

Joint Force Quarterly

Founded in 1993 • Vol. 93, 2nd Quarter 2019 http://ndupress.ndu.edu

Gen Joseph F. Dunford, Jr., USMC, 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

Assistant to Ms. SeichJack Randolph Ostlie

Copyeditor

Andrea L. Connell

Book Review EditorFrank G. Hoffman. Ph.D.

Associate Editors

Patricia Strait, Ph.D., and Jack Godwin, Ph.D.

Art Director

Marco Marchegiani, U.S. Government Publishing Office

Advisory Committee

Charles B. Cushman, Ph.D./College of International Security Affairs;
Col David J. Eskelund, USMC/Marine Corps War College;
VADM Michael M. Gilday, USN/The Joint Staff; RADM Jeffrey A.
Harley, USN/U.S. Naval War College; MG Lewis G. Irwin, USAR/Joint
Forces Staff College; MG John S. Kem, USA/U.S. Army War College;
LTG Michael D. Lundy, USA/U.S. Army Command and General Staff
College; Brig Gen Chad T. Manske, USAF/National War College;
Col William McCollough, USMC/Marine Corps Command and Staff
College; LtGen Kenneth F. McKenzie, Jr., USMC/The Joint Staff;
LtGen Daniel J. O'Donohue, USMC/The Joint Staff;
Col Evan L. Pettus, USAF/Air Command and Staff College;

Col Evan L. Pettus, USAF/Air Command and Staff 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; Thomas Wingfield, J.D./College of Information and Cyberspace

Editorial Board

Richard K. Betts/Columbia University; Eliot A. Cohen/The Johns Hopkins University; COL Joseph J. Collins, USA (Ret.)/National War College; Richard L. DiNardo/Marine Corps Command and Staff College; Aaron L. Friedberg/Princeton University; Bryon Greenwald/ Joint Forces Staff 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): Airman runs in Air Force Marathon at Transit Center, Manas, Kyrgyzstan, September 15, 2012 (U.S. Air Force/Brett Clashman); Coastguardsman from Cutter Bertholf reunites with his wife and child after returning to homeport at Coast Guard Island in Alameda, California, October 24, 2017; Navy engineering project manager assigned to Combined Joint Task Force—Horn of Africa dances with Djiboutians before medical clinic ribbon-cutting ceremony in Ali Oune, Djibouti, January 31, 2019 (U.S. Air Force/Shawn Nickel)







In This Issue

Forum

- 2 Executive Summary
- 6 "Untapped Resources" for Building Security from the Ground Up By Viva Bartkus
- 14 Tactical Maneuver in the Cyber Domain: Dominating the Enemy By Jennifer Leigh Phillips
- 21 From DOPMA to Google: Cyber as a Case Study in Talent Management By David Blair, Jason Hughes, and Thomas Mashuda

JPME Today

- 32 Covert Action as an Intelligence Subcomponent of the Information Instrument By Charles Pasquale and Laura Johnson
- 38 Augmenting Bloom for Education in the Cognitive Domain By Douglas E. Waters and Craig R. Bullis

Commentary

- 47 Warrior Women: 3,000 Years in the Fight By Mary Raum
- 55 Military Medicine: The Gender Gap in Trauma Training By Daniel P. McGarrah
- 60 The Acquisition and Cross Servicing Agreement: An Old Tool for the Modern Military By William M. Stephens
- 66 A Model for Tactical Readiness Through Strategic Opportunity By David A. Zelaya and Joshua Wiles



About the Cover

U.S. Army Soldier assigned to East Africa Response Force, deployed in support of Combined Joint Task Force—Horn of Africa, helps unload flatbed truck during mission readiness drill in Libreville, Gabon, January 17, 2019 (U.S. Air Force/ Chris Hibben)

Features

- 71 Unity of Command: Authority and Responsibility over Military Justice By Lindsay L. Rodman
- 79 U.S. Africa Command and Its Changing Strategic Environment By William Robert Hawkins and Brenda Jeannette Ponsford
- 87 Enhancing Unit Readiness on the Southwest Border By Cindie Blair, Juliana T. Bruns, and Scott D. Leuthner

Recall

93 Gallipoli: Lessons from the Great War on the Projection of Power and Joint Forcible Entry By Patrick William Naughton

Book Reviews

- 100 The Cold War and The Cold War's Killing Fields Reviewed by Walter M. Hudson
- 102 Limiting Risk in America's Wars Reviewed by Tom Greenwood

Joint Doctrine

- 104 The Insufficiency of U.S. Irregular Warfare Doctrine By John A. Pelleriti, Michael Maloney, David C. Cox, Heather J. Sullivan, J. Eric Piskura, and Montigo J. Hawkins
- 111 Fire for Effect: The Evolution of Joint Fires By J. Mark Berwanger
- 116 Joint Doctrine 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

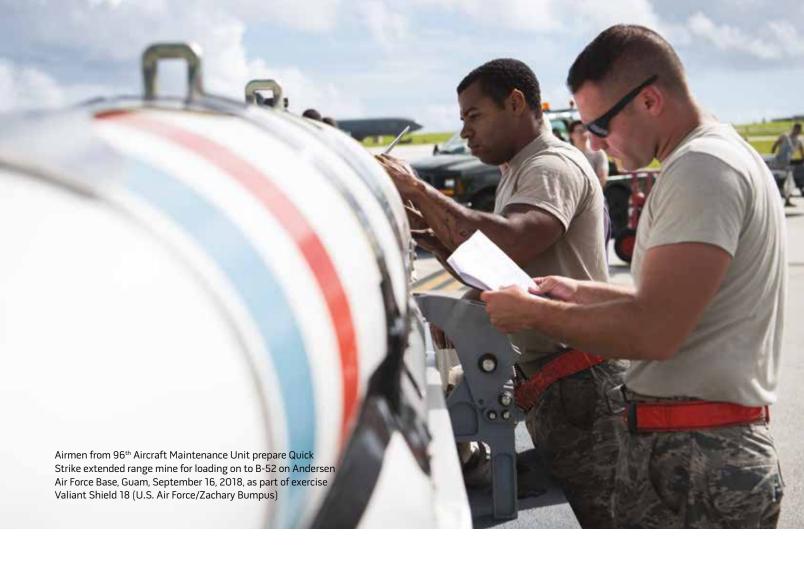
JFQ welcomes submission of scholarly, independent research from members of the Armed Forces, security policymakers and shapers, defense analysts, academic specialists, and civilians from the United States and abroad. Submit articles for consideration to ScholarOne, available at https://mc04.manuscriptcentral.com/ndupress,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

Editor, Joint Force Quarterly

NDU Press 260 Fifth Avenue (Building 64, Room 2504) Fort Lesley J. McNair Washington, DC 20319

Telephone: (202) 685-4220/DSN 325 Email: JFQ1@ndu.edu JFQ online: ndupress.ndu.edu/jfq

2nd Quarter, April 2019 ISSN 1070-0692



Executive Summary

hat good is looking back? Fifty years ago, one of the key people behind the Apollo Moon missions was a computer scientist named Margaret Hamilton. Like many young people in those days, I was all about becoming an astronaut and going to the Moon. While the early astronauts were all men, not everyone involved was, as proved all too well in the movie Hidden Figures. Until that movie, I had no idea who programmed the computers that made the mission possible—and I read everything I could in the Space Race days of the 1960s. Why did I not know that story? It was a different time—no Internet, only three major television networks, and people of color and women were often excluded from the frontlines of many

parts of society. Our view of the world was far more restricted than it is today. I suspect most of our readers have a hard time imagining a past where such boundaries existed or, more likely, why some still exist even if laws removed them long ago.

Now that *Joint Force Quarterly* has served the joint force for over a quarter of a century, I thought a look back might offer a few insights about how jointness has affected the U.S. military since the early days of the Goldwater-Nichols Department of Defense Reorganization Act of 1986, when Chairman of the Joint Chiefs General Colin Powell's idea for *JFQ* originated. Our first edition was published in the summer of 1993 after the Joint Staff and National Defense University developed and executed

General Powell's initial vision. The history of *JFQ*'s founding has been recounted in this column in *JFQ* 85, with assistance from General Powell and others. Key in that recounting was the fact that as Chairman, General Powell had the vision to see the need for this journal as a part of a larger effort that continues today: to find ways to better integrate the military Services into a coherent joint force capable of winning the Nation's wars and every other mission the military would be called on to accomplish.

The inaugural *JFQ* reflected where the Joint Chiefs were on the journey to jointness and their Services' roles in that effort some 7 years after the landmark Goldwater-Nichols legislation. That issue had some 13 articles and 3 book reviews, in addition to General Powell's remarks

2 Forum / Executive Summary JFQ 93, 2nd Quarter 2019

and a column from my predecessor in this chair, Alvin Bernstein. You can access this first issue online, and I think you would find each article of value, some 92 issues later. Here is what I saw by looking back.

In the first section, readers learned that each Service chief had a vision for his Service to follow, which reflected his Title 10 responsibilities to organize, train, and equip as his predecessors had done—but at least with a tip of the hat to becoming part of the joint force. In 1993, the Soviet Union had dissolved and the "Peace Dividend" was the focus of many in the policy circles of governments in the West. We were just three summers after Operation *Desert Storm*, but Saddam was still in power. The Joint Chiefs' views reflected this new reality: Army Chief of Staff General Gordon Sullivan summed up the moment by stating, "International issues require a broader appreciation of the threat—from the unitary and relatively predictable adversary we knew in the Cold War, to the diverse, ambiguous threats that we confront today." He accepted the harsh reality of a reduced force in coming years but in spending that would keep pace with the economy. General Sullivan fully supported the idea of jointness and made it clear where the Army was headed, "There is unmatched power in the synergistic capabilities of joint operations." He saw the need for joint operations to "be the norm at every level of command." Those of you with recent field experience will know if that has happened.

Admiral Frank Kelso wrote about the Navy's shift in strategies from open ocean combat "toward joint operations from the sea." The admiral noted that "[after] Desert Storm the Navy has taken steps to improve its ability to work in the joint arena in operations, planning, procurement, and administration and to improve communications between the staff of the Chief of Naval Operations and the Joint Staff and between the Department of the Navy and the Department of Defense." He recognized the fiscal realities of the end of the Cold War as well but took the challenge to refocus the budget by moving \$1.2 billion (\$2 billion in 2019 dollars) in the Navy and Marine budgets

"to support the new naval strategy and joint warfighting operations."

General Carl Mundy, the 30th commandant of the Marine Corps, stated the clear definition of jointness of that period as he saw it, "Future military success will also depend on maintaining a system of joint warfare that draws upon the unique strengths of each service, while providing the means for effectively integrating them to achieve the full combat potential of the Armed Forces." The commandant would place the Marine Expeditionary Unit and Marine Air Ground Task Force at the center of capabilities that the Marines were ready to provide in the integrated strategy of the Navy and the joint force.

Picking up directly on the idea of a "cool and lively debate," as General Powell offered as *JFQ*'s focus in his opening column, Air Force Chief of Staff General Merrill McPeak offered that "the Cold War was a contest of ideas and, in the end, freedom won out." General McPeak, ever an iconoclast, took this opportunity to suggest topics that aspiring authors should write about in JFQ, a unique call from among the chiefs' articles. Unlike the other Joint Chiefs, he did not discuss any specific Air Force strategy; instead he asked questions about how the military did business in 1993. He strongly believed in the power of divesting the military of functions that he believed would be best accomplished by civilian industry. Presaging a soon-toconvene commission that would review the relationships of the Services to each other, General McPeak suggested a revisit of the roles and missions and the centralization of support in Defense agencies. Decentralization from how the Air Force operated to the logistics of the support of the Armed Forces should be examined in his view. His title "Ideas Count" could be the unofficial motto of IFQ.

Following the Service chiefs, the second Vice Chairman of the Joint Chiefs, Admiral David Jeremiah, saw a world of growing regional conflicts with the demise of what we seem to be headed back into—great power competition. He saw the beginning of a shift away from the Cold War experience, that is, multilateral and bilateral security agreements based



Cover of *Joint Force Quarterly* 1, Summer 1993 (NDU Press)

primarily on the bipolar world until the demise of the Soviet Union. Admiral Jeremiah remarked on the exploding world population and the resulting lack of resources resulting in competition for food, water, and safe places to live. Interestingly, he commented on the responsibility of the world community to deal with "genocidal crimes, such as those committed by the Khmer Rouge in Cambodia. . . . The right to national sovereignty ought not to be absolute in cases of genocide any more than child abuse carried out in a private home should be beyond the reach of criminal law."

Additionally, Admiral Jeremiah saw the need to combine technological advancement with "organizational adaptability," or, as he called it, "learning curve dominance." He defined this requirement as "the ability to develop the tactics, organizations, training programs, and warfighting doctrines to exploit new technology effectively." Reflecting the rising view of warfare in the post-Desert Storm period, the admiral suggested that the joint force now could operate in such a way that would leverage new technologies. While the debates over this balance of human and technological prowess continue today, the admiral noted that due to the world's best military education system, our advantage would always be in our "[military] officers who, while well trained

JFQ 93, 2nd Quarter 2019



Hospitalman Ronda Rollins stands guard at front gate of Fleet Hospital Five compound in Saudi Arabia during Operation *Desert Storm*, February 1, 1991 (U.S. Navy Reserve/Milton Savage)

in their technical specialties, can also calmly gaze into the eye of the tiger when it comes to problems of international politics, grand strategy, force modernization and restructuring, or the complex consequences of future technology." I can attest to the strength of the continuing debate on this point in our professional military education classrooms a quarter of a century later.

The rest of the inaugural JFQ lineup was and remains impressive for the range of military scholars, policy experts, and senior officers, including two theater commanders, former defense officials, and research experts. Looking at the table of contents, the titles themselves show the valuable range of ideas even in that early time. Here are some highlights.

Steven Peter Rosen discussed the issue of whether Service redundancies were wasteful or value added. Colonel Robert Doughty, USA, then leading the History Department at West Point, discussed the

value of joint professional military education, stating that even though "jointness must permeate the curricula of the intermediate and senior Service colleges, it should not do so at the expense of ignoring instruction on individual Service perspectives which remain fundamental to understanding joint warfare." Former Principal Deputy Secretary of Defense for Special Operations and Low Intensity Conflict Seth Cropsey wrote about the limits of jointness as he saw the concept as defying definition. His article deserves another look as a compass check on our current joint status. In an excerpt of their work from a RAND study, Rear Admiral James Winnefeld, USN (Ret.), and Dana Johnson walked our readers through that epic application of coalition airpower followed by a massive combined arms attack on Saddam, removing the Iraqis from Kuwait. In the last article, then-Major Richard Hooker, USA, and Second Lieutenant Christopher Coglianese

provided an outstanding precedent for Recall. It also created a precedent for allowing fairly junior officers, in comparison to the others I have mentioned, to be published in *JFQ*.

In this edition of *IFQ*, our Forum leads off with an interesting article from Viva Bartkus that discusses the world of "right of bang," where a business proposition between the military and industry led to effective execution of the by-with-through concept in Honduras. Looking to integrate the physical domains within the cyber domain, Jennifer Phillips provides us with the requirements to best advantage the joint force today. Even if the military were to succeed in integrating all its efforts in all domains, David Blair, Jason Hughes, and Thomas Mashuda help us see that recruiting, hiring, and retaining the right people to work cyber is just as essential as any other specialty but presents specific challenges

Forum / Executive Summary JFQ 93, 2nd Quarter 2019

in today's highly competitive commercial information technology world.

JPME Today provides two excellent articles from faculty members engaged in advancing the education proposition in ways that meet former Secretary James Mattis's challenge in the National Defense Strategy. As information continues to dominate our thinking in joint doctrine and warfighting, Charles Pasquale and Laura Johnson describe how covert action is used to support intelligence as a part of our national information instrument of power. While Bloom's Taxonomy has long been at the core of theories on how best to provide education to any group of students, Douglas Waters and Craig Bullis offer suggestions on how to augment this framework in order to help those students who learn in different ways than Bloom anticipated.

A JFQ noted alumna, Mary Raum, returns with an excellent review of women in combat that addresses a true blind spot in our staff and war college curriculums. Her discussion is much in line with my personal discoveries on the space program mentioned above. After a bit of a delay, Daniel McGarrah, the first noncommissioned officer to win the Secretary of Defense Essay Competition, highlights a number of issues that should be addressed in how we treat wounded women in combat. Following up on our recent discussion of the by-with-through approach, William Stephens discusses the nuts and bolts of how to support the approach with a simple but effective tool. Recounting the value of tactical operations in advancing theater security cooperation plans, David Zelaya and Joshua Wiles discuss exercise Garuda Shield 17, where the authors were engaged in making new partnerships happen.

Leading off Features, another alumna—with the unofficial record for most viral online *JFQ* article—Lindsay Rodman, returns to help us understand the issues involved at the nexis of military justice, command authorities, and responsibilities, particularly in the area of sexual violence. Looking at the impact of "dark money" on the

governments of Africa, William Hawkins and Brenda Ponsford offer a new U.S. Africa Command approach to helping our partners in the region. Closer to home, Cindie Blair, Juliana Bruns, and Scott Leuthner describe how Joint Task Force North is developing innovative training that enhances combat readiness while accomplishing missions on the U.S. Southwest border.

As we look back in Recall, returning to the Great War of a century ago, Patrick Naughton takes us deep into the Gallipoli Campaign in April 1915, one which Winston Churchill fought in as a young man, to show us how this multidomain operation is a valuable case study for today's joint planners. Rounding out this issue are three outstanding book reviews on works that use the past as a means to inform future operations. Joint Doctrine has an important article from the team of John Pelleriti, Michael Maloney, David Cox, Heather Sullivan, J. Eric Piskura, and Montigo Hawkins that discusses problems with current irregular warfare doctrine. Helping see the potential disagreements after the September 2018 release of Joint Publication 3-60, Joint Targeting, J. Mark Berwanger suggests this debate falls into the definition of "fires" among the Services. And, as always, we provide you with the latest update of joint doctrine development.

In future columns, I will be looking into other editions in that first year of *IFO* because I think those perspectives offer us a good view of how our joint views have evolved and how some remain very well in place. As one comparison to consider, that first issue had no women authors or issues related to them. This issue presents 31 authors of which 8 are women. I believe we are all made better for hearing from a range of views. As General Powell said in the inaugural issue, IFO's "purpose is to spread the word about our team, to provide for a free give-and-take of ideas among a wide range of people from every corner of the military."

I stand in awe of how well our inaugural issue was constructed and how durable the format seems to have been. After 25 years, even with different editors in chief, changes in staff, and the styles of the presentation, plus having added a virtual and very successful online version of the journal, I believe Joint Force Quarterly continues to meet the mission General Powell gave us in 1993. I am proud of our accomplishments and am equally proud of my teammates who work behind the scenes to make *IFO* happen. We promise you that our team here at the National Defense University, Joint Staff, Defense Media Agency (that hosts our Web site), and Government Publishing Office will continue to support the cool and lively debate of issues that matter to the joint force, just as General Powell hoped we would. All we need is you to bring us the ideas to make that conversation continue. JFQ

> WILLIAM T. ELIASON Editor in Chief

JFQ 93, 2nd Quarter 2019 Eliason 5



"Untapped Resources" for Building Security from the Ground Up

By Viva Bartkus

We knew we were winning when gang leaders started quietly sending their sons and younger brothers to us for jobs.

—Command Sergeant Major Joff Celleri, USA 7th Special Forces Group San Pedro Sula, Honduras, 2014

Dr. Viva Bartkus is an Associate Professor of Management at the University of Notre Dame. This article would not have been possible without the extensive collaboration of Professor Emily Block, Mr. Mike Nevens, and Lieutenant General Charles Cleveland, USA (Ret.).

rug cartels and gangs have made Honduras one of the most violent places on Earth. The success of U.S. maritime interdiction operations in the Caribbean has pushed narcotraffickers to adopt strategic land transport routes through Central America, contributing to high levels of gang violence in San Pedro Sula and instability in the Aguan Valley in northern Honduras. The clearest indication of just how bad the Honduran security situation has become is that mothers are sending their 8-year-olds unaccompanied on "the Beast" through Mexico for merely the chance of a better life in the United States. Asked by U.S. Theater Special Operations Command-South in 2014 to develop a more comprehensive theater security plan, Soldiers from the U.S. Army Special Operations Command (USASOC) launched an unconventional partnership with American and Honduran business leaders to generate new and different options.

Eighteen months of intense collaboration revealed not only striking insights but also obstacles for the theater security plan. Based on the experience in Honduras and ongoing research, this article argues that, under certain conditions, combatant commands should develop theater security plans that seek cooperation with business from the onset. It further contends that by working with local, national, and multinational businesses, the U.S. military could access former Secretary of Defense Robert Gates's "untapped resources beyond the U.S. Government"1 to create a powerful self-sustaining force to enhance security.

This article has three objectives. First, it examines the implications of the current security threats, described by the 2018 National Defense Strategy as "more complex and volatile than what we have experienced in recent memory."2 Although civilian-military cooperation is not a new idea, more recent joint doctrine and the Joint Concept for Integrated Campaigning (JCIC) expands the U.S. military role in economic security, particularly in areas outside of traditional armed conflict. Second, it argues that successful execution of such an expanded economic security role will require the U.S. military to overcome multiple challenges. When practice in the field attempts to match joint doctrine, the results are rarely effective and sustainable. Moreover, the urgency of theater campaigns prevents military planners from developing environment insights from outside collaborators in the private sector. Third, it describes the USASOC experience in Honduras and other ongoing research to draw out lessons learned about who, when, where, and perhaps most critically, how such unconventional alliances with business should be piloted in the future. If it stimulates debate, it will meet the author's intent.

The U.S. Military Role in Economic Security

Although by no means exhaustive, the following joint publications (JPs) imply a significant economic security role for the U.S. military:

- JP 3-20, Security Cooperation
- JP 3-08, Interorganizational Cooperation
- JP 3-03, Joint Interdiction
- JP 3-07, Stability
- JP 3-29, Foreign Humanitarian Assistance
- JP 3-57, Civil-Military Operations
- JP 3-28, Defense Support of Civil Authorities
- JP 3-07.3, Peace Operations.³

The 2017 National Security Strategy dictated that "to prevail, we must integrate all elements of America's national power—political, economic, and military . . . the United States must develop new concepts and capabilities to protect our homeland, advance our prosperity, and preserve peace."4 JP 1, Doctrine for the Armed Forces of the United States, defines instruments of national power as diplomatic, informational, military, and economic.⁵ As a matter of course, military campaigns already enforce economic restrictions in the case of sanctions, embargoes, and no-fly zones. Yet civil-military cooperation can also assist in positive objectives such as economic development.

The expansion of U.S. military responsibility into economic security initiatives rests on extensive academic and field research. Leading scholars have shown how economic growth diminishes the threat of war, while poverty and hopelessness create the underlying conditions for conflict.6 Evidence from cross-country analysis demonstrates that societies where work is valued and available show higher rates of satisfaction and indicators of welfare and lower rates of violence and conflict. One of the multiple ways business provides a stabilizing force is that large-scale economic activity absorbs disenfranchised young men who may otherwise gravitate toward violence in the absence of other viable opportunities.⁷ Moreover, thriving businesses and markets provide the opportunity for the formation of networks, norms, and trust among members of previously warring tribes, ethnicities, and religious groups. Business provides a safe haven to develop social capital among members of different communities, which could then provide the glue to hold together societies when the inevitable triggers of violence occur.⁸

Under most conditions, the Department of State and U.S. Agency for International Development (USAID) take the lead responsibility for economic initiatives, with combatant commanders mainly rendering support. U.S. military cooperation with USAID is extensively codified.9 Under certain circumstances, however, combatant commanders must take the lead responsibility for economic measures. These circumstances include when hazardous security conditions prevent the work of civilian humanitarian aid organizations. Such circumstances also rest on the support of the chief of mission. To illustrate, combatant commanders in Iraq and Afghanistan utilized special operations forces (SOF), Provincial Reconstruction Teams (PRTs), and the Commander's Emergency Response Program (CERP) for economic reconstruction priorities. As a consequence, as one SOF general officer commented:

With the recent approval by the Chairman of the Joint Concept for Integrated Campaigning, I consider critical economic efforts as an example of the new roles the U.S. military will have to play outside of traditional armed conflict.... In other words, how can the U.S. military work itself out of a job earlier and achieve real strategic success in these human centric conflicts that have become the norm for the first part of this century?... We need a well-built intellectual bridge between war and peace and business is one of the key spans that needs building.

Challenges: Addressing Who, When, and Where

The question is no longer why the U.S. military should take an economic security role, but rather why it is not executing on that role better. The first of two obstacles to overcome is that even when commanders attempt to execute against their economic security responsibilities, more often than not they do not achieve their long-term

JFQ 93, 2nd Quarter 2019 Bartkus 7

stabilizing objectives. In areas under threat of conflict, USAID and other aid programs rarely generate sustained economic impact; only business generates long-term sustainable economic activity. Indeed, achievement of long-term strategic goals of regional stability requires the substitution of business self-interest for the goodwill of USAID-funded projects.

To illustrate the challenge, take the Village Stability Operations (VSOs) in Afghanistan. VSOs embedded small teams of Soldiers into strategically important villages to coordinate initiatives to improve local governance, protect communities where they live, and enable economic development. There is no more thoughtful analysis of such operations than David Kilcullen's regarding what he christened as the "Kunar model."10 His insights rest on the program of road construction in Kunar in 2006–2008, which integrated local civilian and military leaders and coordinated overlapping initiatives in establishing good governance, protecting local populations, and economic development. Directly engaging local communities in planning, construction, and even protection of the road mattered more than the road itself. The process of building the road improved governance and established trust. That trust encouraged more cooperation by previously wavering populations, and thus ultimately improved security.

Critics of VSOs quickly attacked Kilcullen's model as a failure. Despite some \$80 million in USAID funds for road construction and development, the Kunar security situation deteriorated rapidly after 2008.11 What this debate missed was the question of how to make the security gains sustainable beyond the completion of the Kunar road or comparable efforts. Many observers acknowledged the importance of ongoing funding for such initiatives. However, improvements in the security situation last only as long as the economic activity necessary for increased employment. Economic activities like the Kunar road construction funded by USAID are, by their very definition, unsustainable. American taxpayers will not continue to

fund such projects indefinitely; at some point their goodwill will run out. Once the funding ends, so does the associated economic activity. Once the economic activity ends, so does its inherent stabilization through the employment of military-aged males. Unlike USAID funds to build a road or similar projects, the approach proposed here emphasizes business opportunities that will earn sufficient revenues and profits to generate self-funding operations. Once again, *only business generates long-term, sustainable economic activity*.

The second obstacle is that even though JP 5-0, Joint Planning, and JCIC direct commanders to develop a comprehensive understanding of the environment prior to framing the problem and ultimately planning the theater campaign, experience in the field indicates that, more often than not, planners fall short of doctrine. The pressures on integrated campaign planning are such that adding another critical element such as business is unlikely to gain widespread adoption. This extra effort—expanding beyond traditional community development methodologies to assessing sustainable business opportunities and building ongoing business relationships in the field—will not be warranted everywhere. The upfront investment in skills and time would be too great. And thus, it is critical that the conditions for such an expansion of the concept of "joint" be specified and circumscribed. Such an incremental investment of time and personnel should only be made when "the juice is worth the squeeze."

Thus, the approach to business from the onset of campaign planning must be part of a larger enduring U.S. military commitment to the region.

The decades-long commitment to Plan Colombia would certainly be a case in point. Arguably, the greatest challenge facing the Colombia Peace Accord is the reincorporation of Fuerzas Armadas Revolucionarias de Colombia–Ejército del Pueblo (FARC-EP) ex-combatants into Colombian society and the economy. For that, hundreds, perhaps thousands, of FARC-EP ex-guerrillas need jobs. It is a race to establish livelihoods in the

resettlement zones before the FARC-EP melts back into the jungle to narcotrafficking, extortion, and other criminal activities

Moreover, those commanders who employ Security Force Assistance Brigades (SFABs) or SOF elements should take the lead in reaching out to local and international business, as they possess both the authorities and the skills. When security concerns prevent civilian nongovernmental organization (NGO) economic development efforts, the U.S. military taking the lead in economic security initiatives is critical. Without doubt, the most critical condition is the chief of mission's endorsement.

Challenges: Addressing How

In the design of integrated campaigning, the JCIC expands the operating environment by showing when and where additional allies are needed across the competition continuum below armed conflict. It begins with a recognition that both military and nonmilitary activities are essential to achieve acceptable political goals; military power alone is insufficient. Following through on critical economic initiatives can serve to "improve," "counter," and "contest" competition below armed conflict. JCIC lays out a disciplined approach for working with nonmilitary powers.

Yet for all its comprehensiveness, the JCIC provides remarkably little direction to combatant commanders on how to improve understanding of the operational environment such that they achieve "empathy" with all actors in the sector or how to harness the economic instruments of national power. The USASOC experience of working with business in Honduras on the theater security plan illustrates valuable lessons. The bottom line is that generating transformative options for long-term security through partnerships with business requires sustained commitment, coproduction of strategies between business and the U.S. military, and investment in novel capabilities.

Self-interest drives business. As Adam Smith declared over 200 years ago in the *Wealth of Nations*, "It is not from the benevolence of the butcher, the brewer,



UN Secretary-General Ban Ki-moon addresses crowd after Colombian President Juan Manuel Santos and FARC leader known as Timoleón Jiménez signed peace accord, September 26, 2016 (U.S. State Department)

or the baker that we expect our dinner, but from their regard to their own self-interest. We address ourselves not to their humanity but to their self-love, and never talk to them of our own necessities, but of their advantages." Business expects each individual to determine and pursue his or her own personal self-interest.

In its most basic definition, business produces and sells goods and services within an economic system of markets for goods, labor, and capital. Motivated by profit, every business requires both some form of investment and customers who value its production. Besides increasing employment, business also creates webs of relationships with employees, bankers, customers, and suppliers. It provides a legitimate avenue in society for the ambitious to advance—those with energy, foresight, and willingness to take risks, and launch and build businesses. If these profitable avenues are closed, such

individuals could develop into leaders of illicit networks.

One implication from these business observations is that, although many factors contribute to understanding the operating environment, the rapid expansion or widespread collapse of businesses in an economic sector can serve as a leading indicator of potential instability. The contention here is that opening the aperture to include the interest and perspectives of business can generate such insights and thus strengthen combatant commanders' integrated campaign planning across the continuum of competition.

"The Honduras Play"

In 2013, USASOC launched a pilot program to develop creative approaches to security. As its initial civilian partner, USASOC chose the University of Notre Dame's interdisciplinary Business on the

Frontlines (BOTFL) program. Over the previous decade and across 30 countries, BOTFL students and faculty had worked with local companies and multinational corporations such as General Electric and Newmont Mining, international humanitarian organizations such as Mercy Corps and World Vision, and the local Catholic Church to harness the dynamism of business in rebuilding war-torn societies before they tip back into conflict. Although other business schools work in developing economies, Notre Dame's Mendoza College of Business was chosen for its focus on and success with the business and economics of conflict, asking more of business to build peace and prosperity. To this unique partnership with USASOC, Notre Dame faculty and BOTFL alumni civilian volunteers brought their business expertise and relationships from their employment at Intel,

JFQ 93, 2nd Quarter 2019



Marine Corps landing support specialist with Special Purpose Marine Air-Ground Task Force—Southern Command guides CH-53E Super Stallion on Soto Cano Air Base, Honduras, July 10, 2015 (U.S. Marine Corps/Abraham Lopez)

Amazon, United Airlines, Pricewater-houseCoopers, private equity/venture capital firms, and the Special Olympics. USASOC commanders asked the joint team to explore whether it was possible to overcome the staggering differences in process, mindset, and even language to foster military-business cooperation.

To address the Theater Special Operations Command-South objective to develop unconventional options for the theater security plan, a team of 13 Soldiers and 8 civilians was commissioned. The Honduras premission preparation was different from conventional approaches: not only crossing traditional boundaries within the U.S. Army but also consciously blurring the lines between military and civilian teammates. More specifically, Soldiers immersed themselves in introductory finance, accounting, operations, and marketing at Notre Dame, as well as international law and peace studies. The team then proceeded to Silicon Valley,

where it immediately utilized its new business skills both to work with senior high-tech executives on consulting projects and to launch its own e-commerce businesses, ultimately pitching its business ideas to venture capitalists. One key takeaway from this experience was that most Soldiers have limited experience of what it takes to run a successful business. As one seasoned Silicon Valley private equity investor relayed after meeting with the Soldiers, "Their dedication, commitment, and hard work immediately earned my respect. But their questions on business were beyond naïve." Without a better understanding of this major part of society, Soldiers will not imagine the possible common ground with potential business partners during their toughest deployments, let alone possess the language and facility to build necessary relationships.

The joint team spent real time together developing a common language to foster civil-military dialogue and to identify opportunities. Commanders gave the joint team the freedom to identify knowledge gaps and then seek expertise to address them. To illustrate, recognizing their own ignorance regarding the inner workings of major Honduran gangs, the joint team interviewed incarcerated gang members in Los Angeles prisons and the Catholic priests who are working toward rehabilitating them. The Soldiers traveled to Los Angeles thinking about security threats, while the business civilians were simultaneously thinking about jobs for young uneducated men. The interviews revealed how both possessed an inaccurate lens to analyze the underlying problems. More specifically, gang members described how their criminal participation involved far more about identity, which the Catholic priests further corroborated by identifying tattoo removal as the highest priority for rehabilitation. And thus, the joint team uncovered critical insights into the

operating environment that would have proved impossible for either business or the Soldiers independently.

Despite the violence in San Pedro Sula and the Aguan Valley, local businessmen and expatriate Hondurans in Miami described exciting business prospects. However, the security risks associated with operating in either region essentially prohibited investment. As one potential investor in San Pedro Sula put it, "Why invest in a business when any extra profits will just be extorted?" The region presents a catch-22: Businesses could contribute to stability and economic alternatives to the illicit drug trade, but the region needed security in order to entice investment.

What the joint team found was that although the basic business investment equation balancing risk and return was correct, the math was wrong. Through collaborative approaches that reinforced security, governance, infrastructure, and information transparency of markets, Soldiers and business could make the security cost side of the investment equation variable, not fixed. As a consequence, investment opportunities could become more attractive than business leaders currently believe. The joint team's insights revealed key unrealized benefits for both partners. For businesses, those who contribute to enhanced security in unstable environments would earn decisive advantages and, ultimately, profits. For the U.S. military, these businesses represented potential partners who embody a persistent presence and stabilizing

To test these insights further, the joint team proposed novel mission plans. First, it launched innovative security plus business initiatives to take back one *barrio* in San Pedro Sula in a sustainable fashion from criminal gang domination. Second, it leveraged agriculture and tourism opportunities in the north coast to strengthen peasant farmers, *campesinos*, to withstand pressure from sophisticated narcotrafficking organizations. Indeed, before embarking on this unique effort, few military leaders would have predicted that Soldiers would be working alongside investors in textiles, agriculture,

and tourism industries, for example. Nevertheless, textiles, farming, tourism, and Soldiers share critical common ground around security.

In San Pedro Sula, the focus was on tying together the existing, courageous "points of light" in Honduran society to reinforce governance, security, and economic initiatives. Coordinating the efforts of leaders in vocational training, micro-finance, civic, and religious organizations not only supported the safety, functioning, and transparency of markets for goods, services, and lending but also created nascent and informal community governance structures. Solidifying the local market for labor quickly became the priority to enabling the private sector to hire suitable young men and giving them a reason to invest in themselves and their communities.

Over time, however, the joint team's thinking evolved regarding how to drive a wedge between communities and criminals. SOF expertise was critical to undercut the appeal of gangs and narcotraffickers, discredit their messages to young people, expose their motives, and convince the rest of the population to voluntarily hand over, or at minimum, isolate those who intimidate them. Yet the challenges of local law enforcement to protect Hondurans were deeply rooted and substantial. One junior police officer inadvertently described the challenge: "When both my wife and I need to go to work, the girlfriend of the gang leader living next door looks after our kids." Although such efforts were constantly daunted by local corruption, these capacity-building initiatives relied on investments in police training and equipment to overcome significant structural barriers.

Nevertheless, without the help of their civilian business teammates, the Soldiers did not perceive how they could multiply the impact of their security initiatives through associated business decisions. In a relatively simple example, the San Pedro Sula police force required new uniforms. A team member, a senior noncommissioned officer, immediately phoned the U.S. Army's 7th Special Forces Group headquarters in Florida to

requisition the necessary uniforms. His business teammates counseled otherwise. Honduras has a longstanding textile industry with skilled tailors and seamstresses producing low-cost apparel for the American market. Why not purchase the police uniforms from local textile companies? The large-scale order would encourage these local businesses toward more production, with the second- and third-order effects being increased employment, wage payment, and local consumption.

In the north coast, the joint team ran straight into another example of the instability associated with the rapid collapse of a region's major industry. More specifically, African palm oil production dominates the local economy. However, in recent years, the two largest global producers, Malaysia and Indonesia, have dumped their production on international markets, thereby causing the price for African palm oil to collapse below what the campesinos need to feed their families. As a consequence of domestic political decisions taken by governments on the other side of the world, hundreds of campesinos in northern Honduras were thrown out of work. Yet northern Honduras has a significant competitive advantage: the natural deep-water port in Trujillo. The race for the team then became to enable the campesinos' transition to new and more profitable export crops through tying them into the global food supply chain by building relationships with U.S. agricultural multinational companies.

It is critical to stress that in this pilot program, Soldiers did not and would not pick individual business winners and losers. They spent zero money, unlike the millions of dollars spent through the PRTs and CERP. Rather, the value of this initiative lay, first, in the diagnosis of the root causes of problems; second, in proposing solutions to test; and third, in assisting Soldiers to develop fledgling relationships with new local allies in business.

As benefits the world of gray in which the joint team operated, its solutions were far from elegant. They were messy, precarious, and pragmatic. All depended on

JFQ 93, 2nd Quarter 2019 Bartkus 11



Navy engineman, attached to Coastal Riverine Squadron, discusses navigation with Honduran servicemembers during Southern Partnership Station 2014 (U.S. Navy/Rafael Martie)

the trust developed with local Hondurans based on working side by side. Local and international businesses proved quite willing to "fail fast." They experimented with new initiatives, rewarded those employees who identified failures quickly, and then remedied them on the ground.

Ultimately, business demands simple metrics to track its performance in the marketplace. By analogy, the measures of effectiveness for this joint team and its successors were equally straightforward: reduction in violence, employment of young men, and increased local livelihoods.

Conclusion

The USASOC experience in Honduras indicates that to build security from below, this alliance between the U.S. military and business must tip the scales to improve the risk-return calculation associated with business investment. It

must also provide the security return on the investment of the military's resources and time. Operating in unstable environments presents business with additional costs such as employee protection, work stoppages, and extortion. High security costs push potential business expansions into unprofitability. Yet in Honduras, the scales needed only to be tipped modestly, through reducing security costs, to encourage those investors already contemplating new business launches to make the required investments. Except in rare circumstances, however, business alone cannot affect the needed security for economic expansion. Thus, when developing theater security campaigns, the U.S. military will find powerful and willing local allies in business in enhancing security from the ground up.

For the U.S. military, the first steps toward forging such a civilian alliance

will require no more resources or personnel. The approach does require a shift in mindset, training, and planning. Conversion of common ground into alliance will require combatant commanders to open the aperture when assessing the facts on the ground in order to imagine new possibilities, identify and approach potential new business allies, and jointly develop creative approaches to enhancing security.

Commanders who employ SFABs and SOF should take the lead to seek cooperation with business at the onset of their campaign planning. Implementation will require at least two phases of partnering. First, when developing theater security campaigns, business partners like BOTFL bring to bear problem-solving, data-gathering, analysis, and creativity to identify and frame business opportunities and figure out why these business opportunities are not being pursued already.

Second, once the business opportunities are clear, attention turns to building relationships with civilian partners—such as local business, NGOs, and multinational corporations—that possess the required skills and resources to pursue them. As business ventures drive self-funding operations through earning revenues and profits and provide jobs for military-aged men, they represent a powerful self-sustaining force to enhance security.

Theater security campaigns aligning security and business efforts must be focused to be successful. Furthermore, this approach works if (and only if) macro-governance issues are at some minimum workable level. Some rule of law, currency stability, and functioning civic infrastructure are necessary preconditions. Few businesses can function in the middle of an insurgency or civil war. Moreover, this approach requires consistent policy, unity of effort, and long-term commitment; it takes longer than 6 months to build a business. Similarly, such theater security campaigns require multiple rotations to make security gains sustainable. Without coordination of innovative governance, security, and business efforts, adversaries will simply attempt to co-opt local businesses for their nefarious ends. Yet all the efforts of the U.S. military toward improved governance and security will be wasted unless businesses are created both to provide jobs to disenfranchised young men and to build social capital among communities.

If the conversion of mutual self-interest in security into a viable alliance with business had been easy, the U.S. military would have already accomplished it. The USASOC experiment in Honduras ran into a number of obstacles. Many the joint team overcame, but some proved insurmountable. More specifically, the question of legal authorities consumed the attention of not a small number of judges advocate general, although in the end they did secure the necessary authorities. By contrast, this novel alliance did not survive the retirement of critical commanders. Business leaders build their enterprises for the long term and expect their partners to be there. It is beyond the scope of this article to address the

disconnect between the U.S. military's promotion, command, and mobility cycles and the need for a longer term relationship with businesses on the ground. Perhaps it suffices to point out that the JCIC acknowledges this dilemma: "Improvements in relationships occur over long periods of time. Therefore, they are often undervalued when measured on an event-by-event cost-benefit basis."

Yet in the long term, the most significant obstacle to adopting such a novel expansion of the concept of "joint" may be overcoming the U.S. military's bureaucratic risk-averse culture. From an external perspective as a partner who usually works at the speed of business, the sheer number of roadblocks—what one general officer called the "undeciders"—was striking. Simply getting the joint team into Honduras with some flexibility of maneuver was no small achievement.

The best reason for the U.S. military to embrace this proposed creative approach to theater security campaigning and seek alliances with business is that when this works, we will not have to fight our way in to secure strategically critical areas again and again. Working with business on integrated campaigning must be a focused part of a larger enduring commitment to the region by the U.S. military. As one SOF general officer commented, "10 percent are just the bad guys. Leave them for my 75th Ranger Regiment." For the other 90 percent, all but the most vile adversaries are probably reconcilable under some conditions. The dignity associated with a good day's work in local businesses represents one of those critical conditions. Indeed, the joint team charted its progress in Honduras once gang leaders began to quietly send their little brothers and sons to local businesses for jobs, as those jobs represented a way out of gang life. JFQ

Notes

¹ Secretary of Defense Robert Gates speech (2008), "We as a nation must devote more resources to what has been called 'soft power,' the elements of national power beyond the guns and steel of the military—from diplomacy

to economic development and assistance, institution-building, strategic communications, and more. One of the keys to this effort, I believe . . . is to find untapped resources outside of government."

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).

³ Joint Publication (JP) 3-20, Security Cooperation (Washington, DC: The Joint Staff, May 23, 2017); JP 3-08, Interorganizational Cooperation (Washington, DC: The Joint Staff, October 12, 2016); JP 3-03, Joint Interdiction (Washington, DC: The Joint Staff, September 9, 2016); JP 3-07, Stability (Washington, DC: The Joint Staff, August 3, 2016); JP 3-29, Foreign Humanitarian Assistance (Washington, DC: The Joint Staff, January 3, 2014); JP 3-57, Civil-Military Operations (Washington, DC: The Joint Staff, September 11, 2013); JP 3-28, Defense Support of Civil Authorities (Washington, DC: The Joint Staff, July 31, 2013); and JP 3-07.3, Peace Operations (Washington, DC: The Joint Staff, August 1, 2012).

⁴ Summary of the 2018 National Defense Strategy of the United States of America.

⁵ JP 1, Doctrine for the Armed Forces of the United States (Washington, DC: The Joint Staff, March 25, 2013, Incorporating Change 1, July 12, 2017).

⁶ Paul Collier, *The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It* (New York: Oxford University Press, 2007).

⁷ Jan Osburg et al., *Assessing Locally Focused Stability Operations* (Washington, DC: RAND, 2014).

⁸ James Coleman, *Foundations of Social Theory* (Cambridge: Harvard University Press, 1990).

⁹ USAID Policy on Cooperation with Department of Defense (Washington, DC: U.S. Agency for International Development, 2015).

¹⁰ David Kilcullen, *The Accidental Guerrilla: Fighting Small Wars in the Midst of a Big One* (New York: Oxford University Press, 2009).

¹¹ Gilles Dorronsoro, *Afghanistan: The Impossible Mission* (Washington, DC: Carnegie Endowment for International Peace, 2011).

JFQ 93, 2nd Quarter 2019 Bartkus 13



Tactical Maneuver in the Cyber Domain

Dominating the Enemy

By Jennifer Leigh Phillips

s the platoon clears the alley, Corporal Stokely turns the corner and receives sniper fire from an elevated position near a cluster of high-rise apartment buildings. There is already chaos in the street from an unidentified explosion, and Corporal Stokely can see there are people clustered in the windows on multiple levels of the building where the sniper fire is originating. After several moments of attempting unsuccessfully to neutralize

Major Jennifer Leigh Phillips, USAFR, Ph.D., is Individual Mobilization Augmentee to the Deputy Chief of the Intelligence, Surveillance, and Reconnaissance Division, 607 Air and Operations Center, U.S. Air Force. She is also an Assistant Professor of Education at the University of Southern California.

the sniper, the unit is able to identify him. He is located in the corner apartment of the sixth floor of the building. The unit is not able to call in kinetic support due to the high potential for civilian casualties in the area. The Joint Terminal Attack Controller [JTAC] makes a call for fire: "CYBER01, THIS IS L63, IMMEDIATE SUPPRESSION GRID 211432, BUILDING 2, FLOOR 6, SW CORNER, AUTHENTICA-TION IS TANGO UNIFORM OVER." The response is immediate: "THIS IS CYBER01, IMMEDIATE SUPPRES-SION, GRID 211432 BUILDING 2, FLOOR 6, SW CORNER, OUT." A moment later, an image materializes on the JTAC's Cyber ROVER screen of a man holding a rifle, his back to the camera device. "L63, THIS IS CYBER 01, TARGET CONFIRMED, REQUEST CONFIRMATION FOR IMMEDIATE SUPPRESSION." "THIS IS L63, CONFIRMED." The television

set near the sniper explodes, sending glass and shrapnel through the room. The explosion disrupts the sniper, allowing the team to move quickly through the street, continuing on to their destination.

Imagine the possibilities if tactical teams were able to plan a raid that integrated not only air and ground support but also on-call fires in the cyber domain. In terms of achieving economy of force, limiting costs, and reducing physical collateral damage, the opportunities are endless. To effectively compete in future war, the United States must master the ability to maneuver through and in the cyber domain to seize the initiative by destabilizing the enemy's cognitive decisionmaking capacities. Achieving operational and tactical maneuver success in the cyber domain requires advances in U.S. military doctrine, tactics, and training beyond current capacities.

The concept of tactical cyber maneuver arises from an appreciation that the Internet of Things (IoT) will become ubiquitous, pervading every aspect of our daily lives over the next 20 to 40 years. The IoT will penetrate both large urban areas and the expanse of rural, virtually connected regions of the world currently considered "unconnected."

The large physical footprint that has been an advantage to U.S. military operations in the past is quickly becoming a liability. Disruptive use of force within and manipulation of the cyber domain both in close and deep battle to create surprise and shock is achievable through tactical and operational cyber maneuver. Military actions will not likely be at a time or place of our choosing. U.S. military forces may find they can control strategic use of force in the cyber domain, but commercial, civilian, and systemic influences will demand that tactical military entities function offensively in this domain. These fielded forces will interact with the IoT in the conduct of their duties across the range of military operations.

When facing an enemy of technological parity such as Russia or China, the military actor is potentially at a disadvantage in the cognitive, physical, and/or virtual dimensions. As a result,

conceptual thinking about the cyber domain must move away from an obsession with strategic-level decisions toward full integration of cyber into combined arms for tactical and operational maneuver as a necessary condition for achieving national and strategic objectives. Our national defense mechanisms must invest in appropriate tactical capabilities and practical education of its personnel to effectively maneuver in the cyber domain as part of a holistic multidomain approach.

The operational and tactical initiative is empowered by exploiting cyber maneuver to cripple the enemy's cognitive linkages. Time and space also present challenges for intelligence, command and control, and logistics. Today's linear, strategically reactive approach to the cyber domain cannot overcome the tactical and operational coordination requirements to enable maneuver. To achieve the desired effects across the physical, virtual, and cognitive dimensions where wars are fought and won, a renewed emphasis is needed on the intersectionality between the cyber domain and physical space to refine joint force doctrine; operational practice; and tactics, techniques, and procedures (TTPs). Overcoming the cognitive barriers to conceiving of this intersectionality will require a concerted effort to deliberately query and challenge biases in our own conception of the cyber domain through education, training, simulations, and exercise trials across the joint force. Three key attributes of the cyber domain compel the U.S. military to sharpen its integration of cyberspace in combined arms multidomain maneuver considerations: an interactively complex system; the intersection of the physical, cognitive, and virtual; and nonlinear, disproportionate strategic effects to be achieved by appropriately integrating tactical maneuver in the cyber domain as part of operational design through all phases of warfare.1

Operational Considerations for Tactical Maneuver in Cyberspace

Maneuver. Tactical maneuver elements must take advantage of virtual, physical, and cognitive connections

between the cyber domain and other domains to achieve operational and tactical objectives through multidomain maneuver. The success of distributed operations in the future will rely on the ability to achieve rapid maneuver in the cyber domain as part of sequential or simultaneous integrated movement across other domains. We must move away from a static understanding of focusing on tools used to conduct offensive and defensive operations in the cyber domain toward a focus on dominating the enemy by seizing the initiative through combined arms multidomain maneuver that fully integrates manipulation of the cognitive, virtual, and physical dimensions of the cyber domain. According to Marine Corps Doctrine Publication 1, Warfighting:

Success depends not so much on the efficient performance of procedures and techniques, but on understanding the specific characteristics of the enemy system. Maneuver relies on speed and surprise for without either we cannot concentrate strength against enemy weakness. Tempo is itself a weapon—often the most important. Success by maneuver—unlike attrition—is often disproportionate to the effort made. However, for exactly the same reasons, maneuver incompetently applied carries with it a greater chance for catastrophic failure.²

At the battalion level and below, tactical forces must effectively induce shock and surprise in the enemy, and the cyber domain may be the most effective means of doing so in a given particular situation. U.S. forces are currently integrating robotics, unmanned aerial vehicles, artificial intelligence, and other capabilities. Combined arms maneuver already integrates the cyber domain throughout the military force, but a real understanding of the interaction—the hinges—between the cyber domain and other domains is limited to few specialists at this time. The entire force needs to be better educated regarding the interplay between the cyber domain and other domains to bring about a paradigm shift in current concepts of multidomain maneuver. Clearly,

JFQ 93, 2nd Quarter 2019 Phillips 15



Commander of 558th Flying Training Squadron, left, discusses training mission utilizing T-6 Flight Simulator with enlisted remotely piloted aircraft pilot student, Joint Base San Antonio, Texas, July 17, 2018 (U.S. Air Force/Bennie J. Davis III)

cyber is not a replacement for other forms of maneuver and fire, but it is part of a complete whole in terms of our approach to conducting operations.

Much of the technology exists today within commercial entities to support mapping, overlaying, and exploiting cyber environments. Adapting these technologies for operational and tactical military purposes will require a clear picture of maneuver in the cyber domain as both physically and temporally overlaid with human and physical terrain features of interest to military missions. The activities described to support maneuver will also apply to the fires considerations and will require extensive investment in doctrine and training to understand the logistical and intelligence requirements needed to support these actions. Specifically, logistical considerations will

need to encompass the architectural support and configuration management requirements needed to integrate new and emerging technologies into a distributed network environment. However, the ideas and concepts related to maneuver within the cyber domain must precede investment in technology tools and materiel solutions.

Fires. With the proper authorities and command and control structure in place, calls for fire in the cyber domain may resemble those in other domains. Destroying or activating a virtual-physical connector to achieve lethal effects through cyber during a "troops in contact" by what could be called a close cyber support mission rather than a close air support may or may not have physical effects visible to the naked eye. Tactics will need to meld both electronic

warfare and information operations with coordination procedures to establish the equivalent of a cyber "call for fire."³

Fire support could be provided either through a cyber element embedded within a Tactical Operations Center or through deep fires support provided through U.S. Cyber Command or the joint cyber center established at the joint force command (JFC). In the absence of secure and reliable communications to these reachback elements, the tactical unit of the future must also possess the ability to conduct its own organic fires support within the cyber domain to the greatest extent possible. The ability to engage in direct tactical cyber fire mission, originating from the team rather than a reachback element such as CYBER 01 described in the opening vignette of this article, would not alleviate responsibility

for those disaggregated elements supporting that team to monitor the effects of the tactical cyber direct fire in the virtual dimension as previously described.

