and international institutions and could lead to the United States being supplanted by the PRC as the de facto global leader. To address this threat, the United States needs to extend its time horizon and develop

a strategy that prevents the PRC from becoming the preeminent world leader that shapes the international system to its worldview and potentially threatens U.S. national security with direct military confrontation.

That said, China's actions also create opportunities for the United States. Because the CCP has jailed more than a million Uighurs; repressed basic freedoms of the press, religion, and free speech; and fostered corruption at all levels, it is vulnerable to countermessaging and international backlash.¹⁰ China's 1.4 billion people offer a significant marketplace for U.S. companies, allies, and partners.¹¹ Illiberal trade policies, including intellectual property theft and predatory loans, have frustrated many nations, setting the conditions for building a coalition against the PRC's behavior. Finally, because the PRC has significant influence in the Indo-Pacific region, it is a powerful partner on regional issues, such as the stability of the Korean Peninsula and Afghanistan.

To address these threats and leverage these opportunities, the strategy below has three main objectives. First, the United States must improve its ability to strategically compete with China in the long term. This means taking additional actions now—via a distinct military competitive advantage as well as new policies that will defend the United States from China's unfair trade practices—to deter PRC aggression through 2049. Second, the United States needs to shift back to a multilateral mindset when it comes to dealing with Beijing. It needs to lead a coalition in the Indo-Pacific region that sets rules and norms for an international order and can pressure the CCP to follow them. Finally, when needed, the United States should be prepared to exploit vulnerabilities in the PRC's military and political systems in order to restrict its relative power increase. Critical to this objective will be establishing a communications line to reduce the risk of miscalculation and escalatory conflict.

Regional and Domestic Context

On average, China's GDP has grown 10 percent per year over the past 30 years, making the PRC the predominant

economic power in the Indo-Pacific region.¹² By 2030, it is projected to have the world's largest economy with a GDP of \$26 trillion—surpassing that of the United States, which is projected to reach \$25.2 trillion that year.¹³ Throughout East and South Asia, the PRC leverages its status as the primary trading partner to increase its influence throughout the region; it uses such initiatives as the Asian Infrastructure Investment Bank and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership.¹⁴

In addition, Xi's BRI encompasses more than 60 countries, and estimates of its investments range from \$1 trillion to \$8 trillion.¹⁵ The terms of these lending agreements are often shrouded in secrecy, and defaults can lead to strategic gains—when Sri Lanka could not repay a Chinese Export-Import Bank loan, it essentially ceded sovereignty over a port for 99 years.¹⁶ The PRC is doubling down on the BRI and also moving to protect its assets abroad by building military bases in Djibouti and Tajikistan.

Separate from the BRI, the PRC is asserting its claims to almost all of the South China Sea through building militarized man-made islands and challenging the territorial claims of Japan, the Philippines, Vietnam, and other neighbors, while claiming ownership of international waters. Its military's threatening behavior toward U.S. aircraft and ships in the region is concerning, as it violates freedom of navigation laws and could lead to an incident, such as U.S. and PRC ships colliding in the Pacific Ocean. Xi is also steadily increasing the People's Liberation Army budget, including a recent \$151.7 billion modernization initiative.¹⁷

The PRC's intellectual property theft, currency manipulation, forced technology transfers, and nontariff barriers of entry to its markets have sparked backlash from the international community and a recent trade war with the United States. This behavior has caused additional concern, as Huawei—a state-subsidized PRC-based telecommunications company controlled by a CCP-affiliated employees

union—currently leads the world in 5G network technology.¹⁸ Many countries fear that Xi could direct Huawei to use its telecommunications infrastructure for surveillance or sabotage, given his increasingly authoritarian control.¹⁹ Moreover, the PRC's National Intelligence Law requires Huawei to “support, assist, and cooperate with” China's intelligence agencies, despite Huawei's assertions that this is not the case.²⁰ China is also anticipated to be the world leader in developing artificial intelligence (AI) technology and is investing heavily in other emerging and disruptive technologies. Then-Director of National Intelligence Dan Coats reported in 2018 that China was continuing its espionage and cyber operations against the United States, as well as its pursuit of antisatellite weapons.²¹

However, the PRC also has significant vulnerabilities and domestic problems. Xi and the Politburo Standing Committee are primarily focused on staying in power, which means preventing instability, like last year's protests in Hong Kong, through political control and economic strength. But China's aging population, gender imbalance, lack of basic liberties, rising debt levels, water scarcity, and pollution are just some of the challenges that could lead to disruption or insurrection. For example, the Chinese Academy of Social Sciences has reported on a looming demographic crisis as a result of the One Child policy.²² This demographic downturn will result in the ratio of workers to retirees flipping from two to one today, to one to two by 2050, placing a huge strain on the economy and workforce.

In the United States, there is general consensus that President Richard Nixon's rapprochement with China has failed to convert the authoritarian regime into a more democratic nation that respects the liberal international rules-based order.²³ Last year's National Security Strategy has changed the Federal Government's tone, which now focuses on Great Power competition with China and Russia. The National Security Strategy also recognizes that the U.S. competitive military edge is eroding.²⁴ To address this issue, the FY 2018

defense budget was increased to \$659 billion in order to make technological investments in the sea, air, cyber, and space domains.²⁵ However, the budget is still too weighted toward building capacity (for example, its expenditures on modernizing Brigade Combat Teams and increasing the number of Soldiers in the Army heavily outweigh funds allocated to organizations such as DARPA, which is responsible for discovering and developing disruptive technologies that will determine the outcome of future wars).

The United States is also facing increasing Federal deficits due to mandatory spending outlays and interest payments, which will continue to crowd out defense spending. In fact, overall annual U.S. GDP growth shrank from 2.9 percent in 2018 to 2.3 percent in 2019.²⁶

Regarding the Indo-Pacific region, the United States has withdrawn from Trans-Pacific Partnership talks and chosen to engage in bilateral negotiations to resolve trade disputes. President Donald Trump's base is largely against globalization and the free trade policies of previous administrations, reflecting a rise in populism that can be seen in other democracies throughout the world. In addition, it will be difficult for U.S. leadership to sustain bipartisan and domestic support for this long-term strategy, especially considering the tendency to shift focus and resources from crisis to crisis. This competition for resources will increase and constrain means as U.S. debt restricts defense spending. Regional partners, such as Taiwan, Vietnam, Japan, and Australia, also have little capacity to counter the PRC militarily. Although it may be difficult for U.S. political leadership to build bipartisan, domestic support for sustained diplomatic coordination and pooling of resources, more multilateral efforts are crucial to mitigating threats posed by the PRC going forward.

This executive, congressional, and diplomatic leadership will be critical in formulating and ratifying treaties and agreements, establishing the rules of the road needed in the cyber and space domains, and fortifying maritime international principles and laws. Persuading the U.S. public and the international

community to commit to a long-term strategy will require skilled American leadership that can balance a tone of cooperation with pursuit of a competitive strategy toward the PRC.

Despite stealing trade secrets and intellectual property, the CCP has been persistent in its message that it views the PRC's relationship with the United States as win-win. President Trump has appropriately changed the tone toward China to expose its unfair trade practices; however, going forward, a firm yet cooperative tone should be pursued in order to persuade the world that the United States is the responsible leader in the relationship. In the end, the United States will need to lead in balancing the levers that will contain CCP global influence and bad behavior, while encouraging the PRC government's responsible participation in regional and world issues in order to leverage its strength and influence. This will require persistent diplomatic engagement, careful orchestration of the instruments of power, and U.S. leadership and engagement in international institutions.

Deterring China in 2049

To deter the PRC in 2049, the executive branch should increase investments in research and development and funding of DARPA to maintain the U.S. technological edge and lead the world in fostering emerging and disruptive technologies, such as AI. From FY 2018 to FY 2019, the U.S. Army's base budget increased by \$9 billion, and its overseas contingency operations funds increased by \$4 billion. A large portion of this money was used to modernize Brigade Combat Teams and increase the Army's personnel by 4,000.²⁷ However, DARPA's budget increased by only \$300 million, and its increase for FY 2020 is projected to be only \$100 million.²⁸ This implies that the United States is preparing for conflict with a near-peer adversary by investing in capability today; however, the President and Congress should extend their time horizon when considering the threat from China and plan for direct confrontation in 20 to 30 years, when the U.S.

competitive advantage will have eroded enough to prevent deterrence. To better compete with China and prepare for this future, DARPA's budget should be doubled to \$7 billion.

In the meantime, the Department of Defense (DOD) should prioritize its current spending on hybrid and gray zone capabilities and begin the long process of transforming the military so that it can best defeat the PRC's military capabilities, should direct confrontation occur. The PRC has proved its ability to conduct operations short of military conflict, and DOD should focus on competing in this zone by shifting more funding to improving special operations forces and cyber, information, and space capabilities.²⁹ The U.S. Marine Corps recently proposed a 10-year "force design" that cuts personnel, artillery, aircraft, and all tanks in order to invest in high-tech commando-like groups of 50 to 150 Marines who, armed with drones, rockets, and anti-ship missiles, can hop between islands, allowing U.S. aircraft carriers to stay outside the threat of PRC missiles.³⁰ Although the Navy and Congress still need to be persuaded, it is this type of revolutionary thinking and willingness to change that is needed to best address the PRC's military capabilities.

The Treasury Department and DOD should also further leverage relationships with the private sector and incentivize businesses to invest in research and development. This can be done by providing tax incentives for businesses that invest in technologies critical to the United States, such as AI, aerospace, cyber, and space. Venture capitalists should be given tax incentives for making investments in these areas. The executive branch should also work with the private sector and Congress to drastically increase private-sector research and development in aeronautics and transportation, communications, digital technologies, and biotechnologies, while ensuring that newly created knowledge is not exported to the PRC.