Cyberspace coordination procedures and rules of engagement (ROEs) established in advance are designed to mitigate cyber effects from spilling over and creating unintended consequences outside of the immediate cyber domain environment in which tactical maneuver is taking place. The environment(s) identified as viable for cyber maneuver in advance of the mission may or may not coincide with the specific area of operations within which the tactical unit is maneuvering physically. Even in a no communications or degraded communications environment, the reachback cells previously identified can monitor for spillover effects outside of the cyber environment, ensuring the joint task force commander and/or component commander is aware of changes in the cyber domain environment.

Command and Control. As can be seen from considerations discussed regarding maneuver and fires, planners and operators will need to develop similar control mechanisms to Airspace Control Mechanisms. However, geographic boundaries will not be sufficient given that applications and the network architecture supporting the IoT are not always collocated in the same city, region, or country as the device or program that must be manipulated to support maneuver and fires missions. Command and control of operations that integrate tactical maneuver in the cyber domain is essential in mitigating unintended consequences.

Decisionmakers should examine opportunities to expand authorities to the tactical commander below the JTF level to conduct maneuver in the cyber domain for both offensive and defensive purposes. This expansion should include a careful analysis of the applicability of current ROEs and the Laws of Armed Conflict to examine applications of force in the cyber domain. Further investigation is warranted into how the military force can expand and logistically support passive and nontraditional mechanisms

for monitoring, communication, and coordination in real time to support a more diverse approach in the future to command and control.

Just War Considerations. Gregory J. Rattray has posited an interesting idea related to force in the cyber domain that may be worth further consideration for its implications for military ROEs. He specifically puts forward the concept of microforce, wherein "the use of nonviolent digital attacks to achieve political objectives must be understood as part of a new form of warfare. . . . At issue here is the amount of energy unleashed by a given weapon at the time of attack."4 Putting aside the discussion of whether digital attacks represent a new form of warfare, understanding actions in the cyber domain as a form of energy or violence is useful to applying the precepts of just war theory. Perhaps the current concept of kinetic versus nonkinetic force may need to be adapted to understanding force as the act of violence regardless of how discernable the effects of that force may be to the naked eye or sensor. As demonstrated in the opening vignette, rendering effects through tactical maneuver in the cyber domain has the potential to cause unintended collateral damage to noncombatants either directly or because of bleed over of tools intended for military purposes on civilian networks.

Assuming the perspective that the cyber domain should be treated as an environment just like the other domains helps to clarify the cyber domain considerations in relation to *jus in bello*. Jus in bello, as it applies to the United States military, concerns the moral and philosophical Western tradition of just war theory as well as the international agreements and treaties that comprise international humanitarian law.

Arising Opportunities

Integration of tactical maneuver in the cyber domain by fielded forces focuses on achieving one's objective through offensive maneuver. Rather than emphasizing the *threat* of the individual actor and potential disproportionate effects achieved by the lone wolf, we should seek to *learn* from the lone wolf to

inform tactical maneuver in the cyber domain. These lessons may also inform the imperative for restraint in the conduct of tactical offensive operations in the cyber domain precisely because of the potential disproportionate consequences of interactions within this complex system.

Understanding the Cyber Domain as a Complex System. Military planning is an exercise in problem-solving. When presented with a military scenario or challenge, the planner must design an approach that will result in success based on effective and thorough framing of the problem. Future planners must frame the context of tactical action in all domains, including the interactive networks and configurations of the cyber domain. Traditional military planning assumes that by translating the commander's guidance and mission to objectives and tactical tasks, the planner is able to maneuver and conduct operations across all domains in a simultaneous or sequential approach. However, proper planning requires careful analysis of the multifaceted nature of the influences of these domains on human perceptions and the environmental conditions across these domains.

Integration of the cyber domain in tactical military planning appears to threaten the principle of simplicity. The overdramatization of the domain in current strategic literature and discourse has a tendency to cloud clear thinking on problem-solving in this domain. However, while the domain is an interactively complex system, effective techniques for developing an understanding of the multifaceted connections and layers of the cyberspace domain are available today. Through disciplined investigation of connections, or hinges, among the virtual, physical, and cognitive dimensions of the cyberspace domain, military planners can hope to achieve opportunities to achieve both simultaneity and depth through the cyber domain in concert with other tactical actions. Keeping a close eye on the greater operational and strategic objectives is essential in all planning; integration of the cyber domain in planning is no exception.

JFQ 93, 2nd Quarter 2019 Phillips 17

A key component of future success in achieving simplicity in tactical maneuver in the cyber domain will be to move bevond a reliance on materiel solutions and to focus first on ideas and concepts such as presented here to evolve a shared understanding of the cyber domain. While common operating pictures, computer network defense, and computer network attack (CNA) tools will be requirements to conduct tactical maneuver in the cyber domain, a common and comprehensive understanding of the complexity of this domain in military operation is required. Integrating doctrine, organization, training, materiel, leadership, personnel, facilities, and policy (DOTMLPF-P) considerations as part of a functional solutions analysis is essential as a follow-on consideration of this initial work. Today's joint force is compelled to focus on baselining common knowledge of the cyber domain as essential to equipping military planners and operators with the necessary background for both understanding the cyber environment and conducting successful tactical maneuver in this environment.

While Department of Defense Information Assurance training has become a standard tool for teaching Servicemembers how to protect their own activities within the cyber domain, there is no single-source mandatory training that attempts to shape a common vernacular or language for communication across the joint force regarding this domain. While Intermediate Developmental Education introduces officers to cyber domain concepts, this training is too little and too late to equip the tactical force for planning required at the junior officer and junior enlisted level. A concerted effort to peel away the "mystique" of the cyber domain leads directly to clarity in planning and orders writing.

Finally, design should also consider the integration of just war principles in relation to the cyber domain. Myriad policies, legal considerations, and ROEs procedures will continue to influence the utilization of certain tactics within the cyber domain. The 1988 release of the Morris worm by a Cornell University student, Robert Morris, is an example

of the potential negative impact deriving from poor planning and risk mitigation. Morris's intent in releasing the worm was to tally the size of the Internet at the time. However, the randomization measure Morris installed in the worm to ensure it would be able to succeed in penetrating systems resulted in a level of replication that effectively crashed every computer system it entered. As discussed, the utilization of TTPs and control mechanisms must include risk mitigation protocols to help to limit unintended consequences. Specifically, disruption of a particular WiFi or WiMax network in a village or town in order to prevent citizens from tipping local authorities to the location of a maneuver element could also have the unintended consequence of disrupting medical alert systems, home monitoring equipment for hospice patients, or other life-sustaining activities among the civilian population. As civil defense and civilian cyber infrastructures become more reliant on common architecture backbones, tool and TTP development must focus on discriminators and identification protocols for devices and networks in order to limit unintended collateral damage to the greatest extent possible.

Overcoming the perception that analyzing and problem-solving within the cyber domain is too complex without extensive and specific subject matter expertise undermines the military principle of unity of command. Problem-solving by the military planning team necessarily involves both diagnosing the problem as well as explaining the challenge clearly and concisely to senior leaders. Additionally, senior leaders must be well versed in the risks, assumptions, and opportunities the cyber domain presents. Finally, commanders must have confidence in the risks that the force is assuming in delegating freedom of action to the tactical level. The cyber domain proves to be no exception, but the commander who does not understand the domain will prove to be inherently more risk adverse.

Exploiting the Intersection of the Physical, Cognitive, and Virtual Through the Cyber Domain. Future

planning requires that planners visualize the cognitive, physical, and virtual properties of the cyber domain as co-existing and interacting simultaneously with the physical domains of land, sea, air, and space. Effectively framing the problem in military operations will include mapping the hinges previously discussed between the cyber and other domains, identifying opportunities to exploit those bridges, and providing for deliberate mechanisms to take advantage of those bridges for either offensive or defensive purposes.

The case of the Stuxnet worm's ability to cause physical damage to the uranium gas centrifuge tubes at the Natanz nuclear facility in Iran is the clearest example of exploiting a hinge between the virtual and physical through the cyber domain.5 Like the Morris worm, Stuxnet had a singular purpose, but designers scoped Stuxnet to specifications that attempted to limit effects only to those centrifuge tubes used at Natanz. Effective problem-framing and careful identification of the connection between the virtual and physical dimensions were required to identify the desired means for limiting the expansion of Iranian enrichment programs. This problem-framing effort allowed designers to achieve the desired effect in the physical dimension through manipulation in the virtual. Additionally, the worm initially went undetected by the Iranian government, and when the mechanical (physical) difficulties began to emerge, the initial assumption was that there was a physical defect or malfunction afoot. Stuxnet thus achieved both a physical and cognitive effect through virtual action in the cyber domain.

While the Stuxnet worm attack was authorized based on a strategic priority, the planning, worm development, and execution required tactical focus, including extensive cyber espionage by a skilled cadre of experts. In conducting the problem-framing to determine how to disable the Natanz enrichment efforts, planners necessarily envisioned a path across the virtual hinge in the cyber domain to achieve a physical effect. In this respect, the cognitive interplay with the cyber domain is present in both the attacker and victim of this attack. In particular, Stuxnet



Army Rapid Capabilities Office and Project Manager for Electronic Warfare & Cyber teamed with 173rd Airborne Brigade, 2nd Cavalry Regiment, and other receiving units while participating in Joint Warfighting Assessment 18, Grafenwoehr, Germany, April 2018 (U.S. Army)

informs the proper approach to tactical maneuver in the cyber domain from the perspective of economy of force and mass.

The Israelis achieved economy of force in the case of the Stuxnet worm through extensive intelligence preparation of the battlespace across all domains. This example also highlights the hinge between the technical and human considerations of the cyber domain. While the cybernetic problem of identifying the appropriate hinge is essentially one of scientific method, the intended geopolitical effect and following consequences fit in the larger scheme of "wicked" problems.6 The decision to exploit an opportunity in the cyber domain became a selected option to resolve the Israeli problem precisely because it conformed to a range of "action-prospects" available to the decisionmakers.7

A team properly equipped with a "map" of identified hinge opportunities

could maintain the offensive during tactical maneuvers while limiting unintended civilian collateral damage with further refinement of military doctrine, training, and tactics. Even in the least connected countries today, the widespread use of cellular and WiFi technologies (and in the absence of such technology-integrating networks the use of devices able to connect through peer-to-peer connections such as Bluetooth) creates opportunities to seize the initiative and exploit tactical advantages. Where it may be unacceptable to use a high-tonnage air-dropped munition on an apartment building where a combatant is firing from on a team, it may be possible to see passively into the room where the shooter is firing from through connected devices such as televisions and phones. If the team is able to pinpoint the exact source of the hostile fire, utilizing a hinge to initiate a physical effect by short-circuiting the electricity,

overheating a phone battery to create a low-yield explosion, or turning on the television as a distraction all become possibilities. The objective of neutralizing the enemy is achieved.

Tactical maneuver in the cyber domain is only possible if embraced as a viable component of combined arms multidomain maneuver. U.S. military current force posture and technology certainly does not permit this scenario to come to fruition today, but a reorientation in doctrine and policy would allow for the full realization of DOTMLPF-P solutions to meet these requirements.

Nonlinear, Disproportionate
Strategic Effects Achieved at the Tactical
Level. Joint Publication 3-0, Joint
Operations, states, "Commanders conduct [cyber operations] to retain freedom of maneuver in cyberspace, accomplish the JFC's objectives, deny freedom of action to enemies, and enable other

JFQ 93, 2nd Quarter 2019 Phillips 19

operational activities."8 However, the majority of military discourse remains focused on strategic cyber or simply focusing effects in the cyber domain based on cyber-centric considerations rather than based on a true multidomain maneuver approach. While leadership and strategy to task metrics dominate discussions of leadership, training, planning, and kinetic operations in warfare, a consistent trend concerning the cyber domain is to compartmentalize its application because of the alleged "uniqueness" of the domain. But all tactical tasks performed on the battlefield should trace back to strategic aims. Tactical and operational cyber maneuver provide the potential to achieve nonlinear, disproportionate strategic effects for military forces.

To understand this vision of tactical cyber maneuver, the phrase *nonlinear*, disproportionate strategic effects should be taken in the proper context of problem-solving. The military planner seeks to solve problems, possessed of both scientific and human factors. The purpose of warfare is to crush the enemy's will, denying him the desire or ability to continue to fight. Human will is both expressed and influenced through the cyber domain. While policymakers cannot ignore the importance of strategic control of this medium, targeting the will of the individual is essentially a matter of tactical maneuver—exploiting his weaknesses while making our own weakness appear as strength. To do so effectively requires a shift in our conceptualization of the cyber domain. Russia's ability to conduct tactical maneuver in the cyber domain during the 2008 Georgia crisis provides valuable insight into the utility of applying multidomain maneuver principles that integrate the cyber domain for future military operations.

Though it has been asserted that Russian targeting of Georgian cyber infrastructure as part of its overland maneuver was not conducted at the tactical level, the value of seizing the initiative and achieving economy of force through preparatory cyberspace fires in this operation is clear. The CNA conducted on a wide scale against Georgian civilian

and governmental cyber infrastructure, though not formally tied to the Russian government, achieved clear military objectives. The CNA prevented accurate estimations of the strength and direction of Russian overland movements, preventing communication and queuing among observers, military elements, and senior policy experts. The cyber domain attack was able to prevent an effective initial response to Russian aggression due to ambiguities and a lack of information. Additionally, the attack took advantage of pro-Russian sentiments of a portion of the civilian population, lending confusion to the true nature, intent, and extent of the Russian invasion. As the campaign moved forward, the extent, duration, and scope of Russian maneuver in the cyber domain would change to meet the military needs of the Russian planners.

Rather than focusing on the actions undertaken in the cyber domain, be they denial, deception, espionage, attack, or maneuver, the cyber domain must first be visualized as an organic environment. Humans both influence and are influenced by the cyber domain, much the same as they are on the land, sea, air, and space. Individuals pass through the cyber domain in the same way they walk on the land or sail across the sea. In a future world, the cyber domain is ubiquitous, connecting humans, devices, and even multilayered networks both passively and actively to one another.

Maneuver in the cyber domain is not a new concept given that we as individuals interact with and manipulate the physical, virtual, and cognitive dimensions of the cyber domain on a daily basis. Tactical maneuver in the cyber domain as part of a combined arms multidomain approach to military operations is a concept that must be further explored and elucidated in military doctrine and tactics. Effective education of the force regarding the cyber domain is essential to grooming future planners, operators, and leaders who are able to grapple with this domain. The future force must be able to visualize the operational and tactical hinges between the cyber domain and other domains as they conduct problem-framing

and design campaigns to achieve strategic military and national objectives. A common understanding of the cyber domain as ubiquitous in civilian and military life is the first step for military forces to be prepared for this eventual future. JFQ

Notes

¹The term *phase* specifically refers to the phases of an operational plan as articulated in Joint Publication 3-0, *Joint Operations* (Washington, DC: The Joint Staff, January 17, 2017), V-6.

² Marine Corps Doctrine Publication 1, *Warfighting* (Washington, DC: Headquarters Department of the Marine Corps, June 20, 1997), 38.

³ Per Field Manual 6-30, *Tactics, Techniques, and Procedures for Observed Fire* (Washington, DC: Headquarters Department of the Army, July 16, 1991), calls for fire consist of six elements sent in three separate transmissions. While additional elements or subelements may need to be adopted for real-time cyber support in a close combat situation, the practical coordination mechanisms would remain the same.

⁴ Gregory J. Rattray, *Strategic Warfare in Cyberspace* (Cambridge: MIT Press, 2001), 20.

⁵ For a detailed case study on the Stuxnet worm, see Chris Morton, "Stuxnet, Flame, and Duqu: The Olympic Games," in *A Fierce Domain: Conflict in Cyberspace*, 1986–2012, ed. Jason Healey (Washington, DC: Cyber Conflict Studies Association, 2013), 212–231.

⁶ Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4, no. 2 (1973), 155–169.

⁷ Ibid.

8 JP 3-0, III-9.



From DOPMA to Google Cyber as a Case Study in Talent Management

By David Blair, Jason Hughes, and Thomas Mashuda

alent management is the sine qua non of an effective organization and, therefore, a critical determinant of military success. Within the framework of this article, talent management is best understood as the thinking, policy, and strategy associated with hiring, training, and retaining great people. Due to the competitive nature of combat, military organizational structure and culture must be ruthlessly functional, designed to apply the abilities and skills of the populace

in order to produce dominant combat capability. If the American military cannot attract, develop, and retain the right people, producing an environment in which these people flourish, the joint force cannot expect to find success in competition below the threshold of armed conflict, major combat operations, or credible deterrence. This is a moving target, as the proverbial "right people" change over time due to changes in society and technology. Stated simply, a nation's best military

is the one that best leverages the deep strengths and best mitigates the weaknesses of that society. This is a function of both humans and hardware, requiring talent management reform and acquisitions reform, respectively, but as the special operations forces (SOF) axiom counsels, "humans are more important than hardware." If the military is to retain its competitive edge, it must master talent management, especially in relatively new enterprises such as cyberspace.

Cyber as a Case Study

Surveying our present portfolio, this challenge is most acute and pressing in the cyber community. Since the full scope of the problem exceeds

Lieutenant Colonel David Blair, USAF, is a Senior Special Operations Aviation Advisor at the Office of the Secretary of Defense. Major (P) Jason Hughes, USA, is a Medical Service Corps Officer serving as the Joint Staff Surgeon's Strategic Plans, Exercises, and Logistics Action Officer. Lieutenant Commander Thomas Mashuda, USN, is an MH-60R Pilot currently serving in the Joint and Coalition Operational Analysis Branch of the Joint Lessons Learned Division of the Joint Staff J7.

JFQ 93, 2nd Quarter 2019 Blair, Hughes, and Mashuda 21

the scope of any one article, talent management for cyber warriors is a manageable problem that implicates many of the larger talent management trends. A number of changes to the current industrial-era promotion and retention systems are necessary to maintain a competitive edge in cyber over the coming decades—specifically, tailored control over standards and advancement, a technical track for cyber operators, and the possibility of a cyber auxiliary force with an alternative means of accession.

To outline the challenges associated with talent management in the cyber force, this article begins by describing those challenges and continues by conducting strengths, weaknesses, opportunities, and threat (SWOT) analyses of the U.S. cyber status quo, the independent German "Gray Berets" cyber service model, and the Russian and Chinese levée en masse cyber models. From the SWOT analyses, the authors synthetically derive policy recommendations for improving cyber talent management. Ultimately, this cyber case study can provide a template for solving aspects of the larger talent management problem, especially in highly technical domains or branches.

The Current Cyber Baseline

This article assumes a general knowledge about the basic principles of the current military personnel system. As a quick review of the cyber status quo, cyber operators are subject to the same personnel system rules as the rest of the military. Of particular concern are the "up-or-out" system, the system of centralized promotion boards, and the centrally managed assignment system. These features fit well for an industrial-era assembly line bureaucracy.2 They are ill-suited, however, to a tech company, as the case study below demonstrates, and cyber is more like a tech company than an assembly line.

Checking all the boxes to accommodate an industrial, centrally managed system is a particular problem for cyber, as the field runs at the speed of Moore's law, and operators out of the seat for

more than 6 months have to relearn much of the new "state of the art" when they return. This is incompatible with the current staff and school-in-residence model required to advance under an upor-out system. This remains a persistent problem that will take major changes to fix and which must be coordinated with multiple stakeholders.

Running parallel to this rigid promotion structure is a monetary incentive system that functions as a force management, rather than a talent management tool. The same bonus and incentive pay templates used to retain a sufficient number of pilots and Navy nuclear Sailors to meet billet quotas have been applied to cyber forces since 2010. Such Selective Reenlistment Bonuses and Assignment Incentive Pays, adopted by the Army Cyber Mission Force in 2015,3 are shortsighted stop-gaps at best. They assume, possibly incorrectly, that throwing money at the talent management problem will fix it. These techniques are likely unsustainable in the shadow of an ever-growing private tech sector and workforce shifting toward millennials.

Structurally, cyber operators have achieved some degree of institutional autonomy within the Services—U.S. Army Cyber Command, the 24th Air Force and its cyber mission forces,4 the U.S. Navy's Tenth Fleet, and the U.S. Marine Corps Forces Cyberspace Command.5 Moreover, the establishment of U.S. Cyber Command (USCYBERCOM) provides a warfighting platform for these forces. USCYBERCOM is following a model similar to U.S. Special Operations Command (USSOCOM), with semi-independent funding and acquisition authorities and a direct operational link to the Secretary of Defense.6 However, like USSOCOM, even with these changes, the command will not have much control over the personnel policies and processes of its people, which remain the province of the military departments. Unfortunately, as described above, it is in these policies and processes that the talent management problem lives, not in a lack of institutional independence.

The current structure leverages extant and stable Service processes, a strength

that means that cyber does not need to fund and manage a separate personnel bureaucracy. However, the impediments of the industrial-age systems still used by the Services make it difficult to compete with the market to bring in talent and to retain any talent developed organically. The current structure can take advantage of the opportunity to follow the USSOCOM pattern that, under Section 922 of the 2016 National Defense Authorization Act, gained a responsibility similar to a Service Secretary for the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict, which included new authorities for managing SOF personnel. A similar structure with similar authorities might be imagined for cyber policy elements under the Office of the Secretary of Defense. However, by continuing to rely on legacy industrial-age systems, the joint force may have to severely curtail the role of military cyber and rely on other options.⁷ The better road is to recalibrate our concepts of professional military and citizen Soldiers around these new technologies.

Civilian Model: Flexible Tech Sector Careers

American businesses in the industrial and service sector follow a model similar to the military personnel system—the legislation that scripts the military personnel system was based on best practices from these industries in the late 1970s.8 Gather thousands of applicants, select the best on paper, train them to execute the job required, and follow the company plan for promotion. Workers are placed in an assembly line talent management program, working their way up from the bottom. This works for industrial or service companies, whose product is stable and where optimization often trumps innovation. The tech sector, specifically Google and Microsoft, manages talent in a fundamentally different way because tech-sector requirements are fast-moving targets.

Google, for example, worked to build a system that allowed exceptional talent, outside of the normal metrics of degrees or certifications, to be identified and incorporated into their system. This allows



Cyberspace operations specialists with Expeditionary Cyber Support Detachment, 782nd Military Intelligence Battalion (Cyber), provide support to training rotation for 3nd Brigade Combat Team, 1st Cavalry Division, at National Training Center, Fort Irwin, California, January 13, 2019 (Steven Stover)

recruiters to attract young, ambitious self-starters and original thinkers to keep up with the ferocious pace of change in the tech sector. Competing for those people means understanding how to attract them.9 One of the key aspects of the Google system is an organizational culture that encourages collaboration and individual projects—the company aspires to the concept of "20 percent time," or the principle that employees are empowered to spend one-fifth of their working time on projects of their own initiative. Google demonstrates that in an information-age talent management system, there is a blurring of lines between recruiting, retention, and employment of talent, and quality of service works alongside quality of life both to attract the right people and to use them well.

Microsoft realized that outdated techniques of recruiting hurt its ability to attract the talent needed to succeed in today's environment. The millennial generation and other prospective employees use technology and social networks far more than previous generations. Attracting talent requires a social recruiting strategy that leverages social networks in more fluid and interactive ways. ¹⁰ The Department of Defense (DOD) could similarly shift toward a more fluid recruiting and assignment system that leverages social networks rather than financial incentives.

Recruiting exceptional talent is the first step. Keeping the talent is next. Younger workers want to make an impact by changing the way the world lives one algorithm at a time. ¹¹ They value this "quality of service" more than job security, which was a recruiting factor for earlier generations. Organizations had to design their culture and structure to accommodate this desire. Technical companies eschew hierarchical management

structures to emphasize the individual. Google highlights that they are an organization built by engineers for engineers; this yields a structure that allows freedom on the technical side but manages their career.¹²

Google established Project Oxygen, which uses analytics to develop leaders who allow technical workers to thrive in their culture. Technical experts want to be managed by those who understand their skills. Project Oxygen found that leaders who empowered the team, eschewed micromanagement, communicated with a clear vision and strategy for the team, and wielded key technical skills to advise are those best equipped to manage in a technical environment.¹³

The civilian model enjoys the strength of a flexible organizational structure, not beholden to dated personnel systems, to take advantage of talent or the market. The civilian sector can provide attractive



(From left) Alex Rice, chief technology officer and co-founder of HackerOne, Peter Kim, Air Force chief information security officer, and Chris Lynch, director of Defense Digital Service, announce "Hack the Air Force" event at HackerOne headquarters, San Francisco, April 26, 2017 (U.S. Air Force/Dan DeCook)

employment packages oriented toward creative incentives rather than solely compensation. For instance, Google's commitment to 20 percent time consistently receives high reviews and results in profitable results, most notably Gmail and Google Earth. He Furthermore, access to worldwide talent provides ample access to sources of talent not available to the military. However, the pace and volatility of the industry is a liability that causes constant churn in the workforce. He

Visionary leaders such as Elon Musk¹⁶ provide what Simon Sinek calls the "why,"¹⁷ attracting funding and talent to tackle seemingly unachievable goals. As described above, changing the world is a key attraction for tech talent. The private sector is able to leverage "lore," openly discuss big ideas, and trumpet past accomplishments, thereby creating room for collaboration with other likeminded companies or pull "free agents" from other sectors. (Lore as an attractor is hardly foreign to the military—every

high-level headquarters has a hall of honor that retells the stories of the exemplars of the command. Doing the same for cyber would require a careful navigation of security issues.) Survival in an entrepreneurial environment is only possible by maintaining an innovative spirit and the drive to solve problems.

A talented 12-year-old with access to limitless information can change the world, ¹⁸ and can threaten a company's business model or bottom line. Google, Microsoft, and similar tech companies face threats from continuing digital transformation, advanced analytics, artificial intelligence, machine learning, and other innovations that could fundamentally change the talent landscape. Companies that guess wrong today will find it difficult to attract a workforce needed to win in an unpredictable future. ¹⁹

This analysis reveals several key principles from the civilian sector, namely, that technical cyber operators desire to be led by those who understand their

craft. Additionally, creativity is a hiring draw as well as a value producer, and the flexibility to pursue creative craft is a necessity. Finally, freedom in job placement is a stronger draw than compensation. Gaining and maintaining skill in the cyber domain for the long term require concessions from the traditional military model, especially in the form of a "technical track" option and relief from the pressures of an up-or-out system.

Independent Service: Germany's "Gray Berets"

Germany's Cyber and Information Space Command, colloquially known as the Gray Berets,²⁰ was established as the sixth German military service in April 2017. This three-star command joined the German army, navy, air force, joint support service, and joint medical service.²¹ It was borne out of a real and growing concern that Germany was illequipped to fight future wars (and conflicts short of war) in the cyber domain.

This concern was borne out as hackers targeted the Bundeswehr's information technology (IT) infrastructure 284,000 times in the first 3 months of 2017.²² This new cyber service is slated to garner 13,500 personnel from various IT and intelligence specialties in the existing German force.²³

The independent service model has been advocated by many military leaders, most notably Admiral James Stavridis, USN (Ret.), as a means of ensuring the operational effectiveness of U.S. cyber capabilities.²⁴ Since the German Cyber and Information Space Command is still in its infancy, it is difficult to say exactly how successful a separate cyber force will be at recruiting and retaining talent. However, one can still hypothesize on the strengths, weaknesses, opportunities, and threats that such a force presents. Given the recency of cyber military operations, the ambitious nature of this project commends it as a model worth considering, and one whose advantages are apparent, although in the abstract, especially given the popularity of propagating services and corps in this particular historical moment.

The strengths and opportunities for talent management inherent in the German model of a separate cyber force are numerous. First, that force would be able to set its own standards for entry that could greatly increase eligibility rates within the existing talent pool. Among these are standards for age, physical fitness, and level of education. The German cyber force has already recognized this opportunity and discussed waiving certain education qualification entry requirements.²⁵

Second, an independent cyber force could standardize training for its members. Whereas U.S. Cyber Servicemembers receive a disparate breadth and depth of training among the Services, an autonomous cyber service could ensure its members have a common baseline. Germany has signaled its intent to do just this by instituting a cyber security master's degree at its Bunderswehr University to train up to 70 future cyber force soldiers per year, and subsequently create an educational incentive for enlistment.²⁶ It will take time to

determine the effectiveness of the Gray Berets' retention practices, but increased flexibility in cyber career options should yield positive results.

Next, free from the archetypes of other services, a separate cyber force would also be able to shape its own rank structure and establish the incentives and opportunities for advancement within it. The leadership of such a force would be notionally free to establish the criteria it values among its members and then reinforce those criteria in its advancement and retention systems. This would open possibilities for a flattened rank structure similar to parts of the American tech sector, where experience and time in service do not trump knowledge and capability. Starting off from scratch would allow a cyber force to establish its own ground rules and, therefore, shape its own culture, blending the aforementioned innovative solutions implemented at Google with the already granted USCYBERCOM specific authorities, among other distinctives.

A separate cyber force is also flexible and can determine its own pace for adaptation. If the existing cyber rank, advancement, or incentive structure is stagnant or ineffective, a new one could arguably be implemented much faster than it could within one of the conventional Services. This strength is crucial in a domain that is ever-changing.

Lastly, a separate cyber force could, in theory, compete at an equal level with the other services for money and resources that could help attract talent. Such a paradigm shift would elevate cyber warriors' priorities, where they would otherwise be buried among the other competing priorities of an individual service.

However, there are weaknesses and threats to the separate service model. While the German Cyber and Information Space Command has stated it intends to improve the salaries and career opportunities for its servicemembers, it has been slow to offer specifics, and even as a service, would be still bound to national governmental personnel laws. This is a problem in cyber, for just as the military pilot pool is directly linked to civilian demand for pilots, cyber is linked

to civilian IT, which is a more volatile market than aviation. Additionally, a separate cyber force is susceptible to isolation and stovepiping, both of which are killers of innovation. At its worst, this could manifest itself in an inflexible cyber force incapable of integrating with other military disciplines or government instruments of national power. Service distinctions could also numb cyber to the personalities and needs of other services that it is meant to complement and support.

Despite its strengths, a separate cyber force is not a panacea, as it does not inherently solve the problems of talent management. While it may not be encumbered by the recruiting, retention, and advancement requirements of the existing military services, it still must compete against the private sector, which will likely still possess competitive advantages in salary and career flexibility. Moreover, relaxing entry standards could have the unintended consequence of significant personnel costs in the future, especially with regards to health care.

The independent service model reveals several key principles. First, the military cannot afford to "buy" talent against the tech sector, and must instead focus on providing meaningful missions, camaraderie, a culture of technical excellence, and unique career opportunities. Since "shoehorning" cyber warriors into legacy careers inhibits the development of this requisite unique cyber identity, a cyber force requires flexibility and some degree of autonomy in order to realize these goals. Therefore, the military should consider limited forms of institutional free rein for cyber warriors, akin to those granted USSOCOM but specific to the demands of the cyber domain.

Russian and Chinese Models

Our competitors have seen in cyber a field where they have some degree of natural advantage—namely, the field lends itself to cybernetic theories of controlling human thought and process, and these are well-trodden ground for both the Soviet and Chinese states.²⁷ Additionally, cyber coarsens boundaries of time and space, thereby eroding

the high industrial-era walls between the civil and the military sphere. The Russian model leverages the whole of society, in several tiers, to achieve cyber effects against an adversary. This begins in the interagency and, for historical reasons, the Russian cyber enterprise is led by the Federal Security Service, or FSB (the successor of the KGB), which performs national cyber actions, including propaganda and disinformation.²⁸ The wealth of expertise is owned by these national agencies, and they use them in hybrid warfare, or gray zone, approaches to national policies.²⁹ Similar to the United States, the Russian military considered cyber more in the realm of communications until relatively recently, and Russian military cyber troops were mostly concerned with maintaining computer connectivity and security.

In 2012 Russia created the Foundation for Advanced Military Research (FAMR), a cyber-military unit focused on offensive and defensive cyber operations. Like the United States and Germany, the country has difficulties recruiting qualified cyber warriors because of the competition for more lucrative civilian options. FAMR is an effort to develop its own organic cyber capabilities in order to expand the use of cyber to support conventional military operations.³⁰

Until FAMR bears fruit, Russia's current whole-of-society and outsourcing model creates significant risk. Hackers learn each time they execute a mission, but so do those who are attacked. Outsourced hacking is hard to control, and Russia may find that the hacker exceeds the desired endstate as the hacker finds they can break further into the system. No internationally recognized redline exists on cyber warfare, and each instance may lead to unpredicted consequences for the Russian government, causing kinetic or reprisal cyber warfare.³¹

The good news is that "war is graded on a curve," and the Russians seem to have similar problems with talent attraction and retention. But their national cyber is formidable, and their ability to leverage the whole of society is extremely effective. Security services own the most

sensitive missions and most advanced capabilities, but a second ring of stateowned industries provides both capacity and access to the global information space. A third ring of militia-guerrilla forces allows the state to put "asks" out on the Internet to encourage individual cyber actions. While national capabilities are retained by official organizations, these "patriotic hackers" can aid and abet national efforts through everything from defacement to identifying weaknesses and entry points in systems.³² The Chinese employed a similar concept in the wake of the 2001 EP-3 Hainan Island incident, when patriot hackers conducted distributed denial-of-service attacks and probes on U.S. military Internet sites.³³ This outer tier is unruly and cantankerous, but it is low-cost and plausibly deniable.

China, like Russia, has advanced cyber capabilities and strategies ranging from stealthy network penetration to intellectual property theft.34 China has centralized its cyber force in the 2nd Bureau, Unit 61398, under the 3rd Department (SIGINT/CNO), which reports directly to the Chinese equivalent of the U.S. Joint Chiefs of Staff.35 The People's Liberation Army's cyber command is fully institutionalized within the Communist Party of China (CPC) and able to draw on the resources of China's state-owned enterprises to support its operations. The CPC is the ultimate authority in mainland China; unlike in Western societies, in which political parties are subordinate to the government, the military and government in China are subordinate to the CPC.

The centralization of action is a key factor and explains the focused targeting process directly related to China's strategic goals, as observed by Mandiant, a leading cybersecurity firm. Organizing and directing are useless without the talent to operate in cyberspace. China launched a countrywide effort to find cyber talent, pledging to increase the number of scholarships to attract students pursuing cyber security and running special recruitment for "maverick geniuses," which constitutes a part of nationwide efforts to train cyber security talent.³⁶ This effort is akin to China's efforts to

produce athletes for the Olympic games, in which it scours the countryside for the best and brightest, training athletes from a young age to bring the country glory.³⁷ China is working with companies to cultivate "the world's top cyber security talent" by recruiting top graduates, both from China and overseas and from cyber contests. Traditionally, China has placed people in targeted programs based on exam scores; however, it seems that potential cyber recruits are evaluated on performance and provided practical training to hone key cyber skills.³⁸

The effort of cultivating and recruiting cyber talent feeds Unit 61398, which is housed in a 12-story building and staffed by hundreds to thousands of people who are trained in computer security and computer network operations, and proficient in English. The scale and duration of attacks against a wide set of industries tracked to the known location of Unit 61398 demonstrate China's capability and capacity to execute economic, offensive, and defensive cyber operations.³⁹

The strength of this model is its ability to leverage the whole of interagency and society toward cyber objectives, which is a key enabler for hybrid warfare capabilities. Concentric rings of capabilities, combined with the levée en masse principle, allow both national forces to conduct precise attacks with the most controlled tools and guerrilla forces to conduct deniable, unpredictable hitand-run attacks. However, in order to employ the levée en masse principle in an authoritarian country, a state must roil its people into a foment in order to yield the patriotic hackers, often exposing the government to the threat of its hackers getting out of control and going too far. They also do not need to consider the authorities' problems in using such a model, but untangling this would be challenging.

An effective cyber model should extract this principle of multilayered civil-military cybersecurity partnerships. It should also consider the value of collaboration with industry and "cyber militias" where there are shared interests or values. However, as part of a liberal democracy, the American military must



Commanding general of U.S. Army Research, Development, and Engineering Command tries hand at One World Terrain, March 2018 (U.S. Army)

consider proper authorities, control, and civil society immunities involved in the use of force.

The Policy/Strategy Mismatch

With this survey of available models complete, our analysis returns to the cyber talent management problem and identification of potential solutions. Chuck Spinney, acolyte of Colonel John Boyd, once described a "Plans/Reality Mismatch"40 between the budgetary process and results of said process. The current talent management crisis is a symptom of a policy/strategy mismatch, as evinced by the Air Force pilot shortage,⁴¹ our difficulties in attracting cyber talent,42 and the myriad persistent difficulties induced by an up-or-out system as described in Tim Kane's book Bleeding Talent.⁴³ The root of these problems is a generational mismatch between industrial-era human capital management systems, the hallmark of rust-belt corporations, and contemporary talent management systems such as those used in the Silicon Valley tech sector. The former focuses on transactional optimization tools, which means matching the right number of faces with the right (easily categorized) qualifications to fill all the places on the organizational chart. The latter "expects the unexpected," embracing unique and self-identified talents, and hence it is a model uniquely suited to a creative economy. The mismatch between the creative economy and our lagging industrial-era military personnel systems drives out many of our best people.44 In one particularly concerning turn, U.S. competitors have been able to incorporate many features similar to those used by Silicon Valley into their systems in order to optimize the same sorts of talents that a rigid industrial-age system is driving out of the U.S. Defense establishment writ large.

This problem is especially pressing in light of the Third Offset Strategy⁴⁵

efforts to leverage advanced technologies in pursuit of a new revolution in military affairs (RMA).46 An RMA is a tectonic shift in military operations, a rapid synthesis resulting from long-term shifts in society and technology. For instance, the invention of rifles held the potential for revolution, but they could not be fully applied until nationalism allowed for major changes in distributed command and control, as manifest in the small-unit tactics used in the American Revolution. The possibilities of hardware cannot be realized without evolution on the human side of the equation. For instance, artificial intelligence (AI) is one of these key advanced technologies changing the role of the human workforce. By automating simple, repetitive tasks—the sorts of tasks that industrial systems embrace—AI is forcing humans to refocus on creative tasks, where they will still outpace machines for the foreseeable future. However, the traditional industrial-era military training and recruitment

JFQ 93, 2nd Quarter 2019 Blair, Hughes, and Mashuda 2

system tends to focus on processes for reproducing these repetitive tasks. Just as these technologies drove major structural changes in the civil economy, they will have to drive major changes in the military workforce in order to unlock the full potential of a fighting force increasingly composed of millennials.

Policy Recommendations

Analysis of these three models yields three design principles toward building such a force. The mission focus of the German model demonstrates the value of flexible career tracks that focus on craftsmanship. The Russian model reveals the importance of decentralization and organizational flattening, as their multilayered approach provides span and innovative tactical options. Finally, the Silicon Valley model illustrates the imperative to trust the initiative of our people, as many of the most profitable products of Google began as individual discretionary projects.

Building on these design principles, there are three recommendations that are both within the realm of the possible and within a policy-relevant timeframe. First, DOD should consider supercharging the increasing institutional independence of our cyber forces by granting increased latitude over standards and advancement for cyber operators. Second, realizing that cyber is a non-industrial, creativity-and-collaboration-driven, and extremely perishable skillset, DOD should consider a technical track for cyber operators that focuses on elite technical skills but retains the broad authorities of officers. This maps well onto Silicon Valley precedents of legendary senior coders who are disproportionately productive, as well as practices of our competitors. Finally, following the principle that cyber is part of the larger 21st century's "democratization of production," the national security enterprise must consider coarsening some of the civil-military distinctions along the lines of the early Republic. A multitiered "cyber auxiliary force," which leverages Reserve and National Guard authorities. and potentially revives constitutional "letters of marque and reprisal" authorities,

brings the cyber talent of our society to bear without endangering our freedoms, providing a version of the Russian model more appropriate for a liberal democracy.

Increased Control over Standards and Advancement. No matter what system is ultimately adopted for cyber talent management, it should exert expanded influence over the standards to which members are held and their opportunities for advancement and retention. Perhaps implemented as coordinating authority with the Services, paralleling the expansion of SOF authorities, this influence would address key issues previously highlighted in the existing force structure. First, control of standards would allow recruiters to open their aperture and accept highly talented individuals who would not otherwise qualify for military service. Since cyber warriors do not need to hump miles to charge an enemy hill, the flexibility to refocus standards (within reason) on cyber-relevant requirements would prevent the loss of otherwise premier talent.47

Next, control over advancement boards would ensure that the right qualities, qualifications, and skills are retained, independent of Service biases, as to which blocks should be checked under an upor-out system. Control over retention tools would allow for a tailored incentive system that could overcome existing indiscriminate systems that seek to retain a body to operate a computer terminal without regard to whether that body is the most qualified.⁴⁸ Money might not always be the most effective retention tool, but it is currently the easiest tool given current processes and authorities.

Technical Track for Cyber. The Air Force is presently considering a technical track.⁴⁹ Triggered by an aircrew retention crisis, the Service is realizing that flight skills are perishable and difficult to replace and that many of those who hold them would prefer to continue to exercise them on a technical track rather than to pursue a management-style promotion career path. Such a path, as described below, would allow a branching between those who wanted to pursue and maintain proficiency and mastery of cyber tools and those who will maintain a functional

knowledge but focus on managing and integrating the capability within the larger force. This is a functional split that is evident in many high-tech fields—for example, the National Aeronautics and Space Administration hires excellent engineers, and many focus their careers on honing that craft, while others go on to run the organization. One key cultural feature of this split is that one is not clearly superior to the other, but they are mutually reliant. This is a feature of the tech sector as well—few things will drive out technical talent more quickly than a technically illiterate manager dictating technical decisions to a craftsman.

In many aspects, recurring themes from the tech sector and adversary models parallel aspects of aviation and surgical culture, with high levels of value on technical mastery and collaboration, and the self-policing of performance and values.50 In a technical track model, career operators would recognize the (to their mind, likely unenviable) role of their peers on a management track in instructional governance, and those peers would recognize the value and province of technical experts. Performance pays for technical track officers could offset these lost promotion opportunities. These technical leaders might even enjoy special privileges and opportunities, such as the standardization and evaluation roles, to further create interdependencies. Another advantage of a technical officer corps is the idea of intrinsic authority, which is a requirement for mission sets that are expected to navigate complex problems with national-level consequences, which might not have approved solutions. Given the prospect of a technical expert, deep in an enemy's network, running a time-critical exploit, he will likely not have time to ask for guidance for all unforeseen problems and will need to make some command decisions in the course of his action. A technical officer would have the broad authorities to make these calls.

In another idea from the Air Force's efforts to remedy its manning crisis, virtual staff tours could allow a cyber force member to remain in place at an operational assignment, gain a Pentagon phone number, email, and office symbol,

and do her staff job while maintaining a basic operational currency. Any meetings that could not be done via video teleconferencing could be attended through a temporary duty assignment. This is similar to the tech sector telecommuting model, which is wildly popular in Silicon Valley.

Cyber Reserve and Auxiliary. Two fundamental options supplement our full-time cyber force: a cyber Reserve force and auxiliary cyber force that allows DOD to leverage talent when needed, while also allowing them the opportunity to continue their work in the private sector. The Reserve force model must be modified to accommodate and attract talent to support this venture.

The 2017 National Defense Authorization Act (NDAA) provides the Secretary of Defense flexibility to adjust hiring and retention of cyber personnel.⁵¹ This provides an avenue for DOD to fundamentally change the structure for key personnel in support of the cyber mission. In many cases, Reservists who are civilian cyber professionals could do many of the same tasks for the government under a Reserve commission, which provides the authorities with what they need to execute their "wartime" mission. Placing them in an Individual Ready Reserve status where they are on-call provides access to their talents without competing with the private sector. This model is akin to keeping a lawyer on retainer for future work, and with a flexible drill days option, they could be activated to deal with an emergent problem or even if they identified a problem through their civilian work.

Change in the cyber world is accelerated; this allows key people to maintain their skills and support the private sector while also protecting the homeland from cyber attacks through their company's day-to-day operations of defending their applications and networks. Our competitors attack both government and private-sector entities; therefore, skills need to be consistently maintained to counter the current threat. A yearly virtual drill would allow U.S. Cyber Command to test and provide updates on defense-related targets, but daily work



Cyber Defense Operations Command Sailors monitor, analyze, detect, and respond to unauthorized activity within information systems and computer networks at Joint Expeditionary Base Little Creek–Fort Story, Virginia, August 4, 2010 (U.S. Navy/Joshua J. Wahl)

might count as a drill given arrangements with industry. Specifically, given state-sponsored attacks against American civilian economic interests, cybersecurity industries or major corporations may often find their interests aligned with military cyber objectives. These Reservists might serve as a bridge using both Federal and corporate authorities, much as Merchant Marine officers do, whose civil and military authorities are blended and take on different flavors in war and peacetime.⁵² This would require extensive ethics training and legislative clarification, but is likely a necessity against competitors who do not observe a "Cyber Geneva Convention" in differentiating military versus civil cyber infrastructure.

As a salient example, the shipping industry realized that governments were unable to completely secure sea lines of communication against piracy, thus demanding a private-sector security solution. Governments initially resisted this effort but accepted that active defense measures deployed by owners, along with insurance providers, helped deter attacks. The bottom line—the private sector filled a critical gap in protection.⁵³ This is the idea of "letters of marque and reprisal" discussed by cybersecurity expert

and Georgetown professor Catherine Lotrionte.⁵⁴ Distinct from the Merchant Marine–analog Reserve model, this model is more like raising a militia or privateering.

Government should produce guiding principles for active cyber defense versus laws and regulations that it cannot enforce. This provides a framework to leverage private solutions to defend public and private cyberspace deterring future attacks. Defensive posture operations would be managed by the private sector; however, offensive operations require a different model.

An offensive auxiliary force co-exists with the Reserve force, meaning a Reserve officer, with DOD authorities, leads a team of cyber patriots to execute offensive missions in support of our national defense. Building a national defense entity similar to "Anonymous" allows us to focus efforts and leverage talent in a nonattributable way while defending our national interests, as long as alignment with the values of a free and secure society could be ensured. This is different from the Russian model, in which they leverage hackers by placing asks in cyberspace without controlling their actions or effects, good or bad. This nationalizes the risk and creates an ability to control actions against adversaries, while allowing access to talent that may not be immediately available otherwise.

Implementation Strategy: Spiraling Authorities

To put these concepts into practice, the most promising approach is a spiral design, where each iteration can reduce risk for the next. The logical place to begin is within the authorities already granted under the current Defense Officer Personnel Management Act (DOPMA), and the most profitable of those authorities for cyber is competitive categories. Under DOPMA, placing cyber within a competitive category ensures that cyber officers will get promoted at a rate similar to their peers in other career fields. Perhaps more importantly, a competitive category means that the board for cyber officers will be calibrated to the uniqueness of their career field. Additionally, this competitive category will provide the ability to decide when boards will meet; for instance, the O4 board may meet later than other categories in order to keep cyber officers coding longer, but the O5 board may meet earlier to make up the time. The findings from this first spiral will inform follow-on actions.

Further spirals would then explore options beyond the bounds of current authorities, which would require congressional engagement. Prior to this point, the joint force should compare talent management lessons across its cyber corps, identify best practices, and then identify capability gaps. An eye to competitors would come in useful here. For instance, if the Russians are finding success in commissioning cyber forces off the street, then we may want to consider doing so as well. The second spiral would then focus on creative accessions into the current military force structure, whether readapting standards to a new archetype for cyber warfare, as Crispin Burke suggested in *War on the Rocks*, ⁵⁶ or providing for lateral entry and options for veterans who work in cybersecurity fields, ideally with some apprenticeship and acculturation process for nonveterans.

A third spiral, adjusting for conditions, might make use of "letters of marque and reprisal" and empower businesses or individuals to act as cyber-privateers in the defense of their own interests.⁵⁷

While we imagine the implementation of such a concept well off in the future, the intertwined nature of military and civilian value and capabilities in cyberspace blurs lines between civilian security and military defense, and frontier militia models might prove of use. While this third spiral would depend on the trajectory of the technology and on our competitors' investments, we recommend opening the historical and conceptual aperture wide in seeking out appropriate models.

Cyber as the First Fruits of Talent Management

This analysis borrowed many principles from current pilot reform initiatives, and our further development of these concepts might enrich that discussion. The unprecedented distribution velocity and wide availability of information, democratization of violence (as seen in cheap and lethal quadcopters deployed by the so-called Islamic State and employed in Ukraine), and AI integration all serve to bring about a revolution in political, economic, and military affairs. Therefore, these principles, and perhaps even these polices, could be migrated toward these facets.

Still, one thing remains: humans are more important than hardware, and when considering the Third Offset Strategy, even if the joint force gets all the strategy and technology right, these will fail without the right people. With the right people and enough time, American warfighters will redeem and repair whatever strategies and technologies they are given. American society and culture powerfully apply technology to solve problems. Once again, a nation's strongest military is the one that can best leverage these societal strengths, and this requires change in how the joint force manages and empowers talent. Warfare is a human endeavor, amplified by technology, and the U.S. military must attract and retain people who understand technology to perform it well. JFQ

Notes

- ¹ See "SOF Truths," available at <www.socom.mil/about/sof-truths>.
- ² Max Weber, "The Essentials of Bureaucratic Organization: An Ideal-Type Construction," in *Reader in Bureaucracy*, ed. Robert K. Merton et al. (Glencoe, IL: Free Press, 1952), 19–21.
- ³ Government Accountability Office (GAO), Military Compensation: Additional Actions Are Needed to Better Manage Special and Incentive Pay Programs, GAO-17-39 (Washington, DC: GAO, February 2017), available at <www.gao.gov/assets/690/682508.pdf>.
- ⁴ Kris Osborn, "Air Force to Finalize New Cyber Mission Forces," Defense Systems, May 30, 2017, available at https://defensesystems.com/articles/2017/05/30/air-force-cyber.aspx.
- ⁵ See "U.S. Marine Corps Forces Cyberspace Command," U.S. Marine Corps Concepts & Programs, available at <www.candp. marines.mil/Organization/Operating-Forces/ US-Marine-Corps-Forces-Cyberspace-Command/>.
- ⁶Personal interview, Department of Defense (DOD) Cyber Leader, fall 2017.
- ⁷ Michael V. Hayden, "The Future of Things Cyber," in *Conflict and Cooperation in Cyberspace: The Challenge to National Security*, ed. Panayotis A. Yannakogeorgos and Adam B. Lowther (Boca Raton, FL: Taylor & Francis, 2013).
- ⁸ Bernard Rostker et al., *The Defense Officer Personnel Management Act of 1980: A Retrospective Assessment*, R-4246-FMP (Santa Monica, CA: RAND, 1993), available at <www.rand.org/content/dam/rand/pubs/reports/1993/R4246.pdf>.
- ⁹ Eric Schmidt and Jonathan Rosenberg, "How Google Manages Talent," transcript, *Harvard Business Review*, September 2014, available at https://hbr.org/2014/09/how-google-manages-talent.
- ¹⁰ See "Modernizing HR at Microsoft," June 2015, available at https://itshowcasecontent.blob.core.windows.net/pdffiles/3723_Modernizing_HR_at_Microsoft_BCS.pdf.
- ¹¹ Michal Lev-Ram, "The Global Talent Crunch," *Fortune*, September 4, 2014, available at http://fortune.com/2014/09/04/the-global-talent-crunch/.
- ¹² Schmidt and Rosenberg, "How Google Manages Talent."
- ¹³ David A. Garvin, "How Google Sold Its Engineers on Management," *Harvard Business Review*, December 2013, available at https://hbr.org/2013/12/how-google-sold-its-engineers-on-management.
- ¹⁴ Vijay Govindarajan and Srikanth Srinivas, "The Innovation Mindset in Action: 3M Corporation," *Harvard Business Review*, August 6, 2013, available at https://hbr.org/2013/08/the-innovation-mindset-in-acti-3>.

¹⁵ James Kaplan, Naufal Khan, and Roger Roberts, "Winning the Battle for Technology Talent," McKinsey & Company, May 2012, available at <www.mckinsey.com/business-functions/digital-mckinsey/our-insights/winning-the-battle-for-technology-talent>.

¹⁶ Katie Fehrenbacher, "Elon Musk's Vision Includes New Cars, Car Sharing, and Solar-City Deal," *Fortune*, July 21, 2016, available at http://fortune.com/2016/07/20/elon-musk-master-plan-2/.