To leverage the information instrument of power, the executive branch should establish an information agency, similar to the U.S. Information Agency



Navy helicopter tactical aircrewman 3rd class operates combat systems on MH-60R Sea Hawk assigned to “Wolf Pack” of Helicopter Maritime Strike Squadron 75, South China Sea, April 18, 2020 (U.S. Navy/Nicholas V. Huynh)

that was dissolved in 1999, to focus on advocating for American interests, controlling the narrative toward China, and exposing China’s behavior when appropriate. It should work with the State Department and DOD to ensure that the messaging is consistent and that it reaches the lowest levels of U.S. diplomats and military junior officers.³¹

To improve the Nation’s defenses, the Department of Justice should make it illegal for Americans to participate in any of China’s “talent programs.” These programs have been used to steal technology secrets, as in the case of Xiaoqing Zheng, who worked for GE and was convicted of espionage. The Department of Justice should also examine how to limit the widespread use of top legal experts and lobbyists by CCP-affiliated businesses,

such as Huawei, seeking to influence the U.S. policymaking process in a way that benefits the PRC and puts U.S. national security interests at risk.³² Finally, the Department of State should be given more funding to investigate and restrict visas, when appropriate, for Chinese students studying in the United States.³³

To further guard the United States against intellectual property (IP) theft and forced technology transfers, the Departments of Commerce and Treasury should produce guidelines for U.S. companies warning of the threat to working with China and advising firms on how to negotiate terms so that they are not unknowingly agreeing to IP transfers. Congress should continue to support and increase funding to the Committee on Foreign Investments in

the United States, which reviews foreign direct investments in the United States for national security concerns.³⁴ Finally, it is imperative that national security concerns are kept separate from prosperity concerns. In 2018, President Trump tweeted that he would intervene in a Justice Department case against Huawei if it meant he could get a better trade deal with the PRC. This conflates national security and prosperity concerns when they should be kept separate.³⁵

Maximizing Pressure Through Multilateralism

The executive branch and Congress should also work together to rejoin the Trans-Pacific Partnership (or Comprehensive and Progressive Agreement for Trans-Pacific Partnership, as it is referred

to now) to maximize U.S. ability to pressure the PRC in the future. In addition to preventing trade diversion from the United States, this will reinforce U.S. leadership in the region and help avoid a PRC-led economic order from achieving greater political and security influence in the region.³⁶

With phase one of the U.S.-China trade deal signed, there has been optimism that an end to the trade dispute is near.³⁷ However, if future talks fail or the PRC does not adhere to the terms of the phase one deal, the President should hold a joint summit on the PRC's unfair trade practices with allies and regional partners to build a coalition and bring multilateral pressure on the PRC to follow trade norms.

To better counter the PRC, DOD should shift defense resources, such as funding and intelligence, surveillance, and reconnaissance assets, from the Middle East to the Indo-Pacific region. In addition, the military should increase joint multinational exercises in the region, intelligence-sharing, and contingency planning with partners and allies to strengthen a multilateral approach in the region.

Leveraging Vulnerabilities

Before discussing the PRC's vulnerabilities that the United States could take advantage of, if needed, it is important to note how imperative it is that the United States establish an effective and reliable communication line to off-ramp potential escalatory conflict and prevent miscalculations. President Trump should address this with General Secretary Xi and then delegate his intent to the Chairman of the Joint Chiefs of Staff, the Commander of U.S. Indo-Pacific Command, and the U.S. Ambassador to China. In addition to reducing risk, this communication line should be used to discuss the PRC's actions in the South China Sea, its red lines on Taiwan, a way ahead to denuclearize North Korea, and other areas of common interest, such as addressing climate change and preventing pandemics.

In conjunction with a new type of U.S. Information Agency, DOD, and the

U.S. Intelligence Community, the United States should be prepared to shape the Chinese people's and international community's perception of the CCP, highlighting its debt diplomacy practices used to support the BRI; human rights violations (Uighurs); disregard for neighbors in its riparian policies (Brahmaputra and Mekong rivers); and suppression of the press, religion, and population through Orwellian surveillance. These information operations should be done covertly and through proxies when needed, leveraging disillusioned populations within China.

With backing from predominantly Muslim countries, such as Turkey, the United States should persuade Saudi Arabia to issue a fatwa against China's treatment of the Uighurs. Unfortunately, it seems that Saudi Arabia, Egypt, and Indonesia have prioritized their economic ties to China over concern for human rights abuses.³⁸ However, further exposing and describing these abuses should help bring international attention to and backlash against the CCP and incentivize Saudi Arabia to formally speak out against the treatment of Muslims in China.

In conjunction with the defenses already mentioned, the United States should also tighten regulations on foreign direct investment from China into the United States and freeze or seize CCP oligarchy and elite assets in the United States, if needed. The United States should also require universities, think tanks, and media companies to report any Chinese government funding.

Finally, the State and Treasury Departments should assess all the countries that the PRC is investing in with respect to BRI and help them develop capacity to assess whether BRI development deals risk locking them into a debt trap, such as experienced by Sri Lanka. The United States should then evaluate where it should compete against the PRC in areas that have a direct impact on its interests and where there is potential for cooperation. The PRC's extension abroad also presents a vulnerability that should be evaluated by U.S. intelligence agencies in case there is a future need to exploit those weaknesses.

Risks and Viability

Presidential and congressional elections and uncertain policy preferences pose a risk to a long-term successful strategy, such as the one set forth above that prioritizes competition and cooperation with China and further engagement in the Indo-Pacific region. There is bipartisan political support for President Trump's change in tone toward the PRC, but sustaining this support is necessary to persistently allocate sufficient resources and maintain the public's attention on an increasingly powerful and influential PRC. The United States must also avoid conflicts that are not a direct threat to its national security and eschew shifting resources to other more near-term crises. In addition, greater U.S. presence in the region increases the chances of incidents and miscalculations, which could result in escalatory conflict. As previously mentioned, a stable and established line of communication between key PRC and U.S. leaders would help mitigate this risk.

Regarding cost, this strategy will be less costly over time, as it will deter war against China in the future, and it leverages allies and partners to share the burden of dealing with the PRC's aggressive behavior now. This makes the strategy more feasible and desirable for U.S. interests in the long term. In addition, the increased investments in research and development will have positive spillover effects for the rest of society and improve the American technological edge over other potential adversaries. Finally, if China's GDP does not continue to grow, or if the CCP shifts its attention internally to deal with domestic problems, the United States will have the flexibility to shift resources to address other challenges, while reaping the benefits of technological progress from increased investments in research and development.

Conclusion

It is unclear what General Secretary Xi Jinping and the CCP's intentions are for 2049, or if the PRC will be able to avoid an economic crisis and continue to grow its GDP. The CCP may never realize its Chinese Dream, or it may

decide to focus on the PRC's internal issues and recede from the international stage; however, this is a huge assumption that, if wrong, could lead to the United States being horribly underprepared for military confrontation in 2049. To counter this threat, the United States needs to better position itself for long-term strategic competition that is open to cooperation on shared interests, shift back to a multilateral mindset in the Indo-Pacific region, and be ready to exploit the PRC's vulnerabilities. This strategy is a cost-effective means of accomplishing that by shifting funds from building military capability now to investments in innovation and technology. It can also leverage allies and partners overseas and institute some policies that will better defend the United States from intellectual property theft and unfair trade practices.

The critical elements to this strategy will be maintaining a commitment to competition in technological innovation and timing—knowing when to apply or relieve pressure on the PRC and when to seize opportunities for cooperation. After each move, the United States should reassess its objectives and strive to influence the PRC through consistent dialogue on shared interests. It will take strong U.S. leadership to discern these moments and achieve that dialogue. Implementing this strategy will help position the United States for 2049, but getting those moments right will determine the relationship—the progress one which all else depends. JFQ

Notes

¹ Kate O' Keefe and Katy Stech Ferek, "Stop Calling China's Xi Jinping 'President,' U.S. Panel Says," *Wall Street Journal*, November 14, 2019.

² "Open Standards, Not Sanctions, Are America's Best Weapon Against Huawei," *The Economist*, April 8, 2020.

³ Jen Judson, "Army's \$182 Billion FY19 Budget Request Seeks to Fill Capability Gaps," *Defense News*, February 12, 2018; Department of Defense (DOD) Investment Budget Search database, available at <<https://apps.dtic.mil/dodinvestment/#/>>.

⁴ "The Long March to Capitalism," *The Economist*, September 11, 1997.

⁵ *National Security Strategy of the United States of America* (Washington, DC: The White House, December 2017).

⁶ Paris Marx, "China's High-Speed Train Map Puts U.S. Transportation to Shame," *Radical Urbanist*, January 22, 2018.

⁷ Dexter Roberts, "Don't Count on China to Lift the Global Economy," *Foreign Affairs*, April 8, 2020.

⁸ Charlie Campbell, "Xi Jinping's Party Congress Speech Leaves No Doubts over His Leadership Role," *Time*, October 18, 2017.

⁹ Henry Kissinger, *World Order* (New York: Penguin Books, 2014), 213.

¹⁰ Stephanie Nebehay, "UN Calls on China to Free Uighurs from Alleged Re-Education Camps," Reuters, August 30, 2018.

¹¹ "China's Population Set to Peak at 1.44 Billion in 2029—Government Report," Reuters, January 5, 2019.

¹² Jennifer M. Rudolph and Michael Szonyi, *The China Questions: Critical Insights into a Rising Power* (Cambridge, MA: Harvard University Press, 2018), 119.

¹³ Simon Kennedy, "China Will Overtake the U.S. in Less than 15 Years, HSBC Says," *Bloomberg*, September 25, 2018.

¹⁴ Zachary Torrey, "TPP 2.0: The Deal Without the U.S.," *The Diplomat*, February 3, 2018.

¹⁵ Jonathan E. Hillman, *How Big Is China's Belt and Road?* (Washington, DC: Center for Strategic and International Studies, April 3, 2018).

¹⁶ "China's Debt-Trap Diplomacy," *National Review*, July 3, 2018.

¹⁷ *2017 Report to Congress of the U.S.-China Economic and Security Review Commission* (Washington, DC: U.S.-China Economic and Security Review Commission, November 2017), 8.

¹⁸ Li Tao, "Who Controls Huawei? Chinese Telecoms Leader's Ownership Structure Explained in more Detail," *South China Morning Post* (Hong Kong), April 29, 2019.

¹⁹ Brian Fung, "How China's Huawei Took the Lead over U.S. Companies in 5G Technology," *Washington Post*, April 10, 2019.

²⁰ Lindsay Maizland and Andrew Chatzky, "Huawei: China's Controversial Tech Giant," Council on Foreign Relations, last updated February 12, 2020.

²¹ Daniel R. Coats, *Worldwide Threat Assessment of the U.S. Intelligence Community* (Washington, DC: Office of the Director of National Intelligence, February 13, 2018).

²² Steven Lee Myers, Jin Wu, and Claire Fu, "China's Looming Crisis: A Shrinking Population," *New York Times*, January 21, 2019.

²³ Henry Kissinger, *Diplomacy* (New York: Simon and Schuster, 1994), 729.

²⁴ *National Security Strategy of the United States of America*.

²⁵ Rodney Frelinghuysen, *Fiscal Year 2018 Defense Bill*, House Appropriations Committee, March 21, 2018.

²⁶ "Economic Growth Was Weaker in 2019 than in 2018," Peter G. Peterson Foundation, January 31, 2020, available at <www.pgpf.org/blog/2020/01/economic-growth-was-weaker-in-2019-than-in-2018>.

²⁷ Judson, "Army's \$182 Billion FY19 Budget Request Seeks to Fill Capability Gaps."

²⁸ DOD Investment Budget Search database.

²⁹ Frank G. Hoffman, "Examining Complex Forms of Conflict: Gray Zone and Hybrid Challenges," *PRISM* 7, no. 4 (November 2018).

³⁰ "The U.S. Marine Corps Sheds Its Tanks and Returns to Its Naval Roots," *The Economist*, April 2, 2020.

³¹ Carlos Roa, "Time to Restore the U.S. Information Agency," *The National Interest*, February 20, 2017.

³² Stu Woo, "Huawei's New Playbook in Washington: Drop PR and Hire Lawyers," *Wall Street Journal*, December 17, 2018; Mike Scarcella, "Sidley Austin Augments Huawei Work with New U.S. Lobbying Notice," *The National Law Journal*, August 12, 2019.

³³ Dandan Li and Peter Martin, "Spy Fears Prompt China to Censor Its Own Recruitment Drive," *Bloomberg*, September 19, 2018.

³⁴ Reid Whitten, "Investments with Borders: CFIUS-Style Foreign Investment Review Goes Global," *The National Law Review*, April 9, 2019.

³⁵ Justin Sink, "Trump Says He'd Intervene in Huawei Case to Get China Deal," *Bloomberg*, December 11, 2018.

³⁶ Charlotte Greenfield and Fathin Ungku, "Trump Says U.S. Could Rejoin TPP If Deal Improved. How Hard Would It Be?" Reuters, April 16, 2018.

³⁷ Alan Rappeport, "Mnuchin Says China Trade Talks Are Nearing Final Round," *New York Times*, April 13, 2019.

³⁸ Lindsay Maizland, "China's Repression of Uighurs in Xinjiang," Council on Foreign Relations, April 11, 2019.

Battle of Blenheim, oil on canvas, by Joshua Ross, Jr., ca. 1715 (Courtesy Government Art Collection, London)



The Duke of Marlborough and the Paradox of Campaigning in Long Wars

By Gordon Muir

The Duke of Marlborough was a commander for the ages. For 10 campaigns during the War of the

Spanish Succession, stretching from 1702 to 1711, he was never defeated on the field of battle. However, the war ended in the failure of the Grand Alliance's war aim to prevent Louis XIV's Bourbon dynasty from taking the throne of Spain. Marlborough's campaign in 1711 provides a potent

source of understanding for joint military commanders and practitioners on the complexities of campaigning. Using the U.S. Joint Concept for Integrated Campaigning (JCIC), this article argues that the Duke of Marlborough adhered to many of the sound practices and concepts in JCIC but ultimately

Major Gordon Muir is an Infantry Officer in the British Army with the Royal Regiment of Scotland.

failed in two core areas by 1711.¹ First, he did not adequately adapt his campaign to changed circumstances and continued to seek decisive effect and a military outcome when neither was possible. Second, Marlborough ceased to have honest and open dialogue with his newly elected political masters. These two failings could significantly contribute to defeat and disaster for any military commander. However, there is an underlying paradox to Marlborough's campaign: Despite these failures, he secured the elusive endstate of an advantageous political settlement. Marlborough's last campaign in 1711 illustrates the paradox of achieving national political advantage through military strategic failure.²

This article uses the JCIC as a handrail to discuss Marlborough's exploits and extrapolate lessons for the joint force. It examines the four interrelated elements of campaigning and discusses certain concepts such as the competition continuum, demonstrating that there is great historical continuity to not only what constitutes sound campaigning but also a warning that the complexities the JCIC identifies can lead to nonlinear outcomes. There is also an inherent risk of transposing the Duke of Marlborough's exploits to the modern day. His successes are over 300 years old and certain aspects of integrated campaigning simply are not applicable. Concepts such as multidomain and the interagency community, among others, are not discussed and are out of scope for this discussion. Nevertheless, Marlborough's experiences in his long war continue to resonate during a period of ongoing operations in the Middle East and Afghanistan.

The Continuing Relevance of 1711

The Duke of Marlborough's campaign in 1711 is one of the best cases for the study of campaigning in long wars amid drifting political aims. Marlborough suffered the changing political landscape and the effects it was having on operations. His diminished personal and political power after 9 years of campaigning meant his role more closely resembled that of a modern

commander. Therefore, the campaign of 1711 and Marlborough remain relevant due to three factors.

First, there is a persistent relationship between war and politics. Marlborough was more than a general and wielded greater political power than many of today's generals. Yet due to England's burgeoning representative political control, this power was always constrained and at risk. He was not an absolute ruler and military commander like Napoleon Bonaparte or Frederick the Great; consequently, his role in the dialogue with political leaders and subsequent creation and execution of a campaign are worthy of analysis. Second, the operational context of Marlborough's campaigns is pertinent in the contemporary world. Joint, multinational operations subservient to evolving political aims and coalition intricacies are not modern or emerging phenomena. Marlborough dealt with these considerations continuously in the War of the Spanish Succession. Third, the war was *long*, 11 years in duration—300 years before the term was coined to explain the struggles in Afghanistan. The United Kingdom's recent experiences are indicative of long war political expediency. Involvement in Afghanistan began because of terrorism and al Qaeda, but it morphed into a drugs eradication quest, then a training mission—all while pursuing Western normative ideals. Modern-day joint force practitioners have much to learn from this general who served at the turn of the 18th century.

Understanding 1711 Through the Competition Continuum

According to the JCIC, a common understanding is the “unifying start point” for campaigning.³ When war broke out in 1702 against France and Louis XIV, England was a small land power. Cooperation was therefore vital for the subsequent prosecution of the war. However, as General Rupert Smith stated 300 years later, “The glue that holds a coalition together is a common enemy, not a common desired political outcome.”⁴ This was especially true for the Grand Alliance that united against Louis XIV. The succession of the dying

and childless Charles II of Spain reinvigorated the alliance in 1701 after he bequeathed his throne to Philip, Duke of Anjou. Louis XIV's grandson had the Spanish inheritance in his grasp, and France's strategic position therefore became “exorbitant.”⁵

European powers were in a constant state of competition during this period, utilizing the full spectrum of competition mechanisms outlined in the JCIC, yet war was by no means inevitable. However, Charles II's revelation was followed by Louis's hubris. Following aggressive maneuvers in Flanders, Louis recognized the Catholic heir to the English throne in what Correlli Barnett describes as “one of the more notable achievements of Louis XIV's statecraft.” This blatant threat to the Protestant succession united all but the fervent Jacobite sympathizers in England. It was “a distinct and public declaration of war, not only against the reigning monarch, but [also] against the established religion of Great Britain.”⁶

The unifying starting point and aims of the Grand Alliance were to control French power and partition the Spanish inheritance to this effect. An alliance treaty clause articulated this clearly: “The sovereignty of Spain and its Indian possessions should never appertain to any prince who should be, at the same time Emperor or King of the Romans, or either King or Dauphin of France.”⁷ The religious struggle is highlighted frequently by many sources. However, this was not the only, nor overriding, consideration. Alliances were made irrespective of religious beliefs, rooted, as the clause suggests, in preserving the balance of power.

As the designated allied commander, the Duke of Marlborough fully understood the political concerns and need for cooperation. Furthermore, he was at the forefront of coalition negotiations. His political and courtier skills were in evidence as he sought to find consensus. Marlborough thus was “proclaimed Ambassador-Extra-ordinary and Plenipotentiary, with the right to ‘conceive treaties without reference, if need be, to King or Parliament.’”⁸ This gave him tremendous power, but he also

needed to remember that the English narrative for war was unique and the English had their own desired political outcomes.

English involvement in the war was not solely due to religion or balance of power. According to Brendan Simms, the defense of England, which rested in the security of Flanders, stood above economic or religious factors. France was the major threat to Europe. A union with Spain would mean the already-dominant French power would become overwhelming. England in the war acted to oppose the French as it threatened to gain a “position of predominance” in the European system, which threatened England’s liberties, trade, and very existence.⁹

Campaigning in a State of Cooperation

The JCIC recognizes the need to maintain the coalition during integrated campaigning. It further stresses the transactional nature of the relationship, a facet of cooperation that Marlborough also endured.¹⁰ As 1702 got under way, England along with the rest of the Grand Alliance sought to defeat and consequently “impose [their] desired policy objectives upon” the French.¹¹ However, Marlborough’s approach to accomplish the defeat was at odds with the wider coalition. His campaigns of 1702 and 1703 showed not only his skill at maneuver but also the struggles he endured fighting in a coalition. The coalition was a necessity for England, yet the understandable, although inherently contrasting, views and acceptance of risk led to missed opportunities. Frank Taylor describes the years of 1702 and 1703 as the most divisive of the war. However, alliance concerns cannot be idly dismissed; they too had pertinent strategic considerations and Marlborough was on his first independent command. As David Chandler states of missed opportunities and the valid obstinacy of the United Provinces in the alliance in particular, “Here we see the conflict between military and political priorities; an aspect of these ten campaigns which will all too often recur.