¹⁷ Simon Sinek, "How Great Leaders Inspire Action," video, 17.58, TEDxPuget Sound, September 2009, available at <www.ted. com/talks/simon_sinek_how_great_leaders_inspire_action>.

¹⁸ Laura Arrillaga-Andreessen, "Five Visionary Tech Entrepreneurs Who Are Changing the World," *T Magazine*, October 12, 2015, available at <www.nytimes.com/interactive/2015/10/12/t-magazine/elizabeth-holmes-tech-visionaries-brian-chesky.

¹⁹ Michael Mankins, "How Leading Companies Build the Workforces They Need to Stay Ahead," *Harvard Business Review*, September 6, 2017, available at ">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/how-leading-companies-build-the-workforces-they-need-to-stay-ahead>">https://hbr.org/2017/09/ho

²⁰ Tom O'Connor, "German Military Battles Foreign Hacking with New Cyber Soldiers," *Newsweek*, April 5, 2017, available at <www.newsweek.com/german-military-launches-new-cyber-division-amid-russian-hacking-claims-579573>.

²¹ Andreas Maisch, "German Rolls Out New Cyber Defence Team," Euractiv, December 6, 2017, available at <www.euractiv.com/section/cybersecurity/news/germany-rolls-out-new-cyber-defence-team/>.

- 22 Ibid.
- ²³ Ibid

²⁴ James Stavridis, "Time for a U.S. Cyber Force," U.S. Naval Institute *Proceedings* 140, no. 1 (January 2014), available at <www.usni. org/magazines/proceedings/2014-01/time-us-cyber-force>.

²⁵ Isabel Skierka, "Bundeswehr: Cyber Security, the German Way," ORF, available at <www.orfonline.org/expert-speaks/bundeswehr-cyber-security-the-german-way/>.

²⁶ Ibid.

²⁷ Timothy Thomas, "Russia's Reflexive Control Theory and the Military," *Journal of Slavic Military Studies* 17, no. 2 (2004), 237–256.

²⁸ Michael Connell and Sarah Vogler, Russia's Approach to Cyber Warfare (Arlington, VA: Center for Naval Analyses, March 2017), available at <www.dtic.mil/docs/citations/ AD1032208>.

- 29 Ibid.
- 30 Ibid.

³¹ William Haynes, "NATO's Cyber Capabilities Are Only Defensive Without Cyber 'Red Lines," *Georgetown Security* Studies Review, September 28, 2016, available at http://georgetownsecuritystudiesre-view.org/2016/09/28/natos-cyber-ca-pabilities-are-only-defensive-without-cyber-red-lines/.

³² Connell and Vogler, *Russia's Approach to Cyber Warfare*.

³³ Jose Nazario, "Politically Motivated Denial of Service Attacks," in *The Virtual Battlefield: Perspectives on Cyber Warfare*, vol. 3, ed. Christian Czosseck and Kenneth Geers (Amsterdam: IOS Press, 2009), 163–181.

³⁴ Ashton Carter, "Remarks to the Air Force Association," DOD transcript, National Harbor, MD, September 16, 2015, available at <www.defense.gov/News/Speeches/Speech-View/Article/617405/remarks-to-the-air-force-association/>.

³⁵ See "APT1: Exposing One of China's Cyber Espionage Units," Mandiant, February 19, 2013, available at <www.fireeye.com/content/dam/fireeye-www/services/pdfs/mandiant-apt1-report.pdf>.

³⁶ Cao Siqi, "China Launches Cyber Security Talent Training Nationwide, *Global Times* (Beijing), September 20, 2016, available at <www.globaltimes.cn/content/1007158. shtml>.

³⁷ David Barboza, "Chinese Gymnast Endured Childhood Sacrifice," *New York Times*, August 5, 2008, available at <www.nytimes.com/2008/08/05/sports/05iht-gymnast.1.15012163.html>.

³⁸ Siqi, "China Launches Cyber Security Talent Training Nationwide."

³⁹ "APT1: Exposing One of China's Cyber Espionage Units."

⁴⁰ Franklin Spinney, *Defense Facts of Life:* The Plans/Reality Mismatch (Boulder: Westview Press, 1985).

⁴¹ "Congress Probes Military Pilot Shortage," DOD, March 30, 2017, available at <www.defense.gov/News/Article/Article/1135200/congress-probes-military-pilot-shortage/>.

⁴² Jack Moore, "In Fierce Battle for Cyber Talent, Even NSA Struggles to Keep Elites on Staff," Nextgov, April 14, 2015, available at <www.nextgov.com/cybersecurity/2015/04/fierce-battle-cyber-talent-even-nsa-struggles-keep-elites-staff/110158/>.

⁴³ Tim Kane, Bleeding Talent: How the U.S. Military Mismanages Great Leaders and Why It's Time for a Revolution (New York: Palgrave Macmillan, 2013).

44 Ibid.

⁴⁵ Robert Work, "Deputy Secretary: Third Offset Strategy Bolsters America's Military Deterrence," transcript, DOD, available at <www. defense.gov/News/Article/Article/991434/deputy-secretary-third-offset-strategy-bolsters-americas-military-deterrence/>.

⁴⁶ N.A. Lomov, *Scientific-Technical Progress* and the Revolution in Military Affairs (A Soviet View) (Washington, DC: Headquarters Department of the Air Force, 1973).

⁴⁷ Brian Everstine, "Is Uniformity Needed for All in Uniform?" *Air Force Magazine*, October 13, 2016, available at https://www.airforcemag.com/DRArchive/Pages/2016/October%202016/October%2013%202016/Is-Uniformity-Needed-for-All-in-Uniform.aspx.

⁴⁸ Stavridis, "Time for a U.S. Cyber Force."

⁴⁹ Chris Busque, "Finding the Inside Track
in the Race for Talent," RAND Project Air
Force, Air Force Fellows Program, April 2018;
and Tom Philpott, "The Arguments Behind
New Tech-Track Career Paths," *Stars and Stripes*, August 20, 2015, available at <www.
stripes.com/news/us/the-arguments-behind-new-tech-track-career-paths-1.363770>.

⁵⁰ Geert Hofstede, Gert Jan Hofstede, and Michael Minkov, *Cultures and Organiza*tions: Software of the Mind, 3rd ed. (New York: McGraw-Hill Education, 2010); and Samuel P. Huntington, *The Soldier and the State: The* Theory and Politics of Civil-Military Relations (Cambridge: Harvard University Press, 1957).

⁵¹ U.S. House, *National Defense Authorization Act for Fiscal Year 2017*, Conference Report, 114th Cong., 2nd sess., November 30, 2016, available at <www.congress.gov/114/crpt/hrpt840/CRPT-114hrpt840.pdf>.

⁵² Harold C. Hutchison, "Everything You Need to Know about the Merchant Marine," We Are The Mighty, December 10, 2017, available at <www.wearethemighty.com/military-life/everything-you-need-to-know-about-the-merchant-marine>.

⁵³ Wyatt Hoffman and Ariel (Eli) Levite, *Private Sector Cyber Defense: Can Active Measures Help Stabilize Cyberspace?* (Washington, DC: Carnegie Endowment for International Peace, June 14, 2017), available at http://carnegieendowment.org/2017/06/14/ private-sector-cyber-defense-can-active-measures-help-stabilize-cyberspace-pub-71236>.

54 Catherine Lotrionte is currently Brent Scowcroft Scholar at the Atlantic Council with the Cyber Statecraft Initiative in the Scowcroft Center for Strategy and Security; see also "Catherine Lotrionte," available at <www. atlanticcouncil.org/about/experts/list/catherine-lotrionte>.

⁵⁵ Hoffman and Levite, *Private Sector Cyber Defense*.

⁵⁶ Crispin Burke, "The Pentagon Should Adjust Standards for Cyber Soldiers—As It Has Always Done," *War on the Rocks*, January 24, 2018, available at https://warontherocks.com/2018/01/pentagon-adjust-standards-cyber-soldiers-always-done/>.

⁵⁷ Jeremy A. Rabkin and Ariel Rabkin, "To Confront Cyber Threats, We Must Rethink the Law of Armed Conflict," Hoover Institution, January 19, 2012.



Covert Action as an Intelligence Subcomponent of the Information Instrument

By Charles Pasquale and Laura Johnson

overt action (CA) has long played an important role in supporting and advancing U.S. national security and foreign policy objectives, but broad misunderstandings in both concept and application frequently lead discussants to conflate and confuse

Dr. Charles Pasquale was the Central Intelligence Agency Director Representative to the National War College from 2016–2019 and is an Adjunct Professorial Lecturer at American University. Dr. Laura Johnson is an Adjunct Professor with the Catholic University of America and Director of Analysis at FOG Data Science.

it with military operations and the military instrument of power (referring to the common, yet flawed, DIME typology of diplomatic, information, military, and economic instruments). Despite obvious areas of overlap with other instruments, CA is more appropriately understood as a tool within the intelligence subcomponent of the information instrument. While some might view this as a semantic distinction without a difference, CA's complexity, political and operational sensitivity, and oversight requirements increase the importance of understanding the tool in the intelligence context.

The term *intelligence* itself is open to interpretation. One general description is of the activities and products associated with collecting, analyzing, producing, disseminating, and using information to ultimately support policy objectives. It may also include the various Intelligence Community (IC) organizations and a range of other functions. Intelligence regularly plays an important role in helping leaders to fill knowledge gaps and make better decisions, but there is much more to it than may be evident to a casual observer or consumer. In addition to the associated processes and institutions, intelligence is both an instrument to wield and an underlying *elemental* component that enables, empowers, and supports other efforts with context and perspective. It is more than just a nebulous "knowledge ether" that exists in the background as a mystical fount of knowledge that decisionmakers can dip into for insight. Intelligence—including CA—involves a deliberate process of actively prioritizing information needs, tasking, direction, and evaluation that requires a cadre of professionals who understand its structures, authorities, capabilities, and limitations.

Covert Action

U.S. statute defines covert action, in part, as one or more U.S. Government activities undertaken "to influence political, economic, or military conditions abroad, where it is intended that the [government's] role will not be apparent or acknowledged publicly." The House Permanent Select Committee on Intelligence (HPSCI) and Senate Select Committee on Intelligence (SSCI) have sole CA congressional oversight responsibility. And unlike during the Kennedy and Reagan eras, CA is now developed, authorized, and overseen within a specific formalized process.

In 2017, then-Director of the Central Intelligence Agency (D/CIA) Mike Pompeo publicly reaffirmed this point when he stated that, despite what we may see in the movies, "we do not pursue covert action on a whim without approval or accountability. There is a comprehensive process that starts with the President and consists of many levels of legal and policy review and reexamination. . . . When it comes to covert action, there is oversight and accountability every step of the way."2 The current situation did not develop automatically or organically, however; it evolved largely in response to hard learned lessons, such as those associated with the Iran-Contra scandal in the 1980s.

The legal process for initiating CA requires two key components. The first is a written "finding," which the President of the United States must personally authorize. It may not (with

some exceptions) be retroactive and must specify the action(s) to be undertaken, which government entities are directed to participate, and whether any third parties will be used.3 The second is "timely" notification to the congressional intelligence committees, although notification may be restricted to just a few congressional leaders if sensitivity is required.4 Within these components, the CA also must "support identifiable [U.S.] foreign policy objectives" and be *found* "important to U.S. national security." Statute further requires the President to establish a written response plan for every CA in the event of its unauthorized public disclosure,5 and it prevents any government funds from being expended for CA without a formal finding.6 The National Security Council (NSC) is the highest-ranking executive branch component involved in supporting CA, although it has no authority to conduct such operations.7

Significantly, CA-related statute specifically excludes those actions *primarily* intended to collect intelligence or to conduct *traditional* military, diplomatic, counterintelligence, or government law enforcement activities, among other things.⁸ None of this is to say, however, that operators cannot collect intelligence during the course of a covert action.

Both HPSCI and SSCI consider intelligence and its related activities to include covert or clandestine activities affecting U.S. relations with a foreign government, political group, party, military force, movement, or other association. But poor understanding of a critical distinction between "covert" and "clandestine" activity—described below—blurs the line and creates additional confusion for many.

Clandestine Operations

Much of the IC's and Department of Defense's (DOD's) work is clandestine, although only a relatively small portion fits into the category of CA. "Covert" activity hides the true affiliation or relationship of the primary person or organization behind the action (that is, the *identity* of the *sponsor*), but the activity may be generally observable. In contrast, "clandestine" activity hides the activity itself (that is, the *existence* of

the *operation*). ¹⁰ So "covert" conceals the actor, but "clandestine" conceals the action. There is also an unfortunate tendency to use "covert" as an adjective to describe activities that are not specifically "overt" (done or shown openly); loosely referring to "secret" activity as "covert" only perpetuates misunderstanding of what constitutes CA.

It is worth noting that, while this article presents CA in a U.S. context, some of the general concepts may also apply to similar actions taken by foreign counterparts. Other intelligence services—particularly those with a competent external function—are also likely to have the tools, techniques, relationships, and authorities to plan and execute CA without their government's "fingerprints." However, they do not necessarily have the same statutory definitions, requirements, restrictions, or oversight.

Intelligence and the Military in Title 50 Covert Action: Combined but Distinct

Compounding the above, a related point of confusion lies with the Title 10/Title 50 distinction and discourse, which often inaccurately tries to draw clear lines between military and intelligence activity; in reality, the two overlap (this *does not*, however, constitute Title 60). Whereas Title 10 is exclusively related to the "Armed Forces," Title 50 "War and National Defense" includes all intelligence activities and many military operations.

Although CA was originally implemented as a Central Intelligence Agency (CIA)-specific mission area, press reporting increasingly alludes to military special operations forces (SOF) conducting these operations. But while this idea is becoming increasingly ingrained in common perception, partly because of the aforementioned loose use of terminology, the distinction is less clear cut than it might appear. As Andru Wall notes:

[U.S.] SOF [personnel] typically work closely with CIA personnel while conducting unconventional warfare, although the relationship tends to be informal and focused more on mutual support.... The

relationship is one of cooperation in pursuit of mutual objectives rather than a formal superior-subordinate relationship. . . . This is an important distinction that directly answers whether the unconventional warfare mission is a military operation or intelligence activity.11

This type of complex operating environment—involving both civilian IC and military operators under similar statutory authorizations—may blur the distinctions between types of activity, who is supporting, and who is leading. This is where statutory distinctions become increasingly important.

Not only does the military have some Title 50 roles, but some Title 10 authorities may also appear outwardly similar to CA-albeit without the required Presidential finding or congressional oversight. For example, Title 10 currently allows the Secretary of Defense to expend up to \$100 million in any fiscal year to support "foreign forces, irregular forces, groups, or individuals who are supporting or facilitating ongoing [U.S. SOF] operations to combat terrorism."12 (Prior to the 2005 National Defense Authorization Act, SOF reportedly relied on CIA funding for these operations.¹³) But these are not covert actions, which the legislation specifically excludes among the provided authorities;14 rather, they are more consistent with traditional SOF unconventional warfare, although some of them probably would share many common characteristics were they conducted under CA intelligence authorities.

Similarly, Title 10 gives the U.S. Special Operations Command (USSOCOM) commander the responsibility and authority to conduct all affairs relating to special operations activities, which include "such other activities as may be specified by the President or the Secretary of Defense."15 However, it explicitly does not constitute authority for DOD to conduct any action that "if conducted as an intelligence activity, would require a notice to [SSCI and HPSCI]."16 Although CA would clearly fall within that requirement, some critics worry the criteria are actually designed to expand DOD activities while avoiding the additional oversight.17

The CIA has historically been—and available public reporting suggests that it remains—the leading entity for CA operations, even when they include U.S. military SOF personnel who may be temporarily placed under CIA authorities, guidance, and direction. Although statute technically allows the President to designate any agency to conduct CA,18 doing so is not necessarily feasible, and the same intelligence oversight requirements and restrictions would apply in any event. CA is a core mission area for the CIA, which arguably has unique institutional processes, structures, and experience to carry it out. Secrecy is difficult enough to maintain in ordinary operational conditions; CA sensitivities exponentially magnify this challenge and therefore require extraordinary structural elements to be in place and functioning.

The widely publicized raid that captured and killed Osama bin Laden presents a useful example of military resources being used in an operation officially under the direction and control of a civilian intelligence agency and under CA authorities and congressional intelligence committee oversight. President George W. Bush in 2001 reportedly had issued a finding specifically to target and kill bin Laden, 19 and President Barack Obama, shortly after taking office in 2009, reportedly directed then-CIA Director Leon Panetta "to make the killing or capture of bin Laden the top priority of our war against al-Qaeda."20 Panetta has since publicly stated that he officially commanded the overall May 2011 bin Laden raid from the CIA as a Title 50 covert operation, even while then-Joint Special Operations Command commander, Admiral Bill McRaven, executed operational-level control of the mission from Afghanistan.²¹ Nick Rasmussen, director of the National Counterterrorism Center, recounted 5 years after the operation:

During the raid itself, I clearly recall the role that Admiral McRaven played from Jalalabad, Afghanistan. In addition to carrying out his command and control function with his team, he was piped in via secure video conference to provide updates to the CIA and the assembled officials at

the White House Situation Room, including the President. As the Department of Defense operators would move down their checklist, we heard McRaven's voice as each operational or geographical mark or milestone was hit.22

It is unclear whether the U.S. Government originally intended to acknowledge the bin Laden operation after the fact. Had one of the "stealth" helicopters not crashed in the Abbottabad compound, leaving clear traces of U.S. involvement, it is plausible that the operators could have gotten in and out without leaving America's "fingerprints," thereby maintaining plausible deniability. This is a clear example of using Title 50 CA authorities under the CIA's direction and control, while using military forces as the action arm.23 (As a side note, readers should not conflate Panetta's overall "direction and control" of the covert action with Admiral McRaven's "command and control" of the military forces on the ground and in the air.)

The following additional examples help to illustrate how CA had been used in the mid-1990s and early 2000s with varying degrees of success (or failure) against Saddam Hussein's regime in Iraq to create psychological conditions for regime change, insert teams to conduct counterterrorist and counter-regime operations, and develop indigenous opposition militia groups. But because CA details largely remain shrouded in secrecy, this article's authors take no position on the veracity of these examples—they are primarily to show how covert operations may play out in practice and to highlight some potential challenges associated with CA as a strategic tool.

Selected Examples from Iraq Covert Action Cases

Although the U.S.-led coalition soundly defeated Iraq in the 1990-1991 Gulf War and devastated its infrastructure and army, Saddam remained a meddling dictator with an apparent penchant for weapons of mass destruction. President George H.W. Bush was unwilling to take down the Iraqi regime in the Gulf War because—as he wrote in his

memoir several years later—the human and political costs of removing Saddam would have been incalculable. Had he gone to Baghdad following the dislodgment of Iraq from Kuwait:

the coalition would have instantly collapsed....[It] would have destroyed the precedent of international response to aggression we hoped to establish. Had we gone the invasion route, the United States could conceivably still be an occupying power in a bitterly hostile land. It would have been a dramatically different—and perhaps barren—outcome.²⁴

Instead of pushing to Baghdad, the President reportedly issued a finding that authorized the CIA to spend up to \$100 million to covertly "create the conditions" that would lead to Iraqi regime change from within using two main lines of effort: overseeing a propaganda campaign and creating an opposition movement in Iraq.

Third-Party Propaganda. The CIA reportedly contracted the Rendon Group (TRG)—a private strategic communications and public affairs company—to set up a propaganda office in London.²⁵ TRG's work included planting false stories in the foreign press about Saddam to highlight his atrocities and undermine his legitimacy; this supposedly was easy to do, as he was a frequent perpetrator of real atrocities, and the best lies tend to have a modicum of truth. But TRG supposedly supplied misinformation to unwitting British journalists, who then published it in London press stories that occasionally filtered back into the U.S. media. Because CA statutes prohibit actions "intended to influence United States political processes, public opinion, policies, or media,"26 the CIA reportedly criticized this unintended "blowback" aspect and took additional steps to prevent domestic U.S. circulation.²⁷

Seeking a contractor to expand its propaganda operations *inside* Iraq to bring down the regime,²⁸ TRG engaged Dr. Ahmed Chalabi, a London-based Iraqi exile who came from an elite Shiite family that fled Iraq in 1958;²⁹ he also held a doctorate in mathematics from



Celebrations in Times Square after death of Osama bin Laden, May 2, 2011 (Courtesy John Pesavento)

the University of Chicago³⁰ and had developed significant Washington, DC, political connections.³¹ TRG funded Chalabi to create the conditions in Iraq that would bring down Saddam, but, according to author James Bamford, "Chalabi [himself] was a creature of American propaganda to a large degree. TRG basically created his organization, the Iraqi National Congress [INC], and put Chalabi in charge."³²

The INC reportedly set up a print shop in the Kurdish governorate of Salahuddin and ran a disinformation campaign, creating fake versions of Iraqi newspapers filled with stories of regime abuses. Robert Baer-a former CIA officer who reportedly worked with Chalabi—compared this to "something like a spy novel . . . people were scanning Iraqi intelligence documents into computers, and doing disinformation ...[and] forgeries ... to bring down Saddam."33 But without publicly available assessments of the propaganda's effectiveness, it is unclear to what degree the results met the desired policy outcomes.

Third-Party Support to Opposition Forces. A second part of Chalabi's mission included building an indigenous

opposition force to bring down the Iraqi regime.34 Although he had no military training or service, Chalabi and the INC created a 1,000-man militia to fight the Iraqi military, which he incorrectly claimed was extremely weak, stating it was like "a leaking warehouse of gas, and all we had to do was light a match," according to Baer.35 In addition to the militia, Chalabi attempted to increase the size of his own opposition alliance by bribing non-Kurdish, Mosul-based tribal leaders who agreed to support the INC's rebellion. Press reporting indicates that he may also have partnered with Iranian intelligence officers to conduct a separate coordinated operation in southern Iraq.36

In March 1995, Chalabi launched the attack, reportedly against Baer's advance warnings and recommendation to abort the operation because the plot had leaked and the United States would not provide backup if he went ahead. Iraqi forces killed many of Chalabi's men, and most of the rest deserted as the bribed tribal leaders sat out the operation and Iran withheld support.³⁷ The failure ultimately ended what remained of Chalabi's relationship with the CIA, but the Iraq Liberation Act of 1998 called for Iraqi regime change as an

JFQ 93, 2nd Quarter 2019 Pasquale and Johnson

overt U.S. strategic objective, meaning the INC's actions no longer had to be covert; DOD and the Department of State were then free to openly support Chalabi and others in the INC.38

First-Party Counterterrorism

Operations. In contrast to working wholly through intermediaries, other purported CA missions have directly involved CIA paramilitary officers in the planning, preparing, and conducting operations.39 According to press, President George W. Bush in the days following the 9/11 attacks signed a counterterrorism (CT) CA finding that empowered the CIA to create and deploy paramilitary teams to hunt and kill designated terrorists anywhere in the world as part of the war on terror.⁴⁰ This was especially applicable to Iraq in the summer of 2002, as the administration presumably had been considering war with that country for its alleged complicity with al Qaeda. The below examples are partly based on one self-described CIA CT operator's published description of his deployment to Northern Iraq in advance of the 2003 Iraq War.41

In July 2002, a CIA CT team reportedly entered Northern Iraq and linked up with supportive Kurdish Peshmerga fighters to find and kill terrorists.⁴² They soon found roughly 1,000 members of Ansar al-Islam and al Qaeda encamped in the ungoverned northern Kurdistan part of Iraq along the border with Iran, where hundreds of al Qaeda had sought safe haven after the coalition offensive in Afghanistan.⁴³ Although the CIA team was eager to capture or kill the terrorists, CIA headquarters reportedly did not provide the necessary support to proceed. Unable to conduct the CA offensive, the team instead collected and reported on the groups, interrogated the Peshmerga's captives, destroyed key infrastructure in preparation for war, and built a broad human intelligence network throughout Kurdish-controlled Iraq. This resulted in a trove of raw intelligence that the team sent back to Washington for analysis, and reflected the tangential intelligence collection that falls outside primary statutory authorities for CA.44

First-Party CA Support to Indigenous Paramilitary Forces. The same finding

noted above⁴⁵ also reportedly authorized the CIA team to support an Iraqi Arab paramilitary insurgency group—"the Scorpions"—that was trained to conduct psychological and other operations throughout Iraq. This reportedly was part of the U.S. policy of regime change.⁴⁶ Former D/CIA George Tenet wrote in his memoir that the group was to conduct sabotage and raids to destabilize Iraq prior to the 2003 war.47 The CIA team reportedly vetted the men for suitability before moving them through Turkey to the United States for CIA training, but accounts differ about the Scorpions' operational capability and effectiveness—one press report indicated that the war's quick conclusion minimized the initial mission,⁴⁸ but others refer to the group's inherent lack of skill and capability⁴⁹—leaving an open question as to how planners in Washington perceived the value of such a specialized indigenous team.50

Not the Same by Any Other Name

Some may argue that CA is incompatible with the information instrument, which tends to reflect the soft-power side of national statecraft, or that "covert" simply describes a way of doing things, applied to whatever instrument is being used that way. But it is not that simple, and the above statutory and operational examples show that the essence of CA is not whether it involves pamphlets or paramilitary forces, but to what extent information is withheld or obfuscated about the sponsor. Each of the DIME instruments can be applied overtly, clandestinely, or covertly, but their individual characteristics are secondary to information when applied in a CA context.

National governments *overtly* use public diplomacy and public affairs to directly engage foreign and domestic populations, convey diplomatic messages and intentions, and shape their opinions. But these are different from the covert informational activities described in the Iraq examples because TRG and the INC manipulated foreign and Iraqi perceptions of Saddam's regime through false information to achieve an objective on

behalf of the U.S. Government while concealing its role. Similarly, the Scorpions, as a symbol of Iraqi resistance, may have had a powerful psychological effect on those Iraqis who saw hope for an indigenous uprising, even though the group was a U.S.-manufactured proxy instead of a function of the Iraqi people's will.

Returning to the DIME typology, it is important to remember that in CA, the nature of the tool used does not supersede the information aspect. Some CAs described above (for example, propaganda efforts) clearly align with the "i." But while other examples included applying negotiation skills to engage the Peshmerga (aligning with the "d"), using force to kill terrorists and blow up infrastructure (aligning with the "m"), and wielding large sums of cash to achieve desired influence effects (aligning with the "e"), none of these existed in a vacuum. This is a question of fit as well as function; each of these examples existed within the framework of one or more CA findings, and because CA exists under congressional intelligence oversight and regularly relies on intelligence assets, it remains first and foremost tied to the "i" instrument of national power. CA can therefore never be solely any of the others. Rather, it may be useful to think of DIME instruments in CA operations as creating a hybrid, such as "information-military" is similar to the "political-military" and "political-economic" hyphenated compound terms that are commonly used in security discourse.

The realities noted above have significant implications for applying the DIME construct to intelligence and information, whether overt, clandestine, or covert. Strategists, operators, and educators must be vigilant not only in remembering that CA is rooted in intelligence as a subcomponent of the information instrument, but also in comprehending what constitutes CA, why it is a useful instrument in the strategist's toolkit, and how to weigh the associated costs and risks.

Because covert action's functional mechanism is to deliberately manipulate information and knowledge about the actors involved in an activity, it falls squarely within the information

instrument. Moreover, because its oversight function falls to congressional intelligence committees, it is more specifically within the intelligence subcomponent of information. *This remains a distinction with a difference*. JFQ

Notes

¹ Title 50, U.S. Code, War and National Defense, § 3093(e).

² Central Intelligence Agency (CIA), "Director Pompeo Delivers Remarks at CSIS," April 13, 2017, available at <www.cia.gov/news-information/speeches-testimony/2017-speeches-testimony/pompeo-delivers-remarks-at-csis.html>.

³ Title 50, U.S. Code, War and National Defense, § 3093(a).

⁴ Ibid. See Title 50, *U.S. Code*, *War and National Defense*, § 3093(a)(1); see also Title 50, *U.S. Code*, § 3093(c)(2).

⁵ Title 50, U.S. Code, War and National Defense, § 3093(h).

6 Ibid., § 3094(c).

⁷Executive Order (EO) 12333, "United States Intelligence Activities," December 4, 1981, as amended by EOs 13284 (2003), 13355 (2004), and 13470 (2008). United States Intelligence Agencies (2008); see especially, Section 1.2, "The National Security Council."

⁸ Title 50, U.S. Code, War and National Defense, § 3093(e).

⁹ "Permanent Select Committee on Intelligence," Rule X, 11[j][1], in *Rules of the House of Representatives*, 114th Cong. 1st sess., (2015), 16, available at http://clerk.house.gov/legis-lative/house-rules.pdf>.

10 Joint Counterterrorism Assessment
Team, "Terminology (Covert)," in *Intelligence Guide for First Responders* (Washington, DC:
Office of the Director of National Intelligence, 2014), 46, available at <www.dni.gov/files/
NCTC/documents/features_documents/Intelligence_Guide_for_First_Responders.pdf>.

¹¹ Andru E. Wall, "Demystifying the Title 10–Title 50 Debate," *Harvard National Security Journal* 3 (2011), 115, available at http://harvardnsj.org/wp-content/up-loads/2012/01/Vol-3-Wall.pdf>.

¹² Title 10, *U.S. Code*, *Armed Forces*, § 127e(a). This expenditure requires concurrence of the relevant chief of mission, by statute.

¹³ Richard A. Best, Jr., and Andrew Feickert, *Special Operations Forces (SOF) and CIA Paramilitary Operations: Issues for Congress*, RS22017 (Washington, DC: Congressional Research Service, December 6, 2006), 4, available at http://fas.org/sgp/crs/intel/RS22017.pdf.

¹⁴ Title 10, U.S. Code, Armed Forces, \$
127e(f); see also Ronald W. Reagan National
Defense Authorization Act for Fiscal Year 2005,

Pub. L. No. 108-375, 118 Stat. 1811 (2004), available at <www.congress.gov/108/plaws/publ375/PLAW-108publ375.pdf>.

¹⁵ Title 10, U.S. Code, Armed Forces, § 167(e).

¹⁶ Title 10, U.S. Code, Armed Forces, § 127e(a).

¹⁷ Jennifer D. Kibbe, "Conducting Shadow Wars," *Journal of National Security Law & Policy* 5, no. 2 (January 24, 2012), 373–392, available at http://jnslp.com/2012/01/24/conducting-shadow-wars/.

¹⁸EO 12333, "United States Intelligence Activities," § 1.7(a)(4).

¹⁹ Bob Woodward, "CIA Told to Do 'Whatever Necessary' to Kill bin Laden," Washington Post, October 21, 2001, available at httml>.

²⁰ "President Obama on Death of Osama bin Laden," video, 9.29, The White House, available at https://obamawhitehouse.archives.gov/blog/2011/05/02/osama-bin-laden-dead.

²¹ "CIA Chief Panetta: Obama Made 'Gutsy' Decision on Bin Laden Raid," video, 11:28, PBS News Hour, May 3, 2011, available at <www.pbs.org/newshour/bb/terrorism-jan-june11-panetta 05-03/>.

²² Nick Rasmussen, "The Weight of One Mission: Recounting the Death of Usama Bin Laden, Five Years Later," The White House, May 2, 2016, available at https://obam-awhitehouse.archives.gov/blog/2016/05/02/weight-one-mission-recounting-death-usama-bin-laden-five-years-later-.

²³ For an excellent discussion of the increased role of the military in covert action, see Kibbe, "Conducting Shadow Wars."

²⁴ George H.W. Bush and Brent Scowcroft, *A World Transformed* (New York: Knopf, 1998), 489.

²⁵ Jane Mayer, "The Manipulator," *The New Yorker*, June 7, 2004, available at <www. newyorker.com/magazine/2004/06/07/the-manipulator>; see Seymour M. Hersh, "The Debate Within," *The New Yorker*, March 11, 2002, available at <www.newyorker.com/magazine/2002/03/11/the-debate-within>; see also Peter Rost, "How a Public Relations Firm Helped Start the War," *Huffington Post*, December 6, 2017, available at <www.huff-ingtonpost.com/dr-peter-rost/how-a-public-relations-fi_b_22912.html>.

²⁶ Title 50, U.S. Code, War and National Defense, § 3093(f).

²⁷ Mayer, "The Manipulator."

28 "Events Leading Up to the 2003 Invasion of Iraq," History Commons; see especially "June 1992," available at <www.historycommons.org/timeline.
jsp?timeline=complete_timeline_of_the_2003_invasion_of_iraq&complete_timeline_of_the_2003_invasion_of_iraq_iraq_in_the_1980s_and_1990s=&startpos=100>.

²⁹ Mayer, "The Manipulator."

³⁰ Dan Murphy, "Discredited Iraqi Ally Regroups," *Christian Science Monitor*, June 15, 2004, available at <www.csmonitor. com/2004/0615/p01s04-woiq.html>.

³¹ Robert Dreyfuss, "Tinker, Banker, NeoCon, Spy," *The American Prospect*, October 23, 2002, available at http://prospect.org/article/tinker-banker-neocon-spy.

³² "Buying the War," *Bill Moyers Journal*, PBS, April 25, 2007, available at <www.pbs. org/moyers/journal/btw/transcript1.html>.

³³ See Mayer, "The Manipulator."

³⁴ "Events Leading Up to the 2003 Invasion of Iraq."

35 Mayer, "The Manipulator."

³⁶ Andrew Cockburn, "What He Did as a Catspaw for Teheran: How He Nearly Bankrupted Jordan; the Billions He Stands to Make Out of the New Iraq," *Counterpunch.org*, May 20, 2004, available at <www.counterpunch.org/2004/05/20/what-he-did-as-a-catspaw-for-teheran-how-he-nearly-bankrupted-jordanthe-billions-he-stands-to-make-out-of-the-new-iraq/>.

37 Ibid.

³⁸ Dreyfuss, "Tinker, Banker, NeoCon, Spy."

³⁹ The book used for this example—Mike Tucker and Charles S. Faddis, *Operation Hotel California: The Clandestine War Inside Iraq* (Guilford, CT: The Lyons Press, 2009)—contains information that the CIA reviewed and cleared as not disclosing classified information, but the authors' claims are unconfirmed. They are included here for illustrative purposes only.

⁴⁰ Dana Priest, "Covert CIA Program Withstands New Furor," *Washington Post*, December 30, 2005, available at <www.washingtonpost.com/wp-dyn/content/article/2005/12/29/AR2005122901585.html>. Priest sourced the information about the CIA paramilitary teams to "a dozen current and former intelligence officials and congressional and executive branch sources."

⁴¹ Tucker and Faddis, *Operation Hotel California*, 4–9, 24–27, 35–48.

42 Ibid., xiv, xxii.

43 Ibid., 1-2, 10.

44 Ibid., 3–24.

⁴⁵ Priest, "Covert CIA Program Withstands New Furor."

⁴⁶ Dana Priest and Josh White, "Before the War, CIA Reportedly Trained a Team of Iraqis to Aid U.S.," *Washington Post*, August 3, 2005, available at <www.washingtonpost.com/wp-dyn/content/article/2005/08/02/AR2005080201579.html>.

⁴⁷ George Tenet and Bill Harlow, *At the Center of the Storm: My Years at the CIA* (New York: HarperCollins, 2007), 388–389.

⁴⁸ Tucker and Faddis, *Operation Hotel California*, 44.

49 Ibid., 36-48.

50 Ibid., 33-48.

JFQ 93, 2nd Quarter 2019 Pasquale and Johnson 37



Augmenting Bloom for Education in the Cognitive Domain

By Douglas E. Waters and Craig R. Bullis

he unclassified summary of the 2018 National Defense Strategy (NDS) concludes that "to succeed in the emerging security environment, our Department and Joint Force will have to out-think, outmaneuver, out-partner, and out-innovate revisionist powers, rogue regimes,

terrorists, and other threat actors."1 In describing the required lines of effort to realize the strategy's objectives, the NDS states that professional military education (PME) will have to be revitalized, with an emphasis on "intellectual leadership" and "independence of action."2 The NDS clearly emphasizes a

real need for future joint professionals who possess sophisticated conceptual skills and judgment; judgment is critical because its exercise is a key characterization of any professional.3

Truth be told, this NDS-directed renaissance of thinking and judgment within the joint force will require more than a reinvigorated PME system, as a systems-level analysis and approach will be required to engage the entire career life cycle of the joint professional. PME is only one piece of this puzzle, and it

Douglas E. Waters is an Assistant Professor of Department of Defense Systems in the Department of Command, Leadership, and Management at the U.S. Army War College. Dr. Craig R. Bullis is a Professor of Management at the U.S. Army War College.

does many things right. Any reform effort should carefully focus on areas for improvement without dismantling or degrading proven and effective practices. However, there continues to be both anecdotal and published statements from senior Department of Defense (DOD) leaders and others that indicate that leadership development systems, to include PME, are failing to produce enough strategic-minded leaders for success in the dynamic, complex emerging security environment.4 Whether these senior leaders are right (and we believe there is merit to these assertions), exploring targeted areas of reform within PME that enhance strategic thinking development is an unambiguously desirable goal, and one aligned with the NDS line of effort.

Currently, both joint- and Service-level PME programs use Benjamin Bloom's Taxonomy of Educational Objectives as the primary means to differentiate learning levels within the conceptual domain. This existing model, proposed by Bloom over 60 years ago, significantly advanced pedagogy by suggesting that education begin with simple comprehension of a topic and progress to more complex conceptual activity such as evaluation and creation. As an example of this approach, the Army's program is instructive. The Army Learning Model stresses the importance of education being studentcentered, progressive, and sequential, as well as outcome oriented.5 Progressive and sequential instruction allows higher level courses to build on the foundational material as well as on the experiences of the student population. Outcomeoriented programs enable educational institutions both to add value to the operational employment of learned skills as well as to assess the effectiveness of the instruction. To facilitate these demands, the Army structures its training to follow a task, conditions, and standards framework. Moreover, Army educational systems use Bloom's taxonomy of learning outcomes to differentiate the various learning levels associated with particular learning objectives. The appropriate application of Bloom's taxonomy can improve educational systems by focusing courses and lessons on the desired learning levels.

Table 1. Bloom's Taxonomy for Learning, Teaching, and Assessing					
Domain of Learning	Definition and Description				
Creating	Incorporating components of one concept with a different concept to produce a unique, integrated understanding				
Evaluating	Making judgments (and explaining reasoning) regarding the value of the material				
Analyzing	Deconstructing complicated material into component parts so that those individual components can be assessed for relevancy				
Applying	Using material appropriately in a new situation				
Understanding	Comprehending material as to explain details in one's own words				
Remembering	Reciting previously learned information from memory				

Source: L.W. Anderson et al., A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives (New York: Pearson, Allyn & Bacon, 2001). An important caveat is that both the May 29, 2015, CJCSI and the Army's MCTEP include an earlier version of Bloom's taxonomy as the reference for learning outcomes. The table used in this article reflects the more updated outcomes that have been proposed by Bloom's colleagues.

However, when the learning outcome specifically relates to the cognitive domain, Bloom's taxonomy and the Army training model need a more nuanced application.

This article argues that the progressive application of Bloom's taxonomy is incomplete for education in the cognitive domain. In particular, it argues that thinking competency development must strive for the same learning outcome across all levels of PME. To differentiate those levels, though, outcomes should be augmented by including the *context* in which the behavior is demonstrated. Leaders at all levels are expected to comprehend issues, analyze the situation, apply critical thinking skills, and create innovative solutions. What changes with seniority, however, is complexity of the environmental context. Consequently, PME's role should be to prepare all students to think at high levels, and then do so within increasingly more complex organizational contexts. This will enhance leader performance at all levels and, due to the prominence of conceptual skills at the strategic level,6 is absolutely necessary to enhance strategic thinking capacity in the joint force. In other words, the proposed framework introduces the requirement for sophisticated conceptual development early in one's career in order to better prepare senior leaders for the complex challenges they face. Such a change will not be easy; it will require a significant adjustment to existing PME policy directed by both the Joint Staff and Services. However, change is necessary to better prepare joint and Army professionals to meet the cognitive challenges of the operational environment as characterized by the NDS.

This article starts with a short discussion of Bloom's taxonomy, and then both joint and Army curricular development models are examined within the context (and demands) of the cognitive domain. Additionally, it examines mission command as a prototype for how to better achieve conceptual learning outcomes across all educational cohorts. Ultimately, the article offers stratified systems theory (SST) as a complementary framework that can be used to meet the contextual need. Implementing the article's recommendations should enhance PME to better align with the challenges associated with a dynamic, uncertain future.

Bloom's Levels of Learning

Within military educational settings, outcome-based goals are generally reasonable in focusing instructors and students on the objectives of a particular course or lesson. Inside PME, learning outcomes specify the student's expected learning, as well as the cognitive level of learning for that course or individual lesson within the curriculum.⁷ Bloom's taxonomy helps identify this cognitive level of learning using domains that represent increasing levels of cognitive complexity, depending on the desired endstate of the instruction. Bloom first introduced his taxonomy in 1956 to enhance communication and com-

JFQ 93, 2nd Quarter 2019 Waters and Bullis 39

parison of educational outcomes.8 His initial framework was updated in 2000 by L.W. Anderson and colleagues to include six levels (table 1). The value of this taxonomy within an educational system is that it can orient progressively higher levels of understanding.

Joint Professional Military Education

As currently applied, the joint curricular development model suggests all PME should be structured progressively (that is, begin at Bloom's lower levels and advance to higher levels within the taxonomy).9 This progression typically correlates to the rank or organizational level of the students, and can be seen clearly when comparing learning outcomes between different levels of joint professional military education (JPME). For some training domains, the progressive advancement makes sense, even for higher level PME. For example, consider the concept of joint capabilities as taught in officer JPME. Appropriately, the Chairman of the Joint Chiefs of Staff Instruction (CJCSI) begins at a lower outcome level, requiring basic knowledge of joint structures and processes. It then increases the sophistication of content and the expectation of learning outcomes through Intermediate-Level Education and culminates at the Senior Service College (SSC).¹⁰ At the SSCs, not only are the content areas related to national strategy development, but the outcomes are also predominantly at the Analyze and Evaluate levels of Bloom's taxonomy. Because the outcomes identified in the CICSI relate to knowledge of joint capabilities, it seems reasonable to begin with basic remembering and increase those outcomes over time to evaluation and synthesis. In this way, students leverage both their previous education, as well as their experiences, to better demonstrate the requirements to apply, analyze, and eventually evaluate activities in light of joint requirements.

However, this progressive increase in Bloom's levels is unsatisfactory for all content areas. In fact, within the domain of conceptual capabilities, it is

demonstrably inadequate for educational outcomes at all levels.

Uniqueness of the Cognitive Domain

The cognitive domain of leadership requirements presents a unique challenge to those developing PME education. The NDS, as mentioned, requires significant conceptual skills among its Servicemembers so they can operate effectively in complex environments. Research highlights the unique importance of high levels of conceptual skill for senior leaders.¹¹ In fact, T.O. Jacobs argues that the sophisticated application of advanced conceptual capabilities—what he refers to as wisdom (synonymous with our previous use of judgment)—is the sine qua non of strategic leadership.¹² Conceptual capability is critical at the strategic level because context and responsibilities are mostly ill-defined, and emerging from an environment that is volatile, uncertain, complex, and ambiguous. Moreover, the character of war for today's (and tomorrow's) leaders requires advanced cognitive skills at every level.¹³ Development of such sophisticated skills within the officer corps cannot begin at senior field grade levels, but must start early in one's career.14

Development of conceptual skills begins at birth and extends throughout a lifetime of changing personal and professional context. While the PME system has some responsibility for this development, we suggest that solely using Bloom's categorization for the conceptual domain imposes a rigid standardization that handicaps the joint force's human capital development. First, it establishes an expectation too low for the demands on today's leaders; and second, it enables the Services to ignore the challenges of developing cognitive abilities among all ranks. However, integration of contextual levels into conceptual learning outcomes would facilitate development of thinking competencies through a context-relevant curriculum—one that leverages all of Bloom's taxonomy regardless of PME level. In effect, it would reframe inquiry about how we parse PME.

Augmenting Bloom for Strategic Thinking

To more clearly delineate the idea of contextual consideration within the conceptual domain, we refer to the concept of strategic thinking. Previous work outlines the components of this conceptual capability to include the following:15

- *Critical thinking* is defined as "the use of those cognitive skills or strategies that increase the probability of a desirable outcome. It is used to describe thinking that is purposeful, reasoned, and goal directed."16
- Creative thinking is considered to be the use of cognitive skills to develop novel ideas, approaches, or solutions that improve outcomes and are valued by others.17
- Systems thinking provides a conceptual framework for seeing the whole rather than parts, identifying interrelationships rather than things, and recognizing patterns of change over time.18
- Thinking in time includes having a historical perspective—a sense of past, present, and future as it pertains to an issue—as well as the ability to forecast future organizational strengths and weaknesses and external threats and opportunities.19

Examining these conceptual competencies in more detail is instructive, as it quickly demonstrates the problematic nature of a sole reliance on the progressive application of Bloom's taxonomy. For example, consider creative thinking, which is defined above as the ability to think in novel ways to improve outcomes. It seems obvious that this capability is required at every level. In other words, it seems reasonable to expect lieutenants (or ensigns) to have knowledge of creative thinking constructs and to comprehend the value of creative thinking in the context of their assignments. We would also expect that they could understand and apply creative thinking constructs within the domain of their responsibilities. Finally, most would require these younger officers to analyze the context for the appropriate use of creative thinking and evaluate



General Dunford speaks to students and spouses of Capstone 2018-3, a course for general and flag officers that reinforces comprehension of joint matters and national security strategy, at National Defense University in Washington, DC, May 18, 2018 (DOD/James K. McCann)

the appropriate application of this conceptual skill. But all of those outcomes are restricted to the relatively narrow context of their responsibilities. In most cases, a "lieutenant's world" is limited to understanding company intent (maybe battalion at the more senior lieutenant ranks) within his or her areas of influence and responsibility. But, to be sure, that context is limited.20 Despite this, we believe it is reasonable to expect a lieutenant to evaluate creative thinking and create new understanding by synthesizing other cognitive components and technical skills while adapting to changing circumstances. In fact, establishing an outcome for these young officers only to comprehend or apply is setting expectations too low; the current operating environment simply demands more of these junior officers. In sum, lieutenants need to operate at the highest levels of Bloom's taxonomy, even as they demonstrate those capabilities within the more limited confines of their responsibilities.

Such a perspective does not assume that the same outcomes are expected within advanced education curriculum. At a Senior Service College, we expect the same levels of Bloom's taxonomy to inform the desired learning outcomes. The difference, however, is the context. As SSCs are responsible for facilitating the transition from operationally focused leaders to leaders (and leader advisors) within the strategic domain, the context expands to a different order of magnitude. In fact, one could argue that SSC education should assume few externally constraining limits on leader discretion. So, as in the case of the lieutenant, we would expect the SSC-graduate colonel or captain to be ready to apply, analyze, and even evaluate this adaptive reasoning but, unlike the lieutenant, do so within the much broader context associated with leadership at the strategic level.

Similar arguments can be applied to critical thinking, as "the deliberate, conscious, and appropriate application of reflective skepticism . . . as a way to improve one's judgment"21 should be expected of officers at every seniority level. The same is true of systems thinking, as complexity of systems, including joint, interagency, intergovernmental, and multinational (JIIM) linkages, both inside and outside of the organization, increases at higher levels. Additionally, time horizons at higher levels are substantially longer than those perspectives expected at lower levels.22 All leaders should analyze and evaluate the effects of their decisions over time, but those horizons expand with the added responsibilities of more senior leadership.

JFQ 93, 2nd Quarter 2019 Waters and Bullis 41



Special operations forces from Lithuania, Poland, and Slovakia participated in U.S.-led Advanced Combat Leaders Course designed to improve lethality in close quarters battle, Slovakia, November 14, 2018 (U.S. Army/Alexis K. Washburn)

JPME and the **Conceptual Domain**

We are not meeting this challenge within our current JPME curriculum. Currently, joint leader development is guided by a set of Desired Leader Attributes, one of which directly touches on critical, creative, and strategic thinking competency. This informs learning objective development across the JPME continuum, which follows the same progressive application of Bloom's levels seen in the joint capabilities example provided above. In fact, there are no learning outcomes that directly address critical, creative, or strategic thinking at the precommissioning and primary JPME levels, with intermediate-level outcomes only at the comprehend, apply, and analyze levels.²³

JPME instruction depends on synergy with Service-specific PME programs, so

if the Services are adequately covering thinking competency development, then perhaps the JPME coverage is acceptable. Unfortunately, this is not the case, as a quick discussion of the Army PME program suggests.

Army Training and **Doctrine Command** Educational Standards

The U.S. Army's Training and Doctrine Command (TRADOC) Pamphlet 350-70-14, Training and Education Development in Support of the Institutional Domain, outlines educational policy and directs the use of a taskcondition-standard framework. This pamphlet correctly argues that "one of the most important steps to designing and developing lessons is developing and writing learning objectives." In support of developing clear learning

goals, TRADOC's policy of task, condition, and standards generally serves the Army well. Specifically, the educational learning objective, the outcome of a class or course, "Describes exactly what the student is capable of performing (the action/behavior), under the stated conditions, to the prescribed standard upon lesson completion." Examples of training development in the TRADOC pamphlet specifically portray the training activity. However, the condition is often categorized as either the training location or the accompaniment of material required to execute the activity. Importantly, the condition normally does not refer to the context in which the activity is performed. While the model is a reasonable start for orienting training activities, as already noted, it is incomplete without this contextual consideration.24

Table 2. Creative Thinking Educational Outcomes Incorporating Bloom Levels and Context									
		Comprehend	Apply	Create/Synthesize					
Organizational Level	Strategic (SST Levels VI and VII)	Comprehend policy and strategy, as well as Service and JIIM capabilities	Creatively apply instruments of national power in national and international contexts	Evaluate strategy; develop and implement organizational and systems adaptation and innovation					
	Operational (SST Levels IV and V)	Comprehend Service and joint concepts and capabilities	Creatively apply joint doctrine and capabilities within area of operations	Facilitate operational adaptation via operational design and operational art					
	Tactical (SST Levels I, II, and II)	Comprehend creativity concepts and doctrine	Creatively apply Service doctrine within area of operations	Exercise tactical adaptation (operate outside of doctrinal constraints but within commander's intent)					

Abbreviated Aspects of Bloom's Taxonomy

Relatedly, just as in JPME, TRADOC requires the use of Bloom's taxonomy in the development of learning outcomes. Most often, course developers appropriately create sequential learning objectives by employing consecutively higher levels of Bloom's taxonomy outcomes.²⁵ However, the preferred method of sequencing should be to move from a limited contextual environment to a more complex contextual environment, while keeping Bloom's level of learning constant. In other words, the action verb of Bloom's model (which represents the desired outcome) remains the same, but the context in which that verb is executed is significantly different. This pedagogical option is not clear in joint or TRADOC guidance, but would afford greater flexibility in meeting the cognitive development needs of leaders at all levels (with less institutional confusion).

Moving Beyond Discrete Thinking Competencies: Mission Command

The consideration of context is important to the cognitive domain, but similar arguments can be made for other essential leadership responsibilities. In fact, we suggest that the development of mission command be characterized in a similar way. The Army defines *mission command* as "the exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower leaders to be agile and adaptive in the conduct of Unified Land Operations." Because of its importance for the success of the

Army's Operating Concept, the U.S. Army Mission Command Training and Education Plan FY18–20 (MCTEP) outlines a comprehensive strategy for its development.

The MCTEP correctly asserts that "building competence follows a systematic approach, from mastering individual competencies to applying them in increasingly complex and ambiguous situations." Such an outcome aligns with our argument for explicit inclusion of context in learning outcomes. However, the learning outcomes specified in appendix A of the MCTEP demand the same progression of Bloom's outcomes that we criticize in the cognitive domain, generally beginning with *comprehend* for lieutenants and progressing (sequentially) to *evaluation* at the colonel level.²⁷

Such an educational orientation does not achieve the Army Mission Command Strategic Endstate 1, which reads, "All Army leaders understand and practice the MC philosophy."28 Clearly, company-grade officers practice mission command in much narrower circumstances than commanders at higher levels. While many examples emerge from the listing, we focus on one as an exemplar: "Exercise disciplined initiative." The MCTEP suggests lieutenants and captains are taught to comprehend and analyze levels, with application being the outcome achieved in the operational domain.²⁹ Disciplined initiative is the essence of mission command, and, as such, officers should recognize the many factors associated with discipline, including subordinate training levels, levels of trust, and complexity of the task. And all

officers should be educated to analyze and evaluate all of these components so that each one—lieutenant through general—is best prepared to make the most effective decision. As directed in the MCTEP, however, such instruction is not considered until the Command and General Staff College or the SSC. We believe that is too late. Instead, mirroring our arguments before, we suggest that higher level outcomes are included at junior levels, using the more narrowly constrained context as the distinguishing characteristic of the desired outcomes.