As a soldier Marlborough was wrong to throw up the opportunity; as a statesman, he chose the right course.”¹²

That is not to say Marlborough and the alliance were unsuccessful in this approach, merely that campaigning in a state of cooperation leads to compromise and frustration and requires significant diplomatic skill. The root of Marlborough’s personal frustration lay in his design and construct of the campaigns.

Marlborough’s Campaign Design and Construct

The Duke of Marlborough’s outlook on warfare and visualization of campaigning was to destroy the enemy through battle and a decisive strike. His approach caused friction within the coalition and was firmly at odds with the prevailing consensus of warfare. The balance between “risk tolerance and willingness to expend resources”¹³ was acute in Europe as battles were costly, robbing European rulers of the military means to hold onto power. Warfare was attritional and diplomatically focused, with “slow operational tempo” and short campaign seasons. Indeed, Marlborough conducted far more sieges than battles, and although he “displayed [warfare’s] full potential,” he also, as John Lynn argues, represents warfare’s “abiding limitations.”¹⁴

Moreover, decisive strategic victory, as it is today, was an oxymoron, an anomaly incongruent with warfare at this time. This was not through preference, a lack of campaign visualization, or seeking to change this paradigm by Marlborough.¹⁵ Blenheim in 1704 represented this illusion of decisiveness. In one of the greatest campaigns in the history of war, Marlborough achieved a decisive tactical victory, with the clear strategic aim of keeping Austria in the Grand Alliance. Furthermore, in defeating the perceived invincible French, he heralded a new era in European history. However, it was not enough to secure a political settlement, and the war continued. He followed Blenheim with several other great tactical victories: Ramillies (1706), Oudenaarde (1708), and the Pyrrhic

victory at Malplaquet (1709). The JCIC alludes to this conundrum of military victories when it states that “tactical and operational successes do not possess intrinsic value but are worthwhile only to the extent that they support larger policy aims.”¹⁶ Ultimately, although each battle gave strategic advantage to the allies, and in the case of Blenheim certainly supported the larger policy, none proved decisive in ending the war.

Changing Conditions Over Time

The war continued not only as a result of warfare’s characteristics or the interstate order in Europe; the conditions also evolved in three core areas by 1711. The JCIC notes the complexities caused by changing conditions but should place greater emphasis on the profound effect they can have. Marlborough suffered at the hands of a series of far-reaching effects caused by the erosion of the Grand Alliance’s war aim, the primacy of national political outcomes, and overcooperation.

The Erosion of the Grand Alliance’s War Aim. Spain would also ultimately demonstrate how the aims of long wars can end up being self-defeating. In April 1711, the Habsburg Emperor died, giving the Grand Alliance’s claimant to the Spanish throne, Charles, his own throne in Austria. The overarching aim that the allies had been fighting for—to prevent hegemonic rule over Spain and Europe by a universal monarchy—would occur if Charles was to remain the preferred allied candidate. It would merely mean trading Bourbon for Habsburg dynasties. Therefore, a Grand Alliance victory in Spain would equally upset the balance of power in Europe. Indeed, Ivor Burton describes war aims at this point as being “absurd.”¹⁷

National Political Outcomes.

The passage of the War of the Spanish Succession also evinced further truth in General Rupert’s statement by 1711. Within Great Britain, political calculus shifted significantly with the removal of the moderate Tory Sidney Godolphin from power as Lord Treasurer in August 1710. Godolphin was a vital cog in the war machine; he was willing to work

with the Whigs and was an extremely close ally of Marlborough. The Tories led by Robert Harley now commanded the agenda, and they sought a secretive, unilateral peace with France.

For Great Britain, national political aims were valued more than cooperation by this stage. The logic and appeal of this Tory position attracted popular support. The Tories came to power based on an election, regardless of the limited franchise. Furthermore, the unique free press, a wide-circulation, evident public interest, even “natural obsession,” with containing Louis in Great Britain resulted in an informed audience. Marlborough remained popular, however, and as 1711 began, the Tories needed him to both hold the alliance together and put pressure on France to negotiate. Great Britain’s allies also must not have suspected any foul play, or they might have been tempted to seek their own peace.¹⁸ These factors led to a changed operational environment by 1711. This, in turn, should have led to the refinement of Marlborough’s operational-level logic and the mechanism employed.¹⁹ As Marlborough’s employment of forces would show, however, neither his logic nor his defeat mechanism evolved. He was certainly limited by the warfare of his age, but that alone cannot account for his inaction. A key factor of integrated campaign design reveals Marlborough’s struggles and why in 1711 he stuck to the operational-level logic and mechanism that he had employed throughout the war.

Overcooperation. The unifying starting point of the coalition and basis for cooperation evolved during the course of the war. In negotiating Portugal’s inclusion into the Grand Alliance in 1703, the allies became committed to “no peace without Spain.” The “moderate” aims and strategy established at the war’s outbreak expanded significantly. This committed the allies to winning Spain and placing their favored Austrian candidate on its throne. Politics enmeshed the military in a war that now stretched the length of Western Europe. With hindsight, this overcooperation and need to secure Spain meant the war became unwinnable.



John Churchill, 1st Duke of Marlborough, oil on canvas, by John Closterman, ca. 1685–1690 (Courtesy National Portrait Gallery, London)

The Breakdown in Civil-Military Dialogue

JCIC defines *effective civil-military dialogue* as a “continual round of engagement featuring discussion, feedback, adaptation, and refinement of policy and actions to achieve an evolving set of desired strategic outcomes.”²⁰ Marlborough recognized the political support and economic underpinnings of war. However, his successes during the War of the Spanish Succession are attributable in no small measure to the Lord Treasurer Godolphin. Godolphin had to conduct the arduous process of political agreement and funding every year to raise the troops and pay for the allies. It was Godolphin who dealt with the Tory-

Whig differences, Queen Anne, other British interests worldwide, and state and financial complexities, all while Marlborough fought. The formulation of policy and strategy in England, therefore, was “formulated through a complex interchange of ideas and perceptions.”²¹

The Godolphin-Marlborough partnership was a great example of military and political integration. Their working relationship as political leader and military commander spanned 8 years before Godolphin’s dismissal in 1710. By the following year, the disintegration of Marlborough’s political power was almost complete, and he returned for the 1711 campaign under much different circumstances.



The Duke of Marlborough at the Battle of Oudenaarde (1708), oil on canvas, by John Wootton (Courtesy Sotheby's)

The Tories distrusted Marlborough's motives and had their own agenda.²² Civil-military dialogue and transparency were significantly eroded and the foundations of his operational-level logic and mechanism gave way. Modern joint force commanders will likely not enjoy as close a relationship as Marlborough and Godolphin, but they, too, expect transparent and honest dialogue. This is especially important in a long war, as circumstances change and political aims evolve. The concept of follow-through also then comes to the fore. Military aims are subordinate, while political outcomes must be clearly articulated to allow the joint force to plan appropriately. Follow-through, an "essential ongoing task," would simply not be achievable without dialogue. The national interests the joint force is striving for need to be known to

ensure a commander does not end up in the same predicament as the Duke of Marlborough.²³

The Employment of Force: Marlborough's Final Flourish

In 1711, Marlborough consequently faced an extremely difficult situation. The aims of the French by this stage have modern connotations for Western powers. Suffering from supply shortages, Louis attempted to wear down the allies, break the alliance by diplomacy, and sicken them through huge casualties—the embodiment of the definition of *degrade* provided by JCIC.²⁴ To do so, the French constructed a series of defensive fortifications, coined *Ne Plus Ultra*, to protect France. It was the last line before Paris and the French commander described them as perfect.²⁵

Marlborough subsequently performed masterful operational art. He outmaneuvered a larger force, achieved complete tactical surprise, and crossed the perceived impregnable lines of *Ne Plus Ultra* with virtually no casualties. He took the fortress at Bouchain while keeping logistical lines of communication open and fending off any French attempts to relieve the city.²⁶ Marlborough achieved this after 10 years of campaigning, with dwindling support at home, while out of favor with the Crown, and with peace being clandestinely sought. Although there was no great battle such as Blenheim in 1704, 1711 was undoubtedly one of Marlborough's finest campaigns and one where he was "only" a military commander.²⁷

The military successes of 1711 were his last. He was removed from command as peace negotiations continued during

an abbreviated and convoluted campaign season in 1712 that saw the French regain ground. The Treaty of Utrecht followed in 1713. Despite missed peace overtures in 1706 and 1709, the eventual peace met the majority of the original British policy objectives. Territorial gains in Gibraltar and Nova Scotia gave great national strategic advantage, and the recognition of the Protestant succession eliminated the threat to the state itself. Great Britain maintained control of the balance of power and valuable trade rights were secured. The outcome was not accomplished militarily, regardless of the conditions it may have set.²⁸ This was the epitome of achieving an “advantageous political settlement” as the JCIC discusses.²⁹ Marlborough was not in command when this outcome was secured.

Assessment and Adaptation

The last factor of integrated campaigning discussed in the JCIC, assessment and adaptation, played a role in Marlborough’s removal. To assess and adapt, the mindset and willingness of the staff and commander to analyze appropriately are paramount. They must heed the changing conditions and ensure their outlook is not clouded by their experiences or biases. Marlborough’s outlook in 1711 is hard to discern. He was, as always, set on battle with the French to compel them to peace terms. Despite the few previous battles resulting in great tactical success and some strategic exploitation, they did not manufacture peace. The war, typified by siege and positional warfare, raged on. Nevertheless, neither his frame nor outlook truly changed.

Marlborough did appear more methodical by 1710. He was certainly limited by politics and a French unwillingness to fight, yet the 9 years of campaigning undoubtedly had an effect on Marlborough himself. The Pyrrhic victory at Malplaquet in 1709 weighed heavily on a commander renowned for his concern for the welfare of his soldiers. More critically, that battle’s costly and bloody stalemate eroded support from the coalition. He was also an old man by the standards of his time, entering

his 61st year in 1711. Marlborough was human, and all these factors had to affect his outlook. However, he returned and once again sought to engage the French. He failed to adapt his operational-level mechanism and sought success on the battlefield even though his previous hard-won victories had not ended the war.

Marlborough’s assessment was that one more campaign would herald results. Although his execution in changed conditions remained brilliant, it would not secure the Grand Alliance’s aim. The JCIC identifies as a *required capability* “the ability to respond to changes in policy with multiple approaches/options in the integrated campaign design, construct, and employment.”³⁰ Marlborough did not respond adequately, irrespective if he was shorn of political influence and his dialogue with civilian leaders had broken down. However, his failure to assess and adapt and his overall steadfastness of approach led to numerous advantages for Great Britain. This dichotomy consequently reveals several lessons for the joint force.

The Limitations of Military Action

The instrument of military action could not achieve the policies as devised by politicians. Political calculus is decisive; military conditions are not. This is the critical deduction of Marlborough’s long war. The enlargement of allied war aims to include the conquest of Spain, combined with newly elected masters in 1711, fatally undid the Duke of Marlborough. As Ivor Burton alludes, diplomacy “should always be conducted within the limits set by military possibility.” Spain’s war aim became unachievable, yet the war continued regardless. It is testament to Marlborough’s skill that “he almost succeeded in achieving the impossible.”³¹

Furthermore, with historical hindsight, the War of the Spanish Succession must be seen as a part of a continuum of wars during this period. Continuing advantage with accrued benefits was the best that could be achieved with the limiting character of warfare. In addition, the European system at this time was in a state

of competition, which meant cooperation was transient and firmly based on national aims. The way the war ended was also not the fault of the politicians. The 10 years of campaigning had come at a vast cost. The manner in which peace was sought was poor and harmful; however, the Tories acted out of the interests of the state. The result and gains from the Treaty of Utrecht vindicated this approach.

Reframing Requires Civil-Military Dialogue

Political masters masked their true intentions in 1711; policy evolved, but the operational logic and design remained static. Therein lies the fundamental flaw in Marlborough’s final campaign: Politicians ceased to have open and transparent dialogue with Marlborough, a fact made apparent by his commitment to a political aim that was unaccomplishable. If he had known of the peace overtures, then his military strategy could have been to attain a better negotiating position. In this regard, Marlborough would have been vastly successful. However, this was not the policy he strategized. He may have wished for peace, yet he fought for a peace secured by decisive French defeat. Continually since 1704 and Portugal’s entry into the alliance, policymakers asked for more than a military campaign could deliver. Despite Marlborough’s skill and results, he faltered as he forsook the evolution of policy. He conducted military operations in isolation from the new political reality that the Tory electoral triumph brought.

To reframe, joint force commanders and their staffs must know the aims of their political masters. Dialogue does not automatically eliminate the possibility that the military will be used in roles alien to its makeup or will have to pursue ambitious or ambiguous policies. Dialogue may, however, remove from the table unachievable aims and highlight the need for continual reassessment while seeking the desired outcome.

The use of military force was misapplied in 1711 for the purpose of the policy Marlborough envisaged. He was certainly bereft of influence, yet he must



John Churchill, 1st Duke of Marlborough, oil on canvas, by Godfrey Kneller, ca. 1706 (Courtesy National Portrait Gallery, London)

shoulder some of the responsibility for the strategic failure of the allied war effort.³² The means—sieges and attrition—were unlikely to win the war. The human element of military command and analysis was revealed by his own flawed outlook, framed by the battlefield destruction of the French, requiring time and coalition support he simply did not have. He faltered as he sought decisive strategic victory through epochal constrained military operations in a single theater of war.

Embrace War's Paradoxes

Nevertheless, irrespective of the flaws in Marlborough's understanding, design, construct, adaptation, and assessment,

there is a great paradox to 1711. The 1711 campaign worked brilliantly for the British politicians. A military commander does not need to win the war to achieve the political aim. There was no decisive victory, rather a pure example of Dolmanian strategy.³³ As Donald Barr Chidsey notes, "It was called the War of the Spanish Succession, and its principal object was to keep a Bourbon from occupying the throne of Spain. But a Bourbon sat upon that throne even after the Peace of Utrecht. A Bourbon sits upon it today."³⁴ The year 1711 represented political advantage, achieved by military brilliance seeking an unaccomplishable purpose.

Paradoxes abound and endure in war, and it is certainly mendacious to suggest military victories are inconsequential. Indeed, the War of the Spanish Succession showed that although great military success may not achieve victory, it attains great advantages, which must be seized by politicians. Things have changed; the means and technology are seismically different. However, the assessment remains: Military strategy must be pursued in accordance with policy and national interest. If the policy drifts, as it has in Iraq and Afghanistan, and loses sight of the original national aim, then politicians must be brave and decisive enough to secure an advantageous settlement.

Joint force commanders and planners may feel undermined by political aims generated in a long war. This is further compounded in a democracy when a change in government or president may decisively change political aims or reinforce failure, making military strategic coherence even harder. Further analysis of campaigns such as Marlborough's will assist a joint force in the most critical aspect and starting point of a campaign: understanding an operating environment in which military success fails to secure overall victory.

Nonlinear Campaign Outcomes

Joint force practitioners must therefore study appropriate examples of campaigning. As the JCIC states, "The acknowledgement that campaigning will occur over long periods to achieve evolving policy objectives under challenging conditions is the actual historical experience of American wars."³⁵ The example used in the JCIC of World War II is apposite. Too often case studies depict a fraught process but one that still suggests there is a coherent flow from policy to tactics to national success. However, Marlborough's exploits demonstrate that there is a gap between military successes or failures and the attainment of an advantageous political settlement. Understanding this nonlinearity is vital for joint force commanders and staffs.

Commanders and staffs must consequently acknowledge the nonlinearity between any measurement of success

and military outcomes. Military action's interpretative structure is vital. This is as relevant now as it was in 1711. If military strategy's perceived failures, let alone successes, result in a better national outcome, then commanders should accept and indeed embrace this reality. Integrated campaign design would benefit greatly from this approach and ensure the construction of a far more persuasive narrative and interpretive structure. This approach would ensure that national advantage, rather than tactical action, is paramount in military minds.

In correspondence with Godolphin, the Duke of Marlborough stated, "Whatever is good for my country I shall always wish and pray for."³⁶ Marlborough failed to secure a decisive military result in the War of the Spanish Succession. National political aims and those of the coalition evolved and drifted throughout his long war. He lost honest and transparent dialogue with political masters. He also failed to reframe. However, Marlborough's successes in defeating the armies of Louis XIV transcended the events of 1711. He secured national advantage and created power for Great Britain. There is much contemporaneous discussion in the United States and the United Kingdom of conditions-based missions or drawdowns in the Middle East and Afghanistan. Military commanders campaigning in today's long wars continue to mistake a conflict's end and military stalemate for failure. There is only one condition for a successful campaign. The Duke of Marlborough's experiences with war's paradoxes prove campaign success can be measured only by achieving national advantage. JFQ

Notes

¹ *Joint Concept for Integrated Campaigning* (JCIC) (Washington, DC: The Joint Staff, March 16, 2018).

² The Acts of Union in 1707 complicate the use of England vs. Great Britain, especially as some authors interchange the term. For ease, England will be used prior to 1707, and Great Britain thereafter.

³ JCIC, 7.

⁴ Rupert Smith in Emile Simpson, *War from the Ground Up: Twenty-First-Century Combat as Politics* (New York: Cambridge University Press, 2012), 34.

⁵ James W. Gerard, *The Peace of Utrecht* (New York: G.P. Putnam and Sons, 1885), 77–79.

⁶ Correlli Barnett, *Marlborough* (London: Eyre Methuen, 1974), 27; John B. Hattendorf, *England in the War of the Spanish Succession: A Study of the English View and Conduct of Grand Strategy, 1701–1713* (New York: Garland Publishing, 1987), 226–229.

⁷ Gerard, *The Peace of Utrecht*, 65.

⁸ J.R. Jones, *Marlborough* (Cambridge: Cambridge University Press, 1993), 60; David Chandler, *Marlborough as Military Commander* (New York: Charles Scribner's Sons, 1973), 54.

⁹ Brendan Simms, *Three Victories and a Defeat: The Rise and Fall of the First British Empire* (New York: Basic Books, 2007), 16–18, 45, 48–49; Morton A. Kaplan, *System and Process in International Politics* (New York: John Wiley and Sons, 1957); Per Maurseth, "Balance-of-Power Thinking from the Renaissance to the French Revolution," *Journal of Peace Research* 1, no. 2 (1964), 127.

¹⁰ JCIC, 9.

¹¹ *Ibid.*, 8.

¹² Chandler, *Marlborough as a Military Commander*, 101.

¹³ JCIC, 11.

¹⁴ John Lynn, *The Wars of Louis XIV 1667–1714* (Essex, UK: Longman, 1999), 286, 370–375.

¹⁵ *Ibid.*, 370–375; Chandler, *Marlborough as Military Commander*, 62–64.

¹⁶ JCIC, 23.

¹⁷ Ivor F. Burton, *The Captain General: The Career of John Churchill from 1692 to 1711* (London: Constable, 1968), 180; Henry L. Snyder, ed., *The Marlborough-Godolphin Correspondence*, vol. 3 (Oxford: Clarendon Press, 1975), 1665; Donald Barr Chidsey, *Marlborough: The Portrait of a Conqueror* (New York: John Day, 1929), 267.

¹⁸ Simms, *Three Victories and a Defeat*, 53, 54; Burton, *The Captain General*, 177; Hattendorf, *England in the War of the Spanish Succession*, 219. Public opinion did not amount to "serious consideration" of "war strategy" but rather concerns rooted in simultaneously pursuing a "policy of defence of the nation, trade and offensive with France." See Barnett, *Marlborough*, 252.