This criticism is not aimed at the developers of the MCTEP, who did an impressive job outlining a detailed and comprehensive plan to attain the Army's goals concerning mission command. MCTEP developers followed current Army curriculum development methodology, and it is this curriculum development model that needs to change.

It is clear that the current joint and Army curriculum development models are incomplete. Sole reliance on the progressive application of Bloom's taxonomy, even when augmented by the Army's task, condition, and standards framework, does not provide enough context to better prepare joint and Army leaders for the cognitive demands of the current and future operating environment. Because of the importance of integrating Bloom with contextual considerations, a framework for capturing those considerations is required.

Joint Publication (JP) 3-0, *Joint Operations*, defines three levels of warfare: strategic, operational, and tactical, and such a framework can provide a

JFQ 93, 2nd Quarter 2019 Waters and Bullis 43

Table 3. The Stratified Systems Model of Organizational Leadership

			Task Requirements and Characteristics								
			with Civ	t Supervised ril Service elates	Systems, Resource, and Policy	Scope	of Work	SST Postulated Time Horizon for Planning	Primary Perspective		
Stratum	Domain	Toe Grade	Military Unit	Civil Service (Political Appointees)		Representative no. of Subordinates (Military)	Sphere of Influence or Intelligence				
VII	Indirect - - Strategic Systems	General	Unified or Subunified Command, or Army Command	Cabinet Secretary	Create and integrate complex systems; organize acquisition of major resources; create policy	100,000- 500,000	Global	20+ years	JIIM + Industry + International		
VI		Lieutenant General	Theater Army/ Corps	Deputy Secretary	Oversee direct operations of subordinate divisions; allocate resources; interpret and apply policy	50,000– 200,000	National and Multinational	10–20 years	JIIM + Industry		
V		Major General	Division, Major Enabling Command	Under Secretary	Direct operation of complex systems; allocate assigned resources; interpret and implement policy	10,000– 25,000	Regional (Limited Multinational)	5–10 years	Joint and Multinational		
	Organizational	Brigadier General	Minor Enabling Command	Assistant Secretary	Direct operation of systems; tailor or task organize resource allocations to interdependent subordinate programs and subsystems; implement policy	5,000–10,000	Sector	- 4–7 years	Joint		
IV		Colonel	Brigade/ Group			2,500–5,000	10–20KM				
III	III Direct	Lieutenant Colonel/ Sergeant Major	Battalion	Principal	Develop and execute plans and task organize subsystems; prioritize resources;	300-1,000	4–15KM	1+ years	Service		
III Blicec	Major	Battalion Staff Level	Staff	translate and implement policy and assigned missions	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
II	Command	Captain/ First Sergeant	Company	Assistant Principal	Supervise direct performance of subsystems; anticipate/solve real-time problems; shift resources; translate and implement policy	60–200	1.5–5KM	3+ months	Branch/ Technology		
I		Lieutenant; NCOs	Platoon; Section, Squad, Team	Clerical and Other Office Supervisor	Direct performance of work; use practical judgment to solve ongoing problems	3–40	400M-3KM	Less than 3 months	System- Specific Technology		

Sources: Adapted from Thomas O. Jacobs and Elliott Jaques, "Executive Leadership," in Handbook of Military Psychology, ed. Reuven Gal and A. David Mangelsdorff (New York: Wiley, 1991); and Kenneth W. Lucas and Joan Markessini, Senior Leadership in a Changing World Order: Requisite Skills for U.S. Army One- and Two-Star Assignments (Alexandria, VA: Army Research Institute for the Behavioral and Social Sciences, April 1993).

starting point for this discussion.³⁰ Table 2 demonstrates this application for creative thinking using the JP 3-0 framework and abbreviated Bloom's taxonomy levels for simplicity and readability. While not all encompassing, this approach clearly demonstrates an improved methodology that appropriately challenges officers at junior, intermediate, and senior levels to display appropriate levels of conceptual competence within the frame of the warfighting environment they will face at their respective levels. This JP 3-0 contextual differentiation is certainly a step in the right direction, but we suggest more fidelity is required. For that reason, joint and Service curriculum developers may want to consider the more comprehensive SST model to orient contextual considerations.

Stratified Systems Theory

SST uses multiple dimensions to distinguish leadership responsibilities by level.³¹ This framework proposes seven organizational strata and provides comparisons of military units to politically appointed DOD civilian leaders (table 3). We summarize unique tasks associated with those positions as well as differentiate the organization based on the representative number of subordinates as well as the sphere of influence. The time horizon for planning provides the original authors' synopsis of the time orientation that a leader within a particular stratum should consider. The framework also adds the "perspective" column to highlight the increasingly complex functional orientation required by a leader at successive levels. Such limiting of both time and responsibilities is functional as it reduces some of the uncertainty associated with a longer term view and allows the lower level leader to be more focused on achieving more specified assigned tasks.

For the context of this article, then, the benefit of the SST model is the articulation and differentiation of general responsibilities and unique characteristics at each level, allowing comparison across levels to better understand the increased complexity in the world to which leaders at all levels are progressing. Consequently,

it also provides a ready-to-use template for curriculum developers to insert critical contextual components for education related to the cognitive domain.

We recommend that the Joint Staff and Services consider a modification from the "task, condition, standard" framework of curriculum design to one that includes "task, condition, standard, and context." Understandably, including this additional dimension to PME makes education more complicated. However, we suggest those concerns can be moderated with two caveats. First, higher levels of context can be introduced with similar instruction across PME levels (in accordance with higher level outcomes of Bloom's taxonomy) by employing increasingly complex case studies and faculty examples to represent the contextual differences. Second, the addition of "context" is only necessary for certain domains. This article recommends that at least the cognitive domain, as well as aspects of mission command, are viable candidates for the expanded perspective, but there are many technical skills in which Bloom's taxonomy alone provides sufficient differentiation. Curriculum developers can use their tacit expertise to assist the Joint Staff and Service educational systems in identifying those areas where expanded context is necessary. In the end, though, improving PME through such considerations provides students the best preparation for the challenges they will face in future operational assignments.

Conclusion

The National Defense Strategy is clear in articulating the need for a new approach to PME:

PME has stagnated, focused more on the accomplishment of mandatory credit at the expense of lethality and ingenuity. We will emphasize intellectual leadership and military professionalism in the art and science of warfighting, deepening our knowledge of history while embracing new technology and techniques to counter competitors. PME will emphasize independence of action in warfighting concepts to lessen the impact of degraded/lost communications in combat. PME is to be used as a strategic

asset to build trust and interoperability across the Joint Forces and with allied and partner forces.³²

Ingenuity, intellectual leadership, professionalism, and independence of action require leaders at all levels who are requisitely skilled in handling cognitive complexity. They must be able to identify internal and external threats and opportunities, and interpret those signals to focus organizational action. These leaders must also reconcile paradoxes that exist within the complex environment and provide clear guidance both for the preparation and conduct of military action. In other words, to shoulder the leadership challenges implicit in the NDS, leaders of all ranks must be able to contend with significant conceptual demands. We believe this article advocates a targeted approach within PME that is aligned with meeting these demands.

The categorization of learning outcomes in accordance with Bloom's taxonomy makes sense for many of the educational domains that students are taught in PME. However, the appropriate use of Bloom's taxonomy depends on the pedagogical domain and the context in which that knowledge, skill, or attribute is demonstrated. For some content domains the context matters less, so a progression through Bloom's knowledge levels across the levels of PME is appropriate. However, we suggest that some domains, and in the cognitive domain in particular, a similar application fails to meet the needs of our population. Instead, the differentiating educational outcome should be the context in which the educational domain is demonstrated. Such contextual differences better highlight the unique differences in education across JPME and Service PME educational systems.

Teaching to the higher level outcomes earlier in one's career, even with the more constrained context, sets the conditions for better employment of those skills at the highest levels, when the context is much more unconstrained. Consequently, development of complex thinking skills, as well as other critical considerations, must begin early in PME.

JFQ 93, 2nd Quarter 2019 Waters and Bullis 4

To build such appreciation for their importance and difficulty, PME outcomes should reflect Bloom's higher level requirements across all levels. JFQ

Notes

¹ 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), 5.

² Ibid., 8.

³ Don M. Snider, "The U.S. Army as Profession," in The Future of the Army Profession, 2nd ed., ed. Don M. Snider and Lloyd J. Matthews (Boston: McGraw Hill, 2005), 3-39.

⁴ For representative examples, see Gordon B. Davis, Thomas C. Graves, and Christopher N. Prigge, "The Strategic Planning 'Problem," Military Review (November-December 2013), 12; Heather M.K. Wolters, Anna P. Grome, and Ryan M. Hinds, Exploring Strategic Thinking: Insights to Assess, Develop, and Retain Army Strategic Thinkers, Research Product 2013-01 (Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences, February 2013), 3; and Bob Scales, Scales on War: The Future of America's Military at Risk (Annapolis, MD: Naval Institute Press, 2016), 187-198.

⁵ The Army Learning Model is referenced in several publications, including Richard J. Stafford and William Mark Thornhill II, "The Army Learning Model: Changing the Way Sustainers Train," Army Sustainment 44, no. 2 (March-April 2012), available at <www.almc. army.mil/alog/issues/MarApril12/Army_ Leaning_Model.html>.

⁶Steven D. Clement and Donna Ayers, Leadership for the 1970s: A Matrix of Organizational Leadership Dimensions, Army Leadership Monograph Series 8 (Fort Benjamin Harrison, IN: Army Administrative Business Center, 1976).

Army Training and Doctrine Command (TRADOC) Pamphlet 350-70-7, Army Educational Processes (Fort Eustis, VA: TRADOC, January 9, 2013), 13–14.

8 Benjamin S. Bloom, ed., Taxonomy of Educational Objectives: The Classification of Educational Goals, Handbook 1: Cognitive Domain (New York: David McKay Company, 1956).

⁹ Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 1800.01E, Officer Professional Military Education Policy (Washington, DC: The Joint Staff, May 29, 2015).

10 Ibid.

11 Executive research within the Army is reviewed in Stephen J. Zaccaro, Models and Theories of Executive Leadership: A Conceptual/ Empirical Review and Integration (Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences, 1996).

12 Thomas O. Jacobs, Executive Leadership: The Competitive Edge (Washington, DC: National War College, 2009).

¹³ TRADOC Pamphlet 525-3-1, The U.S. Army Operating Concept: Win in a Complex World (Fort Eustis, VA: TRADOC, October 7, 2014), 8–16, available at <www.g8.army. mil/pdf/army_operating_concept_tp_525-3-1 7oct2014.pdf>.

¹⁴ As an important caveat, though, this article's focus on conceptual capability is not intended to reduce the importance of either technical or interpersonal skills. Skeptics often argue that an excessive focus on cognitive ability would select highly intelligent but less socially and emotionally fluent individuals as future general officers (for fans of the television situational comedy The Big Bang Theory, Dr. Sheldon Cooper comes to mind). However, this counter argument forgets that some of the great general and flag officers (for example, George C. Marshall, Dwight D. Eisenhower, Chester W. Nimitz) were men who possessed remarkable skills in all three of these domains. In parallel with advances the joint force is making in the development of its leaders' technical and interpersonal skills, it should also focus on the advancement of conceptual skills.

¹⁵ Douglas E. Waters, "Understanding Strategic Thinking and Developing Strategic Leaders," Joint Force Quarterly 63 (4th Quarter 2011), 116.

¹⁶ Diane F. Halpern, Thought & Knowledge: An Introduction to Critical Thinking, 4th ed. (Mahway, NJ: Lawrence Erlbaum Associates, 2003), 6.

¹⁷ Teresa M. Amabile, Creativity in Context: Update to the Social Psychology of Creativity (Boulder, CO: Westview Press, 1996), 37-38.

¹⁸ Peter M. Senge, The Fifth Discipline: The Art and Practice of the Learning Organization (New York: Doubleday, 2006), 6-7.

¹⁹ The concept of thinking in time was originally described by Neustadt and May, and later classified by Jeanne Liedtka as one of the five elements of strategic thinking. See Richard E. Neustadt and Ernest R. May, Thinking in Time: The Uses of History for Decision Makers (New York: The Free Press, 1986); and Jeanne M. Liedtka, "Strategic Thinking: Can It Be Taught?" Long Range Planning 31, no. 1 (1998), 123.

²⁰ One scholar argues that the responsibility of each level of leadership is to narrow the focus and responsibilities of each lower organization, thereby allowing more junior leaders to be more narrowly oriented than those at more senior levels.

²¹ Stephen J. Gerras, Thinking Critically about Critical Thinking: A Fundamental Guide for Strategic Leaders (Carlisle Barracks, PA: U.S. Army War College, August 2008), available at http://ssl.armywarcollege.edu/dclm/pubs/ CT%20Paper%20AY10.docx>.

²² Elliott Jaques, Requisite Organization: A Total System for Effective Managerial Organization and Managerial Leadership for the 21st Century (Arlington, VA: Cason Hall, 1996).

²³ CJCSI 1800.01E, Officer Professional Military Education Policy, Enclosure E; A-2, A-3, and Enclosure E. Endnote encompasses paragraph.

²⁴TRADOC Pamphlet 350-70-14, Training and Education Development in Support of the Institutional Domain (Fort Eustis, VA: TRADOC, March 27, 2015), 67-70.

25 Ibid., 62, 69.

²⁶ Army Doctrine Publication 6-0, Mission Command (Washington, DC: Headquarters Department of the Army, March 12, 2014), 1, available at https://armypubs.army.mil/ epubs/DR_pubs/DR_a/pdf/web/adp6_0. pdf>.

²⁷ U.S. Army Mission Command Training and Education Plan FY18-20 (Washington, DC: Headquarters Department of the Army, June 2017), v, A-1-A-6.

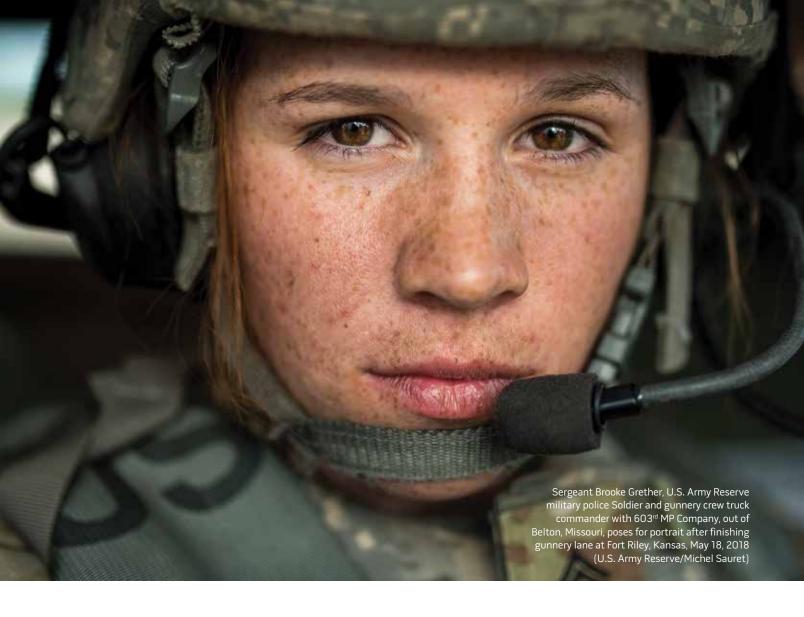
²⁸ U.S. Army Mission Command Strategy FY13-19 (Washington, DC: Headquarters Department of the Army, June 12, 2013), 1.

²⁹ U.S. Army Mission Command Training and Education Plan FY18-20, A-2.

30 Joint Publication 3-0, Joint Operations (Washington, DC: The Joint Staff, January 2017).

31 Jaques, Requisite Organization; Thomas O. Jacobs and Elliott Jaques, "Executive Leadership," in Handbook of Military Psychology, ed. Reuven Gal and A. David Mangelsdorff (New York: Wiley, 1991), 431-447.

³² Summary of the 2018 National Defense Strategy of the United States.



Warrior Women 3,000 Years in the Fight

By Mary Raum

They fought like devils, far better than the men.

— Georges Clémenceau, Mayor, 18th Arrondissement, referring to women of the Paris Commune, during France's republican uprising, 1871

Dr. Mary Raum is a Professor and Swanee Hunt Academic Chair in Women Peace and Security at the U.S. Naval War College.

hree stories: blood, guts, and hand-to-hand combat. Story 1: 40 AD. Four decades after the birth of Christ, the Vietnamese Tru'ng Sisters rise to lead their people after successfully thwarting a Chinese attempt to dominate their country.1 Coming from a society where both sexes work, practice law, and serve as judges, they are encouraged by their families to study the principles of the martial arts. As resistance and freedom fighters, they capture and decapitate their Chinese prisoners and reclaim 65 city fortifications. Both sisters are experts in knife fighting and ride into the fray atop two white elephants in full battle armor, their ornately carved breastplates signaling their status as nobility. The sight of the monolithic beasts and the two women wielding handheld weapons instills fear

JFQ 93, 2nd Quarter 2019 Raum 47



Female tank instructors of School of Infantry Professions conducted drill with Nagmachon tanks and armed hummers, January 1, 2013 (Israel Defense Forces/Zev Marmorstein)

in their enemies and breaks their ranks. While in command, Tru'ng Tac and Tru'ng Nhi school and place in positional authority many generals, 36 of whom are women. Numbers differ, but their troops, composed of peasants and aristocracy, range in size of from 20,000 to 80,000 combatants. The Tru'ng Sisters are regarded as national heroines of Vietnam, with many temples, schools, and streets dedicated to them, and there is a yearly holiday that commemorates their deaths.

Story 2: 60 AD. In 54 AD, after Emperor Nero comes to power, he begins to energize the flagging effort of his predecessor, Claudius, to control Briton by sending troops to the Welsh border country to subdue one of the last strongholds against Roman rule. Tacitus, a Roman senator and historian, pens in his Annals, Book XIV, all the known details of the campaign under the subheading "Romans and the Druids at

Mona Island." He portrays the fear of his soldiers when they set sight upon a Celtic Iceni female leader, "causing their limbs to be paralyzed." Statesman and historian Cassius Dio also writes about the invasion with the Druids: "a terrible disaster occurred in Britain. Two cities were sacked, eighty thousand of the Romans and their allies perished, and the island was lost to Rome. Moreover, all this ruin was brought upon the Romans by a woman, a fact which caused them the greatest shame."

The point that a female commander is at the helm of the defense of Mona is not peculiar to Britons at the time; there is no division between a person's sex and his or her rise to the role of military commander. Celtic women hold high status in the ancient world for the liberties and social positions they claim. Compared to their counterparts in Greek, Roman, and other

ancient societies, they are allowed many freedoms and protections under the law.

Boudicca, the female ruler of the Iceni tribes to which these ancient documents refer, fights the Romans after she is captured, flogged, and beaten. The invaders tie her two daughters to wooden stakes, and she is forced to watch as the legion of heavy infantry gang-rape them. Cassius Dio, in his description of her, stated, "she is tall with flaming red hair, terrifying to look at with a fierce gaze and a harsh, powerful voice . . . grasp[ing] a long spear to strike dead all those who set eyes on her."4 With an arrogant tone, he added, "this woman possessed greater intelligence than is usually found in the female sex."5 Boudicca is excellent with a sword and gifted in hand to hand combat, but her trademark is her ability to maneuver a two-horse chariot. In acknowledgment of the brutal treatment of her daughters by the invaders, she

rides into what is modern-day Colchester and sacks the city. Returning the vengeance applied to her daughters, she is particularly intent on killing the Roman women and impales all of them on outsize gibbets, or suspends their corpses from trees, cutting off the upper fronts of their bodies and sewing the severed fragments to their mouths. Before turning the community into a pile of smoldering ash, the Iceni Queen makes a fiery speech in which she affirms Celtic women as embodiment and soul of the lands from which they arise. Her expert tribal guerrilla tactics are no match over time, however, against the highly organized and outsized enemy forces, but she has a definitive impact on turning the enemy soldiers away from her people.

Today, the Iceni Queen is well known throughout the United Kingdom. During the reign of Queen Victoria, a likeness of Boudicca and her two daughters was commissioned and cast in bronze by the royal family and Parliament's engineer and sculptor, Thomas Thornycroft. The statue sits on a plinth beside the Victoria Embankment next to Westminster Bridge and the House of Parliament in downtown London. This line from William Cowper's *Boadicea*, *An Ode*, is inscribed on the side of the artwork, "Regions Caesar never knew, thy posterity shall sway."

Story 3: 17th Century. The troops are a ferocious sight, advancing silently from the African bush, barefoot, wielding clubs and knives. They walk through acacia, a low-growing dense plant with white, spiny hooked razor-sharp thorns. Each undergoes the same exhaustive drills to become insensitive to fighting and impervious to pain. One methodology to harden them to battle is to have all recruits heave bound prisoners of war into an angry crowd and watch unmoving, as the captives are torn apart. Most lethal of the warriors are the Reapers, armed with 3-foot-long straight razors so they can slice the enemy in two. An artistic rendering of one of the troops shows a standing fighter with a musket, club, dagger, and an enemy's severed head, blood dripping to the ground. These fighting elite are women in the service of the African King

of Dahomey. Within their realm, they are held in high esteem and valued as warriors. Two accounts exist regarding their roots. The first is that they formed sometime in the early 1600s, as *gbeto*, meaning "big game hunter." Malian society, where the gbeto live, is considered progressive for the time due to their valuing education and exchanging scholars with China, Europe, and the Middle East. Other histories describe the women as serving as armed palace guards, later forming into the Black Sparta combat troops of King Gezo, in the region of modern-day Benin in West Africa.7 Female generals oversee their ranks, and they serve 40 continuous years as a significant part of Gezo's military forces.

These stories are only three of thousands of accounts of women combatants that exist in historical archives of war. It has not been until the last two decades that such exploits are appearing as important additions to the timeline of conflict. One of the reasons for the missing factual knowledge and understanding about these women is that their experiences have been purposely written out of the chronology of historical records.8 A 2012 opinion piece by Bettany Hughes, an English historian, author, and broadcaster who specializes in classical studies, asserts that not only have women's exploits been deleted, but also their wisdom and insights about religion, codes, hadiths, texts, and statecraft.9 Hughes discloses that women may only occupy a mere 0.5 percent of about 3,500 years of recorded history.¹⁰ At Stanford University, extensive work by one of the world's leading scholars and researchers of female antiquities, Adrienne Mayor, writes in The Amazons that there is conclusive evidence today that many tales of women warriors thought to be fictional are facts.¹¹ Support for her studies exists in data derived from recent archeological digs. Fifty ancient burial mounds near the town of Pokrovka, Russia, close to the Kazakhstan border, are vielding women's skeletons alongside their weapons. Such excavations are adding to the credibility of the Greek historian Herodotus' accounts that depict numerous instances of female fighters. At other archeological sites from ancient Eurasia, up to 40 percent of

military graves being upturned contain the bones and weapons of horsewomen who fought alongside men. Lying with them are arrows, swords, daggers, armor, shields, spears, and sling stones.¹²

Women Combatants: A Global Review of Their Exploits

Geographically, from the North American continent, eastward to the nations of Asia, and across many eras, women show they are talented and ruthless as combatants and leaders in war. There is no question; they are physically and psychologically able to thrive in battle situations. In the 1800s in North America, Buffalo Calf Road Woman (also known as Brave Woman) of the Northern Chevenne fights with her husband at the Battle of Little Big Horn. In 2005, breaking a century of silence among tribal elders about discussing George Armstrong Custer, she is publicly credited as the warrior who strikes the blow that knocks the cavalry commander off his horse.13 Running Eagle of the Piegan Tribe of the Blackfoot Nation participates in several successful raids and war parties. In a battle with the Flathead, she is explicitly targeted by the enemy after field intelligence confirms there is a strong woman warrior among her people. The enemy singles her out for killing before they enter battle, clubbing her from behind astride her warhorse. Dahteste, a Choconen Apache warrior woman, is a successful raider and compatriot to Geronimo serving as a translator and mediator during the U.S. Cavalry negotiation for his tribe's surrender. Lozen, born into the Chihenne Band, is considered a strategic genius in planning and orchestrating battles. She is so effective in her ability to predictably determine the enemy's movements that her nation claims she is born with shaman powers. Vittorio, her brother and the Chief of the Warm Springs band of the Tchihendeh division of the central Apaches, talks about her in respectful tones, stating, "She is my right hand. She is a shield to her people . . . as strong as a man, braver than most, and cunning in strategy."14

JFQ 93, 2nd Quarter 2019 Raum 49



Students with Infantry Training Battalion—part of first ITB company to include female Marines as part of ongoing research into opening combat-related job fields to women—practice basic marksmanship techniques at Camp Geiger, North Carolina, September 26, 2013 (U.S. Marine Corps/Tyler L. Main)

The Southern Hemisphere has the fewest recorded examples of women warriors, but there are some illustrations worth noting. During the great age of maritime exploration of the early 1500s, there are eyewitness accounts by navigators that see female warriors on the tributaries of the great rivers on the South American continent. Explorer and conquistador Francisco de Orellana relates that during his traverse of the entire length of the Amazon, he encounters warrior women skilled in the use of bordunas. Depicted as tall, with muscular physiques and well trained, the women are lethal additions to fights due to their aptitude in the use of the bow and arrow. Other European expedition histories describe women skilled in martial arts and ground combat inhabiting the Andes.15

On the continent of Africa, Dahomey women are not the only female warriors. Greek histories report seeing Libyan

female troops wearing red leather armor and carrying shields. There are many warrior queens among the Hausa in the region of Niger and Nupe, who practice for and fight savage battles with their enemies. Both groups are primarily Muslim. Yaa Asantewaa, queen mother of Ejisu in the Ashanti Empire—now part of modern-day Ghana, prepares, equips, and leads the War of the Golden Stool in 1900. It is the final battle in the Anglo-Ashanti struggle with British colonialists.

Numerous illustrations of women fighters exist in the history of the geographic regions of south, eastern, and central Europe. While many of the stories depict land battles, there are also women who show excellent aptitudes for fighting at sea. A research team from Western Australia recently uncovered remnants of Viking shield-maidens, or *skjaldmaer*, along with their battle swords. They are believed to have accompanied male

Vikings in their invasions of England. During the Greco-Persian wars, Artemisia I of Caria commands a contribution of five ships under the Persian King Xerxes at the naval battle of Artemisium. As the campaign progresses, and it becomes evident she will fall into Greek hands, she decides to raise the colors of the enemy on her vessel's mast to confuse the Greeks into thinking she is a friend. In the writing of the second-century Macedonian author Polyaneus, Xerxes acknowledges Artemisia's excelling in the face of death and awards her a war prize of a complete suit of Greek armor. One detractor, Thessalus, a son of Greek physician Hippocrates, calls her cunning ploys those of "merely a cowardly pirate." After the Battle of Artemisium, she receives the formal title of Grand Admiral and Commander in Chief of the Persian Navy. In honor of her heroics, her profile is imprinted on fifth-century coins.16

In the Persian Empire, during the sixth century BCE, women are valued for their contributions as rulers, they oversee legislative court and run official ministries, and they hold positions of military might. During the 30-year reign of Cyrus the Great, Pantea Arteshbod stood out as commander of the Persian Immortal Army, which roles are akin to today's special operations forces. The Immortals are referenced in Herodotus' writings as a professional corps consisting of some heavy infantry at a size of up to 10,000 troops.¹⁷ Her society considers Pantea as a sensitive and caring military commander.

In Asian chronologies, there are more examples of female fighters than in any other part of the world. One of the most widely documented is the Japanese onna-bugeisha, who are part of the noble warrior caste that fights alongside the samurai. Each intensively exercises in the use of the ko-naginata, a pole weapon blade for battering, stabbing, or hooking an opponent. All are taught tanto*jutsu*, a series of knife fighting systems. Instruction regimens focus on the use of the kaiken, an 8- to 10-inch-long dagger used for indoor, close quarter combat.¹⁸ The onna-bugeisha's ko-naginata is purposefully formed to be slightly smaller than the *o-naginata* for men, to compensate for women's differing average height and body strength.

Knowing about this history is important because it demonstrates a broad demographic and geographic representation of women in war. It shows they effectively fight and lead in jungles, deserts, steppes, at sea, and in riverine regions. They are physically and emotionally able to compete and do well across an expansive set of scenarios including hand-to-hand combat, camouflage, and tracking, and in using the lethal weapons systems of their times.

The Excommunication of Women from War

Why and how women have been deleted or ostracized from taking on combat roles is believed to be linked to the rise of the patriarchal societies of Greece and Rome. English scholar and classicist Mary Beard, in her New York Times best-selling book Women and Power, argues that the strong patrilineal Roman culture is what obliterated the speech and power of women.¹⁹ Demeaning female populations in this period is the norm. Philosophers, politicians, and artists from the era show a common bond in their negativity toward women. Soldier and mercenary Xenophon believes that "men can better endure physically adverse conditions. Women are much more fearful, and hence more protective of possessions, while men are more courageous."20 Demosthenes, an Athenian general during the Peloponnesian War, sees women as having three roles: "men keep hetaerae (mistresses) for the sake of pleasure, female slaves for daily care, and wives to give legitimate children and be guardians of households."21 From Greek dramatist Meander comes the line "a man who teaches a woman to write should know that he is providing poison to an asp."22 Ancient Greek Hipponax disparages women in his poetry: "There are two days on which a woman is most pleasing—when someone marries her and when he carries out her dead body."23 Euripides' classical tragedies often have women describing themselves in a negative light. From his plays come the lines "I am only a woman, a thing which the world hates" and "we are a curse to man."24

Not all is negative from the period. There are some who take a nontraditional line and advocate for women, but this is not a common occurrence. Student records of Plato's teachings show he believes women should learn the crafts of musical and physical training, as well as military preparation, and that men and women should employ themselves in fighting enemies the same way.²⁵ Aristotle, Plato's student, has an entirely different viewpoint, asserting that women are naturally inferior to men, physically, spiritually, and intellectually.²⁶

Beard makes a compelling argument that there is a direct line between the silencing and invisibility of women in the cultures of the ancients to the current and continuing problems with some of the patriarchy of today. Understanding this historical deletion of women's roles is helpful to start to see that the current gender landscape is not an accident and that today's ideas about women are inextricably linked to what she terms "historical, cultural DNA."27 Extensive research behind Women and Power shows that within the history of equality there is a basic rule of thumb: "in tracing the persistence of female disempowerment, Beard argues that we inherited a deep cultural preoccupation" with it and that the "more a culture oppresses women, or oppresses anyone, the more absorbed they become with keeping the disempowerment rather than moving beyond it."28

In 2017, the World Economic Forum (WEF) estimated that the likelihood for global gender parity in economics and civil and legislative rights would not occur any time soon, with research showing that reaching a modest level of equality is at least 170 years away.²⁹ Not only is an extended timeframe involved, but reaching new stages of reduction in disparities are also taking longer to advance. Labeled by the WEF as the "creeping delay," the excessive lapse of time for change is a result of our human nature to automatically try to find selective arguments to resist moving toward equitabilities. Loss and grievance theory from the field of social dynamics aids in explaining why the disproportionate interval plagues change for women desiring to enter a career in combat arms. Reaching a majority acceptance entails a change in sociocultural, not physical, DNA.

For a shift to occur, the current idealized and privileged spaces men and women hold in the military will need to undergo modification. In socio-science terms, such adjustment requires a reducing of holding onto what is called "severe internal grievances."30 Grievances are defined as "real or imagined wrongs or other causes for complaint or protest to the status quo."31 Two primary grievance groups exist in the combat exclusion issue. Those who support women's rights to bear arms are defined as "liberalist," meaning they are open to new behavior or opinions and are willing to discard traditional values and replace them with

JFQ 93, 2nd Quarter 2019 Raum 51

new ones. Those who would prefer women not be allowed this role take on a "conservativist" approach, meaning their preference is to hold to historical attitudes and values that women should not be combatants. One excellent example of loss and grievance compounding change and an excessive period passing before a new paradigm emerges is with the near century of effort it took to achieve the women's right to vote in the United States and United Kingdom.³²

Ideas and Their Application From 1900-2015, examples of legislatively blocking, rescinding, and reinvigorating the roles of women in the military are numerous. It is not until after World War I, when the women of the all-female medical units prove to be highly successful, that the men overseeing their activities support their formal entry into the forces. Most of the women involved in promoting their value to the military are already hardened to rejection because nearly all of them have labored as suffragists and suffragettes to gain voting rights.³³ Their success in front- and rear-line hospital work leads to the passage of the Army Reorganization Act, which allows female medical professionals to attain status as officers and receive a relative rank to that of their male counterparts. However, limitations are put in place to allow only for promotion within the four lowest officer ranks of lieutenant to major without full rights and privileges, or equal pay. Women will not be considered for substantial, formal leadership responsibilities, and female enlisted Army Soldiers get capped at 2 percent of total enlisted brackets. Officer slots are limited to 10 percent, and rank restrictions exist for female participants for 50 years. The removal of these limitations does not occur until

Any changes related to the military woman after 1967 parallel the passage of national legislation of the Equal Pay Act, Title VII of the Civil Rights Act, prohibiting discrimination, the evolution of the Equal Employment Opportunity Commission, the lifting of the ban

the Vietnam War in 1967.

on women practicing law, and the Pregnancy Discrimination Act. Up until 1975, pregnancy resulted in immediate dismissal from the Armed Forces. One rare example of support from inside the military for women's inclusion is when Chief of Naval Operations Admiral Elmo Zumwalt writes and distributes Z-gram #116, "Equal Rights and Opportunities for Women in the Navy," in August of 1972.34 Some new ideas he proposes are the opening of all enlisted rates to women, the support of the goal of assigning women to ships at sea, the opening of civil engineering and chaplaincy roles to women, and an assignment of technical qualified unrestricted line women to restricted line billets. In follow-on decades, women are allowed entry into the Service academies and to fly combat aircraft. Many of these modifications do not occur until both bodies of the legislative branch of the U.S. Government gain additional female officials who support the changes and branches of the Armed Services approach 10 percent total female population.35

Two primary arguments continue to plague the "women as fighters" issue: that women are considered a distraction to unit cohesion, and women are less able physically and mentally to perform combat roles. As recently as September of 2018, James Mattis is quoted as stating in a presentation to cadets at the Virginia Military Institute (VMI) that "the jury's still out on women serving in combat. The United States needs to decide whether females in close-quarters combat are a military strength or weakness . . . remember our inclination is to have this open to all. But we cannot do something that militarily doesn't make sense."36 The defense given for these statements is that there is not enough data yet on full female inclusion.37 In an earlier interview, Mattis notes what infantrymen are like in battle: "They are cocky; they're rambunctious. They're necessarily macho. And it's the most primitive; I would say even evil, environment. You can't even explain it."38 There is no awareness shown here of 3,000 years of women's participation in events as deadly and horrific as the picture presented here of the

culture of the 21st-century infantryman. The comments also ignore the numeric that there are over 9,000 U.S. military women who earned valor awards and combat action badges in the past two decades. 39 Also disregarded is the current situation of women in the Army. At a Future of War Conference in Arizona in 2018, the Army's Vice Chief of Staff, General James McConville, gave an overview where he stated:

We have women in every single infantry, armor and artillery battalion and every single brigade combat team in the Army.... The Army currently has 600 women in infantry and armor jobs.... Ten (now 12) women have graduated from Ranger School, which is our toughest school. We have a woman commanding a company in the 82nd Airborne Division, an infantry company.⁴⁰

In 2018, the first female sapper tab was awarded, and currently, 22 women are serving as infantry and armor officers. Statements spoken to the cadets in Virginia, while deserving unqualified respect due to the level of highly decorated combat experience behind them, show the "conservativist" line of the women in combat argument, are an example of a deep cultural preoccupation with the status quo, and are a good representation of "loss and grievance" toward a scenario that no longer exists in the battle preparation crucible. A ban on women in combat was rescinded 6 years before the declarations made at VMI and are 4 years after Defense Secretary Ashton B. Carter announced the decision to open all combat jobs to women.

Internationally, the move to delete combat exclusion policies begins almost 30 years ago. By 2018, more than a dozen industrialized nations allow women to serve in combat. During the late 1980s, Canada and Denmark passed total inclusion laws for women in the military. In Australia in 2011, the military began a 5-year plan that resulted in women serving as navy ordnance disposal divers; as airfield and ground defense guards; and as members of the infantry, artillery, and armored units. India's air force is now composed of

almost 9 percent female personnel, and several are serving as helicopter and fighter pilots. In 2018, India deployed its first all-female elite SWAT team with expertise in explosives, urban warfare, and deadly martial arts. Thirty-six commandos work in counterterrorism units and receive preparation by top global experts in weapons proficiencies and Krav Maga, which is a lethal martial arts program pioneered by Israeli special forces. In field maneuvers, the commandos are proving to be highly proficient in ambush and counter-ambush tactics, jungle, and urban operations. They can, stated an article in *The Telegraph*, "spring from deep sleep to action, fully armed, within a minute of an alarm."42 Israel has long had compulsory mixed gender military service and represents an extensive modern history with integrated troops. A 2000 equality amendment to the Israeli Military Service law states that "the right of women to serve in any role in the IDF [Israel Defense Forces] is equal to the right of men." The 33rd Caracal Combat Battalion, taking its name from a cat whose sexes appear the same, is now 70 percent female. Members were actively engaged in Al Agsa Intifada, the Gaza Withdrawal, and the Israel-Lebanon War. Recruits use M16A1 and M4A1 assault rifles, grenade launchers, light antitank weapon rockets, light and heavy machine guns, and automatic grenade launchers. One female member in the battalion served as commander of a sniper platoon.

In general, earlier societies that accepted female warriors did not plague the women with negativity about their inclusion, nor did they impede their talents. Instead, the military ensured women could succeed as warriors. Those developing weapons for women built hardware for success and did not burden them with the idea that they should "fight like a man." Training scenarios were put in place that worked to their strengths. Operationally, women were positioned in situations where they could excel. Only in recent generations have women been excluded by using an excuse that they do not match, precisely, a numeric range in size, shape, and strength of a male contemporary.

Conclusion: Leading, Legislating, and Learning

There continues to be a preoccupation with keeping alive the grievance between the liberalist and conservativist sociological points of view that women cannot and should not fight. Three spheres need to be addressed to offset this problematical state of affairs: leadership understanding, legislation, and education.

Military leaders should consider learning about historical examples of female combatants to affect their own and other's attitudes regarding the myth that women have not been in combat. Over the past 20 years, there has been a vast improvement in the availability of such information, and it should be mined. Including historical and modern stories in instructional scenarios and informal discussions with troops will aid in shifting the negative cultural DNA about women in combat that continues to exist. Those women experiencing a career in combat arms need to write or tell their stories so that the abysmal 0.5 percent of their written and oral input into the history of war can increase.

In the world of politics, legislators who support gender-related military equitabilities or work with lawmakers who are opposed to transformation also need to become and remain knowledgable about why and how past societies disempower female populations. The more examples available in their repertoires of successful and failed scenarios, the abler the policymakers become in their ability to fend off the "creeping delays" that occur due to backward movement from repeating past errors. Educators in war colleges and military Service schools who develop curricula and lectures for security sector professionals would benefit their student populations through formally instigating study units that discuss social aspects and historical examples of women in war. Demographics in war college and Service school classrooms have changed markedly since 2000, and the more mixed gendered the military becomes in the field, the more it is essential for those being schooled in professional military education to develop their awareness about women and war. Pantea

Arteshbod, Artemisia, Boudicca, the Tru'ng Sisters, Yaa Asantewaa, and Lozen should be as well-known as their male counterparts. JFQ

Notes

¹ Nghia M. Vo and Nguyen Ngoc Bich, The Trung Sisters Revisited (Saigon, Vietnam: CreateSpace Independent Publishing Platform, March 18, 2015).

² Joshua J. Mark, "Tacitus on Boudicca's Revolt," *Ancient History Encyclopedia*, January 18, 2012, available at <www.ancient.eu/article/100/tacitus-on-boudiccas-revolt/>.

³ Cassius Dio, *Roman History* (Cambridge: Harvard University Press, 1987). Changes occurring in the 1960s and 1970s parallel the larger, two-decades-long timeframe that has become known as "second-wave feminism."

4 Ibid.

⁵ "Boudica (Boudicca)," in *Encyclopae-dia Romana*, ed. James Grout, available at http://penelope.uchicago.edu/~grout/encyclopaedia_romana/britannia/boudica/boudicanrevolt.html.

⁶William Cowper, *Boadicea: An Ode* (1782), Eighteenth-Century Poetry Archive, February 2019, available at <www.eighteenthcenturypoetry.org/works/o3794-w0400.shtml>.

⁷ Stanley B. Alpern, Amazons of Black Sparta: The Women Warriors of Dahomey (New York: New York University Press, 2011). Also see Frederick Forbes, Dahomey and the Dahomans: Being the Journals of Two Missions to the King of Dahomey, and Residence at His Capital, in the Year 1849 to 1850 (London: Longman, Brown, Green, and Longmans, 1851).

⁸ Mary Beard et al., "Big Books by Blokes about Battles': Why Is History Still Written Mainly by Men?" *The Guardian*, February 6, 2016. Chloe Angyal, "Men Write History, but Women Live It, HUFF Post Opinion, March 28, 2018, available at <www.huffingtonpost.com/entry/opinion-angyal-womens-historymonth_us_5a970857e4b0e6a52304517e>. Helen Lewis, "From Cynisca to the Pages of the TLS, If We Write Women Out of History, We Only Get Half the Story," *New Statesman America*, November 10, 2015. Alison Flood, "Popular History Writing Remains a Male Preserve, Publishing Study Finds," *The Guardian*, January 11, 2016.

⁹ Maya Salam, "In Her Words: Where Women Rule the Headlines," *New York Times*, January 4, 2019, available at <www.nytimes. com/2019/01/04/us/women-quotes-voices. html>.

¹⁰ Bettany Hughes, "Why Were Women Written Out of History?" English Heritage blog, February 29, 2016, available at http://blog.english-heritage.org.uk/women-written-history-interview-bettany-hughes/>.

JFQ 93, 2nd Quarter 2019 Raum 53

¹¹ Adrienne Mayor, *The Amazons: Lives and Legends of Warrior Women Across the Ancient World* (Princeton: Princeton University Press, 2016).

12 See, for examples, Holly Norton, "How the Female Viking Warrior Was Written Out of History," The Guardian, September 15, 2017; Michael Greshko, "Famous Viking Warrior Was a Woman, DNA Shows," National Geographic, September 12, 2017, available at https:// news.nationalgeographic.com/2017/09/ viking-warrior-woman-archaeology-spd/>; Simon Worrall, "Amazon Warriors Did Indeed Fight and Die Like Men," National Geographic, October 28, 2014, available at https://news.nationalgeographic.com/ news/2014/10/141029-amazons-scythianshunger-games-herodotus-ice-princess-tattoocannabis/>; and Jeannine Davis-Kimball, "Warrior Women of Eurasia," Archeology 50, no. 1 (January-February 1997), available at https://archive.archaeology.org/9701/ab- stracts/sarmatians.html>.

¹³ Martin J. Kidston, "Northern Cheyenne Break Vow of Silence," *Helena Independent* Record, June 28, 2005.

14 See "Lozen: An Intelligent and Brave Apache Warrior Woman," Ancient Origins, May 14, 2016, available at <www.ancient-origins. net/history-famous-people/lozen-intelligent-and-brave-apache-warrior-women-005889>; Carolyn Niethammer, Daughters of the Earth: The Lives and Legends of American Indian Women (New York: Simon & Schuster, 1977); and James Axtell, ed., The Indian People of Eastern America: A Documentary History of the Sexes (New York: Oxford University Press, 1981). See also Peter Aleshire, Warrior Woman: The Story of Lozen, Apache Warrior and Shaman (New York: St. Martin's Press, 2015).

¹⁵ Buddy Levy, River of Darkness: Francisco Orellana's Legendary Voyage of Death and Discovery Down the Amazon (New York: Bantam, 2011).

¹⁶ See Polyaenus, *Stratagems*, 8.53.5; also see Jone Johnson Lewis, "Biography of Artemisia I, Warrior Queen of Halicarnassus," ThoughtCo, February 14, 2019, available at http://ancienthistory.about.com/od/artemisia-Of-Halicarnassus.htm.

¹⁷ Herodotus, "The Battle of Thermopylae," in *The Histories*, 7.22, available at <www.livius.org/sources/about/herodotus/herodotos-bk-7-logos-22/>.

¹⁸ Steven Turnbull, *Samurai Women 1184–1877*, Warrior, book 151 (Oxford, United Kingdom: Osprey Publishing, 2010).

¹⁹ Mary Beard, Women and Power: A Manifesto (New York: Liveright, 2017).

²⁰ Stewart Irvin Oost, "Xenophon's Attitude Toward Women," *The Classical World* 71, no. 4 (1977), 225–236.

²¹ Complete Works of Demosthenes, Delphi Ancient Classics Book 56 (Hastings, East Sussex: Delphi Classics, November 28, 2015). ²² James C. Thompson, "What Athenian Men Said about Women," Women in the Ancient World blog, July 2010, available at <www. womenintheancientworld.com/whatathenianmensaid.htm>. See also Andromache, speaking in Euripides, *Andromache*, ca. 428–425 BCE.

23 Ibid.

²⁴ Ibid. See also Phaedra, speaking in Euripides, *Hippolytus*, 428 BCE.

²⁵ Annica Collette, "Women and Misogyny in Ancient Greek Philosophy," in Women in Antiquity: An Online Resource for the Study of Women in the Ancient World, November 27, 2018, available at https://women-and-misogyny-in-ancient-greek-philosophy/.

²⁶ Aristotle, *The History of Animals*, ed. Jonathan Barnes (Princeton: Princeton University Press, 1984).

²⁷ Kate Tuttle, "Tracing the Roots of Misogyny to Ancient Greece and Rome with Mary Beard," *Los Angeles Times*, December 28, 2017, available at <www.latimes.com/books/jacketcopy/la-ca-jc-women-and-power-20171228-story.html>; see also Beard, *Women and Power*.

²⁸ Ibid.

²⁹ World Economic Forum (WEF), *The Global Gender Gap Report 2017* (Geneva: WEF, 2017), available at <www3.weforum.org/docs/WEF_GGGR_2017.pdf>.

³⁰ Gerry Larsson et al., "Daily Uplifts and Coping as a Buffer Against Everyday Hassles: Relationship with Stress Reactions over Time in Military Personnel," *Scandinavian Psychologist* 4, no. 13 (2017), available at https://psykologisk.no/sp/2017/10/e13/>.

³¹ Ibid. See also *The Global Gender Gap Report 2017*.

32 Emmeline Sylvia Pankhurst, My Own Story (London: Eveleigh Nash, 1914). Helen Pankhurst, Deeds, Not Words: The Story of Women's Rights, Then and Now (London: Scepter, 2018). Emmeline Sylvia Pankhurst, The Suffragette Movement: An Intimate Account of Persons and Ideals (London: Longman, 1931). Elizabeth Crawford, The Women's Suffrage Movement: A Reference Guide 1866–1928 (London: University College London, 1999).

³³ These ideas are copyrighted in the working paper, Mary Raum, "Suffragism, Women in Military Nursing and Medicine," in *From Eight Hours to Four Years: Female POW's Civil War to Vietnam*, forthcoming. The suffragists believed in peaceful campaigning, whereas the suffragettes believed in direct action (violence and militancy). The suffragists were nationally organized; the suffragettes were a smaller organization with 2,000 members at its peak in 1914. The suffragists allowed men to join their efforts; the suffragettes did not.

³⁴ Admiral E.R. Zumwalt, Jr., "Equal Rights and Opportunities for Women," Z-gram #116, August 7, 1972, Naval History and Heritage Command, available at <www.history.navy.mil/research/library/online-reading-room/title-

list-alphabetically/z/list-z-grams/z-gram-116. html>.

³⁵ J. Xie et al., "Social Consensus Through the Influence of Committed Minorities," *Physical Review E* 84, no. 1 (July 2011). Data now show that once 10 percent of a population is committed to an idea, it is inevitable that it will eventually become the prevailing opinion of the entire group. The key is to remain committed.

³⁶ Tara Copp, "Mattis Defends Remarks on Women in Infantry, *Military Times*, with video, 0:42, September 26, 2018, available at <www.militarytimes.com/news/your-military/2018/09/26/mattis-defends-remarks-on-women-in-infantry/>.

³⁷ Ibid.

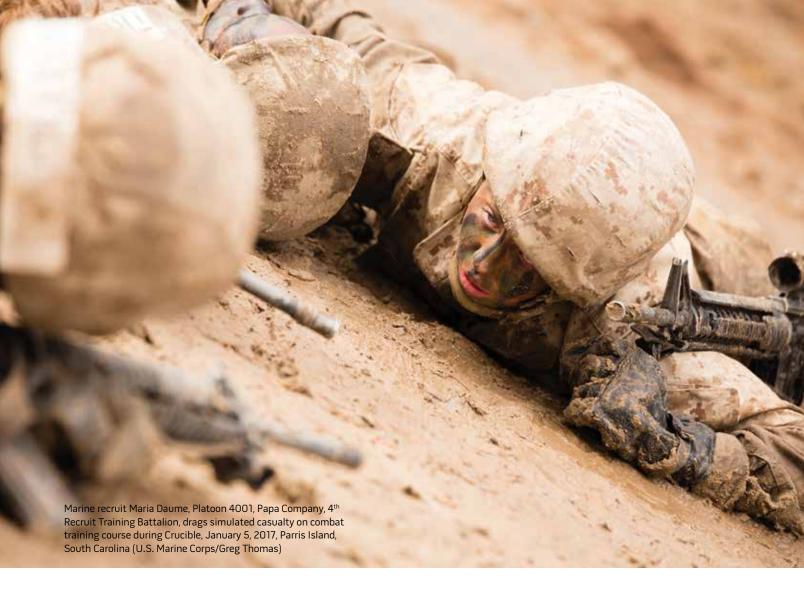
38 Ibid.

³⁹ Richard Sisk, "Women in Combat: Silver Stars, Combat Action Badges and Casualties," *Military.com*, August 31, 2015, available at <www.military.com/daily-news/2015/08/31/women-in-combat-silver-stars-combat-action-badges-casualties.html>.

⁴⁰ Matthew Cox, "Twelve Female Soldiers Have Now Graduated Army Ranger School, *Military.com*, April 9, 2018, available at <www.military.com/daily-news/2018/04/09/10-female-soldiers-have-now-graduated-army-ranger-school.html>.

⁴¹ Information in this section is taken from Gretel C. Kovach, "Wide Range of Policies for Women in Combat Jobs," *San Diego Union Tribune*, February 14, 2015.

⁴² Saptarshi Ray, "New All-Female SWAT Team to Protect Indian Prime Minister after Intensive Training in Martial Arts," *Telegraph* (London), August 11, 2018.



Military Medicine The Gender Gap in Trauma Training

By Daniel P. McGarrah

Sergeant First Class Daniel P. McGarrah, USA, is the Senior Enlisted Medical Advisor for $4^{\rm th}$ Psychological Operations Group, Fort Bragg, North Carolina. He wrote this essay while a student at the College of International Security Affairs. It won the Strategic Research Paper category of the 2018 Chairman of the Joint Chiefs of Staff Strategic Essay Competition.

he combination of civil-military operations, humanitarian duties, and combat operations results in women working in hazardous environments and the necessity of female-specific trauma training. The 2017 National Security Strategy (NSS) declares, "The Servicemen and women who defend our nation will have the equipment, the resources, and the funding they need to secure our homeland." Currently, more female noncom-

batants are positioned in the battlespace due to joint operations with nongovernmental organizations (NGOs), private voluntary organizations, and various partner-nation personnel operating in regions of the world frequented by the U.S. military. Women have moved from support roles to operational ones, making them more susceptible to combat trauma and injuries and increasing the likelihood of U.S. military personnel treating female civilian casualties.

JFQ 93, 2nd Quarter 2019 **McGarrah 55**

Physiological indications and sociocultural concerns for female-specific training are two critical areas resulting from the increase of women working in harm's way. The need for nonmedical personnel to understand both areas is imperative for increasing the survivability of women in physical trauma situations because most preventable mortalities occur prior to a casualty arriving at a hospital.2 The survivability aspect goes beyond the training and into the core values that are the foundation of the Armed Forces. The Chairman of the Joint Chiefs of Staff stated that the integration of women into previously restricted occupations will occur while unit readiness, cohesion, and morale are preserved.3 This statement clarifies that the military must revise its trauma management protocols to maintain a successful National Security Strategy.

Physiological Indications

The physiological indications for female-specific training are not new challenges for the Department of Defense (DOD). The inclusion of physiological differences and demands are in the Army's executive order regarding gender integration. This executive order states:

Both the Army and Marine Corps studies found that women participating in ground combat training sustained injuries at higher rates than men, particularly in occupational fields requiring load-bearing. These studies also revealed concrete ways to help mitigate this injury rate and the impact on individuals and the teams in which they operate. The sustainability of our combat readiness and our obligation to the welfare of the force means these findings must be addressed in the implementation of the full integration of women in the Armed Forces.⁴

However, the Army did not have any conclusive data requiring the need for female-specific trauma training in this executive order. Nevertheless, there are known differences in the effects of traumatic injuries for each sex, including hypothermia, landmarks, verbiage, training models, and the reluctance to touch the opposite sex. These five considerations make up just a portion of the physiological and sociocultural issues facing the DOD medical community and its need to update its trauma curriculum.

Studies show that the effects of hypothermia can differ in men and women, contributing to complications such as the lethal triad.⁵ These three life-threatening issues are vital to managing a trauma casualty as they can lead to irreversible shock and ultimately death. Medical personnel within U.S. Special Operations Command (USSOCOM) reviewed research involving athletes and the effects of hypothermia. These personnel listed this topic as a potential pitfall during combat operations because the study showed women having twice the rate of hypothermia injuries than men.6 The medical personnel conducting the research stated:

Sex differences in thermoregulatory responses during cold exposure are influenced by interactions among total body fat content, subcutaneous fat thickness, amount of muscle mass, and surface area-to-mass ratio. . . . In females and males of equivalent subcutaneous fat thickness, females typically have a greater surface area, but smaller total body mass and smaller muscle mass (thus, lower total body heat content) than males and lose heat at a faster rate. Women's thermogenic response to cold exposure also appears less able to generate metabolic heat than males of similar body composition due to less total muscle mass.⁷

Current military trauma training does not identify this deficit toward women in courses like Tactical Combat Casualty Care (TCCC) or other medical training programs for nonmedical personnel. Thus, if female Servicemembers develop hypothermia twice as fast as male Servicemembers, they require a higher priority in terms of triage to prevent untoward consequences of hypothermia.

Moreover, the differences in anatomy and physiology between both sexes can lead to complications when performing emergency medical treatments. The standard example used by DOD medical training is a fighting-aged man, due to the higher casualty rates of men in combat. Nevertheless, the traditional male model leads to a misperception of where and how to perform particular lifesaving medical interventions such as a cricothyroidotomy (procedure to open an airway) or needle thoracostomy (an incision in the chest wall using a needle, commonly used to treat a collapsed lung). Currently, the training dialogue does not describe the differences in both sexes, for example the instruction to find the Adam's apple as a reference point for a cricothyroidotomy. This body part is primarily a landmark for men due to the larger larynx that men develop during puberty and is typically impossible to see on a woman due to the higher amount of subcutaneous fat. A 2014 mixed-gender case study of cricothyroidotomy procedures examined the failure rate of locating the cricothyroid membrane by palpation rather than ultrasound in a hospital setting.8 The findings indicate that it is significantly more challenging to perform this procedure on women (a failure rate of 29/36, or 81 percent) than men (11/36, or 31 percent).9 In contrast to the hospital setting, Servicemembers rely on the Adam's apple as a landmark to find the cricothyroid membrane, which leaves them unprepared to perform a cricothyroidotomy on women under battlefield conditions.

The next male-specific phrase is to "follow the nipple line" while performing a needle thoracostomy. The training verbiage in this procedure not only shows disregard to the implications for women but overweight men as well. There is no emphasis on the problem of what to do with female breast tissue in any of the TCCC training slides. The need for this discussion should not require lengthy training, merely a reference to specific considerations when dealing with patients who do not meet the example of a fighting-age male. Imagine the additional chaos and stress of combat while conducting a procedure for the first time on a female casualty; it is then the striking differences between both sexes become apparent. The Committee of Tactical Combat Casualty Care officially updated curriculum in August 2018 to reflect evidence-based changes regarding



Sailor cuts pants off training dummy to check for further injuries during week-long tactical combat casualty care course at U.S. Naval Hospital, Okinawa, Japan, January 13, 2017 (U.S. Navy/Kelly M. Agee)

site selection, needle bore size, and confirmation of an effective procedure. ¹⁰ The committee is reviewing what further updates will be implemented regarding female anatomical differences, which will ensure that first responders are knowledgeable when treating female casualties with traumatic thoracic injuries.

Unfortunately, overlooking female mannequins and the effects of medical role-players is a topic that continues after years of inattention. Recently, the Medical Simulation Training Center on Fort Bragg tested the use of female mannequins with mixed results from the Servicemembers performing trauma scenarios. Some of the Servicemembers were still reluctant to cut off the clothes from a plastic mannequin, which

presents a more significant concern. If they are worried about removing clothing from what is essentially a plastic doll, then how are they going to perform—in combat—with a living, breathing, and potentially dying woman? Additionally, a USSOCOM medical survey conducted recently listed 36 characteristics each special operations forces (SOF) medical professional would want in a nonliving model for training.¹¹ The two least desired characteristics were race and gender. In the past, when fewer women were working within the SOF community, the small number of female casualties did not necessitate male- or female-specific training, nor was it cost-effective. As the needs and goals of DOD shift, grow, and develop, there is a

need for proactive planning that stresses cultural inclusivity and overcomes sensitive gender issues or stigmas.

As a TCCC instructor, I facilitated numerous training simulations that included professional actors and actresses role-playing as female patients to provide realistic training for the students. In these trauma scenarios, instructors were able to identify the cultural and medical obstacles that nonmedical personnel may face and were able to assist in desensitizing students to gender challenges.

When Servicemembers began the training with a live female role-player, the dynamics of the medical scenario in play drastically altered a standard response, at least the first time. The reason for this change is varied, but a constant theme

JFQ 93, 2nd Quarter 2019 McGarrah 57



Hospital corpsman, right, gives instruction to Sailor during field training exercise portion of Tactical Combat Casualty Care training, Schofield Barracks, Hawaii, May 31, 2013 (U.S. Navy/Sean Furey)

is that men react poorly when a woman is screaming or sobbing during training. Surprisingly, the students' voices and their actions become erratic and illogical at times. When asked how they felt when the female role-player was crying or screaming, "Don't let me die!" the answer from most students was "My mind went blank" or "I was in panic mode and didn't know how to get her voice out of my head." These reactions were notably worse for individuals with sisters or daughters.

During follow-on scenarios, the students reacted much better and without nearly as many problems because of their exposure in the first scenario. As with other simulations, exposure helped automate appropriate responses. The use of professional medical role-players is not currently a requirement for TCCC but is a valuable tool for training. As such, live role-players should be available in conjunction with mannequins to "inoculate" Servicemembers so that the first time they treat a female casualty, it is not in actual combat. In the end, this is a simple and inexpensive fix to encourage nonmedical personnel to understand what to expect and how to respond to a female casualty.

Sociocultural Concerns

The sociological and cultural concerns for female-specific training include misperceptions, obstacles, and variables concerning women and the requirement to remove clothing in traumatic situations. These issues involve touching women and completing the task of making a female patient "trauma naked." The oversexualization of the female body is best confronted and understood in training to prevent needless female fatalities due to inaction. Currently, there are cultural and societal norms that inhibit trauma training-for instance, sexual harassment. Resolving the reluctance of both medical and nonmedical Servicemembers to treat female casualties and follow mandated protocols that include the removal of clothing is not an easy task. In contrast, the civilian medical community has training protocols set up for these situations to protect both the patient and the medical provider; however, the public sector still struggles to treat women, as shown in a recent cardiopulmonary resuscitation (CPR) report from the American Heart Association.12

A disconcerting problem documented in recent years is a lack of initiative to treat women in life-threatening medical situations. One study involving nearly 20,000 cases nationwide showed a male-female issue with the lack of CPR application; the alarming results found that women were less likely to survive than men when CPR was necessary. The Associated Press reported, "Females are less likely than males to get CPR from a bystander and more likely to die . . . and researchers think the reluctance to touch a woman's chest might be one reason."13 Another factor found in this study is the lack of anatomically correct female mannequins on which to practice chest compressions.14 These cases directly correlate to the lack of female-specific training models and examples accounted for in TCCC training protocols. By discussing the cause and effect aspect of this topic and ensuring that training is professional, DOD could help decrease the number of female Servicemember fatalities.

At first glance, male-female integration into trauma training appears equal and does not require changes to trauma education; however, with closer analysis, it becomes evident that men and women are not the same in a battlefield trauma situation. If women believe that the military does not meet their medical needs, then a reduction in the number of women entering the military is a reasonable response. This problem is vital to female recruitment and retention—there is a need for women to fill positions within the military due to a reduction in the eligible population in America. The cause for this is that DOD "estimates that 71 percent of the roughly 34 million 17- to 24-year-olds in the United States today would fail to qualify based on the current enlistment criteria because of physical or mental health issues, low educational scores, or major criminal convictions."15 The whole issue diminishes the operational effectiveness of Servicemembers within DOD and affects NSS objectives.

Cultural and religious biases are those that many in DOD would rather not deal with to prevent the appearance of discrimination or prejudice in a

"politically correct" environment. The cultural aspect under scrutiny here is when a man wants to protect a wounded woman: this chivalrous maxim drove the Israeli army's decision to remove women from frontline units. The author of a report on female service in the Israel Defense Forces (IDF) comments that the "Army has promised to allow soldiers to avoid conduct that violates their religious beliefs, even if such conduct is considered normal among the mainstream of Israeli society. Examples of such behavior include being alone in a room with a woman or seeing a woman in immodest clothing."16 This example plays into concerns among U.S. Servicemembers who are Orthodox Jews or members of other religions with similar laws regarding these customs.17

On one hand, female-specific trauma training could be affected by those individuals who refuse to violate their morality or religion by seeing a woman not fully clothed. On the other hand, many medical professionals have stated that religion will not be considered a challenge. Many of those same individuals stated that in the heat of battle a soldier would complete the trauma procedures without hesitation. Unfortunately, what happens when this is not the case? Another question is what to do in environments where the female body is not to be viewed unclothed and would potentially cause operational concerns. And, as stated in the IDF report, "Evaluating the IDF's fitness is not the business of religious leaders or the Israeli public, both of whom lack the technical knowledge required."18 Currently, within the U.S. military, religious concerns are accepted and the segregation of the sexes is not yet a concern. Nevertheless, the need for military leaders to ensure that this situation is addressed is evident with the turmoil seen in the IDF and the problems it is facing with the public as well as with religious leaders. These examples are not meant to show that women are not valuable to the mission, but to illustrate the need to have better research for the variables when it comes to trauma training.

Recommendations

The following recommendations identify some options for the problems uncovered. First, update trauma training and the DOD-approved TCCC guidelines to include female-specific guidance for casualties. Second, review research studies provided and commit to further investigations in order to examine any potential pitfalls in current medical training. Third, incorporate live female role-players and female mannequins in the trauma training curriculum. Finally, ensure that women continue to be given the opportunities for survival by extending the research proposed in this article. Doing so is essential to our national strategy.

The current policy in the Department of Defense is that women will integrate into combat arms positions. This process requires training content to address female-specific physiological/sociological differences and concerns. DOD policy should support training, medical treatment, and research to ensure women have the same opportunity to survive combat trauma as men. DOD has made it clear that women will serve in combat arms, so women's survivability should be equal to that of men. JFQ

Notes

- ¹ National Security Strategy of the United States of America (Washington, DC: The White House, 2017), available at <www.whitehouse. gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905-2.pdf>.
- ² Brian J. Eastridge et al., "Death on the Battlefield (2001–2011): Implications for the Future of Combat Casualty Care," *Journal of Trauma and Acute Care Surgery* 73 (December 1, 2012).
- ³ HDQA Execution Order 097-16 to the U.S. Army Implementation Plan 2016-01 (Army Gender Integration) (Washington, DC: Headquarters Department of the Army, 2016), 2, available at <www.defense.gov/Portals/1/Documents/pubs/WISR_Implementation_Plan_Army.pdf>.
 - 4 Ibid., 3.
- ⁵The lethal triad consists of hypothermia, acidosis, and coagulopathy. Hypothermia is merely being colder than one's average resting temperature, which usually averages to 98.6°F, but can fluctuate. Coagulopathy is the impair-

ment of a casualty's blood to clot properly. Acidosis is the excessive amount of acid in bodily fluids or tissues.

⁶Thomas A. Cappaert et al., "National Athletic Trainers Association Position Statement: Environmental Cold Injuries," *Journal of Athletic Training* 43, no. 6 (November/December 2008).

7 Ibid

⁸ M. Campbell et al., "The Accuracy of Locating the Cricothyroid Membrane by Palpitation: An Intergender Study," *BMC Anesthesiology* 14, no. 108 (2014).

⁹ Ibid.

¹⁰ National Association of Emergency Medical Technicians, "TCCC-MP Guidelines and Curriculum," August 1, 2018, available at <www.naemt.org/education/naemt-tccc/tccc-mp-guidelines-and-curriculum>.

¹¹ Greg Horn et al., "Manikin Human-Patient Simulator Training," *Journal of Special Operations Medicine* 17, no. 2 (Summer 2017), 89–95.

¹² "Women Are Less Likely to Receive CPR Because of Boobs: Study," *New York Post*, November 13, 2017, available at https://nypost.com/2017/11/13/women-are-less-likely-to-receive-cpr-because-of-boobs-study/.

13 Ibid.

14 Ibid.

¹⁵ John Spencer, "The Military's Real Problem: Fewer Americans Are Joining," *Politico*, December 15, 2015, available at <www.politico.com/agenda/the-militarys-real-problem-fewer-americans-are-joining-000005>.

¹⁶ Idit S. Gittleman, "Female Service in the IDF: The Challenge of an 'Integrated' Army," Lawfare blog, March 5, 2018, available at <www.lawfareblog.com/female-service-idfchallenge-integrated-army>.

- 17 Ibid.
- 18 Ibid.

JFQ 93, 2nd Quarter 2019 **McGarrah 59**



The Acquisition and Cross Servicing Agreement An Old Tool for the Modern Military

By William M. Stephens

Relatively small but wise investments in African security institutions today offer disproportionate benefits to Africa, Europe, and the United States in the future, creating mutual opportunities and reducing the risks of destabilization, radicalization, and persistent conflict.

—STATEMENT OF GENERAL DAVID M. RODRIGUES, USA, Before the Senate Armed Services Committee, March 8, 2016

Lieutenant Colonel William M. Stephens, USA, is a Staff Judge Advocate at the Defense Language Institute Foreign Language Center. n a recent issue of *Joint Force Quarterly*, Joseph Votel and Eero
Keravuori presented the by-withthrough (BWT) operational approach
to multiple areas of operations and
illustrated how the United States can

support partners by working with multinational, regional, and local forces.¹ The goal of this approach is to maximize the effectiveness of a mutual goal, such as regional stabilization. By working by, with, and

through regional partner forces, the U.S. military can help others build their own defense and/or governmental organizations but not necessarily through direct engagement in combat. This article expands on this concept and illustrates how the use of a simple exchange of supplies and materials by joint forces or by individual Service components via Acquisition and Cross Servicing Agreement (ACSA) transactions may assist in fulfilling General Votel's vision and promote sustainable regional defense institutions. It also expands on how forces can increase their logistics interoperability and be strategic in their BWT approach.² This article next illustrates that ACSA transactions could be tailored as an effective tool for U.S. Army train-andassist units, multidomain task forces, or multinational forces and allow these to build partner capacity and increase access to support for other countries' forces. Lastly, this article explores and advocates for an expansion of the use and oversight of the simple, underutilized ACSA.

Background

An ACSA is an international agreement between the United States and another country/entity that can assist in the acquisition of needed supplies or material in order to support living conditions or mission accomplishment.³ Acquisition is defined in Department of Defense Directive 2010.9, Acquisition and Cross-Servicing Agreements, as "obtaining logistics support, supplies, or services under an acquisition agreement." Logistics support, supplies, or services (LSSS) may be reciprocally paid for by the receiving/requesting country.⁵

When a transport ship sails into harbor, for instance, it is easy to forget how much work it took to create that picturesque scene. The challenges associated with the trip (including the years of training and experience to give the crew the requisite knowledge and skills to sail) and the backbreaking work of the longshoremen loading the supplies are underappreciated. Similarly, although the

ACSA process is relatively easy in theory, fulfilling an ACSA order and handing that item to another unit requires a significant amount of knowledge, skill, and coordination. The first step is to identify a need, and there must be a recognition that this need can be fulfilled by another partner organization. After the need is identified and it is determined that this need can be met, the recipient customer places a written order giving a full description of the goods or services required on a standardized order form. When the order is placed, the form of payment must be decided, along with the value of the item provided on a Standard Agreement Form 3381. There are many other small staffing steps by the J4, resource manager, and legal section, but in general, after entry, the United States uses the ACSA Global Automated Tracking and Reporting System to track orders, the completion of those orders, and if payment has been made for those orders.6

Payment for the requested goods or services may be accomplished in three ways, but each of these means is not necessarily mutually exclusive. The first method is direct payment—one organization pays the appropriate amount of money for the item received. If it is a direct payment, one nation is billed and the other should pay the value of the good received within 30 days. The second means is through replacementin-kind (RIK). RIK payment allows the receiving party to replace LSSS that it receives with the LSSS "of an identical, or substantially identical, nature."7 Under the RIK payment, if a nation receives food, it may repay the debt by providing an equal amount of the same type and kind of food. The last available means of payment is through an equal value exchange (EVE), which allows payment by the receiving party by paying the providing country with another type of supplies or services (or other LSSS) "of an equal value to those received."8 Under the EVE payment method, if the receiving country receives fuel, it may provide security services equal to the amount of the value of the fuel. Neither RIK nor EVE repayment systems require immediate repayment. If they are not

paid within 30 days of the transactions, this "debt" is tracked, and the customer will carry the debt. This is key, especially in dealing with less well-funded allies in the developing areas of world. As the debt is tracked, it may be paid by future operations, including any other type of operations. For example, if the United States provided equipment in January 2018 during exercises to a host country, that same country may repay that debt by providing airlift services to U.S. personnel in support of a multinational operation in September.

Applications

ACSA transactions are utilized primarily during "wartime, combined exercises, training, deployments, contingency operations, humanitarian or foreign disaster relief operations, certain peace operations under the UN [United Nations] Charter, or for unforeseen or exigent circumstances."9 The authorization to use an ACSA in more innovative ways is allowed in the controlling Directive 2010.9.10 This expansive language is critical, as the global nature of conflict means that there will be greater opportunities to partner with multinational or UN forces to achieve an objective. Terrorist groups, such as Boko Haram and the so-called Islamic State, do not limit themselves to a specific region, as porous borders facilitate regional influence spanning multiple countries. As a result, any successful mission/solution to counter these groups should focus on regional stability versus specific country stability.

This article does not propose that the use of a simple exchange of supplies and materials between respective defense departments is the ultimate fix to promote sustainable defense institutions or that it is a solution for rapid resupplying a fast-moving strike force. Instead, it proposes that ACSA transactions can be a multifunctional tool used for several purposes; it encompasses the spectrum of operations currently taking place, and it is also a flexible tool that can be a force multiplier for planned future operations or new Army units. By expanding this program,

JFQ 93, 2nd Quarter 2019 Stephens 61



Sailor assigned to USS Curtis Wilbur receives food from Japan Maritime Self-Defense Force helicopter air crewman for Acquisition and Cross Servicing Agreement logistics exchange during Keen Sword 19, Philippine Sea, October 31, 2018 (U.S. Navy/Emily Cooper)

it will be especially useful as a tool that can be used as part of the Army's future in fighting and winning wars.

The application of the BWT operational approach is effective in working with and equipping partner nations in order to build their capacities. The use of the ACSA is also consistent with the future vision of Army logistics to build partner capacity. As Edward Dorman and Christopher Townsend adeptly note in their article in a recent issue of JFQ, one nation or service cannot and should not be the sole source of support in an operation.11 Instead, each partner, including the host-nation partner, should equally provide the capabilities of support to the joint coalition of forces interdependently.¹² In future conflicts and operations, Soldiers will be performing their regular role of maintaining the logistics tail rather than contracting for all the basic support or services.¹³ This means that ACSA programs should

become even more prevalent and extensively used by troops on the ground. Two specific units that would benefit from the application of the ACSA program in Army operations are the Security Force Assistance Brigade (SFAB) and Multidomain Task Force (MDTF).

Security Force Assistance Brigades. The Army is developing and will stand up six SFABs that will train, advise, and assist partner conventional forces.14 The genesis of this authority is the 2015 National Security Strategy, which mandates that the United States train and equip local partners as well as provide operational support to confront terrorist groups in their own country-in essence, providing each country with the tools to contain and defeat terrorists in its respective location.¹⁵ SFAB members should be extensively trained on ACSA, as it will be an useful method of providing the right tools, at the right time, to partner forces.16

The ACSA program could be tailored as a force multiplier to fit each SFAB respective area of operation and tailored to each different partnered conventional force. 17 Each partner will have different needs at different times. As the goal is to provide each country with the tools to contain and defeat terrorists in its respective location, the proper equipment must be provided in combination with training and assistance.18 As indicated, the first step to any ACSA transaction is identifying a need. The SFAB could assist the partner nation with identifying the equipment or services needed as well as by listening to the troops on the ground. The SFAB could then train host-nation units and build partner capacity by requiring repayment through RIK or EVE. While payment by monetary exchange may be easier for both countries, it does not increase logistical support training or capacity.19 By requiring RIK or EVE payment, the SFAB could help the partner's

logistics and transportation sections/unit fill the repayment orders and increase the institutional muscle memory for working through their own acquisition and logistics systems.

One example of how the ACSA process could assist the SFAB unit members on the ground is by the simple exchange of equipment for billeting. A ground force commander may provide a host nation with limited surveillance/detection equipment in return for billeting and security for the SFAB team, which would train the host-nation forces on how to use the equipment. In this example, the United States would obtain the equal value exchange of the equipment by being billeted and fed by the host nation while also benefiting from the increased security of a well-trained host-nation security team. As another example, an ACSA transaction may be entered with a multinational partner that is also in the same area of operations to provide fuel and security for a series of ground convoys, if the partner will provide air transportation, billeting, and security for U.S. troops in that partner's existing compound.

In either of these examples, care must be given that the exchange is actually equal and the reciprocal exchange must be a fair trade in that the training is high quality, the billeting and security is adequate, and the fuel is of the proper type. In both of these examples, presuming all of the trades are equal, the SFAB troops working shoulder to shoulder with the partner forces not only could provide material or support directly to that partner force but also would be the direct beneficiary of the exchange. Each transaction, while small in context, builds trust as well as institutional capabilities and assists in accomplishing the strategic long-term goals of the SFABs.

Multidomain Task Force. The ACSA process could also be a force multiplier for the newly created MDTF. This unit concept is developing new tactics for the lightning pace and greater lethality of future conflicts.²⁰ The small units in the force must be able to move quickly, live and operate in austere conditions, and be lethal.²¹ These new units will not operate

just in one battlefield domain but must also be able to exploit opportunities and vulnerabilities that may rapidly appear and disappear in separate domains.²² Instead of an attacking conventional force marching to assault an objective, the new units will be rapidly assaulting an objective via several domains either before, during, after—or a combination of all. This rapid deployment force must be able to nest within local elements in order to conduct insertions and actions where necessary and be able to operate and conduct multidomain battle across time.²³ These units must be able to operate quickly in order to penetrate areas quickly and avoid being targeted by conventional or antiaccess/area-denial systems.24 This means each unit must have the exact equipment and capability at the exact moment when necessary. This equipment may be utilized in the assault or it may be used as sustainment during an approach. In either case, the units must be able to obtain equipment and exercise those capabilities in as short as time as possible. Previously, even if a requester attempted to obtain gear from prepositioned stocks, it could take days or weeks from the time of the request to the time the order is filled and on the way to the requestor. Even though requests can now be completed in approximately 96 hours,25 utilization of an ACSA exchange would enable U.S. and partner forces to obtain the necessary stocks or capabilities much faster.

MDTF elements should work by, with, and through multinational partners or host-nation elements for maximum effectiveness.26 They must use all the available resources in order to engage the objective rapidly, safely, and lethally, including working with other governmental organizations. One way to assist these troops in moving quickly through ground terrain and working across domains and time is to work with partner forces, including multinational or coalition forces and utilization of reciprocal exchanges via ACSA transactions. These transactions would allow the MDTF units to partner with multinational task force elements to engage and defeat the enemy through greater lethality without

being encumbered by a long logistics or capabilities tail.

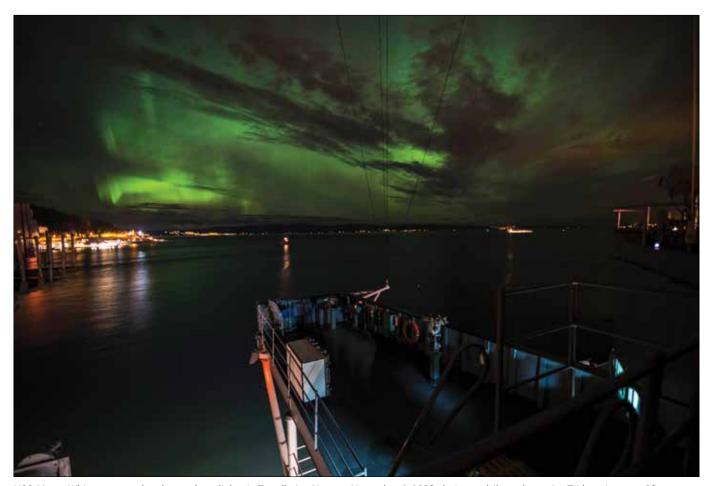
For example, MDTF forces, integrated with local or multinational forces, in cooperation with the government of Niger could engage an element of Boko Haram on the border of Chad with air, cyber, satellite, and joint ground forces. The Boko Haram elements might flee the area and cross the border into Chad to regroup and broadcast a request for assistance to fighters in the area. Presuming there was legal and operational desire and authority, the United States could switch host-nation partners from Niger to Chad and then use the latter's supplies to restock. U.S. and Chadian forces could rapidly continue the operation utilizing the cyber, satellite, and ground capabilities to engage the Boko Haram elements in all domains.27

In this example, if U.S. forces could not reasonably use commercial resources due to the rapid speed of the operation, the geographic distance from a logistics hub, or the austere environment, they could rapidly complete the requisite ACSA paperwork and move to complete the mission. The Department of Defense (DOD) could repay the government of Chad by any means allowable without having to engage in negotiations during an ongoing mission or cease the operation because it did not have enough supplies. Repayment of equipment or services used in the mission could be completed later by an equal value exchange of items or services such as in a planned humanitarian relief operation in another part of the country at a much later time.

Challenges

Although the logistics and support exchange may be an effective tool to build capacity and institutions, the knowledge of this tool and ensuring that it is used properly present challenges. The knowledge of this tool should be incorporated into training with U.S. forces, and there must be an increase of strategic messaging to the partner nations regarding this tool. Second, there must be increased oversight and training of this tool to ensure

JFQ 93, 2nd Quarter 2019 Stephens 63



USS *Mount Whitney*, moored under northern lights in Trondheim, Norway, November 4, 2018, during multilateral exercise Trident Juncture 18 (U.S. Navy/James R. Turner)

that it does not become a perpetual "gift" of supplies but remains an equitable exchange between equal partners. While the United States cannot use ACSA transactions to increase its inventory or use them when the item can be obtained from U.S. commercial sources, neither should the requesting organization be permitted to use the generosity of the ACSA program to be a routine and continual supplier of goods and services.

According to open sources, the United States is a party to ACSA agreements with only 19 African nations, including some in the areas of regional concern, such as Mali, Niger, and Chad.²⁸ An ACSA transaction successfully completed provides a strategic opportunity to broadcast a verifiable truthful message to a target audience that may shape the tactical as well as strategic environment.²⁹ This target

audience may be other leaders across subregional areas, which may lead to an increase in "demand" for the same ACSA transactions by a different country or regional partner seeking greater U.S. presence, mutual cooperation agreements, or even mutual aid agreements.30 For example, if a nation's leadership sees DOD as a valuable partner that can provide valuable logistics resources during a crisis situation, it may be willing to allow basing in a strategic location. This could provide the United States with even more opportunities to create long-term relationships and establish a long-term presence, potentially even building a greater network of partner nations, which would only lead to a greater capacity to engage in missions of a greater effect but smaller scale and at a lower cost.

The issue of costs and the disparity of U.S. contributions to the defense

of an area versus partner nations has come into focus recently as seen by the controversy in the North Atlantic Treaty Organization even after 2014, when members assured the United States that they would increase their respective contributions to 2 percent of their gross domestic product.31 This attention highlights the struggle to ensure equality of payment of blood and treasure among partner nations and ensures that one nation does not become the perpetual gift giver without reciprocity. The ACSA program theoretically negates potential disparity, as each country is to contribute an equal value exchange of goods and services or pay the cash value of the item/ services. Theoretically, for every dollar spent to support a partner force, that dollar must be recaptured.

Reality does not necessarily match theory, however, as seen by an inspector general's report that was critical of the U.S. Africa Command (USAFRICOM) use of the ACSA program in current operations.32 The report indicates that "USAFRICOM did not effectively manage the ACSA orders it executed and was not required to oversee ACSA orders executed by its Subordinate Components in the USAFRICOM area of responsibility."33 It suggests that the command did not include all the essential data when processing the orders and did not track implementation properly or obtain proper assurances that the logistics support was executed properly or even that it would be reimbursed according to the DOD Instruction. As seen by the report, there will need to be significant training and oversight to ensure that the partner forces repay the debts owed to the United States. Without this additional training, oversight, and monitoring, the United States could give so much well-meaning support that a less wealthy country would not be able to repay that debt, and the trade balance would always be in deficit against the United States.

Conclusion

The United States is increasing the spectrum of joint military operations and increasing multinational engagements to accomplish mutual objectives. The rise in nonstate actors instigating regional conflict spanning multiple countries means that any successful mission/solution to counter these groups must focus on regional stability, which necessitates regional institutionbuilding by working by, with, and through local and multinational partners as well as by building partner capacity. Despite the increase in current operations and the proposed expansion of operations and units in the future, the U.S. military must utilize all the resources available to be a leaner, faster, more mobile force.

One way to accomplish this juxtaposition of goals is to leverage the resources of our partners and utilize some of the tools already available, such as the Acquisition and Cross Service Agreement. This simple but effective tool allows Servicemembers to operate and thrive in future volatile, uncertain, complex, and ambiguous environments and will increase our ability to support units across a greater reach of the globe through agreements with our regional partners. ³⁴ By doing so, we can simultaneously build partner capacity and increase support from other countries forces by working *with* them instead of *for* them. JFQ

Notes

- ¹ Joseph L. Votel and Eero R. Keravuori, "The By-With-Through Operational Approach," *Joint Force Quarterly* 89 (2nd Quarter 2018), 40.
- ² Edward F. Dorman III and Christopher Townsend, "Laying the Foundation for a Strategic By-With-Through Approach," *Joint Force Quarterly* 89 (2nd Quarter 2018), 69, 73.
- ³ Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD[AS]), "Acquisition and Cross-Service Agreements," available at <www.acq.osd.mil/ic/ACSA.html>.
- ⁴ Department of Defense (DOD) Directive 2010.9, *Acquisition and Cross Service Agreements* (Washington, DC: DOD, September 30, 2016).
 - ⁵ Ibid., § E2.1.1.
- ⁶ For a great legal article on the process as well as how to obtain an ACSA, see Ryan A. Howard, "Acquisition and Cross-Servicing Agreements in an Era of Fiscal Austerity," *The Army Lawyer*, October 2013, 26–37.
 - ⁷ DOD Directive 2010.9, § E2.1.14.
 - ⁸ Ibid., § E2.1.6.
- ⁹ OUSD(AS), "Acquisition and Cross-Service Agreements."
 - 10 Ibid.
- ¹¹ Dorman and Townsend, "Laying the Foundation for a Strategic By-With-Through Approach," 69, 73.
 - 12 Ibid., 73-74.
- ¹⁸ Richard Sisk, "Army Goes Back to Basics on Supply, Maintenance," *Military.com*, November 2, 2017, available at <www.military.com/dodbuzz/2017/11/02/army-goes-back-basics-supply-maintenance>.
- ¹⁴ Matthew Cox, "Army Chief: Adviseand-Assist Units to Wear Brown, Not Green, Berets," *Military.com*, November 2, 2017, available at <www.military.com/dailynews/2017/11/02/army-chief-advise-assistunits-wear-brown-not-green-berets.html>.
- ¹⁵ National Security Strategy (Washington, DC: The White House, February 2015); Matthew Cox, "Army Chief: Train and Advise Troops 'Are Not Special Forces," Military.com, October 9, 2017, available at <www.military.com/daily-news/2017/10/09/army-chieftrain-advise-troops-not-special-forces.html>.

- ¹⁶ Cox, "Army Chief: Advise-and-Assist Units."
 - 17 Ibid.
 - 18 National Security Strategy.
 - 19 Ibid.
- ²⁰ Sydney J. Freedberg, Jr., "New Army Unit to Test Tactics: Meet the Multi-Domain Task Force," *Breaking Defense*, March 21, 2017, available at https://breakingdefense.com/2017/03/new-army-unit-to-test-tactics-meet-the-multi-domain-task-force/.
 - ²¹ Ibid.
 - 22 Ibid.
- ²³ David G. Perkins, "Multi-Domain Battle: Joint Combined Arms Concept for the 21st Century," Association of the United States Army, November 14, 2016, available at <www.ausa.org/articles/multi-domain-battle-joint-combined-arms-21st-century>.
- ²⁴ Freedberg, "New Army Unit to Test Tactics."
- ²⁵ Sisk, "Army Goes Back to Basics on Supply, Maintenance."
- ²⁶ Freedberg, "New Army Unit to Test Tactics."
- ²⁷ The situation is completely hypothetical and not based on any scenario, real or fictitious. The author also understands that this scenario does not take into account the legal and operational authorities or the complexities of each country's relationship and does not reflect the current state of operations in that area.
- ²⁸ Dave Hecht, "U.S. Africa Command Hosts First Ever Signing of Acquisition Cross Service Agreement," U.S. Africa Command, September 19, 2014, available at <www. africom.mil/media-room/article/23592/u-s-africa-command-hosts-first-ever-signing-of-acquisition-cross-servicing-agreement-acsa>.
- ²⁹ James G. Stavridis, "Strategic Communication and National Security," *Joint Force Quarterly* 46 (3rd Quarter 2007), 5.
 - 30 Ibid.
- ³¹ Ivana Kottasova, "How NATO Is Funded and Who Pays What," CNN, March 20, 2017, available at https://money.cnn.com/2017/03/20/news/nato-funding-explained/index.html.
- ³² Department of Defense Office of Inspector General, "U.S. Africa Command's Management of Acquisition and Cross-Servicing Agreements, DODIG-2017-121," September 21, 2017, available at <www.dodig.mil/reports. html/Article/1328536/us-africa-commandsmanagement-of-acquisition-and-cross-servicing-agreements/>.
 - 33 Ibid.
- ³⁴ Judith Hicks Stiehm, *The U.S. Army War College: Military Education in a Democracy* (Philadelphia: Temple University Press, 2002),

JFQ 93, 2nd Quarter 2019 Stephens 65



A Model for Tactical Readiness Through Strategic Opportunity

By David A. Zelaya and Joshua Wiles

heater security cooperation programs (TSCPs) provide a unique opportunity to simultaneously generate U.S. force readiness and improve strategic interoperability with partner nations; however, the percep-

Captain David A. Zelaya, USA, is Company Commander of B Company, 1st Battalion, 27th Infantry Regiment, 2nd Brigade Combat Team, 25th Infantry Division (1-27 Infantry), on Schofield Barracks, Hawaii. Major Joshua Wiles, USA, is Operations Officer at 1-27 Infantry. tion among tactical units is that readiness often takes a back seat to strategic objectives. What follows is a model for tactical unit integration into the strategic planning process that yields better outcomes for units at echelon. It is a simple model developed from our experience in Exercise Garuda Shield 17 (GS17). The model emphasizes placing tactical leaders at strategic points of friction to communicate tactical requirements up the chain of command and receive strategic messages down

to the Soldier. First Battalion, 27th Infantry Regiment, 2nd Brigade Combat Team, 25th Infantry Division (1-27 Infantry), used tactical strategy to meet both national and strategic requirements while furthering unit readiness during GS17 with the Indonesian army (Tentara Nasional Indonesia Angkatan Darat [TNI-AD]).

While the battalion did achieve its overall training objectives, it was not without friction. We can now provide feedback into our missteps and successes.

What follows is a road map that outlines how we would have done things if we had another chance. We outline our situation, describe the model, and focus on some of the key friction points we encountered along the way.

The Situation and Model

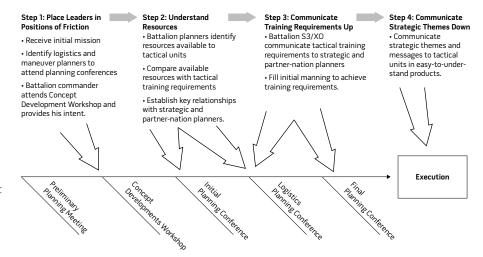
1-27 Infantry's experience was unique in that it was the highest degree of interoperability yet achieved with Indonesia. GS17 is an annual preplanned exercise that has historically focused on disaster relief and nonlethal civil support operations; however, in recent years the exercise has shifted toward a more kinetic theme. 1-27 Infantry had three primary goals going into the exercise:

- Maximize interoperability at the highest and lowest echelon possible between U.S. and Indonesian forces.
- Leverage strategic resources to conduct a Company Combined Arms Live Fire Exercise (CALFEX).
- Train at echelon and achieve the required complexity to conduct a Battalion Fires Coordination Exercise simultaneously with the Company CALFEX.

GS17 included B Company of 1-27 Infantry and A Company of 303 Infantry (TNI-AD) training side by side, mutually supported by indirect fires, snipers, and both U.S. and TNI-AD aviation. The battalion headquarters was a combined command post with staff representation from the United States and Indonesia. The partnered task force operated under the auspices of a United Nations mandate for training purposes.

To achieve its training objectives, 1-27 Infantry utilized a four-step tactical integration model outlined in the figure. As with most things, the most important step is the first one. Units must identify and empower the correct tactical exercise planner to communicate readiness requirements to strategic decisionmakers (specifically, the Service component command [SCC]) and subsequently place that planner at positions of friction in order to communicate the tactical unit's interests. When identifying the right leaders for the job, we found that echelon was

Figure. Model for Balancing Tactical and Strategic Requirements



the key factor. The closer that planner is to the executing unit, the better he will be able to communicate and negotiate that unit's readiness requirements. Regardless of who is in the position, however, he must be empowered with a clear understanding of his commander's intent and training requirements to be successful. The commander's intent must include the minimum requirements that define success for the training unit. These minimum requirements are often communicated as key training gates on a tactical unit's training progression.

Once a leader is identified and empowered, he must be placed in the best position to advocate for his unit. The regularly held planning conferences are the best venue to establish face-to-face relationships with all parties. The interactions among tactical planners, strategic combatant command planners, and the partner nation are critical for setting the conditions for success, both strategically and tactically. SCC exercise planners generally viewed their mission through a lens based on senior leader directives and guidance. These planners were often not fully aware of our distinct readiness requirements; therefore, it was key to select a tactical unit-level representative armed with the unit commander's readiness intent to advocate for integration of those objectives into the TSCP exercise. In our particular case, we sent the battalion's assistant operations officer to all planning

events. Additionally, face-to-face coordination with the partner nation became crucial, as it controls the key resources of land and time. 1-27 Infantry successfully established this vital relationship with the TNI-AD early and leveraged it throughout the planning process to ensure that training objectives remained relatively stable regardless of changes to the strategic and political environment.

Strategic Planners

Home station training often includes a complex environment of competing units and limited resources. Tactical units tasked with a TSCP have a unique opportunity to leverage strategic resources for gains in readiness. Steps two and three in our model are the tactical unit's opportunity to shape the planning process to achieve its ends. Units should maximize focus on two lines of effort that define success with clearly outlined standards. We specifically used Objective T (OBJ-T) standards as our baseline when determining our minimum requirements in accordance with guidance provided to us by brigade leadership. The OBJ-T standard outlined minimum personnel requirements and training objectives that defined success.

TSCP personnel requirements were the first key components for consideration. We found ourselves balancing two areas: force-cap and leader presence.

JFQ 93, 2nd Quarter 2019 Zelaya and Wiles 67



Indonesian soldiers and Borzoi Company, 1st Battalion, 27th Infantry Regiment, 25th Infantry Division (1-27 Wolfhounds), conduct live fire exercise during Garuda Shield, in Cibenda, Indonesia, September 27, 2017 (U.S. Army National Guard/Matthew A. Foster)

The OBJ-T Leaders Guide outlines minimum personnel requirements for any given training event. Eighty percent of the unit's authorized Soldiers must be present for training, and 85 percent of key leaders must be present. Tacticallevel planners must consider minimum requirements to achieve desired readiness; this includes number of Soldiers being trained, external evaluators, and enablers. We recommend, at a minimum, a battalion-level headquarters element to mission command the broader exercise in order to give the training audience the flexibility to focus on what is most important: training. Planners must keep in mind, however, every seat assigned to staff or an enabler is a seat taken from the primary training audience.

1-27 Infantry brought one light infantry company, a scout/sniper team, a battalion fire support element, battalion medical team with provider, and the battalion main command post to GS17. The required support personnel quickly

exceeded the initial force-cap of 150 personnel and had to be adjusted upward with SCC planners. Due to successful negotiations, 1-27 Infantry was able to secure the required personnel slots that led to a successful mission. The battalion dual-hatted enablers as observer-controllers and safeties, achieving significant efficiencies.

Filling key leader slots to achieve OBJ-T requirements became a particular point of friction due to the constant change of personnel before, during, and after the exercise. To maintain the readiness gains secured from a TSCP, it is critical to lock key leaders into positions. We achieved success by maintaining focus on the minimum required personnel and using that standard as the basis for all negotiations. We also influenced the process throughout a 6-month planning period by injecting battalion-level planners early and maintaining that presence throughout execution.

The second focus area relating to readiness is unit training objectives. 1-27 Infantry was able to increase readiness through disciplined commitment during the planning process. As mentioned, battalion representation at the logistics planning conference directly influenced training success. The battalion armed key leaders with the minimum readiness tasks required to achieve success. These tasks were based on training gates required to achieve future readiness milestones. In this case, the battalion executed a company CALFEX and battalion fire coordination exercise in preparation for a battalion live-fire set to occur later in the year.

Partner Nation

Despite language and technological barriers, communicating requirements to our partners was relatively straightforward once we established a sense of trust at the lowest level. That said, we focused most of our effort



Indonesian armed forces and Hawaii Army National Guard participate in command post exercise during Garuda Shield, in Cibenda, Indonesia, September 25, 2017 (U.S. Army National Guard/Thomas A. Foster)

on communicating our live-fire training requirements and accepted risk on our interoperability training objective. The outcome was a considerable gap in emphasis by both parties during execution.

Testing interoperability via a tactical voice bridge (TVB) was an objective identified as critical to operations in the Pacific. TVBs allow for shared communication between two partner forces without the need to reduce communication security or equipment. TVBs are not new or uncommon in modern operations; however, GS17 was the first time the technology was employed between American and Indonesian forces. Traditionally, TVBs are used between partnered nations with similar command and control architecture and a shared language. We established our TVB with a partnered force with significantly different communications architecture and which also spoke a significantly different language. While the TVB was established successfully, achieving interoperability via the TVB was a more precarious proposition.

The TNI-AD preferred face-to-face integration to maintain a shared network. Furthermore, the language barrier between forces incurred unforeseen costs. The use of a TVB in this context required translation on both sides of every transmission. The TVB also forced the TNI-AD to apply new combat power to manning partnered radios.

Despite some initial complications, the TVB still proved to be a powerful tool to reduce friction between units. During situations where shared communications were necessary for safety, the TVB and our architecture worked as designed. Specifically, during two realworld medical evacuations and indirect fires coordination, the TNI-AD seized the opportunity provided by shared communications. They manned the TVB, maintained the network on their radios, and sent critical reports.

Below are a few planning considerations that we should have emphasized in steps 2 and 3 of our tactical integration model that would have allowed us to maximize interoperability during the training exercises:

- During the initial planning conference, SCC planners should have provided tactical units with an interoperability assessment in accordance with Army Regulation 34-1, Multinational Force Interoperability. Based off the assessment of the partner-nation's capabilities, planners at echelon (including the tactical level) should bring interoperability training objectives to the table. Those training objectives should be outlined and agreed to by the partner countries. Both partners need to understand and strive toward the same goals throughout the exercise.
- Tactical planners for partnered forces should align communication capa-

JFQ 93, 2nd Quarter 2019 Zelaya and Wiles 69



New from NDU Press

Chairman Xi Remakes the PLA

Assessing Chinese Military Reforms

Edited by Phillip C. Saunders, Arthur S. Ding, Andrew Scobell, Andrew N.D. Yang, and Joel Wuthnow

China's current military reforms are unprecedented in their ambition and in the scale and scope of the organizational changes. Virtually every part of the People's Liberation Army (PLA) now reports to different leaders, has had its mission and responsibilities changed, has lost or gained subordinate units, or has undergone a major internal reorganization.

The contributors review the drivers and strategic context underpinning the reform effort, explore the various dimensions of PLA efforts to build a force capable of conducting joint operations, consider the implications for the PLA services, and examine Xi Jinping's role in driving the reforms through and using them to strengthen control over the military. The chapters chronicle successes and outstanding problems in the reform effort, and consider what the net effect will be as the PLA strives to become a "world-class" military by midcentury, if not much sooner.

- bility, staff manning, and structure as closely as possible. If not, the mission command architecture across all warfighting functions should be outlined, agreed to, and rehearsed during the initial phase of the exercise with a specific emphasis on medical lines of communication.
- When overcoming a language barrier, the following should be considered by all parties: maintain a robust interpreter capability and balance the depth of integration against the risk of overcomplicating lines of communication. Specifically, planners must understand that the higher the echelon of integration between nations, the lower the complexity of interoperability.

Communicating Strategic Themes Down

During our time training with the TNI-AD, we found them to be motivated, professional, and competent. They were our peers and desired to be treated as such. Over time and within recent conflicts, U.S. forces have operated with a mentor/mentee mindset in relation to other armies. Our tactical exercise scenario was originally built at home station using a host-nation framework common in current U.S. Army decisive-action training scenarios. The idea of a host nation subtly implies that the nation doing the hosting needs our help managing their internal affairs. The TNI-AD were quite aware of the context of the exercise and wanted to make sure that the training scenario reflected our countries working together under a United Nations resolution.

Subtle strategic distinctions like the one above are just as critical at the tactical level as at the strategic. The final step in our tactical integration model focuses on the idea that strategic themes, messages, and pitfalls need to be understood by tactical leaders who are conducting face-to-face engagements with foreign partners. The following is a possible solution to the strategic communications issues we experienced during our exercise:

- The Embassy attaché generates a summary of the exercise's recent history that is then given to the strategic effects cell at the SCC.
- The SCC then outlines its commander's intent for the exercise, including desired interoperability training objectives by echelon.
- Division-level planners reconcile the commander's intent with their own training objectives, themes, and messages.
- All three inputs are finally given to the training unit in either a one-page document or a leader smart card.

At endstate, Soldiers conducting face-to-face interaction and training with partner nations understand the context of their operation and can communicate with partners in a productive manner—all of which further enables a quality exercise and successful accomplishment of readiness objectives.

TSCPs should be viewed as readiness opportunities, not burdens. They provide opportunity for increased resources, unique experiences, as well as deployment and training readiness. Influencing the process early and continuously directly correlate to a unit's ability reach readiness levels outlined in their commander's intent for the exercise. Planners successfully enable increased capability and readiness generation by understanding manning requirements and the commander's desired training objectives to be successful. Exercise planners and their partner-nation equivalents are the key audience to influence and ensure success. 1-27 Infantry gained capability and readiness through diligent planning and the hard work of its Soldiers. We utilized a tactical integration model to increase interoperability in the Pacific and do our part within the greater team. It is our humble desire that future units participating in TSCP missions will apply our lessons learned. JFQ



Unity of Command

Authority and Responsibility over Military Justice

By Lindsay L. Rodman

he military justice system has been undergoing constant change for the past decade, as a seemingly endless stream of legislation continues to modify the procedures through which we achieve justice and accountability. This period of flux, however, is coming to an end. The most

sweeping reforms in 30 years, the result of a comprehensive 2-year Department of Defense (DOD) review, were passed by Congress in late 2016 and implemented via executive order on March 1, 2018. These changes went into effect on January 1, 2019, bringing with them the modern era of military justice.

of all of these reforms is not what has changed, but what has remained the same: the role of the commander in the military justice process.

The military places commanders at the center of all disciplinary decisions related to their troops. Commanders have the authority to direct investigations and then to determine what forms

the center of all disciplinary decisions related to their troops. Commanders have the authority to direct investigations and then to determine what forum is appropriate for the adjudication of misconduct. For lower level misconduct, the commander can choose to impose administrative punishment, that is, anything from a reprimand to nonjudicial punishment under Article 15 of the Uniform Code of Military Justice (UCMJ).² For more serious misconduct, it is the commander who determines whether a court-martial is appropriate, and if so,

Many important changes will come out of this legislation, including sentencing reform, a reformed appellate process,

and changes to jury composition.

Perhaps the most important outcome

Major Lindsay L. Rodman, USMCR, is a Judge Advocate for the U.S. Marine Corps Reserve. The author thanks Lieutenant Colonel Iain Pedden, USMC, for his leadership and inspiration for this article.

JFQ 93, 2nd Quarter 2019 Rodman 71



Servicemembers review Manual for Court Martial in legal office of USS Dwight D. Eisenhower, deployed in support of Operation Inherent Resolve, maritime security operations, and theater security cooperation efforts, Arabian Gulf, August 11, 2016 (U.S. Navy/Joshua Murray)

whether a summary, special, or general court-martial is warranted.3

Commanders have always been at the center of the military justice process. That role has been under attack over the past decade by legislators who believe that the system would be more just if decisions were taken away from commanders. Very few other countries with similar civilian justice systems continue to maintain as central of a role for commanders in justice matters. Many onlookers have therefore understandably asked why commanders must stay at the center of the U.S. military justice system. The answer is simple: it would be inconsistent with our doctrine, and the needs of our globally deployable military, to organize our justice system in any other way.

There are many reasons for commanders to retain authority over the military justice process, but primarily the question of accountability must be paired with responsibility. If commanders

are accountable for what happens in their units—that is, whether their troops are following orders and maintaining discipline—then they must have the concomitant authority and responsibility to address disciplinary infractions. Similarly, if commanders are accountable for the well-being of their troops, then they must have the authority and responsibility to take care of them, which includes things like enabling access to health care and responding to the needs of victims of crimes.

Commanders' oversight of the military justice process is not only an imperative from an accountability perspective, but it is also actually what is best for all stakeholders in the military justice process: the accused, the victim, and those who seek justice. Commanders have the ability to take a systems-based approach to protect the rights of both victims and those accused of crimes. Rather than disaggregate the various services and processes that go into investigations, courts-martial, and

victim rehabilitation, the commander is uniquely positioned to ensure that the system is effective holistically, as well as in its component parts.

This article explains more thoroughly what many military justice practitioners have taken for granted for some time: the importance of retaining authority of the commander over the military justice process. First, the article examines the commander's role over military justice as a historical matter and as established in the law. Then it discusses the commander's role as a doctrinal imperative. Finally, it addresses some of the practicalities associated with the commander's role and major counterarguments.

A Matter of History and Law

Although military court-martial proceedings now look similar in most ways to Federal civilian criminal proceedings, their history is quite different. Courts-martial have evolved over time

to look like civilian courts, as expectations from Congress and the American people about due process, the rights of accused and victims, and consistency of outcomes have driven reforms to the system. Nevertheless, their origins are instructive, as they highlight the fundamental differences between the two systems and their purposes.