¹⁹ JCIC, 12.

²⁰ *Ibid.*, 13.

²¹ "England beat France with the purse as much as the sword, and great credit is due to Godolphin's finance." See George Macaulay Trevelyan, *England Under Queen Anne: Blenheim* (London: Longmans, Green and Co., 1948), 187; Hattendorf, *England in the War of the Spanish Succession*, 53.

²² Marlborough is a complicated figure. He "betrayed" his Catholic sponsor in 1688 and,

as many characters of the time, led a delicate balancing act; he remained in correspondence with the Jacobites, and the war did much to further his own wealth and position. Duplicitous and self-serving he may undoubtedly have been, or merely a canny operator, a survivor in tumultuous times.

²³ JCIC, 16: "Leaders and planners ensure proper follow through so campaigning yields acceptable and sustainable outcomes. Military operations are subordinate to policy and must remain orientated on the achievement of acceptable political outcomes."

²⁴ Claude C. Sturgill, *Marshal Villars and the War of the Spanish Succession* (Lexington: University Press of Kentucky, 1965), 103, 104–107; Chidsey, *Marlborough*, 271.

²⁵ *Ne Plus Ultra* figuratively means "thou shalt not pass." Some sources also use *non plus ultra*. The term originates from a boastful letter from Commander Claude Louis Hector de Villars to Louis XIV. Chidsey, *Marlborough*, 266; Archibald Alison, *The Life of John, the Duke of Marlborough*, vol. 1 (Edinburgh: William Blackwood and Sons, 1852), 280; John Hussey, "Marlborough and the Loss of Arleux, 1711, Accident or Design?" *Journal of the Society for Army Historical Research* 70, no. 281 (Spring 1992), 7.

²⁶ Success is never due solely to one factor, the "genius of Generalship." Marlborough benefited greatly during the war from several factors: Earl Cadogan's logistical exploits, his partnership with Prince Eugene, the strong Dutch contingent, and an increasingly well-trained army.

²⁷ Chidsey, *Marlborough*, 281; Simms, *Three Victories and a Defeat*, 55.

²⁸ Hattendorf, *England in the War of the Spanish Succession*, 269–271: "Although the means [military to political/diplomatic] to this goal were altered in 1711, the goal was achieved." The English/British method in the war was also to become the "British way of warfare" for the next two centuries.

²⁹ JCIC, 25

³⁰ *Ibid.*, 30.

³¹ Burton, *The Captain General*, 193–194.

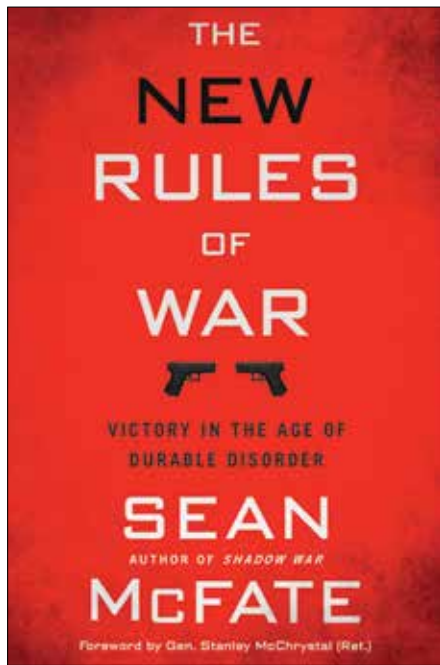
³² Jones, *Marlborough*, 194–196.

³³ The formation of strategy is, according to Dolman, "unending" and "a plan for attaining continuing advantage." It is, furthermore, fluid and flexible. See Everett Carl Dolman, *Pure Strategy: Power and Principles in the Space and Information Age* (New York: Routledge, 2005), 1–10.

³⁴ Chidsey, *Marlborough*, 283.

³⁵ JCIC, 26.

³⁶ Snyder, *The Marlborough-Godolphin Correspondence*, 1680.



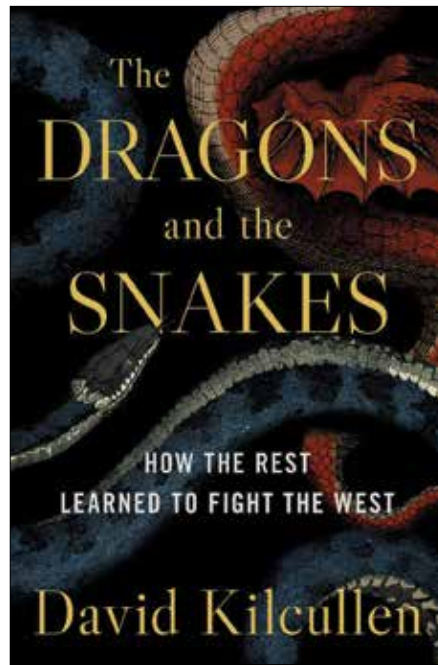
The New Rules of War: Victory in the Age of Durable Disorder

By Sean McFate
William Morrow, 2019
336 pp. \$29.99
ISBN: 978-0062843586

Reviewed by Frank Hoffman

It is said that generals always want to refight the last war. Often scholars are willing to do the same. Martin Van Creveld's *Transformation of War* (Free Press, 1991) was heavily influenced by the painful intifadas in his native Israel. Mary Kaldor's *New and Old Wars: Organised Violence in a Global Era* (Stanford University Press, 1999) was based on the criminal warlords of the ethnic Balkan clashes. In his *The Utility of Force: The Art of War in the Modern World* (Knopf, 2007), British general Rupert Smith declared that war, as he was taught, no longer existed and drew heavily on the breakup of the former Yugoslavia and his tour in Bosnia. Conventional warfare was thrown into history's dustbin and "wars amongst the people" presented as a novel paradigm shift.

These two books follow this tradition. They should prove useful in helping the U.S. policy community and modern



The Dragons and the Snakes: How the Rest Learned to Fight the West

By David Kilcullen
Oxford University Press, 2020
336 pp. \$27.95
ISBN: 978-0190265687

practitioners learn from recent conflicts that absorbed a great deal of the national treasury for modest gains. Yet just as those books were accused of "presentism," these books will also be accused of extrapolating the immediate past into the future.

These authors and their books share common ground. Both are experienced former military officers, with excellent academic credentials. Both have served in multiple theaters and published extensively. Sean McFate is a U.S. Army veteran and a professor in the College of International Security Affairs at the National Defense. He holds a Ph.D. from the London School of Economics and Political Science. His past research leveraged his experience in private military security organizations. David Kilcullen, a retired Australian soldier, was a noted counterinsurgency advisor in Iraq and Afghanistan. He served with the U.S. Department of State during the Iraq War and provided substantial advice to the development of U.S. defense

strategies since 2006. His last book, *Out of the Mountains: The Coming Age of the Urban Guerrilla* (Oxford University Press, 2013), offered numerous insights into urban warfare. Both authors are frequent contributors to professional military education.

The odor of burnt sacred cows wafts from McFate's book, where the overpriced F-35 jet aircraft, American notions of war, and the myths of U.S. counterinsurgency doctrine are torched. The U.S. addiction to technology is also taken to task: "Sexy technology does not win wars. Since World War II, high-tech militaries have been thwarted consistently by low-tech opponents. The humble roadside bomb still outsmarts America's smart weapons, and the lowly AK-47 is the world's true weapon of mass destruction if measured by people killed."

The author lays out a set of new rules that are more a series of assertions that the book is organized around. McFate concludes that "Conventional Warfare is Dead," the "Best Weapons Do Not Kill," "Mercenaries Will Return," and "Shadow Wars Will Dominate." To McFate, the salience of indigenous militias, foreign fighters, and proxy support from major competitors is rising. For those who envision the coming era of Great Power conflict as a purely conventional challenge, *New Rules* is a cold shower. The author evidently sees the recent past as prologue: "Wars will move further into shadows. In the information age, anonymity is the weapon of choice. Strategic subversion will win wars, not battlefield victory. Conventional military forces will be replaced by masked ones that offer plausible deniability, and nonkinetic weapons like deception and influence will prove decisive."

New Rules reminds that we do not get to reliably dictate the terms of war and that our opponents do not design their operations to fit our preferred paradigms. McFate wrote this book for a popular audience to help Americans understand the persistent state of crisis that he argues will exist around the world. He succeeds with a sense of passion and urgency that forces the reader to reconsider conventional logic and Western illusions about war.

His prescriptions are debatable, however. Proposals to invest in strategic education are sound, as are his ideas for better leveraging special operations forces and proxies. However, his recommendation to establish a Foreign Legion has dubious merit and is likely to be quickly dismissed by the American public.

In *The Dragons and the Snakes*, Kilcullen aligns with McFate. “It is clear,” he states, “that the utility of the current Western military model as a set of techniques and technologies is fading.” Kilcullen examines the major and minor threats to U.S. interests, namely Russia and China as the major problems or “dragons.” His “snakes” include the current versions of al Qaeda, the so-called Islamic State, Hizballah, and Hayat Tahrir al-Sham. Early chapters trace the development of these nonstate actors and their active learning from the West’s campaigns to eradicate them. All chapters reflect solid scholarship and trace the evolution of each “reptile.”

Kilcullen’s China chapter is a good overview that is appropriate for classroom use, but it should be augmented with recent work on military reforms (see Phillip C. Saunders et al., eds., *Chairman Xi Remakes the PLA: Assessing Chinese Military Reforms*, NDU Press, 2019) and scholarship on Chinese concepts on “systems destruction” to prepare students for a more competitive People’s Liberation Army. The author makes it clear that Chinese thinking has conceptually enveloped the West and embraces combinations “that lie outside the ken of Western warfighters and thus invoke limited direct military competition.”