The modern-day military justice system derives primarily from the establishment in 1950 of the UCMJ, which was a codification and professionalization of the U.S. Army's Articles of War. These articles had evolved over the course of the Army's history, starting in 1775, and had their roots in British law and tradition.4 Although the original scope of military jurisdiction was meant to be narrow and only apply to military offenses, commanders in practice would use disciplinary proceedings even for civilian offenses because of their impact on the discipline of the unit.⁵ In 1863, Congress "expressly authorized courts-martial to try various civil crimes, regardless of whether the circumstances of their commission prejudiced good order and discipline,"6 thus codifying what had become practice out of necessity in the preceding 88 years. Another similar expansion occurred in 1916, when courtmartial jurisdiction was again extended to all civilian crimes, in peacetime as well as during a time of war.7

While the historical trend was toward giving commanders more authority over their Servicemembers, by the end of World War II there was also a call for military justice reform. During the 4 years of U.S. involvement in World War II, there were roughly 2 million court-martial proceedings.8 Many of the outcomes in those cases appeared arbitrary or haphazard, leading to public pressure on Congress to use its constitutional authority "to make Rules for the Government and Regulation of the land and naval Forces" to create a fair system of justice.9 The effort to achieve a balance between the need for commanders to have expanded jurisdiction over their members and the need for a system that treats the accused fairly and in accordance with American values of fairness and justice resulted in the 1950 UCMJ.

Before the consolidation of disparate justice systems into one UCMJ, military courts-martial looked much more like administrative separation boards than today's courts-martial.10 Each Service had its own system with its own rules. The common thread was the commander's authority to appoint a person or board to make a swift determination of guilt or innocence, and an appropriate sentence, for any accusation of criminal activity against a Servicemember under his or her purview. At the time, there was no expectation that courts-martial should have the same protections or processes as civilian criminal courts. Quite the opposite—the military context dictated that the process had to be battlefield- or battleship-appropriate and accommodate the exigencies of war.

Even after 1950, courts-martial did not use judges. Instead, "law officers" who were trained judge advocates were appointed as nonvoting members to advise the court-martial (a panel of Servicemembers) about the law as they reached their decisions. 11 The commander was responsible for selecting the law officer and the panel. 12 There were no "standing courts," that is, judges and a system of courts standing by waiting for cases to come to them. Instead, a court-martial would be convened, as necessary, by the commander to address misconduct ad hoc.

Today's system still preserves the same roles for the commander, with some modern-day tweaks. Only a subset of the panel is actually selected to serve in its current role, which is akin to that of a jury. And although military judges have replaced the law officers, thus fundamentally changing the look and feel of the court-martial, there are still no standing courts. Courts-martial are convened only when they are needed. A commanding officer still must determine that alleged misconduct should be appropriately adjudicated through a criminal court proceeding, and only then, through his or her "convening order" is a judge appointed.

Although the UCMJ is often thought of as the collection of laws that govern courts-martial, it is actually a much

broader set of statutes that creates the framework for the establishment of good order and discipline within military units. The modern UCMJ codifies important tools other than the court-martial for commanders to use to maintain the security and discipline of their troops, including the authority to arrest or restrain¹³ and the authority to impose nonjudicial punishment.¹⁴

The role of the military commander controlling all aspects of discipline for the Servicemember is one that has been reinforced many times over the course of U.S. history. Starting with the Bill of Rights, the Fifth Amendment right to a grand jury applies "except in cases arising in the land or naval forces, or in the militia," indicating that even the Founding Fathers acknowledged the importance of an expedient military justice system outside the normal civilian criminal process. The history of expanded military jurisdiction summarized above is indicative of this need. The resulting modern day UCMJ states in its preamble, "The purpose of military law is to promote justice, to assist in maintaining good order and discipline in the armed forces, to promote efficiency and effectiveness in the military establishment, and thereby to strengthen the national security of the United States." Additionally, a long line of Supreme Court cases, culminating in the clarification of law in Solorio v. United States, 15 upholds Congress's establishment of jurisdiction over U.S. Servicemembers for all cases, simply as a result of their service in uniform, understanding the need for the military to retain control over the discipline of its Servicemembers.

In international law, the doctrine of command responsibility creates liability for commanders for the war crimes of their subordinates. ¹⁶ Commanders can be found guilty at court-martial solely because they were the superior at the time, if one of their subordinates commits a war crime. ¹⁷ Command responsibility is good law, and came up as recently as 2015, when onlookers clamored for greater accountability for leadership after the mistaken bombing of a hospital in Kunduz, Afghanistan. Although U.S.

JFQ 93, 2nd Quarter 2019 **Rodman 73**



Airman with 455th Air Expeditionary Wing Legal Office Superintendent (left) looks over Manual for Courts-Martial guide with Airman NCO-in-Charge of General Law, at Bagram Air Field, Afghanistan, March 17, 2016 (U.S. Air Force/Nicholas Rau)

commanders are rarely brought before courts-martial on command responsibility charges, ¹⁸ this notion—that "Commanders are legally responsible for their decisions and for the actions, accomplishments, and failures of their subordinates" ¹⁹—is a basic principle of the international laws of war.

A Matter of Doctrine

Marine Corps Doctrinal Publication (MCDP) 6, Command and Control, states simply, "No single activity in war is more important than command and control." The doctrinal definition of command used by all the Services is found in Joint Publication (JP) 1-02, Department of Defense Dictionary of Military and Associated Terms, and it "includes responsibility for health, welfare, morale, and discipline of assigned personnel." Current doctrine in all Services expects commanders

to be responsible and accountable for disciplinary matters, which is due in part to their legal obligations under the UCMJ. However, closer examination of the Services' command and control (C2) doctrine reveals the importance of keeping disciplinary decisions within the command. C2 doctrine requires commanders to have complete disciplinary authority, as this authority derives from fundamental principles of command in general.

The interaction of responsibility and accountability is essential to understanding command authority. As explained in JP 1, *Doctrine for the Armed Forces of the United States*, "Inherent in command is the authority that a military commander lawfully exercises over subordinates including authority to assign missions and accountability for their successful completion. Although commanders may delegate authority

to accomplish missions, they may not absolve themselves of the responsibility for the attainment of these missions."22 Commanders' inherent authority and responsibility for the attainment of the missions below them make them likewise inherently responsible for the deeds, and misdeeds, of their troops. In the Marine Corps, responsibility and accountability are described as corollaries of authority: "Responsibility, or accountability for results, is a natural corollary of authority. Where there is authority, there must be responsibility in like measure. Conversely, where individuals have responsibility for achieving results, they must also have the authority to initiate the necessary actions."23

The Navy uses nearly identical language in its doctrinal publication on command and control, and Navy culture additionally takes accountability and responsibly even more seriously than the other Services.²⁴ Famously, in the Navy, commanders are routinely relieved of command for failures in their unit, regardless of their proximity to the failure itself.²⁵

Authority and responsibility have long been intertwined concepts, and it is not surprising to see the Services' doctrines recognize their interdependence. In doctrine they are used nearly interchangeably. This is important because the American public has an expectation that commanders must be accountable for any bad behavior, including criminality, within their units. Accountability for misbehavior in the unit must be paired with the authority to address it.26 Failure to hold commanders properly accountable is therefore not best addressed by the removal of authority. Even when commanders delegate their authority, as stated in JP 1, "they may not absolve themselves of the responsibility for the attainment of these missions."27 The Air Force includes this language, nearly verbatim, in its own C2 doctrine.28

The Army Doctrine Publication (ADP) 6, Mission Command, on command approaches the subject slightly differently than the Navy and Marine Corps, distinguishing between the art of command and the science of control, stating, the "art of command lies in discriminating between mistakes to underwrite as teaching points from those that are unacceptable in a military leader."29 Part of the essence of command, to the Army, is in making the tough decisions about military justice and discipline within the unit. In fact, in the Air Force, the minimum requirements for a commander to have sufficient administrative control of a unit to go forward are the following: "responsibility for UCMJ actions, protection of assigned forces and assets, lodging, dining, and force reporting"30—in other words, as a matter of doctrine, but one cannot have effective C2 if one does not have UCMJ disciplinary authority.

Command and control includes a number of concepts that are integral to effective warfighting and a professional military. Navy Doctrinal Publication 6, *Command and Control*, breaks command down into its component parts succinctly, addressing five characteristics in turn:

mission control, unity of effort, decentralized decisionmaking and execution, initiative of subordinates, and implicit communication and understanding. These five elements are addressed in each of the Services' doctrine, using slightly different verbiage, but with similar sentiments. Each of the Services' treatments of these elements of effective command reveals the importance of retaining disciplinary authority with the role of the commander.

Mission control "takes the form of feedback—the continuous flow of information about the unfolding situation returning to the commander—which allows the commander to adjust and modify command action as needed."³¹ This iterative process is a quintessential part of warfighting. Only the commander has the ability to determine the needs of the unit and the resultant means through which a disciplinary issue must be handled. Although disciplinary matters are incredibly important, they are not the primary mission of the Armed Forces; the primary mission is warfighting.

One attribute essential to effective warfighting is speed: "speed over time is tempo—the consistent ability to operate quickly."32 In the Navy, "To use his command and control process at peak effectiveness, the naval commander must gather and use information better and faster than his adversary."33 Different Services have different mnemonics for understanding decisionmaking and speed or tempo.34 Regardless of which model is employed, the decisionmaker must have all pertinent information, and then must make decisions quickly, in order to maintain an advantage over an adversary. Especially in a battlefield scenario, the commander must be able to autonomously make decisions.

Unity of effort is the Navy's second characteristic that comprises command and control. JP 1 provides the following: "Unity of command means all forces operate under a single commander with the requisite authority to direct all forces employed in pursuit of a common purpose. Unity of effort, however, requires coordination and cooperation among all forces toward a commonly recognized objective,

although they are not necessarily part of the same command structure."35

As stated, UCMJ authority is a requirement for troops to be administrative control to a unit, meaning that unity of command and unity of effort should be the same for disciplinary matters. Because disciplinary matters can be complex, it is important that unity of command exists for these matters. Typically, the notion of unity of command stands for the notion that one person cannot and should not have more than one chain of command. For disciplinary matters, this means that delegating disciplinary decisions outside of the chain of command would contravene the doctrine of unity of command.

The last three of the Navy's five characteristics of command and control (decentralized decisionmaking and execution, initiative of subordinates, and implicit communication and understanding) all derive from the trust that commanders must place in their subordinates. The idea of disciplined initiative by subordinates is also foundational to the Army's notion of mission command. In the Army, it is the role of the commander "to enable disciplined initiative within the commander's intent to empower agile and adaptive leaders" in the employment of land operations.36 As stated in ADP 6, the "exercise of mission command is based on mutual trust, shared understanding, and purpose."37 The ultimate trust from commanders will result from their own knowledge that they hold the authority and responsibility over the trustworthiness of their troops.

MCDP 6 states that C2 effectiveness can only be measured in relation to the enemy.³⁸ In matters of discipline, that means commanders must be held responsible and accountable for outcomes in their units—their enemy is criminality, bad behavior, and victimization. As discussed, that responsibility is not best achieved by diminished authority (that is, less C2 altogether), but rather through better accountability measures and improved leadership (better and more effective C2).

JFQ 93, 2nd Quarter 2019 Rodman 75

Practical Concerns

In 2013, the Secretary of Defense established the Military Justice Review Group (MJRG) to perform the largest review of the military justice system since 1980.39 MJRG efforts resulted in the Military Justice Act, which passed the House and Senate in December 2016 and which represents the largest set of reforms of the UCMJ since its enactment.40 The MJRG states at the outset of its report, which was released in December 2015, that "the necessity for justice and the requirement for discipline are inseparable."41 In other words, the achievement of military discipline is not, and should not be, at odds with the achievement of justice. It is therefore the role of the commander to maintain the discipline of the unit and to achieve justice when misconduct arises; both roles are intertwined and complementary.

The MJRG also considered one of the most often cited reasons that the commander's central role in the military justice process should be maintained: the ability to be globally engaged and deployed. The MJRG, which did not substantially revise the commander's disciplinary decisionmaking authority, stated, "In the military, there is a unique need to conduct trials in deployed environments during ongoing combat operations around the world, as well as in other nations where American Servicemembers are stationed."42 Commanders must be able to address misconduct in any deployed environment; our military does not have the luxury of outsourcing these kinds of decisions in expeditionary and combat environments. Nevertheless, there are good reasons that commanders are best poised to execute disciplinary decisionmaking at home as well.

Aside from the MJRG, which was established within DOD, a number of outside groups have studied the commander's role in the military justice process recently. The most noteworthy of these was the Response Systems to Adult Sexual Assault Crimes Panel (RSP), a Federal Advisory Committee Act commission established in the

National Defense Authorization Act of 2013. DOD made many witnesses and resources available to the RSP, which did laudable and thorough investigations. Advocacy organizations that felt strongly about removing the commander's discretionary authority in the military justice process also provided extensive testimony and other materials for consideration. At the end of the day, the RSP was not persuaded that it made sense to modify the commander's central role in the decision process, despite its departure from civilian norms. The RSP, which was exclusively focused on sexual assault crimes, concluded as follows, addressing many counterarguments along the way:

Evidence considered by the [RSP] does not support a conclusion that removing authority to convene courts-martial from senior commanders will improve the quality of investigations and prosecutions or increase conviction rates in these cases. Senior commanders vested with convening authority do not face an inherent conflict of interest when they convene courts-martial for sexual assault offenses allegedly committed by members of their command. As with leaders of all organizations, commanders often must make decisions that may negatively impact individual members of the organization when those decisions are in the best interest of the organization. Further, civilian jurisdictions face underreporting challenges that are similar to the military, and it is not clear the criminal justice response in civilian jurisdictions, where prosecutorial decisions are supervised by elected or appointed lawyers, is more effective.43

The RSP was appointed in the context of annual efforts to legislate change in the military justice process in order to help address the problem of sexual assault in the military. Many of the changes that resulted from passed legislation have helped address problems in the military justice process or problems with how the military was handling sexual assault generally. Proposals to remove the commander from the military justice process have not passed, likely due to conclusions like those of the RSP and MJRG that

altering the commander's role would not help address actual problems.

Most of the recent proposed legislation that would remove the commander's disciplinary authority would place that authority in the hands of uniformed lawyers, either assigned to the command or assigned to a separate legal unit. However, some have hinted that serious crimes could be removed from the commander's authority altogether, which is the practice in some other countries.⁴⁴ For the U.S. military, these proposals would not lead to a more effective military or more just outcomes.

There are many reasons that other countries have modified the commander's role regarding military justice. The primary reason is lack of capacity and professional capability in their courtmartial systems. Smaller militaries cannot achieve a critical mass of experienced and professional litigators to competently try complex cases. Lawyers need years of trying a variety of cases to become well-prepared for higher stakes cases. In other countries, justice is better served by letting civilian authorities handle those cases. This is a problem that the U.S. military has addressed by working hard over the past decade to better professionalize and train its litigators, including a requirement that complex cases be tried by specially qualified prosecutors.

There is no country in the world that is engaged globally to the same extent as the U.S. military. The United States has the thorniest missions, in some of the most remote parts of the planet. In those environments, disciplinary decisions, like most decisions, can have life-or-death consequences. As discussed, there is a doctrinal imperative associated with retaining disciplinary authority in the commander. There is also a pragmatic utility to ensuring that commanders have control over the discipline of their units and do not have to refer to other officers. other lawyers, or other units to make swift determinations that best meet the needs of the mission. Countries that do not find themselves fighting in similar environments consistently may not prioritize these mission effectiveness considerations to the same extent as the United States.



Alabama National Guard Trial Defense Service and 167th Judge Advocate General's Corps section culminated yearlong training exercise, August 7–8, 2018, at Calhoun County Courthouse, Anniston, Alabama, with mock trial, going through entire legal process that Uniformed Code of Military Justice would require (U.S. Army National Guard/Katherine Dowd)

It is worth noting, however, that justice is not compromised by retaining the commander's authority over military justice. The commander is in the best position, from the perspective of all stakeholders in the criminal process, to oversee military justice. Commanders have no incentive to condone criminality or harbor those who commit misconduct. Lack of discipline is toxic to mission accomplishment. At the same time, commanders want justice for their troops and have an incentive to ensure that proceedings are fair. Commanders do not have an incentive to railroad innocent Servicemembers; they have a strong incentive to take care of their troops. For victims of crimes, this means providing additional resources to help with recovery, both mental and physical.

Especially with respect to sexual assault cases, the military has developed in many areas, with the help of some legislation, pressure from leadership in the

White House and Congress, and consultation with advocacy organizations. The military has vastly improved its ability to support victims in the past few years, including the advent of the victims' legal counsel and efforts to incorporate new methods into the victim support processes, such as counseling and workplace support.45 There is a need for culture change within the military to address sexual assault. But removing the commander from disciplinary decisions is not the way to achieve culture change. As the RSP stated, "Historically, commanders have proved essential in leading organizational responses during periods of military cultural transition, as the Services have relied on them to set and enforce standards and effect change among subordinates under their command."46

Especially in the area of victims' needs and rights, it is imperative that commanders stay involved. Commanders will be, and should be, held accountable for

ensuring, first, that the rate of sexual assault decreases (that is, fewer victims are created), and, second, that victims are well supported if a sexual assault should occur. A commander who is powerless over the justice process is also powerless to ensure that a victim's needs and input are taken into consideration.

There is a saying in the military that 10 percent of troops take up 90 percent of the commander's time. Some advocates, and even the occasional commander, have argued that removing the authority over discipline from commanders would free them up to concentrate on other matters. The desire to move away from commanders controlling these decisions reflects a misunderstanding of the history, doctrine, and underlying policy justifications for the current system. Maintaining the well-being of the unit is commanders' responsibility, and as such they must retain the concomitant authority.

JFQ 93, 2nd Quarter 2019 **Rodman 77**

Legislation that would further distance commanders from their command responsibility will degrade discipline, decrease effectiveness, and impair command response to victim needs and enforcement of victim rights. Future legislative, executive, and regulatory efforts should adopt a harmonized approach to the codification of principles consistent with both command responsibility and the fundamental principle of unity of command. The reforms made to the military justice system in this last round of litigation are truly transformative. They promise to professionalize the military justice system, bringing it further in line with civilian practice without sacrificing the pivotal role of the commander. JFQ

Notes

¹ Military Justice Act of 2016 is Division E, "Uniform Code of Military Justice Reform," of the National Defense Authorization Act for Fiscal Year 2017, Public Law No. 114-328, 114th Cong., 2nd sess., January 4, 2016, available at http://jsc.defense.gov/Portals/99/Documents/FY17NDAA, pdf?ver=2016-12-30-100457-077>; Executive Order 13825, 2018 Amendments to the Manual for Courts-Martial, United States (Washington, DC: The White House, March 1, 2018), is available at "https://www.federalregister.gov/documents/2018/03/08/2018-04860/2018-amendments-to-the-manual-for-courts-martial-united-states>"https://www.federalregister.gov/documents/2018/03/08/2018-04860/2018-amendments-to-the-manual-for-courts-martial-united-states>"https://www.federalregister.gov/documents/2018/03/08/2018-04860/2018-amendments-to-the-manual-for-courts-martial-united-states>"https://www.federalregister.gov/documents/2018/03/08/2018-04860/2018-amendments-to-the-manual-for-courts-martial-united-states>"https://www.federalregister.gov/documents/2018/03/08/2018-04860/2018-amendments-to-the-manual-for-courts-martial-united-states>"https://www.federalregister.gov/documents/2018/03/08/2018-documents/2018/03/

² 10 *U.S. Code* § 815, Art. 15, "Commanding Officer's Non-Judicial Punishment."

³ See 10 U.S. Code § 822-24.

⁴ Jan Horbaly, "Court-Martial Jurisdiction" (Ph.D. diss., Yale Law School, 1986), available at <www.loc.gov/rr/frd/Military_Law/pdf/CM-Jurisdiction_Horbaly.pdf>.

⁵ Joseph W. Bishop, Jr., *Justice Under Fire:* A Study of Military Law (New York: Charterhouse, 1974); William Winthrop, Military Law and Precedents (Washington, DC: U.S. Government Printing Office, 1920); see also Solorio v. United States, 483 U.S. 435, 444 (1987).

⁶Robert D. Duke and Howard S. Vogel, "The Constitution and the Standing Army: Another Problem of Court-Martial Jurisdiction," *Vanderbilt Law Review* 12, no. 2 (March 1960), 435, 449–450.

⁷ Horbaly, "Court-Martial Jurisdiction," 69n8.

⁸ Department of Law, U.S. Military Academy at West Point, "Overview of Criminal Law and the Military Justice System," n.d., 3, available at <www.americanbar.org/content/

dam/aba/administrative/litigation/materials/sac_2012/01-2_crimLaw_miljsystem.auth-checkdam.pdf>.

⁹ U.S. Const., art. I, § 8.

¹⁰ Uniform Code of Military Justice (UCMJ), Act of May 5, 1950, ch. 169, 64 Stat. 108 (now 10 *U.S. Code* §\$ 801–940 (1970). Hereinafter, 1950 UCMJ.

¹¹ Article 26, 1950 UCMJ. The 1950 version of the Uniform Code of Military Justice is available at <www.loc.gov/rr/frd/Military_Law/pdf/morgan.pdf>.

¹² Article 25–26, 1950 UCMJ.

¹³ 10 U.S. Code § 809, Art. 9, "Imposition of Restraint."

14 10 U.S. Code § 815, Art. 15.

¹⁵ Solorio v. United States, 483 U.S. 435, 444 (1987). Solorio reversed O'Callahan v. Parker, which for a brief time limited jurisdiction in the military to only Service-connected cases. Solorio describes O'Callahan as ahistorical and misunderstanding a long tradition of jurisdiction over Servicemembers by military commanders.

¹⁶ Victor Hansen, "What's Good for the Goose Is Good for the Gander: Lessons from Abu Ghraib; Time for the United States to Adopt a Standard of Command Responsibility Towards Its Own," *Gonzaga Law Review* 42, no. 3 (2006–2007), 335–414, available at http://blogs.gonzaga.edu/gulawreview/files/2011/01/Hansen.pdf.

¹⁷ See *In re Yamashita*, 327 U.S. 1 (1946).
¹⁸ The last such trial was the *United States*v. *Medina* (see *Medina v. Resor*, 43 C.M.R. 243
[C.M.A. 1971]), which precipitated out of the My Lai massacre during the Vietnam War.

¹⁹ Army Doctrinal Publication (ADP) 6-0, *Mission Command* (Washington, DC: Head-quarters Department of the Army, May 17, 2012), 6.

²⁰ Marine Corps Doctrinal Publication (MCDP) 1, *Warfighting* (Washington, DC: Headquarters United States Marine Corps, June 20, 1997), 35.

²¹ Joint Publication (JP) 1-02, Department of Defense Dictionary of Military and Associated Terms (Washington, DC: The Joint Staff, November 8, 2010, as Amended Through February 15, 2016), 101.

²² JP 1, *Doctrine for the Armed Forces of the United States* (Washington, DC: The Joint Staff, March 25, 2013, Incorporating Change 1, July 12, 2017).

²³ MCDP 6, *Command and Control* (Washington, DC: Headquarters United States Marine Corps, October 4, 1996), 39.

²⁴ Navy Doctrinal Publication (NDP) 6, *Naval Command and Control* (Washington, DC: Headquarters Department of the Navy, May 19, 1995), 8.

²⁵ Ibid., 7.

²⁶ Loretta Sanchez, "Hold Commanders Responsible for Sexual Assaults," *U.S. News* & World Report, February 14, 2014, available at <www.usnews.com/debate-club/ is-sen-gillibrand-right-on-how-to-address-sexual-assault-in-the-military/rep-loretta-san-chez-commanders-must-be-held-accountable-military-culture-must-change>.

²⁷ IP 1, V-1.

²⁸ Air Force Doctrine Document (AFDD) 6-0, *Command and Control* (Washington, DC: Headquarters Department of the Air Force, June 1, 2007, Incorporating Change 1, July 28, 2011), 5.

²⁹ ADP 6-0, 6.

³⁰ AFDD 6, 39.

31 MCDP 6, 40.

³² MCDP 1, 40.

³³ NDP 6-0, 4.

³⁴ In the Marine Corps, for example, it is Colonel John Boyd's Observe-Orient-Decide-Act Loop. See MCDP 1, 40n18.

35 JP 1, V-1.

³⁶ ADP 6, 1. The notion of disciplined initiative reappears on page 4.

³⁷ ADP 6, 2.

³⁸ JP 1, 38.

³⁹ Secretary of Defense Memorandum, "Comprehensive Review of the Uniform Code of Military Justice," October 18, 2013, available at http://ogc.osd.mil/images/mjrg_secdef_memo.pdf>.

40 Ibid.

⁴¹ Military Justice Review Group, Report of the Military Justice Review Group: Part I; UCMJ Recommendations (Washington, DC: Department of Defense, December 22, 2015), 16, available at httml>.

⁴² Ibid., 19.

⁴³ Response Systems to Adult Sexual Assault Crimes Panel (RSP), *Annex to Report of the Comparative Systems Subcommittee to the Response Systems to Adult Sexual Assault Crimes Panel* (Arlington, VA: RSP, May 2014), annex B: "Report of the Role of the Commander Subcommittee," 5, available at http://responsesystemspanel.whs.mil/public/docs/Reports/00_Final/RSP_Report_Annex_Final_20140627.pdf.

⁴⁴ For example, in Canada, murder, manslaughter, and abduction cannot be tried at court-martial, according to section 70 of the National Defence Act. In Australia, the military justice system is used "when the offence substantially affects the maintenance and ability to enforce Service discipline in the [Australian Defence Force]. Otherwise, criminal offences or other illegal conduct are referred to civil authorities, such as the police." See Australian Government Department of Defence, "Military Justice System," available at <www.defence.gov. au/mjs/mjs.asp>.

⁴⁵ 10 U.S. Code, § 1044e, "Special Victims' Counsel for Victims of Sex-Related Offenses." ⁴⁶ RSP, annex B, 2.



U.S. Africa Command and Its Changing Strategic Environment

By William Robert Hawkins and Brenda Jeannette Ponsford

n March 6, 2018, General Thomas D. Waldhauser, USMC, commander of U.S. Africa Command (USAFRICOM), testified before the U.S. House Armed Services Committee. He hailed the decade of work his organization had done since it was established in 2008. He reported

that "On any given day, up to 7,200 U.S. uniformed personnel, Department of Defense civilians, and contractors are in Africa representing all services, career fields, and specialties, protecting our national security and working tirelessly to tackle the many challenges on the African continent." He continued,

transnational threats, and conducts crisis response in order to advance U.S. national interests and promote regional security, stability, and prosperity." In his lengthy prepared statement, however, he did not mention how the nature of American interests have changed over the years. These changes, primarily related to trade with the continent, have greatly reduced American ties to Africa and call into question

how much money and personnel are

"U.S. Africa Command, with partners,

strengthens security forces, counters

William Robert Hawkins is a former economics professor who taught at universities in Tennessee, North Carolina, and Virginia before spending 20 years in Washington, DC, integrating international trade issues into a broader national security context. Brenda Jeannette Ponsford is the Dean of the Walker School of Business at Mercyhurst University in Erie, Pennsylvania, and specializes in international business.

JFQ 93, 2nd Quarter 2019 Hawkins and Ponsford 79

allocated to USAFRICOM given the many challenges the United States is facing in other theaters where the stakes are higher.

Two weeks later, the chairman of the House Armed Services Committee, Representative Mac Thornberry (R-TX), took a 7-day trip through East Africa. He stopped in Djibouti, Somalia, Kenya, Sudan, and Ethiopia, meeting with U.S. commanders and troops and local African political and military leaders. In his return press release, he tried to carry strategic concerns from other regions into Africa to justify increased American efforts there. In particular, he noted, "I saw evidence of China stretching its influence across the region. Anyone who believes that China is only concerned about the Indo-Pacific region is ignoring the clear evidence in Africa and elsewhere."2

Thornberry's reference to China is at the center of trending events on the continent. China's President Xi Jinping visited Africa during his first overseas trip after being reelected in March 2018, just like he did in 2013 after he was first elected as president. Indeed, he has visited the continent four times in the last 5 years. As the state-run China Daily reported upon President Xi's return from his most recent trip to Senegal, Rwanda, South Africa, and Mauritius in July 2018, "China and Africa have formed a community of shared interests featuring win-win cooperation."³ In addition:

China remains committed to helping Africa clear its development bottlenecks in infrastructure, capital, and talents while helping African countries explore a development mechanism and path that suit their own conditions. . . . Sino-African cooperation has also provided Africa with an alternative to Western development philosophy and path, and has had a positive effect on African people's ideas, development philosophy, and perception of the world.4

In early September, the Beijing Summit of the Forum on China-Africa Cooperation (FOCAC) attracted leaders from all 53 African nations. According to state-run Chinese media, "Leaders exchanged views on such issues as

promoting China-Africa relations, deepening cooperation in all areas, building a China-Africa community with a shared future, and jointly building the Belt and Road as well as global and regional issues of concern to all sides."5 The Belt and Road Initiative (BRI) is Beijing's bid for global control of infrastructure, resources, and markets. President Xi pledged \$60 billion in development funds to the continent.6 The summit supposedly resolved to "firmly safeguard the open global economy and multilateral trading system, [and] oppose trade protectionism and unilateralism." Preventing foreign nations from taking actions to control (protect) their own economic destiny will ensure Chinese industrial dominance in trade and investment. This is the renewed doctrine of "free trade imperialism" practiced by the British Empire two centuries ago and which the Chinese learned about from the other end.

That the People's Republic of China (PRC) sees itself in competition with the West in Africa has prompted many American foreign policy experts to argue that the United States should do more in Africa to counter the spread of Beijing's political influence and control of the continent's resources. Part of this argument rests on an exaggerated view of U.S. material interests in the region, both now and in the future. What is real is the need to prevent China from using its increasing economic ties to gain political influence, thus mobilizing the continent to increase Beijing's clout in world affairs.

At the 17th Annual Sub-Saharan Africa Trade and Economic Cooperation Forum last July, Deputy Secretary of State John Sullivan made the usual claims: "Africa is the major market of the future," and "the United States, as the largest economy in the world, sees boundless opportunities for Africa."7 Yet, rhetoric aside, few material interests exist that can undergird USAFRICOM.

In 2008, when U.S. Africa Command was stood up under General William E. Ward, USA, the United States was running a \$65.7 billion trade deficit with Sub-Saharan Africa, importing roughly four times as much as its domestic producers were exporting. The main cause of this imbalance was oil. The 2008 financial crisis and resulting recession brought imports and the deficit down for a few years, but by 2011 imports were back up to \$74.3 billion, generating a deficit of \$53.2 billion. The U.S. trade deficits in goods with the four largest African suppliers of oil in 2011 were \$28.9 billion with Nigeria; \$12.1 billion with Angola; \$3.1 billion with Chad; and \$439 million with the Democratic Republic of the Congo (DRC). According to the U.S. Trade Representative (USTR), Nigeria was only the 44th largest market for U.S. exports; Angola ranked 69th, and the DRC was 136th on the list. Exports to Chad were so low the USTR did not bother to rank them.8 African states prefer to import goods from Europe or China rather than from America.

By 2017, the goods deficit with Africa had dropped to \$10.8 billion. This was due entirely to a reduction in imports, from \$93 billion in 2011 to \$24.9 billion in 2017. U.S. goods exports to Africa had actually decreased over these years, down from \$32.9 in 2011 to \$14.1 in 2017. The cause for the change can be seen more succinctly regarding the three largest oil suppliers of 2011; by 2015 imports from Nigeria, Angola, and Chad had dropped a total of \$44.6 billion. Thanks to the rapid increase in domestic oil production in the United States because of fracking and offshore wells, America no longer needs African oil.

Appropriately, General Waldhauser's testimony was much more about improving conditions in Africa than in linking events there with U.S. economic interests. He told the House committee, "Our first strategic theme is that U.S. Africa Command activities directly support U.S. diplomatic and development efforts in Africa. Working with our interagency partners—primarily the Department of State and U.S. Agency for International Development (USAID)—is a core tenet of our strategic approach in Africa."9 He continued:

African nations—their people, their increasing appetite for democratic principles, their growing economic impact and potential in global markets—remain an enduring

interest for the United States. U.S. Africa Command supports our African partners in building the capability and the capacity to develop local solutions to radicalization, destabilization, and persistent conflict. By making targeted investments and maintaining strong partnerships, we can set the basic security conditions needed for good governance and development to take root. Africa, our allies, the United States, and the world stand to benefit from a secure, stable, and prosperous Africa. 10

The Marine commander thus represented the same approach that has long characterized U.S. policy—the development of Africa for the Africans, with Americans playing a benevolent role rather than a self-interested "imperialist" role. The mission statement of the State Department's Bureau of African Affairs takes the same tone, making no mention of advancing any explicit American material interest.¹¹

The Failure of Trade Expansion

On July 1, 2013, President Barack Obama announced a new Trade Africa initiative. According to the White House fact sheet, the program "seeks to increase internal and regional trade within Africa, and expand trade and economic ties between Africa, the United States, and other global markets." Its focus was the East Africa Community (EAC) comprising Burundi, Kenya, Rwanda, Tanzania, and Uganda. The accompanying description of the EAC fit an export-oriented policy:

The EAC is an economic success story, and represents a market with significant opportunity for U.S. exports and investment. The five states of the EAC, with a population of more than 130 million people, have increasingly stable and pro-business regulations. They are home to promising local enterprises that are forming creative partnerships with multinational companies. And EAC countries are benefiting from the emergence of an educated, globalized middle class . . . and the region's GDP [gross domestic product] has risen to more than \$80 billion—quadrupling in only 10 years. 13

However, no estimate was given as to how much American producers might benefit from the initiative. Instead, most of the detail was about using "trade as aid" to boost the EAC economies. The White House stated, "In its initial phase, Trade Africa aims to double intra-regional trade in the EAC [and] increase EAC exports to the United States by 40 percent." Another priority was "Exploration of a U.S.-EAC Investment Treaty to contribute to a more attractive investment environment." This would lead to the export of U.S. capital rather than goods to the continent, expanding African production rather than American production.

Speaking at the U.S.-Africa
Business Forum on August 5, 2014,
in Washington, President Obama proclaimed, "I'm proud that American
exports to Africa have grown to record
levels, supporting jobs in Africa and the
United States, including a quarter of a
million good American jobs." But this
situation would not last.

Exports to Tanzania and Uganda peaked in 2013, and those to Kenya—the largest trade partner—peaked in 2014, and were down 72 percent by 2017. Only in Rwanda were exports higher in 2016 than in 2013. For the EAC as a whole, U.S. exports in 2016 were less than a third of what there were in 2013 when Trade Africa was launched and less than half what they had been in 2005. Even in the aggregate peak year of 2013, total exports amounted to just over \$1.2 billion, hardly a significant amount in the larger context of U.S. world trade and its national deficit.¹⁵

The Nature of the U.S.-China Rivalry

The U.S. Chamber of Commerce, in league with its affiliated chambers in Nigeria, Ghana, Kenya, South Africa, Tanzania, Uganda, and Zambia, sent a letter to Capitol Hill in 2011 stating that economic engagement "represents an overwhelmingly positive tool of soft power on the continent. This goodwill is felt on a daily basis by U.S. companies on the ground." It argued, "If the United States is to continue to play a

leadership role in the global economy, it is imperative that it dedicate significant attention to making inroads in frontier markets. . . . U.S. companies are presently at risk in Africa." But where does the risk come from? The Chamber warned, "Last year China surpassed the United States and assumed America's long-running status as Africa's single largest trading partner." Since then, China has taken a much more aggressive policy toward expanding its trade with Africa with a keen eye to boosting exports to cover what is still a large import flow of oil and minerals.

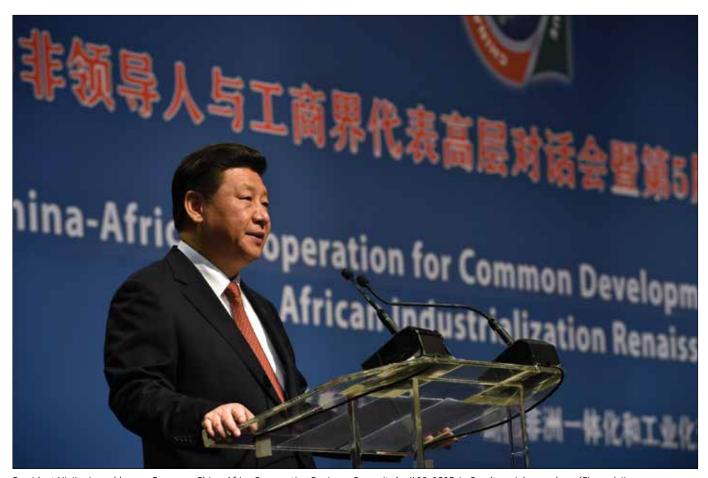
Though couched in commercial terms, the Chamber's letter presented the concept of strategic competition between the United States and China, which foreshadowed the National Defense Strategy (NDS) drawn up by the Trump administration.17 The NDS identified "Great Power" competition with Russia and China as the major challenges facing the United States, superseding the primacy of counterterrorism, which had dominated thinking since 2001. This change in strategic focus affects USAFRICOM directly and in a major way. Its security cooperation programs have concentrated on combating terrorism and insurgency. While these threats remain, the command must now raise its sights to recognize a Chinese presence that is far more pervasive and influential. One of the strategic approaches the NDS sets is to "Counter coercion and subversion":

In competition short of armed conflict, revisionist powers and rogue regimes are using corruption, predatory economic practices, propaganda, political subversion, proxies, and the threat or use of military force to change facts on the ground. Some are particularly adept at exploiting their economic relationships with many of our security partners. We will support U.S. interagency approaches and work by, with, and through our allies and partners to secure our interests and counteract this coercion. 18

This should apply to China and Africa. The ability of Beijing to subvert the integrity of local governments and

JFQ 93, 2nd Quarter 2019

Hawkins and Ponsford



President Xi Jinping addresses Forum on China-Africa Cooperation Business Summit, April 12, 2015, in Sandton, Johannesburg (Elmond Jiyane, Government Communication and Information System)

even change their diplomatic orientation away from the West far exceeds the menace of radical groups that do not have the resources of a major power behind them. Unfortunately, the NDS does not mention Africa in this context. In its list of regions where the United States is concerned about maintaining a favorable balance of power, Africa is the only region not on the list. Later, a section is devoted to the continent, but its priority is to "Support relationships to address significant terrorist threats in Africa." While mention is also made of stopping human trafficking, transnational criminal activity, and illegal arms trade, the Chinese threat is not explicitly cited. A final mission in the Africa section of the NDS, however, is to "limit the malign influence of non-African powers," which should certainly apply to China as a "revisionist power."

On November 15, 2018, the Pentagon announced a "realignment of

Counter-Violent Extremist Organization personnel operating in U.S. Africa Command to support priorities outlined in the National Defense Strategy. Over the next several years, the realignment projects a reduction of less than 10 percent of the 7,200 military forces serving in Africa Command."19 The press release also stated that "Optimization preserves the majority of U.S. security cooperation partnerships and programs in Africa."20

While the campaign against Islamic terrorist groups and insurgents such as Boko Haram, the so-called Islamic State, al Shabaab, and al Qaeda needs to continue, consideration must be given to the potential for China to back its own proxies to pressure or even overthrow governments that will not grant the concessions Beijing wants to advance its interests. Given that USAFRICOM is already under-resourced for the counterterror mission, it will be difficult to expand its range in this direction unless

it can make the case that its role is vital in the larger global context. However, since the aim of staying competitive with China in Africa is more a political than a military operation, it need not be abandoned in the name of force optimization.

China's Strategy

In 2009, the Congressional Research Service reported that

China's foreign aid is difficult to quantify. The PRC government does not release or explain Chinese foreign aid statistics and much of PRC foreign aid does not appear to be accounted for in the scholarly literature on foreign aid. . . . China is a relatively small source of global aid. However, when China's concessional loans and state-sponsored or subsidized overseas investments are included, the PRC becomes a major source of foreign assistance.21

According to then PRC President Hu Jintao, speaking at the 5th FOCAC held July 2012 in Beijing, the Chinese government had built more than 100 schools, 30 hospitals, 30 anti-malaria centers, and 20 agricultural demonstration projects in Africa.²² Beijing has also successfully rolled out \$15 billion in preferential lending, trained close to 40,000 Africans in various sectors, and provided more than 20,000 scholarships to students from African countries to study in China.

In addition to becoming Africa's largest trading partner, its loans have made China Africa's largest financier, ahead of the World Bank and International Monetary Fund (though as a legacy of their imperial pasts, the United Kingdom, India, and France still hold larger shares of direct foreign investment in the continent). Hu stated the move was designed to stop "the big bullying the small, the strong domineering over the weak and the rich oppressing the poor," a thinly disguised slap at America and Europe. The loans will go toward supporting infrastructure, manufacturing, and the development of small businesses. However, the general practice of Chinese state-owned banks is to finance Chinese firms in building the roads, ports, factories, mines, wells, power plants, and shops that will be counted as African growth.

In Beijing, economics is tied to broader strategy. The final FOCAC document proclaimed, "We believe that the development of the new type of strategic partnership between China, the largest developing country, and Africa, the largest group of developing countries, is of great significance for the peace, stability, and development of the world and serves the fundamental and strategic interests of both sides." The phrase *balance of power* was also used.

At the 2014 FOCAC, however, Vice Foreign Minister Zhang Ming had talked about "South-South cooperation" in terms of the same division of labor within the international economy that characterized past patterns of imperialism:

China-Africa cooperation offers a model of mutual complementarity. China and Africa are both at a critical stage of

development. With different features and advantages, our economies are cut out for each other. China has mature, applicable technologies and equipments and relatively abundant capital. Africa, on its side, boasts great strengths in market size, labor cost, and resources. Our cooperation is constructive in nature as it expands shared interests and leads to win-win results. It is cooperation between brothers that fosters common development by leveraging our respective strengths.²⁴

Within the pattern of importing oil and minerals from Africa and paying for them with manufactured goods, China-Africa trade continues to expand. In 2013, total trade topped \$200 billion, nearly the equal of the trade carried on with Africa by the United States and European Union (EU) combined. And by 2015, China-Africa trade neared \$300 billion, with Beijing setting \$400 billion as its goal by 2020.²⁵

Yet it is loans to African states that present the greatest threat to their stability and independence. China holds at least 14 percent of the continent's sovereign debt, having lent more than \$100 billion to governments and state enterprises since 2000, according to the Brookings Institution, and the Belt and Road blitz has just started. "We're seeing countries at 50 percent, 100 percent, and in one case 200 percent of GDP debt, based on concessionary loans from China," stated U.S. Ambassador to Somalia Donald Yamamoto, when he was the acting Assistant Secretary of State for African affairs.26 Rwanda, Angola, Zambia, Kenya, and the DRC have started to ask questions about the debt burden that has come from partnering with China. Concerns over what Beijing might demand if debts go bad have increased since Sri Lanka was coerced into turning over its port of Hambantota (built by a Chinese stateowned firm) and 15,000 acres of land to China for a lease of 99 years—a financial transaction with a strategic yield.²⁷

David Zweig, a professor at the Hong Kong University of Science and Technology, has stated, "In the past, if a state wanted to expand, it had to take territory. You don't need to grab colonies any more. You just need to have competitive goods for sale."28 Chinese goods sell at prices that are only a fraction of what comparable goods cost from Europe or America. Nor are they all low-end items. The proportion of machinery and electronic products accounts for more than half of China's exports to Africa. America no longer makes inexpensive consumer goods, having conceded that market to China. Chinese telecom giants Huawei and ZTE are pushing Western firms out of new networks, providing less expensive service in over 30 Sub-Saharan African countries.²⁹ China is also expanding the export of automobiles to Sub-Saharan Africa. French journalists Serge Michel and Michel Beuret argue that "Cheap goods can be an even more habit-forming drug in poor countries than they are in rich ones."30 Yet this can slow local growth not only in manufacturing but also in the formation of a business class, as Chinese merchants handle the distribution and sale of Chinese goods often down to the retail level so as to extract every Yuan from their exports. Indeed, many Chinese are moving to Africa not only to start small businesses but also to become farmers.

Pushback Against Chinese Imperialism

There is, however, pushback in Africa against a trade pattern that suppresses local industrial development, compounds national debts, and often brings in Chinese workers rather than provide more skilled jobs to Africans. Chinese interest in African agriculture is also strong, setting off concern about food security on the continent as the Chinese buy up farm land and export harvests. As the *Economist* has reported:

Africans are increasingly suspicious of Chinese firms, worrying about unfair deals and environmental damage. Opposition is fueled by Africa's thriving civil society, which demands more transparency and an accounting for human rights. This can be an unfamiliar challenge for authoritarian China, whose foreign policy is heavily based on state-to-state relations, with little appreciation of the gulf between African rulers and their people.³¹



Djiboutian army commander of elite military force Rapid Intervention Battalion listens during course graduation, taught by U.S. Soldiers with 1-26 Infantry Battalion, 2nd Brigade Combat Team, 101st Airborne, at training location near Djibouti, March 7, 2019 (U.S. Air Force/Shawn Nickel)

Beijing's push to imbed its own interests in the assistance offered to others often backfires. On January 26, Le Monde Afrique reported that the Chinese government's gift of a \$200 million headquarters building and computer network for the African Union in Addis Ababa contained a back door that could allow the transfer of African Union files to servers in Shanghai.³² Beijing has denied this charge, but feels the heat from critics. These dangers will only increase. As part of the BRI, China is developing a "digital Silk Road" of fiber optic networks across the developing world, including Africa. These projects will undoubtedly include overt mechanisms for censorship and covert means of surveillance and data collection. USAFRICOM needs to develop ways to assist local governments to safeguard themselves from the threats emanating from Chinese-provided cyber infrastructures. This new capability will not be cheap in either money or personnel, but the Trump administration is making cyber security a high priority. The case must be made for Africa to receive its proper share of these new resources in light of the Chinese effort on the continent.

Global Times, a media outlet of the Chinese Communist Party, has struck back at those claiming Beijing is engaged in imperialism. In 2014, it ran an op-ed

by a Kenya-based journalist blaming African leaders for keeping their people poor by balking at Chinese extractive resource development projects. He concluded, "Clearly, the actual battle in Africa is not between external players. It is between Africa's leadership and its people."³³ This lays the groundwork for changing these leaders in favor of those more willing to partner with Beijing for the good of the people.

The targets of the op-ed were democratic governments responding to public concern about Chinese influence: "It is time for Africa to stop aping the democratic systems championed by Western powers."34 Though the Chinese do business all across the continent, they feel more comfortable dealing with authoritarian regimes. Indeed, one of their selling points is that, unlike the United States and EU, they do not push democracy and human rights on host governments. Indeed, these values run contrary to the principles that underlie China's own Leninist regime. Beijing made this connection explicit in its 2011 white paper China's Peaceful Development. In its foreign policy section, the official document states:

The Chinese people adhere to the social system and path of development chosen by

themselves and will never allow any external forces to interfere in China's internal affairs... nor does it use social system or ideology as a yardstick to determine what kind of relations it should have with other countries. China respects the right of the people of other countries to independently choose their own social system and path of development, and does not interfere in other countries' internal affairs.³⁵

The BRI is expanding Beijing's circle of friends as the project is delivering significant benefits in the short term.³⁶ Most of those benefits, however, are intended for China in the long term, where the program is spearheaded by firms that are either state owned or closely tied to the Communist regime. President Xi signed numerous BRI agreements during his recent African trip. And as Beijing's media reported, the FOCAC summit in September 2018 was "expected to align Africa's natural resources, population dividends and market potential with China's investment, equipment and technology."37 Another restatement of the imperialist model.

Expanded Mission

While U.S. economic interests in Africa are waning, China's interests will continue to expand. Analysts believe that by 2020, nearly 65 percent of the oil consumed in China will have to be imported. China's oil dependency reached 45 percent in 2006 and 52 percent in 2014. It became the world's largest oil importer in 2015, passing the United States, whose imports were falling. In addition to fueling continued economic growth, Chinese demand is being reinforced by a rapidly growing private auto market and the government's policy of using low global oil prices to fill (and expand) its strategic petroleum reserve. Domestic oil production in China is also declining as the country lags behind the technological progress made in the United States. Chinese strategists are looking at ways to control its import dependence, from developing more protected oil resources in Central Asia that can be delivered by pipeline to meeting the demands of

the world's largest automobile market with electric cars.³⁸ Yet there seems to be little chance for oil imports to be brought down, and thus no way China's campaign to expand exports to pay for African oil can slacken.

China's heavy investment in Africa and dependence on its oil and other resources make it vulnerable. Political volatility and pushback against Beijing's greed, exploitation, and explicit rejection of human rights will raise the political price of its investments and risk drawing in substantial security forces.³⁹ A report released in August by EXX Africa Business Risk Intelligence found that

China is actively positioning itself as a major supplier of arms to the African continent. Beyond the commercial objective of increasing sales of Chinese manufactured weapons and military equipment, China . . . seeks to control a greater share of the weapons trade in Africa in order to protect its extensive infrastructure investments on the continent. On the back of the One Belt, One Road initiative, China has made massive investments in East Africa, including railway lines, hydropower dams, and new port projects in countries such as Kenya, Sudan, and Ethiopia. Central to this strategy is China's military logistics base in Djibouti.40

According to the Stockholm International Peace Research Institute, China exported more military equipment to Africa in the 2012–2016 period than the United States and France combined, though less than Russia, which is the largest provider of weapons to the continent.41 American policy has been to discourage African states from spending scarce resources on weapons when there are so many more important development goals. However, when African governments choose to improve their military capabilities, the United States should make a stronger effort to be the source of any desired equipment and the training that goes with it. This is a critical field of political competition with China and Russia.

USAFRICOM is well positioned to provide political support to African

national governments that want the confidence to constrain Chinese ambitions and guard their own freedoms. That USAFRICOM represents a whole-of-government approach, with personnel from more than 10 U.S. Government departments and agencies, including the State Department and USAID, gives it the depth and scope to partner with a multitude of local authorities. USAFRICOM can serve as a coordinated reinforcement to Ambassadors and Embassy staffs from multiple departments. This will require improved cooperation between the Department of Defense and State. Bureaucratic rivalry must lessen in the face of a growing common adversary playing for very high stakes.

While Africa needs economic investment and foreign development assistance, its leaders must be able to channel growth to benefit their own people and resist becoming victims of a new imperialism. The United States may not be able to confront China economically in Africa, but its military and other public agencies can compete with China in influence across the continent by presenting itself as a genuine friend of local authorities in their desire to maintain national independence and to root out the corruption Chinese money will breed. This is nation-building at the institutional level. While the American message in aid and training programs has long emphasized democracy and human rights (values the rejection of which Beijing tries to sell as an advantage in dealing with Africa), it must also build a sense of national consciousness and higher loyalty that can recognize and resist the pressures to abandon the common good to the benefit of foreign interests. A professionalism based on "honor, duty, country" over avarice.

The strong ties that USAFRICOM has made with African militaries based on facing common insurgent and smuggling threats can be broadened to face another truly existential danger. One example of USAFRICOM's success in developing professionalism in the ranks of Africa's armed forces is in Malawi, where it has partnered with the Malawi Defense Force Sergeants Major course. This course is

based on the Noncommissioned Officer Leadership Center of Excellence at Fort Bliss, Texas. First offered in 2014, it has produced over 240 African sergeants major, both male and female, from 18 African countries. Its July 2018 graduating class included 45 noncommissioned officers from Botswana, Kenya, Malawi, Mozambique, Nigeria, Rwanda, Tanzania, Uganda, Zambia, and Zimbabwe.⁴² This kind of training is an important element in the human infrastructure of national independence.

China is also involved in Malawi, but in ways that present a stark contrast to American efforts. It has invested in the country's economic development, but to its own benefit. Research by Theodora C. Thindwa, a lecturer at Mzuzu University's Centre for Security Studies in Malawi, found "no relationship between investment levels and employment created. This suggests the importation of Chinese labor into Malawi, which leads to economic losses for the Malawian workforce."43 China has provided help in some fields such as medicine, leading Thindwa to conclude, "China comes out as both a neo-colonialist in some areas and as a development actor in other areas." This kind of tension is common across the continent. The small African states cannot stand alone against China ("a force to reckon with in the 21st century," as Thindwa calls it). USAFRICOM can, however, provide enhanced capabilities and foster coalitions to strengthen their hands.

Even if Beijing is able to safeguard its material interests on the continent, it can still be prevented from expanding its political clout. And it must move its coveted supplies of energy and other resources from Africa through waters currently controlled by the U.S. and Indian navies, reinforced by other allies being pulled into alignment to contain China's ambitions. An asymmetrical strategy that supports local opposition to Beijing's imperialism and authoritarianism while controlling the commercial/logistical sea routes that link China and Africa is a cost-effective approach that puts USAFRICOM at the center of the action as America's lead element on the continent. JFQ

JFQ 93, 2nd Quarter 2019

Hawkins and Ponsford

Notes

¹Thomas D. Waldhauser, "National Security Challenges and U.S. Military Activities in Africa," U.S. Africa Command Posture Statement Before the U.S. House Armed Service Committee (HASC), March 6, 2018, available at https://docs.house.gov/meetings/AS/ AS00/20180306/106953/HHRG-115-AS00-Wstate-WaldhauserT-20180306.pdf>.

² "Thornberry Returns from East Africa Tour," HASC press release, March 29, 2018, available at https://armedservices.house.gov/ news/press-releases/thornberry-returns-eastafrica-tour>.

³ Zeng Aiping, "Xi's Africa Visit Fosters Shared Future," China Daily (Beijing), July 26, 2018, available at <www.chinadaily.com.cn/a/201807/26/WS5b5902afa31031a351e90293.html>.

⁴ Ibid.

⁵ An Baiije, "Belt, Road Aligns with African Nations," China Daily (Beijing), September 5, 2018, available at <www.chinadaily.com. cn/a/201809/05/WS5b8ed947a310add-14f38999a.html>.

⁶Lina Benabdallah and Winslow Robertson, "Xi Jinping Pledged \$60 Billion for Africa: Where Will the Money Go?" Washington Post, September 17, 2018, available at <www. washingtonpost.com/news/monkey-cage/ wp/2018/09/17/xi-jinping-pledged-60-billion-for-africa-where-will-the-money-go/?utm_ term=.2f3bcf8f54be>.

John J. Sullivan, "Remarks at the AGOA [African Growth and Opportunity Act] Forum," Department of State, July 11, 2018, available at https://www.state. gov/s/d/2018/284018.htm>.

8 "2012 National Trade Estimates Report on Foreign Trade Barriers," Office of the U.S. Trade Representative, available at <www.ustr. gov/about-us/press-office/reports-and-publications/2012-1>.

9 Waldhauser, "National Security Challenges and U.S. Military Activities in Africa."

11 See "Bureau of African Affairs: Our Mission," Department of State, available at <www. state.gov/p/af/mission/index.htm>.

12 "Fact Sheet: Trade Africa," The White House, July 1, 2013, available at https:// obamawhitehouse.archives.gov/the-pressoffice/2013/07/01/fact-sheet-trade-africa>. 13 Ibid.

¹⁴ President Barack Obama Speaks at the U.S.-Africa Business Forum, Mandarin Oriental Hotel, Washington, DC, August 5, 2014. The forum was part of a larger summit that brought some 50 African leaders to the U.S. capital.

15 "U.S. Trade in Goods by Country," U.S. Bureau of the Census, available at <www.census.gov/foreign-trade/balance/index.html>. Data are given for the period 1997-2016 and includes regions as well as individual countries.

¹⁶ U.S. Chamber of Commerce, "Multi Industry Letter Regarding Opportunities for Growth in Africa," October 17, 2011, available at <www.uschamber.com/issues/letters/2011/ multi-industry-letter-regarding-opportunitiesgrowth-africa>.

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

18 Ibid., 5.

19 "Pentagon Announces Force Optimization," DOD press release, November 15, 2018, available at https://dod.defense.gov/ News/News-Releases/News-Release-View/ Article/1691538/pentagon-announces-forceoptimization/>.

²⁰ Ibid.

²¹ Thomas Lum et al., China's Foreign Aid Activities in Africa, Latin America, and Southeast Asia, R40361 (Washington, DC: Congressional Research Service, February 25, 2009), available at http://china.usc.edu/ ShowArticle.aspx?articleID=1423>.

²² Speech by President Hu Jintao at the Opening Ceremony of the 5th Ministerial Conference of the Forum on China-Africa Cooperation, Beijing, July 19, 2012.

²³ "Beijing Declaration—Toward an Even Stronger China-Africa Community with a Shared Future," People's Republic of China (PRC), Ministry of Foreign Affairs, September 5, 2018, available at <www.fmprc.gov.cn/mfa eng/zxxx 662805/t1593686.shtml>.

24 "Vice Foreign Minister Zhang Ming: China-Africa Cooperation: A Model of South-South Cooperation, Complementarity, Equality, and Real Results," PRC, Ministry of Foreign Affairs, December 11, 2014, available at <www. fmprc.gov.cn/mfa_eng/wjbxw/t1218377. shtml>.

²⁵ "China-Africa Trade Approaches \$300 Billion in 2015," China Daily (Beijing), November 10, 2015, available at <www. chinadaily.com.cn/business/2015-11/10/content_22417707.htm>.

²⁶ Matina Stevis-Gridneff, "More of Africa Finds Itself in China's Debt," Wall Street Journal, July 25, 2018, available at <www.wsj.com/ articles/more-of-africa-finds-itself-in-chinasdebt-1532549741?mod=hp_listb_pos3>.

²⁷ Maria Abi-Habib, "How China Got Sri Lanka to Cough Up a Port," New York Times, July 25, 2018.

²⁸ Quoted in Serge Michel and Michel Beuret, China Safari: On the Trail of Beijing's Expansion in Africa (New York: Nation Books, 2009), 115.

²⁹ David E. Brown, Hidden Dragon, Crouching Lion: How China's Advance in Africa is Underestimated and Africa's Potential Underappreciated (Carlisle, PA: Strategic Studies Institute, September 2012), 33.

³⁰ Michel and Beuret, China Safari, 115.

31 "One Among Many," The Economist, January 15, 2015, available at <www.economist. com/news/middle-east-and-africa/21639554china-has-become-big-africa-now-backlash-oneamong-many>.

32 Joan Tilouine and Ghalia Kadiri, "A Addis-Abeba, le siège de l'Union africaine espionné par Pékin," Le Monde Afrique (Paris), January 26, 2018, available at <www.lemonde. fr/afrique/article/2018/01/26/a-addis-abeba-le-siege-de-l-union-africaine-espionne-parles-chinois_5247521_3212.html>.

33 Mark Kapchanga "Better Governance Will Create a New Africa," Global Times (Beijing), September 3, 2014, available at <www. globaltimes.cn/content/879793.shtml>.

35 See "Full Text: China's Peaceful Development," PRC, Information Office of the State Council, available at <www.gov.cn/english/official/2011-09/06/content_1941354.htm>.

36 "World Needs More Globalization, Not Less," Global Times (Beijing), January 20, 2017, available at <www.globaltimes.cn/content/1029819.shtml>.

37 "Goals Set for Upcoming Forum on China-Africa Cooperation Beijing Summit," Xinhua, June 17, 2018, available at <www.xinhuanet.com/english/2018-06/17/c_137260504. htm>.

38 "Petroleum stockpiling is of great significance to the country because a strategic petroleum pool would assure China's energy security," quoted in Niu Li, "Wisdom of China's Strategic Oil Reserves," China. Org. Cn, March 3, 2017, available at <www.china.org.cn/english/international/188201.htm>.

³⁹ Nyshka Chandran, "China Says It Will Increase Its Military Presence in Africa," CNBC, June 27, 2018, available at <www.cnbc. com/2018/06/27/china-increases-defenceties-with-africa.html>.

40 EXX Africa, "The Secret Chinese Arms Trade in the Horn of Africa," EXX Africa Business Risk Intelligence, August 2018.

⁴¹ Aude Fleurant et al., Trends in International Arms Transfers, 2016 (Stockholm: Stockholm International Peace Research Institute, February 2017), available at <www.sipri.org/ sites/default/files/Trends-in-internationalarms-transfers-2016.pdf>.

42 Charlie Stefan, "Building Readiness, Partnerships Through NCO Development," U.S. Africa Command, September 24, 2018, available at <www.africom.mil/media-room/ article/31240/building-readiness-partnershipsthrough-nco-development>.

43 Theodora C. Thindwa, "China-Malawi Relations: An Analysis of Trade Patterns and Development Implications," African-East Asian Affairs, no. 4 (2014), available at http://aeaa.journals.ac.za/pub/article/ view/146>.



Enhancing Unit Readiness on the Southwest Border

By Cindie Blair, Juliana T. Bruns, and Scott D. Leuthner

ood, realistic training can often be illusive. External factors such as urban growth, pollution, competition for frequencies and airspace, and protected habitats continually challenge the Department of Defense (DOD) in carrying out realistic training at installations.¹ However, a small Southwestern task force has a unique solution to keep units training like they fight. When planning training for operational units that provide engineering or intelligence, surveillance, and reconnaissance (ISR) capabilities, commanders from all Services should consider supporting counterdrug (CD) missions on the Southwest border through Joint Task Force North (JTF-N) as a readiness enhancer. Supporting JTF-N-funded CD missions with Federal law enforcement agencies

(LEAs) enables units to meet many of their wartime mission essential tasks (MET), operate against a thinking and adaptive adversary, and improve interoperability with the joint force and interagency community. Such training also contributes to protecting the homeland by supporting CD/counter–transnational organized crime (CD/CTOC) activities. In many instances, examples of this training opportunity are currently being demonstrated.

Criminal activity along the Southwest border poses a significant national security threat for the United States.² JTF-N

Lieutenant Colonel Cindie Blair, USMC, is the Staff Judge Advocate for Joint Task Force North. Major Juliana T. Bruns, USAF, is a Tactical Data Link Program Manager at the Defense Information Systems Agency. Major Scott D. Leuthner, USA, is a Special Forces Officer at Special Operations Command–Pacific.

JFQ 93, 2nd Quarter 2019 Blair, Bruns, and Leuthner 87

missions combine realistic unit training with the goal of protecting the homeland that benefits units, LEAs, and the Nation. Unit commanders are often unaware that JTF-N pays for their support, or they may underestimate just how much these CD missions enhance deployment readiness by providing training in a real environment similar to overseas contingency operations (OCO) locations.

Mission. Processes. and Authorities

Located at Fort Bliss, Texas, JTF-N is a U.S. Northern Command (USNORTHCOM) element that is under the operational control of U.S. Army North³ and has an annual counternarcotics budget of about \$8 million.4 As a task force without allocated or apportioned forces and only about 160 assigned personnel, JTF-N relies solely on volunteer units from all Services to complete its missions.⁵ Each of these missions lasts 60–179 days, but the majority generally span 2 to 4 months.6 Supporting LEAs since 1989, JTF-N's area of responsibility includes the entire continental United States including Puerto Rico and the Virgin Islands; however, most missions occur along the four Southwest border states of Arizona, California, New Mexico, and Texas, covering more than 660,000 square miles.⁷ Its mission is to support LEAs and facilitate DOD training through conducting CD/CTOC operations in order to protect the homeland and increase DOD unit readiness.8

Policy permits JTF-N to support Federal LEAs from the Department of Homeland Security, Department of Justice, and the High Intensity Drug Trafficking Area.9 Once an appropriate LEA official requests CD support, JTF-N provides military operational units and a comprehensive intelligence threat assessment for the requested mission.¹⁰

JTF-N's sourcing cell then finds supporting DOD units by attending resource, training, and planning conferences, and reaching out to units deliberately identified as having the organic resources to successfully provide Southwest border support.¹¹ Units with

ISR capabilities contribute the primary support for Southwest border missions, which include ground and aerial radar systems, unmanned aircraft systems (UAS), foreign intelligence, ground reconnaissance, and other support providing detection and monitoring (D&M).12 Additionally, JTF-N facilitates engineer missions to construct roads, fences, or lighting.13

Once a unit agrees to provide support, JTF-N facilitates funding, transportation, mission planning, and execution between the unit and the supported agency.¹⁴ JTF-N also coordinates with the applicable state National Guard CD program coordinator to synchronize all military LEA support across the border.¹⁵ While the sourcing cell tries to identify all target units, JTF-N always encourages commanders to contact the cell directly for more information or to volunteer for missions on the Southwest border. Statutory authorities permit DOD units to lawfully support LEA by conducting CD/CTOC missions, and the JTF-N staff obtains all proper approvals.16

Federal statutes and Office of the Secretary of Defense (OSD) policy provide DOD authority and guidance to coordinate DOD support to LEA on the Southwest border.¹⁷ JTF-N relies on 10 U.S. Code § 284 and its subsections for most missions, which permit, but are not limited to:

- transportation support
- CD-related LEA training
- detection and monitoring of air, sea, and surface traffic
- engineering support for building roads, fences, and lighting
- aerial and ground reconnaissance (including ground sensor platoons [GSP] and tunnel detection)
- linguist or intelligence analyst support
- communications and network support.18

All JTF-N missions comply with the Posse Comitatus Act and intelligence oversight rules.¹⁹ Not only do these missions provide DOD units with invaluable training opportunities that improve interagency interoperability, but they also assist LEAs in protecting U.S. borders from drug traffickers and transnational organized crime threats.

Training Benefits

Units conducting counterdrug missions derive many benefits from providing CD/CTOC support to LEA. First, in recognition of the U.S. military's emphasis on realistic training, supporting units conduct missions on the Southwest border in a diverse environment with terrain and climate similar to that in current OCO locations.20 Comparable to the U.S. Central Command (USCENTCOM) theater of operations and parts of Northern Africa, the Southwest border between the United States and Mexico (US/MX) covers almost 2,000 miles with limited visibility, tough mountainous terrain, some major population centers, and large swaths of uninhabited desert, providing a robust training environment for all units.21 The Southwest border's climate also provides a year-around training opportunity for those hindered by inclement weather at their home station, especially UAS units from the cold and windy U.S. northern states such as Alaska, Washington, and New York.22

Second, units operate against a thinking and adaptive adversary when targeting drug traffickers on the Southwest border. Criminal organizations use the varied terrain and vast desert along the US/MX border to traffic drugs, humans, and weapons; launder money; and conduct other associated illegal activities.23 The Southwest border is the main entry point for all major illicit drugs into the United States.²⁴ Such training provides units conducting D&M and reconnaissance missions the opportunity to use, test, and adjust sensors, optimize tactics, techniques, and procedures, and employ lessons learned in a real-world environment with immediate feedback.25 These lessons provide valuable input for future missions or contingency operations.

When conducting D&M missions, aircrews and operators may monitor, continuously track, and report to LEAs certain targets within 25 miles of the U.S. border.26 These missions rely on trained

operators who use sophisticated aircraft sensors in a real-world environment to locate vehicles, ultralight or unmanned aircraft, backpackers, all-terrain vehicles, boats, horses, and any other method traffickers use to transport illegal drugs across the border.²⁷ Some units also use sensors combined with intelligence training to provide LEAs with a pattern analysis through processing, exploitation, and dissemination, identifying named areas of interest where traffickers may create new techniques or routes to move their drugs. In essence, training mirrors, with great accuracy, how these units operate during contingency or stability operations.

For units conducting mounted and dismounted reconnaissance, the challenge of facing a thinking, adaptive adversary is often difficult to replicate outside of OCO areas, yet it is commonplace along the Southwest border.²⁸ One Marine Corps reconnaissance company commander highlighted his appreciation for the JTF-N-funded training, emphasizing the relevance of the terrain and adaptive adversary in his final report.²⁹

In another recent example, an adversary spotter compromised a U.S. Marine Corps GSP while the latter emplaced radio repeaters. When conducting sensor maintenance and repositioning 5 days later, the platoon realized that someone tampered with the wiring to one of the repeaters. Ten days after the compromise, the same platoon noticed a sensor pulled from the ground with a severed wire. ³⁰ This real-life adversarial reaction to detection operations affected the mission and evoked a problem-solving response that was better experienced in the JTF-N permissive environment than in a combat situation.

Third, JTF-N missions train units to complete essential wartime tasks. Mission essential tasks are collective tasks evaluated and assessed by commanders at all echelons through bottom-up feedback obtained primarily with training and evaluation outlines.³¹ From October 2014 to August 2018, 12 air assets supported LEAs through JTF-N by flying 6,944 CD missions.³² During this period, pilots and operators flew 30,000 flying or training hours, enabling units to meet various MET objectives and for aircrews

to accumulate crew mission ready hours and conduct formal training instruction.³³

Engineer missions provide units with technical construction operations and management training in a complex and challenging environment.³⁴ Engineer support is inclusive from survey and design through final construction and enables units to exercise all operational planning process steps including mobilization, deployment, employment, sustainment, and redeployment.³⁵ Participating units report successfully training on 90 percent or more of their individual and collective MET objectives per mission, averaging a total of 12 units and 429 Servicemembers trained per year.³⁶

Ground tactical units also proficiently train MET objectives tied to functions in the find, fix, finish, exploit, analyze, and disseminate (F3EAD) model. Volunteer tactical units, including Marine Corps GSPs and reconnaissance forces and Army scouts, regularly conduct find and fix operations using reconnaissance expertise to locate drug traffickers and transnational organized criminals and provide LEA with geolocation and target description for interdiction purposes.³⁷

Similar to planned combat missions, units submit a thorough concept plan followed by a detailed mission confirmation brief to JTF-N.38 In addition to normal operational planning, the volunteer forces may include other training opportunities directly before or after a CD/CTOC mission, such as a live-fire range that also contributes to MET training.39 The unit's plan must include details for a medical evacuation, communications, logistical support, contingency battle drills, risk mitigation, and rules for the use of force, among others.⁴⁰ This detailed planning alone provides training for key related collective tasks prior to deployment. Throughout one ground reconnaissance mission, Marines conducted 21 days of persistent reconnaissance from multiple observation points, enabling them to certify of 3 out of 7 mission essential tasks and 12 out of 37 key collective tasks.41

Besides enabling units to complete wartime essential tasks, JTF-N missions also expand training opportunities. Due to high costs, environmental hurdles, and space limitations on military bases, DOD engineer units rarely have opportunities to perform horizontal construction projects prior to deploying to a contingency or stability operation. ⁴² Units that support LEAs through JTF-N gain invaluable training from construction projects on the Southwest border that include training on rental equipment equivalent to the unit's own organic assets. ⁴³

Additionally, many Army UAS units fail to achieve required annual flight training due to external factors, such as weather or competition with other units to train in the same, limited military airspace.44 JTF-N not only offers additional military airspace for training but also expands the area to make the National Airspace System (NAS) available to all Services' UAS units.45 Unlike manned aircraft, DOD UAS have not historically operated in the NAS. The Federal Aviation Administration (FAA) must first issue a Certificate of Waiver or Authorization (COA) to DOD.46 A COA allows DOD UAS to fly precoordinated flight routes from the NAS into DOD special use airspace where, currently, DOD conducts the vast majority of UAS training.47 In fiscal year 2019, JTF-N coordinated over 70,000 square miles of airspace with the FAA for UAS units to conduct training while supporting LEAs along the south Texas border.⁴⁸ This number will only increase as JTF-N works closely with the FAA to secure even more COAs for military UAS operating in the NAS.49

This benefits UAS units not only because flying in Class A airspace requires instrument flight rule certification (IFR), which the 2nd Battalion, 13th Aviation Regiment, UAS training center in Fort Huachuca is only now training Army UAS operators to support JTF-N missions, but because it also provides a better training area when compared to the smaller, more restricted military airspace.⁵⁰ While the Air Force already IFR certifies its operators, it still requires a COA from the FAA to fly in the NAS.51 JTF-N continues to coordinate COAs for any LEAs supporting unit, consistently adding more flight corridors for UAS operators around the country.⁵²



Soldier with 541st Engineer Company, Special Purpose Marine Air-Ground Task Force 7, moves concertina wire over stake on practice barricade at Naval Air Facility El Centro in California, December 4, 2018 (U.S. Marine Corps/Asia J. Sorenson)

DOD and the Services in general further benefit from UAS operators obtaining IFR certification because it provides an advantage when fighting irregular warfare inside a legitimate state or nation's owned airspace.53 Training at or above flight level 180 (that is, sea level up to flight level 600) in a noncongested airspace with robust terrain allows the military to increase its proficiency and closely aligns UAS operators to their manned counterpart.54 The increased integration of manned and unmanned assets enables greater expansion of UAV applications and utility to further assist in homeland security.55

In addition to benefiting from a new IFR certification, a larger airspace provides UAS operators the opportunity to train in beyond visual line of sight (BVLOS) operations. UAS operators conduct BVLOS flights out of their visual range, which enables a drone to cover far greater distances. ⁵⁶ Flying BVLOS operations requires a satellite Ku frequency band. ⁵⁷ Because current training procedures do not require proficiency in

BVLOS operations, the Services do not fund units for a Ku satellite frequency.⁵⁸ However, JTF-N will pay for dedicated Ku satellite frequencies to increase training benefits.⁵⁹ Funding is yet another perk JTF-N provides to supporting units.

In an era when military components are competing for scarce resources, JTF-N provides much-needed funding to units for training and LEA support on the Southwest border, thereby saving the unit's own operation and maintenance funds for other purposes. While not permitted to pay for operational tempo items like flight hours, fuel, maintenance, and spare parts, JTF-N can pay for equipment and personnel transportation, lodging, per diem, rental cars, and more. 60 In fact, the only costs incurred by volunteer units generally relate to equipment purchases and refit and maintenance of their organic assets. Additionally, the supported LEA provides engineering units with all necessary construction materials, while JTF-N funds the unit's transportation, travel, per diem, and equipment rental costs.61

Protecting the Homeland Through Interoperability

Counterdrug missions on the Southwest border in support of Customs and Border Patrol (CBP) benefit DOD through training and improve interoperability with the interagency community, which aids in protecting the Nation's borders. This is especially important in light of the recent deployment of 5,200 Title 10 forces to the Southwest border.⁶² These troops are moving into JTF-N's area of operation to reinforce the ports of entry and assist CBP officers in securing the border, ensuring officer safety as migrants approach the United States seeking asylum.63 This is the second deployment of military troops to the Southwest border in the past 6 months and the opportunity to coordinate with LEAs through JTF-N missions prior to such a deployment is invaluable.64

Those units conducting D&M or reconnaissance missions on the border report its observations to the interagency community, which assists LEAs

in both apprehending and deterring drug traffickers, stopping illegal drugs from entering the United States, and countering other transnational organized crime activities. From October 2014 to August 2018, air D&M support directly contributed to LEA detaining 46 narcotic traffickers and 14,206 undocumented aliens.65 Additionally, DOD support enabled our LEA partners to seize 280,788 pounds of marijuana, 5,271 pounds of cocaine, 2.1 pounds of methamphetamine, and 29.2 pounds of other drugs.66 Joint surveillance and target attack radar system (JSTARS) D&M missions also provide a good example of our interagency support benefiting the Nation. Using a moving target indicator that looks for suspicious movement in named areas of interest, the JSTARS crew coordinates with interagency partners to maximize crosscueing opportunities with other paired assets to locate drug traffickers.67 In one instance, a JSTARS crew identified three tracks of interest on a mission.68 The crew provided real-time coordination with 11 separate departments across the interagency community.69 LEA and DOD cross-cued the tracks with positive results, culminating in the apprehension of three Dominican Republic nationals, a 25-30-foot boat, 151.6 kilograms of cocaine, and 740.3 grams of heroin.⁷⁰

Similarly, ground reconnaissance units coordinate with interagency partners and provide benefits by communicating sensor and personal observations to LEAs for drug interdiction purposes.71 Due to the Posse Comitatus Act, which prohibits Title 10 military personnel from directly participating in police functions on U.S. soil, Active-duty units do not accompany LEAs on interdictions.⁷² However, ground tactical units directly coordinate with interagency partners who interdict traffickers based on the relevant information DOD provides.73 For example, a U.S. cavalry scout squadron conducting a reconnaissance mission provided actionable information to LEAs that enabled them to interdict 275 pounds of narcotics and apprehend 72 undocumented aliens.74

Engineer projects provide protection to the homeland in a different manner. When completed, these roads provide increased mobility of restrictive terrain, enabling LEAs to decrease response time in interdicting CD/CTOC threats along the Southwest border.⁷⁵ Currently, in one of the U.S. CBP sectors, volunteer engineer units from all different Services and locations are alternating missions to complete close to 3 miles of all-weather road.⁷⁶ Upon completion, the road will provide 55 miles of unimpeded lateral movement for this sector, improving CBP's ability to secure the border.⁷⁷

Similar engineer projects in the Rio Grande Station contributed to disrupting drug trafficker infiltration routes, denying vegetation concealment, causing a 190 percent increase in apprehensions and a 74 percent increase in turn-backs.⁷⁸ This project also increased visibility along the Rio Grande River and will reduce CBP's interdiction response time by 75 percent.79 In the Nogales Station, CBP reported a 90 percent reduction in DTO interdiction time (from 30 minutes to 2 minutes) and an almost 50 percent decrease in the number of individuals who have gotten away in due part to DOD's completed engineer projects.80

Yuma Sector also reported benefits from JTF-N-sponsored engineer projects. That sector reported a 500 percent increase in detection capability and an increased wide-area response speed from 5 miles per hour to 30, resulting in a 75 percent reduction in interdiction response time thanks to DOD engineers.⁸¹ This mutually beneficial relationship can expand and even improve with increased volunteer DOD participation.

Unit personnel from all Services feel a sense of pride and accomplishment when they contribute to protecting the homeland by providing ISR or engineering support to LEAs under statutory authority. Personnel learn to communicate with the interagency community during the planning and execution phases of all missions and provide immediate, mutually reinforcing benefits to their own units and to the agencies with whom they collaborate.

OSD policy requires that all JTF-N missions provide DOD training and readiness opportunities to volunteer units conducting CD missions. This is not only a policy requirement, but also a part of JTF-N's mission statement and vision. While training benefits are easy to articulate in operational planning documents, JTF-N seeks innovative approaches to increase the scope and variety of training opportunities for the joint force, such as the aforementioned initiative to fly UAS in the NAS. JTF-N sourcing and planning teams are always looking at new ways to integrate forces and missions, layer coverage, and enable interagency and joint force training to units that otherwise may not have such an opportunity. With engineers, UAS, and GSP units raving about the real-world training experience that Southwest border missions present, it is clear that commanders who fail to take advantage of such opportunities are missing a phenomenal money-saving readiness enhancer for their units. JFQ

Notes

¹ Government Accountability Office (GAO), *Military Training: DOD Approach to Managing Encroachment on Training Ranges Still Evolving*, GAO-03-621T (Washington, DC: GAO, 2003), available at <www.gao.gov/assets/110/109786.pdf>.

² "National Southwest Border Counternarcotics Strategy," Office of National Drug Control Policy, May 2016.

³ Joint Task Force North (JTF-N), "Protecting the Homeland," trifold, October 2017, available at <www.jtfn.northcom.mil/Portals/16/trifold%20Oct%202017%20A.pdf>.

⁴ "Joint Task Force North Information Brief," PowerPoint slides, December 22, 2015, slide 12.

⁵ Ibid.

⁶ Matthew Fath, "Information Paper: Sourcing Assistance Request," February 21, 2018.

⁷ See "Joint Task Force North—History," available at <www.jtfn.northcom.mil/About-Us/History/>.

8 Ibid.

⁹ Paul Wolfowitz, Department Support to Domestic Law Enforcement Agencies (Washington, DC: Department of Defense [DOD], October 2, 2003); JTF-N, "Protecting the Homeland." While JTF-N can also provide limited support to State, tribal, and foreign law enforcement agencies (LEAs), the majority of JTF-N missions support Federal LEAs.

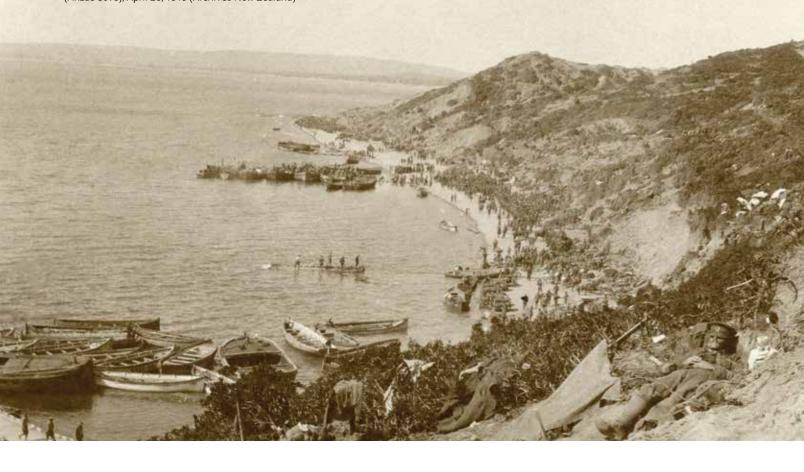
- 11 "Joint Task Force North Proposed Policy Changes," PowerPoint slides, April 16, 2018, notes on slide 11.
 - 12 Fath, "Information Paper."
 - 13 Ibid.
- 14 Ibid.; see Joint Task Force North Web site, available at <www.jtfn.northcom.mil>; JTF-N, "Protecting the Homeland."
 - 15 JTF-N, "Protecting the Homeland."
- 16 "Section 284, Support to Counterdrug Activities and Activities to Counter Transnational Organized Crime," Code of Federal Regulations (CFR) Title 10 (2018), available at <www.law.cornell.edu/uscode/text/10/284>.
- ¹⁷ Ibid.; Wolfowitz, Department Support to Domestic Law Enforcement Agencies.
- ¹⁸ "Section 284, Support to Counterdrug Activities and Activities to Counter Transnational Organized Crime."
 - 19 Fath, "Information Paper."
- ²⁰ U.S. Army Combined Arms Center, Enhancing Realistic Training White Paper: Delivering Training Capabilities for Operations in a Complex World (Fort Leavenworth, KS: U.S. Army Combined Arms Center, January 26, 2016).
- 21 "National Southwest Border Counternarcotics Strategy"; Rich Witwer, "Joint Task Force North J37—Sourcing Cell Brief," PowerPoint slides, last updated July 21, 2014, slide 18.
- ²² This comment is derived from an email sent to our research group from Major Nicholas D. Ryan, USA, JTF-N J35 Aviation Plans officer, on October 19, 2018, with the subject, "Research for Paper."
- 23 "National Southwest Border Counternarcotics Strategy."
 - ²⁴ Ibid.
- ²⁵ "JTF-N CONPLAN 2-13th UAS UV9983-18 (26JUN17)," JTF-N, 2013, 1-4.
- ²⁶ "Section 284, Support to Counterdrug Activities and Activities to Counter Transnational Organized Crime."
- ²⁷ "JTF-N CONPLAN 2-13th UAS UV9983-18 (26JUN17)," 1-4.
- 28 Michael Adams, "JTFN DOD Training Capabilities," video, 1:53, August 5, 2016, available at <www.jtfn.northcom.mil/ News/Video/videoid/548834/dvpcc/ false/#DVIDSVideoPlayer2946>.
- ²⁹ Toby Moore, "Operation Persistent Vision: Ground Reconnaissance," PowerPoint slide, May 8, 2018.
- ³⁰ "Ground Sensor Platoon—Deming, NM: DTO Counter-measures/GSP Disruption of Illicit Traffic," PowerPoint slide, July 18, 2018.
- 31 "OBJ-T and Joint Task Force North Information Brief," PowerPoint slides, October 31, 2018, slides 1 and 12.
- 32 This information is derived from an email sent to our research group from Guillermo Rovayo, Operational Law Attorney for JTF-N, on October 12, 2018, with the subject "Charts." 33 Ibid.

- ³⁴ Witwer, "Joint Task Force North J37— Sourcing Cell Brief," slide 3.
 - 35 Ibid
 - 36 Ibid.
- ³⁷ Adams, "JTFN DOD Training Capabilities."
- 38 "JTF-N ROS/CONPLAN GS7178-13 (26JUN17)," 1-4; and U.S. Marine Corps 1st Reconnaissance Battalion, "Joint Task Force North Mission Command Brief for Operation Persistent Vision," PowerPoint slides, March 8, 2018.
- 39 South Texas Regional Support Team, "4th Ground Sensor Platoon Live-Fire Range," PowerPoint slide, July 28, 2017.
 - 40 Ibid.
 - ⁴¹ Moore, "Operation Persistent Vision."
- 42 Jose Cambreros, "JTF-N Mission Brief-Mission Number: ES 10928-18," PowerPoint slides, June 21, 2018.
- 43 Witwer, "Joint Task Force North J37-Sourcing Cell Brief."
 - 44 Ibid.; Ryan, "Research for Paper" email.
- ⁴⁵ Moore, "Operation Persistent Vision;" Ryan, "Research for Paper" email.
- 46 "Unmanned Aircraft Systems (UAS): DOD Purpose and Operational Use," available at https://dod.defense.gov/UAS/>.
 - 47 Ibid.
- 48 Ryan, "Research for Paper" email. Typical military restricted airspace training blocks are less than 10,000 square miles of airspace.
- 49 Ibid. National Air Space is also referred to as Class A airspace.
 - 50 Ibid.

 - 52 Ryan, "Research for Paper" email.
- ⁵³ Therese Jones, *International Commercial* Drone Regulation and Drone Delivery Services (Santa Monica, CA: RAND, 2017), available at <www.rand.org/pubs/research_reports/ RR1718z3.html>.
- 54 This information is derived from an email sent to our research group from CW4 Adam Morton, Battalion Standardization officer for 2-13th Aviation Regiment, on October 3, 2018, with the subject "Air Info."
- 55 Andrew Lacher et al., "Airspace Integration Alternatives for Unmanned Aircraft," presentation by the MITRE Corporation, Pan Pacific Hotel, Singapore, February 1, 2010, available at <www.mitre.org/sites/default/ files/pdf/10_0090.pdf>.
- ⁵⁶ Allison Ferguson, "Opening the Skies to Beyond Visual Line of Sight Drone Operations," PrecisionHawk, 2018, available at <www.precisionhawk.com/beyond-visual-line-</p> of-sight-bylos-drone-operations/>.
 - ⁵⁷ Ryan, "Research for Paper" email.
- ⁵⁸ This information is derived from an email sent to our research group from CW4 Adam Morton, Battalion Standardization Officer for 2-13th Aviation Regiment, on October 23, 2018, with the subject, "Questions."
 - ⁵⁹ Ibid.

- 60 GAO, DOD Counterdrug Activities: Reported Costs do not Reflect Extent of DOD's Support, GAO/NSIAD-98-231 (Washington, DC: GAO, 1998), 3, 10, available at <www. gao.gov/assets/230/226278.pdf>. Operating and support costs are not included in DOD's counterdrug budget because they pertain to the existing force structure that supports the national defense mission and would be incurred regardless of the type of operation conducted. "As such, they are not true counterdrug costs," according to the DOD Coordinator for Drug Enforcement Policy and Support; and Management Controls Over National Drug Control Program Funds Managed through the DOD Central Transfer Account, DOD Inspector General Audit Report No. D-2000-145 (Arlington, VA: DOD Office of Inspector General, 2000), 10-11, available at https://media.defense.gov/2000/ Jun/09/2001715717/-1/-1/1/00-145.pdf>; GAO, DOD Counterdrug Activities, 2-3.
- 61 Adams, "JTFN DOD Training Capabilities "
- 62 Barbara Starr and Ryan Browne, "Pentagon to Send 5,000 Troops to Border as Migrants Inch Closer," CNN, available at <www. cnn.com/2018/10/29/politics/pentagonborder-troops-migrants/index.html>.
 - 63 Ibid.
- 64 John L. Mone and Paul J. Weber, "Operation Guardian Shield on U.S.-Mexican Border," FOX26, available at <www.fox26houston. com/news/operation-guardian-shield-on-usmexico-border>; however, this previous deployment involved Title 32 forces, not Title 10.
 - 65 Rovayo, "Charts."
- ⁶⁷ Joint Task Force North Information Brief," PowerPoint slides, December 26, 2017, slide 1.
 - 68 Ibid.
 - 69 Ibid.
 - 70 Ibid.
- ⁷¹ South Texas Regional Support Team, "JTF-North Support to CD/CTOC—USMC Ground Sensor Operations," PowerPoint slide, January 16, 2018.
 - 72 Fath, "Information Paper."
- ⁷³ U.S. Army, 6-1 Calvary, "Coyote Over Watch," PowerPoint slides, 2016, slides 1-2.
 - ⁷⁴ Ibid., slide 1.
- 75 Witwer, "Joint Task Force North J37— Sourcing Cell Brief," slide 3.
- 76 Rich Witwer, "Joint Task Force North Readiness Generation Brief," PowerPoint slides, January 20, 2017, slide 7.
 - 77 Ibid.
- 78 Witwer, "Joint Task Force North J37-Sourcing Cell Brief," slide 3. Turn-backs describe when people who are about to illegally cross the border into the United States return to Mexico after seeing Customs and Border Patrol respond to the area.
 - ⁷⁹ Ibid., slide 3.
 - 80 Ibid.
 - 81 Ibid.

New Zealand landing troops at Gaba Tepe, Gallipoli (Anzac Cove), April 25, 1915 (Archives New Zealand)



Gallipoli

Lessons from the Great War on the Projection of Power and Joint Forcible Entry

By Patrick William Naughton

s the 100th anniversary of the end of World War I passes, it is worthwhile to reflect on the lessons that the conflict can teach the joint force. Most remember the war as being primarily fought by land forces; jointness did occur, though

Major Patrick William Naughton, USA, is an Army Interagency Fellow in the Veterans' Employment and Training Service at the Department of Labor. the gaps among the different domains were clear. The Gallipoli Campaign executed in the Dardanelles Strait in April 1915 was one of the few events in the war that incorporated land, sea, subsurface, air, and multinational operations at all levels of war that today can be recognized as a true joint operation. The attempt by the allied nations in February and March of 1915 to execute a naval assault through the Dardanelles to threaten the Ottoman

Empire's capital of Constantinople (now Istanbul) had three objectives: force the empire's surrender, open a route behind the German lines, and bolster ailing ally Russia, who could not face the Ottomans and Germans on its own. Once the naval attack was stymied by effective shore-to-ship artillery firing from hardened forts and the mining of the strait, the allies planned to conduct amphibious landings, allowing the army to seize the fortifications

JFQ 93, 2nd Quarter 2019 Naughton 93

and silence the enemy guns so the navy could pass safely to Constantinople.

This plan, recognized today as a joint forcible entry, involved coordination among all domains, as well as the synchronization among numerous multinational participants, including troops from Australia, Ceylon, England, France, India, Morocco, Nepal, New Zealand, Newfoundland, Russia, Senegal, Syria, along with Jewish Palestinian refugees. The Gallipoli Campaign offers the joint force five main lessons when examining possible forcible entry operations within the multidomain operational (MDO) concept:

- unity of command
- coordination of joint fires
- multiple dilemmas
- logistics and consolidation gains
- health service support concept.

Joint Forcible Entry

According to a recent National Military Strategy of the United States, the "U.S. military stands ready to project power to deny an adversary's objectives and decisively defeat any actor that threatens the U.S. homeland, our national interests, or our allies and partners."1 Looking at large-scale combat operations within the MDO concept, oriented against a peer competitor, the end-point of the projection of that power will culminate with joint forcible entry, which joint doctrine defines as operations to "seize and hold lodgements against armed opposition." A lodgement is defined as a "designated area in a hostile or potentially hostile operational area . . . that affords continuous landing of troops and materiel while providing maneuver space for subsequent operations."2

Forcible entry will most likely occur in the seize the initiative and dominate phases of the joint combat operational model. As such, it becomes crucial in allowing the joint force to progress toward controlling the operational environment, achieving strategic military and political objectives, and setting the conditions to advance to subsequent phases of the operation.³ Joint doctrine introduces

numerous considerations when planning this type of operation. As one of the first true joint forcible entries in the modern era, the events in the Dardanelles in April 1915 provide a historical case study for modern military professionals to study in order to supplement this doctrinal guidance. Gallipoli presents several lessons still applicable today when examining potential future large-scale combat operations within the MDO concept.

Unity of Command

Unity of command is a core principle of joint operations and is defined as the "operation of all forces under a single responsible commander who has the requisite authority to direct and employ those forces in pursuit of a common purpose." The common purpose is the achievement of unified action, which is enabled by the unison of all military efforts directed by a singular leader.4 Due to the complexity of joint forcible entry operations and the coordination required among the different services across all domains, to include multinational participants, joint doctrine recognizes that achieving unity of command is vital for success.5

After the evacuation of allied forces from Gallipoli, the Dardanelles Commission was formed by order of the British government to determine the origin, inception, and conduct of operations. In 1917, the commission issued its first report, which determined that the entire operation lacked unity of effort from the top down. The report stated, "It is impossible to read all the evidence, or to study the voluminous papers which have been submitted to us, without being struck with the atmosphere of vagueness and want of precision which seems to have characterised the proceedings of the War Council."6 This council was dominated by the overbearing personalities of Secretary of State for War Lord Herbert Kitchener and First Lord of the Admiralty Winston Churchill, neither of whom were experts in naval or amphibious warfare. The commission found that the specialists present were hesitant to express their opinions or voice dissent due to the personalities of these two men. The commission concluded that technical matters for campaign planners were "guided wholly by the views laid before them by the Secretary of State for War and the First Lord of the Admiralty."⁷ Finally, the commission found that at the end of each planning meeting of the Dardanelles War Council, many "left without having any very clear idea of what had or had not been decided."⁸

Starting at the strategic level, these two prevailing characters, often at odds with each other, resulted in a divided unity of command from the commencement of operations. The effects of this quickly trickled down to the operational and tactical levels. The commission found that Sir Ian Hamilton, appointed as the overall ground commander of the Mediterranean Expeditionary Force for the Dardanelles, was perplexed by the command structure. The final report concluded that Hamilton appeared to have regarded Kitchener as the commander in chief rather than Secretary of State for War, bypassing the established military chain of command to take all guidance directly from him.9 When later questioned on his actions, Hamilton stated that every decision he made was overshadowed and critiqued by Kitchener.10

The Dardanelles Commission report highlighted three issues with Hamilton's leadership and plan. First, his invasion concept allowed for zero flexibility and hinged on unrealistic expectations. Once Hamilton had his plan approved, it allowed for no deviation at the tactical level. The commission concluded that the invasion plan "entered into so much detail as to what was to be done if all went well that they left little margin for the unexpected." It further claimed that the rigidity of the plan and its reliance on assumed success was responsible for the damping of the initiative of the commanders at the direct level, preventing them from exploiting what successes were achieved.¹¹ Second, he had no reserves available to exploit opportunities or reinforce forces stymied at the landing points. Third, his entire army staff was located on the HMS Queen Elizabeth, a dread*nought*-class battleship commanded by the Royal Navy and also tasked with fire

94 Recall/Gallipoli JFQ 93, 2nd Quarter 2019

support for the landing. Consequently, while the ship gave Hamilton mobility, it meant he had limited direct communication and span of control over his dispersed landing forces.¹²

Since the initial Dardanelles operation was a naval endeavor, critics would later claim that though Hamilton was appointed as the commander for the entire operation, he was always treated as an auxiliary of the Royal Navy and a minor nuisance to be tolerated until the navy could again assume control.13 This was reinforced by the insistence of Churchill on the importance of the navy, in contrast to Kitchener, to any who would listen. The commission also noticed this division, which was propagated by both dominant senior leaders. To alleviate this, it suggested that a specially equipped and dedicated unarmed vessel with adequate signaling capabilities that could house both staffs from the navy and army together would have allowed for a more effective unity of command and span of control during the landings.14

When asked in an unguarded moment about the campaign difficulties, Hamilton, ever the loyal subordinate, stated, "Lord Kitchener is a great genius, but like every great genius he has blind spots."15 For modern military professionals, the Gallipoli campaign demonstrates the dangers of how division at the political and strategic levels can affect operations at the operational and tactical levels of war. It also reflects what can occur when domineering leaders refuse to utilize the "understand, visualize, describe, direct, lead, and assess" operations process loop.16 Lastly, Gallipoli graphically illustrates the importance of undertaking a whole-of-government approach aimed at achieving unified action through unity of effort guided by unity of command. If the message coming from the strategic level is divisive or heavily dictatorial, it is extremely challenging for a commander to nest the efforts of joint, interagency, intergovernmental, and multinational forces aligned against a singular objective.

Joint Fires

Joint doctrine understands that "In forcible entry operations, the initial

assault forces are building combat power in the operational area from nothing as quickly as possible." It recognizes that forces will normally have minimal to no artillery fire support initially available. To assist with this, doctrine declares that "Fires from aircraft (manned and unmanned) and/or naval platforms (surface/subsurface) take on added importance to compensate for the lack of artillery." Planners for the operation did identify the importance of fires in supporting the Gallipoli landing forces

War Council planners understood that the Dardanelles Strait was protected by numerous hardened forts hidden among the hills, invisible from direct line of sight. These positions contained heavy Turkish guns, thwarting any attempt to force the strait or land troops. However, as Churchill later stated during the commission's investigation, "This war had brought many surprises. We had seen fortresses reputed throughout Europe to be impregnable collapsing after a few days' attack by field armies without a regular siege."18 Events on land at the Western Front had demonstrated that previously impenetrable forts could be easily destroyed by howitzers. To mitigate the concern over the inability to spot the forts directly from the ships, it was decided, in a first for modern warfare, to use seaplanes and air balloons, which planners believed could act as spotters for indirect fire.19

Despite the evidence demonstrated on land at the Western Front, one of the first attempts at joint fire support for the landings in the Dardanelles was disastrous. As noted by the commission, they overlooked the fact that "Guns as mounted on board ships cannot be given sufficient elevation to obtain high-angle fire similar to howitzers."20 The success of howitzers on land against hardened positions was later found to be due to the high-angle entry of the shells, which exploded within the forts bypassing outer walls, hills, and other obstacles. Ship-toshore fire during the landings had little effect on Turkish forts and entrenched positions due to the angle of fire and the armor-piercing instead of high-explosive

shells used. Lastly, the belief fell short that the untested tactic of coordinated fires, aided by aerial observation, would make up for the inability to spot the forts by direct line of sight. The seaplanes "did not fulfill expectations, as the engine power was deficient, and there was much difficulty experienced in rising from the water when there was any sea."²¹

Though joint fire support efforts failed to suppress the Turkish forts during the landing, they did aid in halting counterattacks, allowing the landing parties to gain a foothold. It would also set the tone and shape of the battlefield for the rest of the campaign. German General Liman von Sanders, commander of all Ottoman forces on the Dardanelles, later commented on the effectiveness of allied fire support, stating, "the artillery effect of the hostile battleships constituted a support of extraordinary power for the landing of the army."22 Sanders also noted the synchronization that land- and sea-based artillery quickly achieved after the initial landings. He claimed, "the roar of the guns on the coasts of the peninsula never ceased day or night. When the land batteries ceased firing, the ships' guns began, and vice versa."23

Gallipoli validates the concept of coordinated joint fires and their importance during joint forcible entry attempts. As discussed, Kitchener and Churchill dominated the planning process; both had little understanding of joint coordinated fires between ships and shore, aided by aerial spotting. Rather than allowing subject matter experts to inform the War Council on each service's capabilities, these two men pressured everyone to continue with the plan. The result was split: joint fires failed to suppress the Turkish forts during the invasion and subsequent 8-month campaign but were effective in allowing landing forces to gain a foothold and later shaped the nature of the peninsula conflict.

The overall operational objective of the entire campaign was to silence the Turkish forts in order to allow the navy to pass to threaten Constantinople, which was never achieved. Due to the infancy of joint fires and the suppression of subject matter experts during the planning phase,

JFQ 93, 2nd Quarter 2019 Naughton 95

the concept was never fully developed and leveraged to its full effect. A core lesson for joint planners is evident: during planning, all key fire experts from each service and nation participating must establish capabilities, communication, and employment prior to execution in order to leverage the full effect of joint fire support.

Multiple Dilemmas

Joint doctrine acknowledges that forcible entry may include a combination of amphibious and air assault operations. It champions presenting the enemy with multiple dilemmas that create "threats that exceed the enemy's capability to respond." The overall goal is to create a "coordinated attack that overwhelms the enemy before they have time to react" and to facilitate follow-on operations.²⁴ Hamilton received much condemnation for his decision to land his force at multiple points. Numerous critics claimed he should have landed in one place, using a strategy of deterrence mixed with surprise. However, despite attempts at secrecy, the Ottomans knew well in advance that Hamilton's force was coming and had ample preparation time. To counter this, Hamilton presented his enemy with multiple dilemmas in order to confuse and overwhelm their ability to react.

Once it was realized that the navy alone could not force the straits and threaten Constantinople, Hamilton concluded that to effectively "force the passage of the Dardanelles, the cooperation of the whole military force will be necessary."25 Due to the terrain, entrenched enemy, and lack of surprise, rather than putting all of his troops ashore in one landing area via a tiered force flow, Hamilton decided to land his entire force at once at different locations.26 He acknowledged his plan "involved difficulties for which no precedent was forthcoming in military history." Hamilton lacked an accurate intelligence estimate of enemy forces or even maps that reflected the terrain. From this he decided it was necessary "not only to land simultaneously at as many points as possible, but to threaten to land at other points as well," thus setting the stage for the first joint and multinational forcible entry operation in the modern era.²⁷

In the early morning of April 25, 1915, after a brief but intense naval bombardment, the 29th British Division conducted a deliberate amphibious attack on five beaches (labeled S, V, W, X, Υ) in the Cape Helles region on the European side of the Dardanelles, with an endstate of overwhelming Ottoman forces and seizing key high ground. Simultaneously, the Australia and New Zealand Army Corps (ANZAC) conducted a deliberate attack with no preparatory fires at beach Z, with the intent of cutting the Cape Helles peninsula in two and isolating and fixing the Ottoman army on the Cape. In conjunction with these landings, a feint was conducted at the Gulf of Xeros by the Royal Navy, and the French conducted a demonstration followed by a raid on the Asiatic side at Kum Kale.28

Against all odds, the allies established a foothold and limited lodgement at each entry point. They did so by presenting Ottoman forces with multiple dilemmas to react to. Sanders later wrote about his experience early on April 25 and the rapid succession of reports on enemy landings that bombarded his headquarters: "From the many pale faces among the officers reporting in the early morning it became apparent that although a hostile landing had been expected with certainty, a landing at so many places surprised many and filled them with apprehension."29 Sanders and his subordinate commanders struggled to develop a common operational picture and response to the landings. Eventually, effective individual leadership exercised at the direct level halted the allied advances. The most famous example was Ottoman Lieutenant Colonel Mustafa Kemal Ataturk's (later the first president of Turkey) order to his men: "I don't order you to attack, I order you to die. In the time which passes until we die other troops and commanders can take our places."30

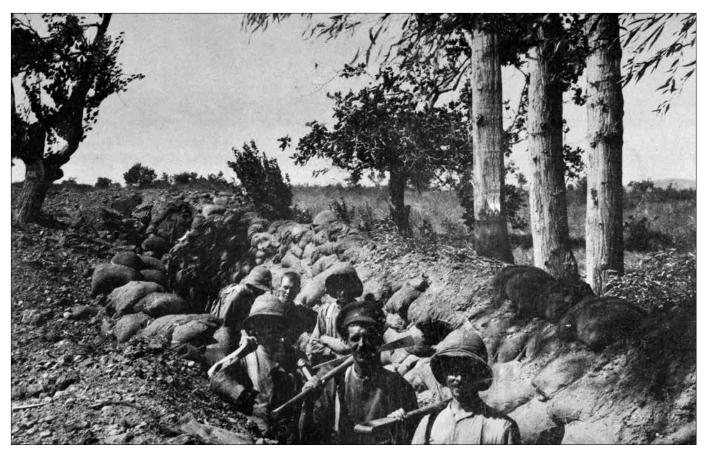
Sanders, following Ataturk's example, threw successive wave after wave of counterattacks against all the allied landing points, seeking to drive them back into the sea. In response, Hamilton, reverting to what military leaders of the time knew best, informed his men, "You have got through the difficult business, now you have only to dig, dig, dig, until you are safe."31 In testimony to the effectiveness of joint fires and how it shaped the battlefield. Sanders ordered his men to establish their trenches as close as possible to the allies to negate any fires arrayed against them.³² Once dug in, fires from the ships had little effect, since they could only fire in depth and not linearly along a trench line. Soon the fronts solidified and assumed the character seen in other theaters of World War I.

The entire Gallipoli campaign is often called a failure, with distinct critique being leveled against the initial landings and their lost opportunities. However, considering that Hamilton had almost no knowledge of the enemy situation, poor maps, no deterrence options, and faced an entrenched enemy who both outnumbered and expected him, the initial entries achieved their objective of establishing lodgements for subsequent operations. Hamilton accomplished this by presenting the enemy with multiple dilemmas to react to. The various deliberate attacks-feint, demonstration, and raid—when combined, presented the Ottomans with a situation they struggled to comprehend, which prevented them from immediately marshaling their overwhelming combat power to counter. Had the allies landed on one or two beaches, the Ottomans would have easily repelled them. The effectiveness of presenting an adversary with multiple dilemmas to offset advantages is a valid lesson for today's joint force.