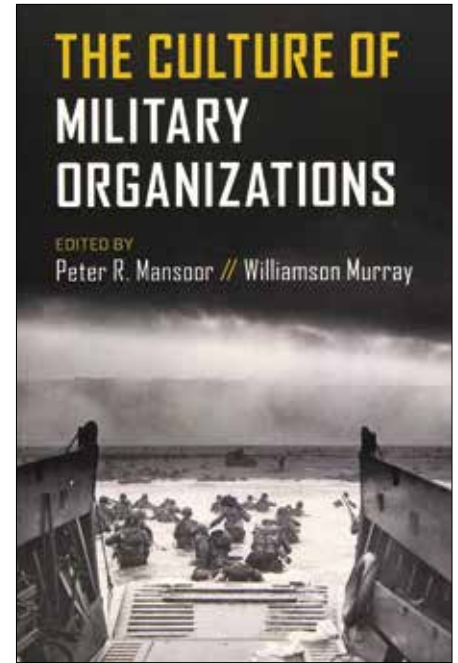
Kilcullen’s Russia chapter is equally useful; he offers his own version of gray zone conflict called “liminal warfare.” *Liminal* (Latin for threshold) is a term used in anthropology to capture ambiguity experienced by societies transitioning between two states of being. Kilcullen uses it to capture the transition zones between peoples and their activities that have ambiguous political, legal, and psychological status. Applied to warfare, the term aptly depicts the blurring of guerrillas, militias, terrorists, and resistance movements. The author expertly incorporates various interpretations of

the putative “Gerasimov Doctrine” and how Moscow continues its long tradition of malign measures short of direct military confrontation. To augment this chapter, Oscar Jonsson’s *The Russian Understanding of War: Blurring the Lines Between War and Peace* (Georgetown University Press, 2019) and Ofer Fridman’s *Russian Hybrid Warfare: Resurgence and Politicisation* (Hurst, 2019) provide supplemental depth.

Kilcullen offers three potential strategic solutions for American strategists in his last chapter, ominously titled “The Ebb Tide of the West.” The first, “doubling down,” is an expensive investment in current technologies to buy capability upgrades to allow the United States to sustain its military instrument for the near term. Accepting decline and managing its impact is captured in Kilcullen’s second approach, in essence rejecting competition and reducing costs. His preferred third option is a form of retrenchment based on offshore balancing. This option is more robust than what is advocated by most academics; it bolsters regional allies such as Saudi Arabia and Israel, prevents hostile powers from dominating key regions, and ceases efforts to actively promote democracy. Where U.S. interests require intervention against snakes, Kilcullen opts for low footprint operations such as El Salvador. However, offshore balancing undercuts regional stability by the absence of the United States and weakens the alliance architectures that are our strength against dragons. Moreover, with respect to snakes, as Stephen Biddle has argued, low footprint warfare is generally “low payoff.”

These books are written by authors with well-grounded experience in armed conflict, and both writers are engaging. Whether or not the reader agrees with their diagnoses or proposed cures, he or she will come away from reading these provocative texts with a deeper appreciation for the complexities of today’s disorder and what is at risk in the 21st century. JFQ

Dr. Frank Hoffman is a Distinguished Research Fellow in the Center for Strategic Research, Institute for National Strategic Studies, at the National Defense University.



The Culture of Military Organizations

Edited by Peter R. Mansoor and Williamson Murray
Cambridge University Press, 2019
472 pp. \$99.99
ISBN: 978-1108485739

Reviewed by Anthony King

It would be difficult to find scholars who are better qualified to edit this excellent new volume of military culture. Having retired from the U.S. Army following a distinguished career, culminating as one of General David Petraeus’s most trusted aides in Iraq in 2007, Peter Mansoor has published a number of books on military history and Iraq. Williamson Murray has been a major figure in military studies for over 30 years, producing, among many other works, the now classic three-volume study *Military Effectiveness* (Cambridge University Press, 2010) with his long-term collaborator Allan R. Millett.

At the beginning of their new book, Mansoor and Williams suggest that *The Culture of Military Organizations* is intended to address some of the shortcomings of *Military Effectiveness*: “In the three volumes of *Military Effectiveness*,

focused on World I, the interwar period, and World War II, editors Allan R. Millett and Williamson Murray . . . posited a number of factors influencing military effectiveness. . . . But organizational culture was not an explicit element of the study and chapter authors, for the most part, did not address it.” This is excessively modest; certainly, I read that collection as a disquisition on military culture. Nevertheless, Mansoor and Murray see the current volume as a corrective to that study.

Like *Military Effectiveness*, the current volume is a scholarly work, but the editors also have a professional practitioner in mind. They do not merely want to interpret military culture but to change it: “One of the purposes of this book is to help military leaders understand how organizational culture forms; the influence culture has on organizational functioning and the development of strategy, operations, and tactics; and how culture changes.”

Mansoor and Murray are correct to address the question of military culture because it is vital to military performance and effectiveness. They are also equally justified in noting the complexity of the term. Because its connotations are multiple, it is a difficult term to apply with any analytic rigor. However, Mansoor and Murray propose a plausible definition of culture at the beginning of the work. They define *organizational culture* as “the assumptions, ideas, norms, and beliefs, expressed or reflected in symbols, rituals, myths, and practices, that shape how an organization functions and adapts to external stimuli and that give meaning to its members.” Organizational culture refers, then, to the often unacknowledged stocks of shared understandings and to the habitual collective practices of military personnel. Culture unites the armed forces.

On the basis of this definition of culture, Mansoor and Murray identify a predicament in which all military organizations find themselves. Since they must order their personnel to kill or, potentially, be killed, armies, navies, and air forces have to be highly cohesive organizations; they must be unified like no civilian company. Yet, ironically, the military requirement for dense culture integration threatens to undermine them.

Precisely because they must be so bound to existing hierarchies, established traditions, and internal commitments, military forces often ignore or wilfully misinterpret their enemies and the threat they pose. Frequently, they reject innovations which in retrospect prove vital because they seem to jeopardize order, discipline, morale, cohesion, and entrenched organizational interests. Like Achilles, the armed forces are tragic organizations, fatally compromised by their very virtues.

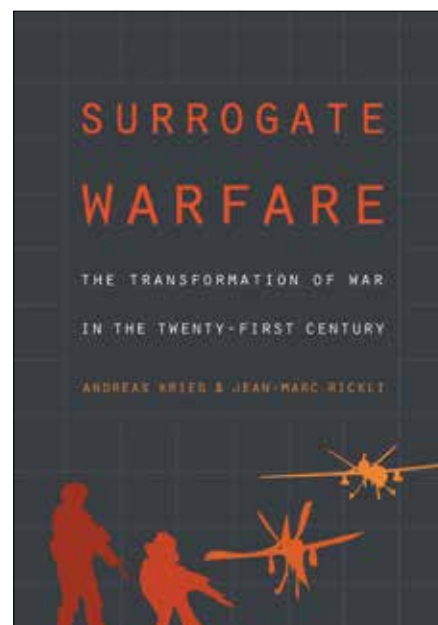
Every chapter in this book describes this predicament through colorful historical explication. For instance, David Kilcullen discusses how, in Mogadishu, at 1620 on October 3, 1993, U.S. Task Force Ranger had completed its mission to capture Somali militia leaders when a Blackhawk helicopter crashed over the city. Instead of simply returning to base, the convoy detoured to the crash site to save the pilots and crew. In the following 26 minutes, it suffered 50 percent casualties as it engaged in furious firefights in the city streets. Kilcullen notes, “Rational military decisionmaking is not a sufficient explanation for behavior in what was later dubbed the ‘lost convoy.’” Yet culture may. Bound by an ethos that no Soldier would ever be left behind, U.S. Rangers and special operations forces felt obliged to try to rescue comrades rather than complete their mission. The very cohesiveness of these elite forces led to mission failure in those streets of Mogadishu.

The Culture of Military Organizations is replete with insights like this. It explores the predicament of the armed forces from a diversity of fascinating angles. Particular high points include analyses of German (Jorit Wintjes), North Virginian (Mark Grimsley), Indian (Daniel Marston), U.S. Marine (Allan R. Millett), and U.S. Army culture (Peter Mansoor). Most of the chapters in this book use a narrative historical method rather than a critical, analytical framework, and the collection may, therefore, have benefited from drawing more explicitly on sociological and anthropological literature. In particular, although the infamous 1991 U.S. Navy Tailhook scandal is discussed insightfully by John Kuehn, questions of gender, race, and

ethnicity might have been addressed more systematically.

Mansoor and Murray want this collection to be useful to military professionals. It will undoubtedly be of the greatest utility to the brightest and most inquiring officers. However, readers should be under no illusion. This is a scholarly work of the highest academic credentials that military scholars will find both deeply interesting and useful. JFQ

Dr. Anthony King is a Professor and the Chair of War Studies at the University of Warwick, United Kingdom.



Surrogate Warfare: The Transformation of War in the Twenty-First Century

By Andreas Krieg and Jean-Marc Rickli
Georgetown University Press, 2019
244 pp. \$104.95
ISBN: 978-1626166776

Reviewed by Harry Wingo

What do you get when two Middle Eastern subject matter experts decide to update the age-old concept of proxy warfare and explore the potential of machines to serve as surrogates that substitute or supplement a nation’s formal military

forces? The answer is an ambitious and useful examination of how war is changing in light of emerging technologies, such as autonomous unmanned aerial vehicles (UAVs, or drones) and cyber weapons able to leverage artificial intelligence (AI). Members of the joint force willing to brave the occasional academese passages on Clausewitzian theory will find gems of insight throughout *Surrogate Warfare*.

This well-researched volume benefits from the considerable experience of two defense scholars at Kings College London. Andreas Krieg has a background supporting professional military education for officers of the British and overseas armed forces, and Jean-Marc Rickli mines his experience as the head of global risk and resilience at the Geneva Centre for Security Policy (GCSP) in Switzerland. Together, they have created a framework for considering ways that nations may ease the burden of warfare by constructing “security assemblages” of irregular forces, both human and machine, that afford strategic leaders the ability to coerce adversaries overseas while avoiding political upheaval at home.

The book surveys the use of surrogates throughout history, taking the reader from the adventures of Sir Francis Drake—English privateer of the Elizabethan era—and his exploits liberating gold and silver from Spanish colonies in South America, to the modern use of Stuxnet to slow the Iranian nuclear program. The authors attempt to broaden the scope of surrogates in warfare by examining an evolving array of entities, from privateers to modern mercenaries and contractors. Technological surrogates, however, remain a central focus. It is a thought experiment likely to provoke healthy debate among scholars and practitioners alike.

The authors also propose an update to Carl von Clausewitz’s “trinity” of society, state, and soldier, a concept they rebrand as the “neo-trinitarian” aspects of modern warfare that are now “privatized,” “securitized,” and “mediatized.” This is deeply academic but should intrigue more than just military theorists. It is worthwhile framing for those in the joint force who must increasingly

Joint Publications (JPs) Under Revision (to be signed within 6 months)

JP 1-0, *Personnel Support*

JP 2-0, *Joint Intelligence*

JP 3-0, *Joint Operations*

JP 3-03, *Joint Interdiction*

JP 3-07, *Stability*

JP 3-20, *Security Cooperation*

JP 3-25, *Countering
Threat Networks*

JP 3-36, *Joint Air Mobility
and Sealift Operations*

JP 3-63, *Detainee Operations*

JPs Revised (signed within last 6 months)

JP 1, *Doctrine for the
Armed Forces of the United
States, Vols. 1 and 2*

JP 3-05, *Special Operations*

JP 3-26, *Combating Terrorism*

JP 5-0, *Joint Planning*

JP 3-72, *Nuclear Operations*

JP 3-85, *Joint Electromagnetic
Spectrum Operations*

consider the “burden” of war and the implications of externalizing it to machines such as UAVs and advanced autonomous weapon systems, or for those who must now contend with the dynamics of novel cyber weapons and social media “super influencers,” all powered by increasingly independent artificial intelligence.

Krieg and Rickli also explore the well-known promises and challenges of integrating AI into joint force operations and grand strategy. What is new, however, is the attempt to ground this discussion in a comprehensive historical framework of military theory while tackling broader ethical dilemmas. What does it mean when the state becomes, as Krieg and Rickli observe, simply a remote manager of violence? These are considerations that will become only more pronounced as the United States and its allies seek to recover from the impact of the novel coronavirus.

The implications of growing more reliant on technological surrogates are discussed so convincingly and thoroughly in *Surrogate Warfare* that the book falls short only in its scope. While the authors acknowledge their Western perspectives of military theory, the latter part of the book goes to Krieg’s and Rickli’s deep experiences in the Middle East, as they discuss Iran’s extensive and creative use of surrogate warfare—something likely

to continue despite the killing of General Qasem Soleimani on January 3, 2020, by a U.S. military drone, the quintessential technological surrogate. It is a useful deep dive, but the book would have benefited from a wider aperture and the examination of a peer competitor primed to use a range of surrogates both technological and otherwise. This is especially salient as U.S. strategic focus turns to East Asia and Great Power competition in the aftermath of the coronavirus pandemic.

While *Surrogate Warfare* offers a wealth of history, theory, and novel thought about the nature of surrogates and their evolving technological dimensions in war, it is the near- and long-term engagement with near-peer competitors in the wake of the coronavirus that serves as a catalyst to recommend this book to the joint force. As theories abound about the origins of the microscopic force that has changed the world in a few months, it is clear that the diminished ways and means of the United States, its allies, and its partners will make the lessons of *Surrogate Warfare* necessary, even required reading for all strategic leaders. JFQ

Harry Wingo is a Professor in the College of Information and Cyberspace at the National Defense University in Washington, DC.

CALL FOR ENTRIES

for the

2021 Secretary of Defense and
2021 Chairman of the Joint Chiefs of Staff

Essay Competitions

Are you a professional military education (PME) student? Imagine your winning essay published in a future issue of *Joint Force Quarterly*, catching the eye of the Secretary and Chairman as well as contributing to the debate on an important national security issue. These rewards, along with a monetary prize, await the winners.

Who's Eligible? Students, including international students, at U.S. PME colleges, schools, and other programs, and Service research fellows.

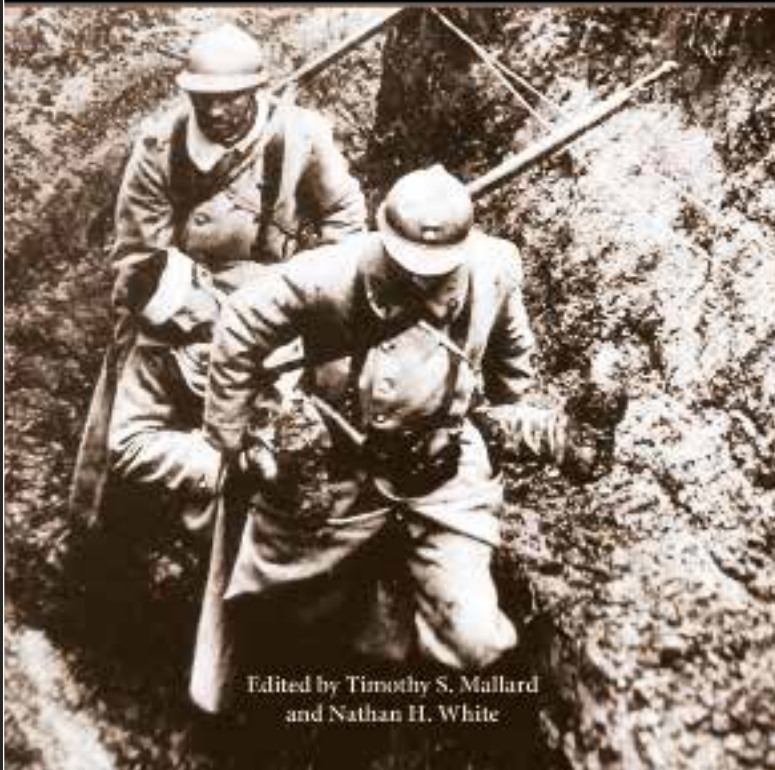
What's Required? Research and write an original, unclassified essay on some aspect of U.S. national, defense, or military strategy. The essay may be written in conjunction with a course writing requirement. Important: Please note that entries must be selected by and submitted through your college.

When? Anytime during the 2020–2021 academic year. Students are encouraged to begin early and avoid the spring rush. Final judging and selection of winners take place May 2021, at NDU Press, Fort McNair, Washington, DC.

For further information, see your college's essay coordinator or go to:
<http://ndupress.ndu.edu/About/Essay-Competitions/>

A PERSISTENT FIRE

The Strategic Ethical Impact of World War I
on the Global Profession of Arms



Edited by Timothy S. Mallard
and Nathan H. White

New from NDU Press

**A Persistent Fire: The Strategic Ethical
Impact of World War I on the Global
Profession of Arms**

Edited by Timothy S. Mallard and Nathan H.
White

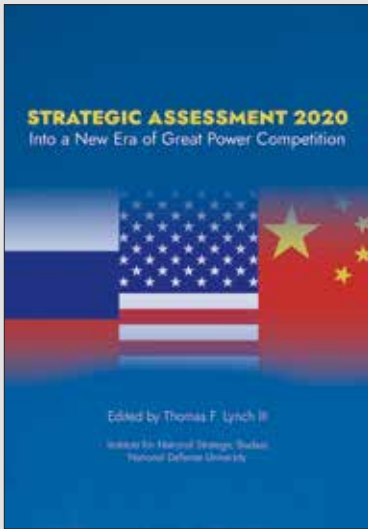
2020 • 412 pp.

Since “the war to end all wars” witnessed the rise of global war among competing nation-states conducted in often tenuous alliances with nascent professional militaries—characteristics that continue to mark contemporary warfare a century later—then studying that conflict’s impact seems a relevant method to decide ways in which the profession of arms will develop in the next 25 to 50 years. Indeed, like a smoldering, persistent fire that threatens to re-erupt into a fresh conflagration, World War I continues to deeply shape and guide the profession of arms today.

Download the EPUB, MOBI, or PDF version
for free.



Scan the QR Code above or go to:
[https://ndupress.ndu.edu/Publications/
Books/A-Persistent-Fire](https://ndupress.ndu.edu/Publications/Books/A-Persistent-Fire)



Coming Soon from NDU Press

Strategic Assessment 2020: Into a New Era of Great Power Competition

Edited by Thomas F. Lynch III

Great Power competition is a framework for understanding interstate relations that dominated geopolitics for centuries prior to World War II. Past GPC eras have featured multiple powerful states jockeying for relative status and position. After lying dormant during a two-decade period of post-Cold War globalization and American international primacy, the dynamics of GPC returned to international relations and security studies in earnest during the late 2010s.

Strategic Assessment 2020 provides an expert and nuanced understanding of the most important emerging dimensions of GPC between the three Great Powers in 2020: the United States, China, and Russia. It establishes that the United States stands atop the triumvirate, with China a rising competitor and Russia vying for top-level prestige while facing clear signs of decline. The Sino-American competitive dyad is likely to be the dominant Great Power rivalry into the future. Chapters focus on the critical activities among these Great Powers and develop major implications for other state actors, nonstate actors, and global institutions.

Authors include scholars from the National Defense University and the Institute for National Strategic Studies who have been directly engaged as thought leaders and policymaking pioneers grappling with the strategic contours of the new era of GPC. Chapters and combinations of chapters will be not only useful for students of national security, international relations, and foreign affairs in an academic setting, but also of great value to policy practitioners.

Have you checked out NDU Press online lately?



With 20,000 unique visitors each month, the NDU Press Web site is a great place to find information on new and upcoming articles, occasional papers, books, and other publications.

You can also find us on:



Facebook



Flickr



Twitter



Pinterest

Visit us online at: <https://ndupress.ndu.edu>



JFQ

JOINT FORCE QUARTERLY

Published for the Chairman of the Joint Chiefs of Staff by National Defense University Press
National Defense University, Washington, DC