Logistics and Consolidation of Gains

Joint doctrine recognizes that a joint forcible entry's main objective is to seize and hold a lodgement as a base for subsequent operations. This foothold is meant to receive large follow-on forces and the logistics to support them.³³ Army doctrine has recently introduced the concept of the consolidation of gains—activities to ensure that any tem-

96 Recall / Gallipoli JFQ 93, 2nd Quarter 2019



Allied soldiers dug in at Chocolate Hill, Suvla Bay, Gallipoli, August 6, 1915 (National Army Museum/Trooper O. Ward)

porary operational success is enduring and to set the conditions for the joint force to exploit it.³⁴ In a forcible entry context, these consolidation activities primarily deal with defending the lodgement, landing and building combat power, and the logistics to support it. Hamilton set about doing exactly that; his first dispatch stated that all time immediately after the landing "was consequently spent in straightening the line, and in consolidating and strengthening the positions gained."³⁵

Though the initial landings were a success, the attempts to move inland failed. One of the main reasons for this was the inability to consolidate gains and build logistics nodes to support follow-on forces. One witness later described the scenes on the beaches and how they "reminded one irresistibly of a gigantic shipwreck." The commission report found many faults with the sustainment activities during and immediately after the landings. Hamilton himself acknowledged how logistics hampered his ability to move off the beaches,

writing, "The men were exhausted . . . the small amount of transport available did not suffice to maintain the supply of munitions, and cartridges were running short despite all efforts to push them up from the landing places." 37

The commission faulted the extended lines of communication and poor packing of supplies as being behind the failed sustainment plan. Material packed in Alexandria, Egypt, was repacked for the invasion on the staging islands of Lemnos and Mudros.³⁸ While this is a common practice, the supplies were not combat loaded or prioritized by need. Consequently, the force was unable to access supplies needed to consolidate its gains in the lodgements. Though the logistics officers were later criticized, the commission found they were not at fault. The real reason for the stowage failure "was the absence of knowledge of the operations for which the embarkation was required, and that the embarkation officers at the ports of loading were not to blame."39

Hamilton was unable to resupply his forces quickly enough, which resulted in them culminating soon after landing. His immediate response was to solidify the lines, consolidate his gains, and allow his logistics support to sort itself. By then, however, the Ottomans had recovered from the multiple dilemmas presented and effectively halted further advances. A slug-fest ensued over the next 8 months, as the allies attempted to break the deadlock, move up the peninsula, and seize key terrain that had been expected to fall on the first day of the landings. Hamilton excluded his logistics officers in preplanning events, with disastrous consequences. Had they known the scheme of maneuver, they could have better prepacked the ships to support it. A valuable lesson exists for joint force planners considering future forcible entries: include all joint functions during planning activities.

JFQ 93, 2nd Quarter 2019 Naughton 97

Health Service Support Concept

During large-scale combat operations, a valid health service support (HSS) plan will prevent a force from culminating. This was understood in World War I, as noted in a British field manual from the era that is still applicable today within the MDO concept: "The presence of a number of sick and wounded proves an encumbrance to a Commander, and since his mobility will be handicapped by being compelled to carry a number of unfit men, every effort is made to remove them to the lines of communication with all despatch."40 The HSS plan for the landings was simple: as the lodgements were secured and the force advanced, casualty clearing stations, ambulance units, and field hospitals would be established. Evacuation would occur via the ambulances through the clearing stations, to the field hospitals, and then via barges to hospital ships, just as in other theaters.⁴¹ The plan hinged on immediate success on the beaches.

As discussed, the rigidity of Hamilton's scheme of maneuver preordained that all objectives would be accomplished as planned. Medical authorities were told that the Turks would be quickly driven off the beach and room made for hospitals ashore. However, as the Dardanelles commission highlighted, this "presupposed success, but better provision ought to have been made for the contingency of failure."42 Medical planners did account for a slight lapse in coverage as troops landed and moved inland, but they did not factor in that this might take days rather than hours or that adequate space for hospital units would not become available.43

"Hardly any advance was made after the landing, and it was found impossible to carry out the evacuation as intended" began the commission's description of the actual execution of the HSS plan. It continued, "it therefore became necessary that all casualties should be evacuated by seas as soon as possible. The casualties began at the very outset of the landing, and many of them occurred in the boat before the men had disembarked. It was impossible to sort the cases as had been intended, and they could not be left on the beaches, which were under shell fire."⁴⁴ Consequently, the wounded were immediately loaded on any ship of opportunity, without triage, to transport them to the hospital ships, which then removed that asset to transport more fighting men ashore.

Like the sustainment preparation, the reason why the HSS plan was found lacking was medical authorities' exclusion during planning activities. The commission was highly critical of Hamilton, who did not inform his surgeon general of the possible risks on the beaches. This resulted in inaccurate casualty estimates and a misunderstanding of how to support the landings with medical assets. ⁴⁵ As the lines solidified, the force health protection (FHP) plan was also found to be wanting. Dysentery, typhoid, diarrhea, gangrene, and later frostbite—all easily preventable—devastated the ranks. ⁴⁶

The official history of the war published by the Australian government issued a charge that no medical military planner ever wants to hear. It claimed the men lost their faith in their leaders mainly due to the lapse in medical coverage for both the HSS and FHP plans.⁴⁷ In their defence, medical support was always an afterthought in Hamilton's mind and the surgeons general were never kept fully informed of operational plans. In addition, expectation management, always the bane of medical authorities, was present at Gallipoli. One surgeon later wrote in frustration, "If you are going to expect to have at a place like ANZAC all the arrangements one expects at St. Thomas's Hospital, you will not get them, and I cannot understand anyone expecting them."48 Finally, planners also had no historical precedence to draw from; as noted by the ANZAC Surgeon General Neville Howse: "We were in the unfortunate position of having no history to guide us of a previous landing on such a large scale in modern times, so that we could get no idea of what medical arrangements should have been made."49

Five of the six principles of joint health services—proximity, flexibility, mobility, continuity, and control—were present at Gallipoli. What was missing was the

HSS plan's conformance to the tactical plan, which today is recognized as the most basic element for providing effective HSS.50 Since medical planners never initially understood the tactical plan, they prepared no contingencies. The Australian official history concluded that in Hamilton's staff planning, "Whatever suffering, disillusionment, and loss was caused by the absence of medical arrangements was due to this obsession . . . that the presence of the 'operations' branch was in some way more important than that of the 'administrative' branch [which included medical]."51 As with sustainment, joint planners must understand the importance of including medical treatment throughout all planning activities; furthermore, joint medical planners must aggressively advocate for their function and resist marginalization. Failure to do so will have disastrous consequences for the joint force in any forcible entry attempt.

Conclusion

Until only recently, Gallipoli was a synonym for a military debacle at all levels of war. The Dardanelles Commission's final report did acknowledge that though none of the campaign's objectives were reached, it succeeded in diverting forces that would have otherwise been used to face Russia, it influenced the Balkan States either to remain neutral or delayed them in joining the Central Powers, and also occupied a large part of the Ottoman forces that could have been used elsewhere.52 The report also concluded that the operation could have succeeded had it been treated as the main effort rather than as support to the events on the Western Front.53 When examined through the prism of trench warfare that dominated military thought in other theaters of World War I, as stated by renowned historian Alan Moorehead, "the Gallipoli campaign was no longer a blunder or a reckless gamble; it was the most imaginative conception of the war, and its potentialities were almost beyond reckoning."54

As Hamilton and numerous others stated in their testimony to the commission, this was the greatest amphibious

98 Recall / Gallipoli JFQ 93, 2nd Quarter 2019

operation ever undertaken in the annals of warfare up to that point that attempted to synchronize ground, sea, subsurface, air, and multinational forces. As such, they had zero historical precedence to draw from and were learning as they went. Churchill himself later conceded, "To land a large army in the face of a long-warned and carefully prepared defence by brave troops and modern weapons was to attempt what had never yet been dared and what might well prove impossible." 55

The negative memory of the attempted joint forcible entry at Gallipoli influenced military thought in the interwar years. As written in the doctrine of the time, by the 1920s it was believed that, due to events in the Dardanelles and the high death tolls caused by technology, "Descents upon a hostile coast, if opposed, have a very small chance of success, particularly in modern times. It is true that the landing may be made, but getting away from the coast is the difficulty."56 Interestingly enough, in the interwar years, as the Marine Corps worked to reinvent itself and become experts at amphibious operations, the Gallipoli Campaign was studied profusely, becoming the main catalyst behind the creation of the Marine's first doctrine on the subject, the Tentative Landing Operations Manual.⁵⁷ The concepts introduced in this manual went on to influence World War II operations, including the largest joint forcible entry operation to date—the landings at Normandy.

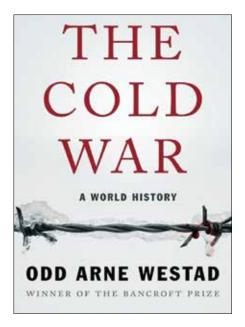
Overall, events from World War I are often remembered for the careless loss of life on an industrial scale, which leaders on all sides were unable to fully comprehend or prevent. However, the war still offers modern military professionals several lessons—earned through the massive expenditure of blood and treasure of an entire generation—that can be applied today. Fortunately, unlike our World War I predecessors, modern day joint planners have numerous historical forcible entry examples to learn from, which should not be wasted. JFQ

Notes

- ¹ The National Military Strategy of the United States (Washington, DC: The Joint Staff, 2015), 7.
- ² Joint Publication (JP) 3-18, *Joint Forcible Entry Operations* (Washington, DC: The Joint Staff, 2018), I-1.
- ³ JP 3-0, *Joint Operations* (Washington, DC: The Joint Staff, 2017), V-7–V-10.
 - ⁴ Ibid., I-9, GL-16.
 - ⁵ JP 3-18, II-1.
- ⁶ Dardanelles Commission, First Report (London: His Majesty's Stationery Office, 1917), 21.
 - ⁷ Ibid., 10.
 - 8 Ibid., 21.
- ⁹ The Final Report of the Dardanelles Commission, Part II (London: His Majesty's Stationery Office, 1919), 88.
- ¹⁰ Thomas Mackenzie, Supplementary Report: The Final Report of the Dardanelles Commission, Part II (London: His Majesty's Stationery Office, 1919), 93.
- ¹¹ C.F. Aspinall-Oglander, *History of the Great War, Military Operations: Gallipoli, Vol. I* (London: William Heinemann, Ltd., 1935), 251–252.
 - 12 Ibid
- ¹³ E. Ashmead-Bartlett, *The Uncensored Dardanelles* (London: Hutchinson & Co., Ltd., 1920), 94.
- ¹⁴ Aspinall-Oglander, *History of the Great War*, 254.
- ¹⁵ Compton Mackenzie, *Gallipoli Memories* (New York: Doubleday, Doran & Company, Inc., 1930), 45.
- ¹⁶ Army Doctrine Reference Publication (ADRP) 5-0, *The Operations Process* (Washington, DC: Headquarters Department of the Army, 2012), 1-2.
 - ¹⁷ JP 3-18, IV-15.
 - ¹⁸ Dardanelles Commission, First Report, 24.
 - 19 Ibid.
 - ²⁰ Ibid., 25.
 - 21 Ibid.
- ²² Liman von Sanders, *Five Years in Turkey* (Uckfield, East Essex: The Naval and Military Press, Ltd., 1927), 71.
 - ²³ Ibid., 78.
 - ²⁴ JP 3-0, VIII-14.
- ²⁵ The Final Report of the Dardanelles Comnission, 13.
- ²⁶ Ian Hamilton, "Dispatch to the Secretary of War, 20 May 1915," *The Final Report of the Dardanelles Commission, Part II* (London: His Majesty's Stationery Office, 1919), 97.
 - ²⁷ Ibid.
 - ²⁸ Ibid., 100.
 - ²⁹ Sanders, Five Years in Turkey, 63.
- ³⁰ Richard D. Robinson, *The First Turkish Republic: A Case Study in National Development* (Cambridge: Harvard University Press, 1963), 22.
 - 31 Ian Hamilton, Gallipoli Diary, Vol. I

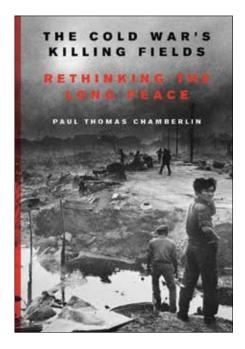
- (London: Edward Arnold, 1920), 144.
 - 32 Sanders, Five Years in Turkey, 71.
 - ³³ JP 3-18, I-1.
- ³⁴ ADRP 3-0, *Operations* (Washington, DC: Headquarters Department of the Army, 2017), 3-7
- ³⁵ Hamilton, "Dispatch to the Secretary of War," 107.
- ³⁶ Ashmead-Bartlett, *The Uncensored Dardanelles*, 57.
- ³⁷ Hamilton, "Dispatch to the Secretary of War," 106.
- ³⁸ The Final Report of the Dardanelles Commission, 16.
 - ³⁹ Ibid., 17.
- ⁴⁰ G.R.N. Collins, *Military Organization* and Administration (London: Huge Rees, Ltd., 1918), 272.
- ⁴¹ The Final Report of the Dardanelles Commission, 70–71.
 - ⁴² Mackenzie, Supplementary Report, 95.
- ⁴³ The Final Report of the Dardanelles Commission, 72.
 - 44 Ibid., 73.
 - 45 Ibid., 90.
 - 46 Ibid., 76.
- ⁴⁷ C.E.W. Bean, Official History of Australia in the War of 1914–1918, Vol. I: The Story of ANZAC from the Outbreak of War to the End of the First Phase of the Gallipoli Campaign, May 4, 1915 (Sydney: Angus & Roberton, Ltd., 1941), 563.
- ⁴⁸ The Final Report of the Dardanelles Commission, 76.
 - 49 Ibid., 80.
- ⁵⁰ JP 4-02, *Joint Health Services* (Washington, DC: The Joint Staff, 2018), I-1.
- ⁵¹ Bean, Official History of Australia in the War of 1914–1918, 569.
- Dardanelles Commission, First Report, 39.
 The Final Report of the Dardanelles Commission, 86.
- ⁵⁴ Alan Moorehead, *Gallipoli* (New York: HarperCollins, 1956), 357.
- ⁵⁵ Winston S. Churchill, *The World Crisis*, 1915 (London: Thornton Butterworth Limited, 1923), 314.
- ⁵⁶ William K. Naylor, *Principles of Strategy with Historical Illustrations* (Fort Leavenworth, KS: General Service Schools, 1921), 335.
- ⁵⁷ Kenneth J. Clifford, *Progress and Purpose:* A Developmental History of the United States Marine Corps, 1900–1970 (Washington, DC: Headquarters Department of the Navy, 1972), 47, 139.

JFQ 93, 2nd Quarter 2019 **Naughton 99**



The Cold War: A World History By Odd Arne Westad Basic Books, 2017 720 pp. \$40.00

ISBN: 978-0465054930



The Cold War's Killing Fields: **Rethinking the Long Peace**

By Paul Thomas Chamberlin HarperCollins, 2018 640 pp. \$29.99

ISBN: 978-0062367204

Reviewed by Walter M. Hudson

he Cold War is now suddenly back in vogue, since we are supposedly entering an era of great power competition. China looms as the greatest security challenge according to the latest National Defense Strategy. China and Russia are considered revisionist powers, disturbers of the existing international order. Therefore, there is an understandable impulse to look back, beyond the war on terror of the 21st century's first decades, beyond the dubious "End of History," the info-tech boom of the 1990s, past the hubristic and all-so-brief "Unipolar Moment," to the last great power struggle itself. It is ancient history to many now, but the decades-spanning Cold War, with its ideological clash between the communist and free worlds, certainly seems germane today. It was, at certain times, a potentially existential conflict that would turn the world into cinders. It was, at other times, a tense conflict that many thought would never end.

Two recently published sweeping surveys tell the Cold War's story. Odd Arne Westad's massive The Cold War: A World History broadens the temporal perspective. Instead of the standard 1945 to 1991 bracketing, he opens up a panoramic 100-year-long view. The Cold War did not start following apparent Soviet (or, depending on your perspective, American) encroachments into an opposing sphere of influence. The capitalist West and the communist Soviet Union had been in conflict from the USSR's very founding in 1917. Indeed, Westad goes back even further than that. The Cold War era was born of larger 19th-century socioeconomic transformations. Economic unravelings, such as the global crisis of the 1890s, consequently loosened communists from socialists, turning the former into radical revolutionaries. Anti-colonialist stirrings in turn-of-the-century national parties and congresses from Indonesia to South Africa also contributed. These events subsequently brought forth leaders and mass movements, paving the way for ultimate independence. Europe's 1914–1945 immolation, as Westad terms it, the "thirty-year European civil war," gave

rise to "revolutions, new states, economic dislocation, and destruction on a scale that nobody . . . would have thought possible." World War II's outcome finalized the global order's de-Europeanization.

Seen this way, as part of a huge geopolitical economic and political reordering, we can therefore also see that the Cold War did not exclusively, or even primarily, define the planet and its inhabitants. Westad's perspective shows that the U.S.-USSR Cold War dynamic can be seen as part of a larger historical process that was concurrent with the years of superpower standoff. Indeed, much of what strikes us as uniquely part of today's newest novus ordo seclorum—its multipolarity, its nationalism, its identity obsession—was all underway during the Cold War. This very multiplicity continuously defied superpower attempts at taming and reducing it. As Westad writes, "Time and again, grand schemes for modernization, alliances, or transnational movements stumbled at the first hurdle laid by nationalism or other forms of identity politics."

This reconfiguration of the Cold War as more than a bipolar ideological struggle is also emphasized in Paul Thomas Chamberlin's hefty The Cold War's Killing Fields: Rethinking the Long Peace. The author's perspective is equally global, and to some degree revisionist (hence the title, a respectful riposte to Professor John Lewis Gaddis's book) in challenging the notion that the Cold War was a time of bipolar placidity. As he capably sets forth, not only was the Cold War not bipolar, it also was not in the least sense cold. Fourteen million people were killed in what he calls "catastrophic waves of violence" that crashed on a huge geographic arc from northeast to southwest Asia.

What really mattered in emerging nations throughout the world, and especially in this killing arc, was not some proletarian revolution, but a workable model to jumpstart a new country into modernity. In all its cruelty, destruction, and waste, the Soviet model for development—a combination of state planning, collectivized agriculture, and nationalized industryseemed to offer the fastest path.

According to both authors, time and again the superpowers misread particular yearnings. In so doing, bipolarity not only did not keep the peace, but it also prolonged or otherwise escalated struggles into long-drawn-out conflicts fueled by superpower arms and money. Westad states, "Over and over again, events that were in origin local and specific metamorphosed into manifestations for a global struggle." For Westad, the Cold War's "universalist heart" drove America to stake massive amounts of blood and treasure in places that, only a few years earlier, had meant nothing. In American eyes, communism became the exemplar transnational threat that often demanded total, whole-of-government approaches on a scale that would dwarf anything today.

Chamberlin writes that sometimes America did not even understand that success, in terms of stopping communism, was staring it in the face—for example, the brutal obliteration of the Indonesian Communist Party in the mid-1960s that all but secured much of Southern Asia from communism and that served as a "harbinger for the collapse of the Communist movement in the Third World." Yet at the same time, the United States plunged ever deeper in the Vietnam morass to stop a model of communism already on its way to being discredited in the same region. Of course, the Soviets misread the world as well. According to Westad, the fundamental contradiction of the seeming pan-Marxist offensive during the Cold War was that communism premised itself on a classless, nationless world of proletarians and peasants—but the "problem was that for many ordinary people . . . a strong nation-state was what they wished for most."

China gets rich treatment in both books. The communist victory in China was, Chamberlin notes, of momentous consequence. Its triumph there, with fully 20 percent of the world's population, seemingly made the world look all of a sudden "Red." In America, the shock was enormous (imagine if all of Saudi Arabia, Egypt, or Turkey fell completely under al Qaeda, and one gets a small sense of the dismay). It astonished the Soviets precisely because what happened went completely against communist doctrine—China was a peasant nation, not

an industrialized one, and its revolution was not led by the proletariat. And in just a few years after communist China's founding, China broke decisively with the USSR and pursued a separate geopolitical trajectory. Even among major powers, the Cold War ceased being a bipolar struggle. Westad points out that the mid-1950s Sino-Soviet split ended the notion of the USSR and China as "brother states" for good. Any notion that the world was simply bipolar should have been discarded.

Few policymakers understood this. Westad notes that President Richard Nixon, for all his many faults, was one of the few who did. Nixon, in Westad's book, is a very strange hero of the very strange Cold War (juxtapose this with Chamberlin's villainous take). It was Nixon, who in Westad's words, "[b]ecause he fundamentally distrusted his own people, forced U.S. foreign policy onto a track where, for the first time during the Cold war, it dealt with others on the assumption that U.S. global hegemony would not last forever." Nixon, in his rejection both of American exceptionalism and democratic globalism, was thus able to grasp China's singularity, a concept far more important than "linkage." China could be separated and dealt with as its own entity, not as part of a larger global pattern.

Nixon's breakthrough occurred in the 1970s, the Cold War's strangest decade. Experts assumed the superpowers were becoming, in Westad's words, a "permanent duopoly, in which the United States and the Soviet Union shared responsibility for limiting regional conflict, making sure that nuclear weapons did not proliferate, and avoiding restlessness within their own ranks." But this overstated superpower influence and importance. The ground was in fact shifting tectonically during the 1970s. Conflicts broke out that escaped the taut Cold War logic. The India-Pakistan War in 1971 had little to do with superpower ideological struggle; the stakes were not in the slightest over whether a communist party would prevail. Rather, as Chamberlin notes, the war indicated the rise of "ethno-religious politics of violence in the Third World."

This new wave of conflict defied superpower labeling. Chamberlin writes

of "a new breed of radicals driven by religious and ethnic politics [that] seized the vanguard . . . this next generation of fighters rejected both Washington and Moscow's influence." A prime example was Lebanon, the apparent "model of a functioning, multisectarian republic" that exploded into violence and anarchy. Beirut's Battle of the Hotels, during which Phalangist, Muslim, and pan-Arab secularist gunmen shot it out from atop luxury resort high-rises, augured this era. Meanwhile, Marxist globalist pretentions were dashed as neighboring communist nations fought each other tooth and claw. Cambodia launched attacks into Vietnam in 1977, just 2 years after absolute communist victory in both countries, and Vietnam responded with its own invasion. By the following year, Pol Pot was calling for Vietnam's "wholesale destruction." And, of course, nothing was more astonishing than the Iranian Revolution.

All in all, neither book is perfect. In Chamberlin's account in particular, there is a whiff of *agit*-history, of revisionist historical thinking that, at times, makes American policymakers and their policies sound venal, and/or downright sinister in ways that strike this reviewer as unfair. And Westad concludes with a sort of would-be idealist paean that the previous 600 pagesplus of his global history undermine. Nonetheless, both books' distinctive virtues strongly outweigh their flaws.

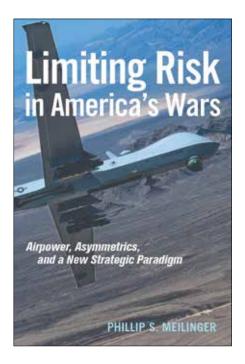
So, in the end, what lessons can we derive, explicit or implicit, from these Cold War histories? We know that the Cold War demanded a clear and long-term strategy at the highest level. Strategies, often due to their temporal and contextual construction, as well as the demands for parsimony, have to whittle down complex situations. The Cold War strategies adopted by the United States may not have been done with ill will or bad intentions. At times, they may have been theoretically sound and coherent. But they often simplified and assumed away too much. Given the stakes, the temptation was constantly to seek connection when there was, in fact, particularity or separation. Events seemed linked, though often such events were not, and nations and peoples acted with

JFQ 93, 2nd Quarter 2019

Book Reviews 101

unique motivations. This pattern-seeking compulsion in turn prompted and itself fed what David Halberstam termed the "crisis psychology" of the Cold War: threats were everywhere and increasing, and thus they became existential. Instead, what we can learn from each book is that, often during the Cold War, the parts were greater than the whole. Nations and peoples worked out their own destinies, regardless of, and sometimes in defiance of, superpower goals. Perhaps the biggest lesson, as simple as it may be, is to be aware, not of connection and pattern, but of exceptionalism and singularity. JFQ

Colonel Walter M. Hudson, USA, is an Assistant Professor and Deputy Chair of the National Security and Economic Policy Department in the Dwight D. Eisenhower School for National Security and Resource Strategy at the National Defense University.



Limiting Risk in America's Wars: Airpower, Asymmetrics, and a New Strategic Paradigm By Phillip S. Meilinger Naval Institute Press, 2017 304 pp. \$39.95 ISBN: 978-1682472507

Reviewed by Tom Greenwood

n Limiting Risk in America's Wars, Phillip Meilinger boldly argues against conducting prolonged wars of annihilation with large conventional U.S. ground forces. This strategy has proved too costly and seldom achieves the political goals for which recent campaigns have been fought, he argues. Instead, Meilinger, a retired Air Force pilot, favors the indirect approach espoused most prominently after World War I by British military thinkers Sir Basil H. Liddell Hart and Major General J.F.C. Fuller. Building on their ideas, the author contends U.S. strategy would be better served if our forces undertook second-front operations, which he defines as a "grand strategic maneuver involving a major military force that strikes the enemy unexpectedly somewhere other than the main theater of action (the source of the enemy's strength)." Such operations could help divert opposing forces, attack critical vulnerabilities, reinforce allies, develop asymmetric advantages, and be decisively exploited. In short, second-front operations could enable military forces to avoid prolonged and inconclusive conflicts and more rapidly achieve stated war aims at lower risk.

The foregoing summary of the author's analysis may strike some readers as strategically valuable. It may be in some contexts, but it is deceptively simple (perhaps even facile) when one ponders just how difficult it is to open up second-front operations against nonstate actors whose foot soldiers wear no uniforms, defend no sovereign territory, and rely on illicit transnational networks to fund their operations. Moreover, few readers are likely to argue that deception and surprise—key tenets of the indirect approach—are less important today than they were in Sun Tzu's day. But, as U.S. Navy SEALs learned in 1992 when they came ashore in Somalia under the glare of TV cameras, the proliferation of information technology makes achieving and maintaining surprise on the modern battlefield extraordinarily difficult.

The most controversial theme of this book, however, is that advanced precision munitions have now elevated airpower to be America's most decisive arm. And

when combined with sophisticated intelligence, surveillance, and reconnaissance (ISR) networks and highly trained special operations forces (SOF), the author believes this triad now renders large ground formations (similar to those employed in Afghanistan and Iraq) irrelevant. In his view, the latter are unwieldy, easy to target, often misconstrued as occupation forces, and responsible for a preponderance of civilian casualties. Citing 2006–2007 statistics from Afghanistan, Meilinger writes:

Nearly 95 percent of the 35 airstrikes resulting in collateral damage involved troops-in-contact—those instances when the rigorous safeguards taken at the air operations center to carefully vet targets to avoid such mistakes were bypassed. Given that there were some 5,342 airstrikes flown by Coalition air forces that dropped "major munitions" during those 2 years, the number causing collateral damage was a mere 0.65 percent of the total.

He further asserts that this percentage could have been lower if there had been fewer situations where troops-in-contact needed in-extremis close air support. Unfortunately, he offers scant evidence that SOF troops-in-contact were more adept at accurately guiding air-delivered munitions on to enemy targets than general purpose forces. Nor does he examine the implications of greater risk for SOF units in different operational contexts.

The author does a nice job balancing his discussion of warfighting theory with historical vignettes that highlight both successful and unsuccessful indirect approaches and second-front operations. The successful campaigns he discusses are the French and Indian wars in America (1754–1763), Wellington in Spain (1809-1812), the Arab Revolt (1916-1918), and Operation Torch in North Africa (1942). The failed campaigns he analyzes are the Sicilian Expedition during the Peloponnesian War (415-413 BCE), Imjin War (1592–1598), Napoleon Bonaparte in Egypt (1798– 1799), Gallipoli (1915), and Norway (1940). Not surprisingly, he dedicates a separate chapter, titled "Descent into

102 Book Reviews JFQ 93, 2nd Quarter 2019

Disaster," to the so-called endless wars in Afghanistan and Iraq.

The author's succinct and pithy campaign summaries are quite good; however, no mention of modern armaments and airpower in some of the vignettes makes their relevance suspect, if not disconcerting, given his overarching theme about the efficacy of airpower.

Why did some of the armies and fleets in the case studies do better than others? Meilinger argues it was not simply that these forces pursued an indirect approach and fought on multiple fronts. Rather, they did so while displaying a high degree of strategic, operational, and tactical finesse by being consistently more proficient than their adversaries in devising a logical and achievable strategic plan; conducting an accurate net assessment; providing sound leadership; obtaining timely and accurate intelligence; fostering a friendly and sympathetic population; fielding properly sized forces; developing specialized doctrine, tactics, and weapons; and exercising command of both the sea and air.

However, a central question left unanswered by the book is whether Meilinger's proposed triad (airpower, ISR, and SOF) will be able to withstand rigorous historical scrutiny and meet our future needs. In the era of great power competition, can this concept be ultimately validated as the Defense Department's warfighting concept for use against high-end peer competitors?

There are good reasons to be skeptical. First, in a degraded and contested future operating environment, sophisticated ISR systems may prove increasingly unreliable, thereby impeding joint force target identification and kill chain processes so essential to sustaining high-tempo operations. The inability to locate enemy mobile targets could result in reduced U.S. and allied air target engagement and sortie generation rates, rendering second-front operations more problematic. More recent campaigns have enjoyed unusual freedom of action given the adversary's inability to compete in the air domain.

Second, the increasing range and lethality of threat missile systems will require highly capable and robust U.S. and allied air defense units. While a

quantitative analysis of U.S. air missile defense requirements is beyond the scope of this review, transforming fixed air bases—both overseas and at home—to successfully survive a long-range enemy cruise missile attack portends to be a Sisyphean task. As T.X. Hammes has noted in *Joint Force Quarterly* 81 (2nd Quarter 2016):

An opponent does not have to fight modern fighters or bombers in the air. Instead, he can send hundreds or even thousands of small UAVs [unmanned aerial vehicles] after each aircraft at its home station. Support aircraft, such as tankers... are even more difficult to protect. Even if aircraft are protected by shelters, radars, fuel systems, and ammunition dumps will still be highly vulnerable.

Third, distributing combat power across a theater may be a prerequisite for joint forces to survive and effectively operate inside the enemy's weapons engagement rings. If so, then credible land forces will continue to play a vital role in executing a number of critical missions (for example, deterring, deceiving, protecting, raiding, reinforcing, clearing, attacking, holding, and evacuating, to name just a few). While SOF can perform some of these missions, they are ill-suited for others and generally lack sufficient organic combat power needed to defeat even modestly sized enemy formations. While large U.S. conventional ground forces bivouacked inside static forward operating bases may be a recipe for stalemate (if not defeat), it is an exaggeration to argue that conventional land forces have no operational utility in a high-end war. Ongoing efforts by the Army and Marine Corps to equip conventional forces with long-range precision surface fires could defend strategic chokepoints and free up maritime or aerospace forces to commence second-front operations that the author so strongly advocates. For this reason, readers should not be quick to dismiss the important role conventional land forces will continue to play on the modern battlefield within a joint context.

Fourth, assuming air installations can be adequately protected, it is not clear

what the author's theory of victory is for employing airpower—beyond minimizing military and civilian casualties—which is a recurring theme in the book. Historically, airpower has been less than decisive. While the World War II Bombing Survey acknowledged the significant impact of strategic bombing campaigns in both theaters, it did not determine they were decisive. Historians, including Geoffrey Wheatcroft (New York Review of Books, 2018) most recently, conclude that the operational and strategic effects of airpower have been hyped since Kitty Hawk. Airpower's utility has garnered positive reviews in contemporary conflict (the two conventional Gulf Wars) as its precision capabilities have improved. Yet even with complete mastery of the air over Iraq, Afghanistan, and other ongoing campaigns, airpower has not yet proved that it can deliver decisive effects.

These reservations notwithstanding, Phillip Meilinger has written a thoughtful and provocative book that warrants close attention from *JFQ*'s readership. The changing character of war suggests it may be worthwhile to use this book as a springboard for once again reexamining airpower's potential contribution to multidomain operations in the 21st century. JFQ

Colonel Tom Greenwood, USMC (Ret.), was an Infantryman, with subsequent assignments at the Office of the Secretary of Defense for Policy and National Security Council.

JFQ 93, 2nd Quarter 2019

Book Reviews 103



The Insufficiency of U.S. Irregular Warfare Doctrine

By John A. Pelleriti, Michael Maloney, David C. Cox, Heather J. Sullivan, J. Eric Piskura, and Montigo J. Hawkins

s the United States enters a new era of near-peer competition, current irregular warfare (IW) doctrine is insufficient to counter adversary irregular strategies intended

to disrupt and degrade the Nation over time. China and Russia, Iran and North Korea, and violent extremist organizations (VEOs) have been using irregular methods, including infor-

Colonel John A. Pelleriti, ARNG, is G3 Deputy Chief of Staff Operations for the Florida National Guard. Colonel Michael Maloney, USAF, is Commander of the 932 Operations Group at Scott Air Force Base, Illinois. Lieutenant Colonel David C. Cox, USMC, is Commanding Officer of Intelligence Support Battalion, Marine Corps Support Facility, in New Orleans, Louisiana. Lieutenant Colonel Heather J. Sullivan, USAF, is Commander of the 349th Force Support Squadron at Travis Air Force Base, California. Lieutenant Commander J. Eric Piskura, USN, is Assistant Operations Officer, Naval Supply Systems Command Fleet Logistics Center, in Norfolk, Virginia. Major Montigo J. Hawkins, USA, is a Logistics Officer at U.S. Transportation Command.

mation, cyber, drug, economic, and unconventional warfare, to avoid and offset U.S. conventional military advantages. While aware of threats, U.S. strategists struggle to define them, as evidenced by the frequent use of non-doctrinal, poorly defined terms such as hybrid, gray zone, nontraditional, unconstrained, and asymmetric warfare. The doctrinal terms irregular warfare and unconventional warfare (UW) provide a common point of departure for the discussion, but are incomplete, generally not well understood, and

often misused. To be successful in this new era of irregular competition, U.S. planners must reassess and update IW-related terms, concepts, and authorities required to counter irregular threat strategies.

Joint Publication 1, Doctrine for the Armed Forces of the United States, defines IW as "a violent struggle among state and nonstate actors for legitimacy and influence over the relevant population(s)."1 This definition evolved largely out of post-9/11 counterinsurgency (COIN) operations in Iraq and Afghanistan and is focused on influencing the relevant population to defeat insurgencies. While appropriate for COIN environments, current IW doctrine is not focused on countering strategic irregular threats intended to undermine the United States over time. Traditional, or conventional, warfare also falls short. Traditional warfare consists of major force-on-force operations and is characterized as "a violent struggle for domination between nation-states or coalitions and alliances of nation-states."2 While traditional warfare covers nation-state level competition, it is insufficient to counter most statesponsored irregular threats. The risk of escalation with China, Russia, Iran, or North Korea—all current or potential nuclear powers—is too high for traditional warfare to be a viable strategic option in most cases. This is why the indirect approach is so attractive to U.S. adversaries and why they have become highly skilled at operating below the level of traditional conflict and are careful not to provoke one.3 While conventional capabilities may certainly be leveraged in nontraditional warfare, major combat operations against near-peer competitors is seldom a feasible strategic option.

UW, a related concept to IW, is often misused and generally not well understood outside of the special operations forces (SOF) community. UW is not merely the opposite of conventional warfare, but is defined as "activities to enable a resistance movement or insurgency to coerce, disrupt, or overthrow a government or occupying power by operating with an underground, auxiliary, or guerrilla force in a denied

area."4 UW is currently only conducted by SOF, primarily Army Special Forces, who are specially organized, trained, and equipped to conduct UW by U.S. Special Operations Command.5 While UW is focused on coercing, disrupting, or overthrowing hostile governments, it adds the complex requirement of working with or through an insurgency or resistance movement to achieve UW objectives. Recent UW examples include U.S. SOF support to the Northern Alliance in Afghanistan and anti-Islamic State forces in Syria. Adversary definitions of UW often differ from the U.S. definition and include a much broader scope of nontraditional warfare activities. These are discussed in more detail later, but, suffice it to say, the current U.S. definition is too narrow to counter the broad range of irregular strategies being employed by America's adversaries.

The Use of Unrestricted Warfare

National strategic documents clearly outline the irregular threats posed by China, Russia, Iran, North Korea, and VEOs. U.S. strategists previously referred to this group as "4+1" and more recently as "2+2+1." The National Security Strategy makes a clear case that the 2+2+1 are actively competing against the United States, its allies, and partners.6 The document states, "many actors have become skilled at operating below the threshold of military conflict—challenging the United States, our allies, and our partners with hostile actions cloaked in deniability."7 It further details how adversaries are disrupting and degrading sources of American strength utilizing transnational criminal organizations, cyberspace, and economic warfare.8 The key takeaway is not that they are competing with the United States, but how they are competing. U.S. adversaries are not interested in a conventional fight, but prefer to attack indirectly so as not to provoke conventional conflict. The National Defense Strategy adds, "Both revisionist powers and rogue regimes are competing across all dimensions of power. They have increased efforts short of armed conflict by expanding coercion to new fronts, violating principles of sovereignty, exploiting ambiguity, and deliberately blurring the lines between civil and military goals." The NDS also acknowledges adversarial use of threat strategies, short of open warfare, to achieve its goals that include information warfare, ambiguous or denied proxy operations, and subversion. Both documents make a clear case that the most senior U.S. leaders understand the irregular nature of the threats the Nation is facing.

Threatened use of unrestricted warfare, not to be confused with IW or UW, is not new. For years, U.S. military and professional debate has examined and incorporated elements of unrestricted war, albeit under a variety of models and names. Recognition of recent successful employment of unrestricted warfare against the United States is starting to emerge in military and political dialogue and the national strategic documents outlined. At a time when many aspects of the conventional U.S. military are at their peak, primary competitors are freely employing unrestricted warfare to counter U.S. strength.

As early as the 1980s, the Chinese began the process of modernizing their conventional force structure, power projection capability, and doctrine. The unprecedented success of the U.S.-led coalition in the Gulf War provided the Chinese with a template for future war through recognition that technological dominance gave the United States and its allies unparalleled information that could exploit an opposing force.¹¹ Recognizing the difficulty and expense of trying to match the U.S. conventional military in the near term, the Chinese focused on overcoming the conventional advantages that contributed to military dominance. Unrestricted warfare doctrine was a by-product of this quest, ultimately introduced to the public in February 1999 when two Chinese PLA Air Force colonels, Qiao Liang and Wang Xiangsui, published the book Unrestricted Warfare.12

Unrestricted Warfare hypothesized that modern warfare would no longer

JFQ 93, 2nd Quarter 2019 Pelleriti et al. 105



Soldiers assigned to 7th Special Forces Group conduct urban warfare training during Emerald Warrior 17 at Hurlburt Field, Florida, March 7, 2017 (U.S. Air Force/Barry Loo)

conform to the Clausewitzian principles of using armed forces "to compel [the] enemy to do our will,"13 but had instead transformed into a layered and interminable campaign "using all means, including armed force or non-armed force, military and non-military, and lethal and non-lethal means to compel the enemy to accept one's interests."14 Such campaigns would integrate information and resources across multiple domains simultaneously, creating a "battlefield of battlefields" in order to reduce an opponent's superiority on one battlefield by forcing the opponent to deal with many battlefields concurrently.¹⁵ The result would be the fading distinction between soldiers and civilians because war would be everywhere—battlefields would be "virtually infinite." 16 Traditional operating domains (land, sea, air, space, cyber) would expand in every direction, including politics, economics, trade, culture, legal, information, infrastructure, and even the national psyche.

Qiao and Wang suggest that most unrestricted warfare activities would occur prior to any formal declaration of war and would be a mixture of covert and overt. licit and illicit activities. "Combatants" would be representative of the population: civilians, businessmen, politicians, servicemembers, entrepreneurs, criminals, and terrorists, all constantly shifting between roles. Conventional military battles would be secondary in nature and complementary to other efforts, if they occurred at all.17 The ultimate goal would be to diminish the United States and its allies, creating conflict without crossing thresholds that would result in open, conventional combat.

Iran employs unrestricted warfare for many of the same historical and practical reasons as China. As outlined in his paper, "Unrestricted Warfare in Chinese and Iranian Foreign Policies," Canadian Lieutenant Colonel M.R. Perreault outlines the similarities in how both nations see themselves and the world—threatened by the West and driving toward regional supremacy.¹⁸ As a result, China and Iran both seek to offset U.S. power and influence, but neither are capable of achieving their desired results through application of conventional

military means. Because Iran lacks the size, influence, and resources of China, their application of unrestricted warfare may be more aggressive. Lacking the same options as China, and operating in a vastly different regional environment, Iran's employment of unrestricted warfare comes in the form of support for terrorism and subversion through surrogates. Through its Islamic Revolutionary Guard Corps, Iran supports numerous regional terrorist and militia groups, including Hamas, Hizballah, Palestinian Islamic Jihad, the Taliban, and Iraqi Shia groups.¹⁹ The success of Iranian unrestricted warfare strategy can be seen in the current conflicts in Lebanon, Iraq, Syria, and Yemen, all battlefields where conventional forces support the layered and simultaneous application of influence by other means.

Russia also subscribes to unrestricted warfare strategy, dubbed "New Generation Warfare" by Russian general Valery Gerasimov in February 2013.20 Gerasimov described the evolution of Russian hybrid warfare whereby future conflict will be defined by the "tendency

toward blurring the lines between the states of war and peace."21 Conflict will focus on a series of "asymmetrical operations using a host of [strategic] capabilities to 'nullification of an enemy's advantages in armed conflict."22 Like the Chinese unrestricted warfare model, the Russian version simultaneously links limited, targeted military operations to layers of "information operations, cyber warfare, legal warfare, economic war, and any other activities that are directly linked to the designated strategic outcome."23 These layers are constantly evaluated and modified to achieve the desired effect of "shifting stable and thriving state[s] into a web of chaos, humanitarian upheaval and outright civil war, making it susceptible to foreign intervention."24 In his article, "Conventional and Unconventional in Military Actions," Romanian lieutenant general Teodor Frunzeti characterizes unconventional war as a "political struggle with non-political and non-military means, putting into practice . . . political, economic, psychological, propaganda, military measures against a state to destabilize its political power."25

Russia's successful operations in Ukraine and Georgia are representative of the new model. Russia succeeded in delegitimizing the Ukraine government and its North Atlantic Treaty Organization supporters, while also seizing large areas of Ukrainian territory by employing a blend of SOF, proxy forces, corporate entities, civilians, intelligence agents, political agitators, media, and transnational criminal elements. As stated in the U.S. Army Special Operations Command (USASOC) white paper "Counter-Unconventional Warfare," "Funded by the Kremlin and operating with differing degrees of deniability or even acknowledgement, the Russian government uses 'little green men' for classic [unconventional warfare] objectives . . . causing chaos and disrupting civil order."26 The speed and effectiveness of employing multiple "battlefields" simultaneously took the United States and its allies by surprise.27 Russia's conventional forces played a supporting, nondecisive role, demonstrating Russia's commitment to unrestricted warfare as a strategic tool.

North Korea is the most recent country to adopt and employ unrestricted warfare. Through media manipulation, intelligence infiltration, sabotage, espionage, cyber hacking, and military threats, North Korea has been able to protect its ruling regime while simultaneously developing its nuclear and conventional warfighting capabilities. Its application of unrestricted warfare has successfully frustrated U.S.-led sanctions and U.S.-South Korean military might. Although their capabilities are more limited than China, Russia, or Iran, all of these regimes support North Korean efforts as part of their own unrestricted warfare campaigns. The political tension and chaos caused by the North Korean strategy increases U.S. costs in national treasure and political attention. Similar to support to North Korea, several specific irregular tactics are utilized by multiple adversaries and worthy of further analysis.

Drug Warfare

A growing body of scholarly work points to the deliberate use of illicit narcotics by 2+2+1 as both a chemical weapon and funding strategy. Utilization of illicit narcotics in this manner is not a new concept. The Western powers leveraged the opium trade extensively during the 19th-century Opium Wars both to exploit China economically and to degrade its population and military power.²⁸ As early as the 1940s, Mao Zedong realized the potential of using drugs as a weapon and mounted a coordinated drug warfare campaign against the West, officially targeting "Japan, the United States military forces in the Far East, neighboring countries throughout the Far East, and the United States mainland."29 Currently, the Drug Enforcement Administration assesses that the vast majority of the most dangerous illicit drugs (for example, fentanyl and other synthetic opioids) are imported from China through direct mail or smuggled through Canada and Mexico.³⁰ Long-time analysts Ralph Little and Paul Pilliod describe how Islamic extremists and China are deliberately using drug warfare to weaken Western target populations. They state,

"There is a remarkable correlation to [China's] historical experience of the opium wars in the mid-1800s, in which foreign nations fostered Chinese addiction, leading to the takeover of their assets. This episode was led by the British, with German, French, Dutch, American, Russian and Japanese support—just the nations where the new wave of synthetics has struck." U.S. adversaries understand that drug addicts cannot serve in the military. They also pay fewer taxes and eventually become an economic drain on society.

China is not alone in using drugs as a weapon. Joseph Douglass stated, "While the dubious distinction of initiating largescale political war with drugs goes to the Chinese, it is the Soviets who have made trafficking the effective political warfare and intelligence weapon it has become."32 Douglass further outlined how both the Chinese and Russians effectively utilized the drug trade throughout the Cold War to undermine the United States economically, socially, and militarily to great effect. Qiao and Wang define drug warfare as "obtaining sudden and huge profits by spreading disaster in other countries."33 This distinction highlights that the illicit drug trade is more than just a profit-making business but also a form of warfare used to threaten the security of other nations. The USASOC white paper asserts that drug warfare is one piece of a wide spectrum of warfare tied to a broader Chinese military strategy meant to destabilize an adversary.34

Jihadists have also adopted the tactic to target American and Western youth and use the immense profits to finance terrorist activities.35 Both Hizballah and al Qaeda have issued fatwas encouraging the use of drug warfare as part of their overall strategies against the West.³⁶ This tactic is literally a "two for one" for VEOs as they use drugs to undermine target populations while simultaneously reaping enormous illicit profits to fund other nefarious activities. In 2016 alone, over 63,000 Americans were killed by drug overdose³⁷ at a cost of over \$500 billion to the U.S. economy.³⁸ The numbers are staggering, and when viewed through an irregular strategic lens, a

JFQ 93, 2nd Quarter 2019 Pelleriti et al. 107

brilliant strategy—intended to poison a target population while degrading military capabilities and bankrupting the economy—comes into focus.

Economic Warfare

The economy is arguably the most important of the four instruments of national power and a key target of near-peer adversaries' indirect attacks. As mentioned, both China and Russia include the concept of economic warfare as part of their unconstrained warfare doctrines. Historically, economic warfare encompassed sanctions, trade embargoes, blockades, and quarantines, as well as competition for markets and raw materials.39 The possession or denial of natural resources, sources of production, and wealth have served as root causes of warfare throughout history. A prime example is Japan's reaction to U.S. trade and oil embargoes in the late 1930s, which Japan perceived as an act of war and precipitated the attack on Pearl Harbor.

Modern economic warfare, however, is not merely about trade embargoes, sanctions, and commerce. The modern economic warfare environment includes cyber theft of trade secrets, currency and market manipulation, globalization, and interconnectivity on a scale not seen to date. Economic warfare is merging with cyber war to make the notion of embargoes enforced by ships of the line seem quaint. Regarding China, Harold Furchtgott-Roth stated, "competition and property rights are blurred and diminished."40 He also references the coming fight over 5G cellular technology and the U.S. response to Chinese attempts at dominance in 5G highlighting property rights and intellectual property theft as key components of economic warfare.41 New economic flashpoints are also emerging in Africa, as China seeks control over raw materials and rare earth elements (REEs). In 2010, China controlled over 90 percent of African REE mining, forming, manufacturing, and refining, essentially creating a monopoly on these key resources. China is also expanding its influence in developing regions through economic investment with

no strings attached. Unlike the United States, China does not demand free and fair elections, human rights vetting, or anti-corruption measures in return for economic aid. Lack of quid pro quo is enticing for developing nations that merely wish to gain new infrastructure or aid with no expectation of repayment. China's Belt and Road Initiative—a massive infrastructure effort to develop a Eurasian land bridge from China to Russia, Central Asia, Indochina, and India, coupled with a maritime Silk Road from China through Singapore to the Mediterranean—is a prime example. The United States has little influence and less control over these geographic areas that have significant economic impact in the United States and globally. The competition for raw materials and markets will provide enormous potential for conflict in the years to come.42

Cyber Warfare

Information and cyber also represent significant irregular challenges, as the world has grown increasingly dependent on information and communication technology. Regimes have adapted their information and cyber doctrine to overcome historical U.S. technological advantages. The Russian cyber attack on Estonia in 2007, for instance, served as a significant warning regarding adversary intent and capabilities. It was the "first cyber-attack in history that affected a country nation-wide," according to Helen Popp, counselor for cyber issues at the Estonian embassy in Washington, DC.43 During what came to be known as a distributed denial-of-service attack. Estonians could not access online media, government Web sites, or bank accounts.44 The coordinated hybrid attack on Georgia just a year after the Estonia attack was another example of Russia's threat to U.S. allies.45 Even more concerning, the jury is literally still out on claims that Russian state-backed hackers leveraged information and cyber warfare to influence the U.S. Presidential election in 2016. If true, a state's ability to directly influence the outcome of a U.S. election could represent one of the most effective irregular warfare campaigns in history and serve as a prelude of future battles.

Open source media reports are replete with examples of the nefarious use of the cyber domain by adversaries other than Russia. These include China's theft of F-35 Joint Strike Fighter plans to create its J-31 aircraft, Iranian hackers charged with attacks on U.S. banks and infrastructure, and a North Korean release of damaging emails from the Sony entertainment company.46 As acknowledged by then Chairman of the Joint Chiefs of Staff General Martin Dempsey in 2015, cyber is "the only major field of warfare in which the United States doesn't have an advantage over its foes."47 Commanders of every U.S. combatant command have echoed this sentiment. Information and cyber are not only key enablers for conventional forces and operations but also important weapons in the unconstrained warfare arsenal.

Reassessing Doctrine

The United States is clearly engaged in a nontraditional conflict but possesses limited irregular doctrine and strategies to compete and win. Reassessing current doctrine presents several options. First, we must expand the current definition of IW to include all nontraditional forms of warfare. While the current definition focuses narrowly on influencing a relevant population in a COIN environment, an expanded IW definition should include identifying and countering nearpeer competitors' irregular tactics, which are characterized by a conventionally weaker opponent using irregular means to degrade, disrupt, and eventually defeat a conventionally stronger foe—a fundamental premise of irregular warfare going back to the beginning of warfare itself.48 U.S. IW doctrine must evolve from its current post-9/11, COIN focus to one that encompasses a broader spectrum of irregular threats.

A second option is to broaden the definition of UW with an expanded emphasis on near-peer competition. As mentioned, the current definition requires working with or through an insurgency, resistance movement, underground, auxiliary, and guerrilla force, all



SEALs conduct military field operations during exercise Trident 18-4 at Hurlburt Field, Florida, July 11, 2018 (U.S. Air Force/Corban Lundborg)

of which do not always apply to near-peer irregular conflict. UW has not always been as narrowly focused as it is today. UW definitions from the Cold War era emphasized guerrilla warfare and resistance movements, but also included the concepts of political, psychological, and economic warfare, as well as sabotage and subversion supported and directed by an external force.49 The Army UW definition from 1969 states, "UW consists of military, political, psychological, or economic actions of covert, clandestine, or overt nature within areas under the actual or potential control or influence of a force or state whose interests and objectives are inimical to those of the United States."50 UW doctrine continued to include the concepts of sabotage and subversion into the 1990s, and did not lose doctrinal ties to political, psychological, and economic warfare until well into the COIN era in Iraq and Afghanistan.⁵¹ Expanded UW doctrine should be less tied to working with and through insurgencies and resistance movements and more focused on the broader aspects of state-versus-state irregular conflict.

A third option is to leave the current definitions of IW and UW intact and develop an entirely new doctrinal concept to cover near-peer sponsored irregular threats (for example, hybrid, asymmetric, unconstrained, or nontraditional warfare). The new concept should be inclusive of all irregular methods, as well as conventional force and interagency capabilities to be fully effective. Counter-Unconventional Warfare states, "To prove successful, counter-UW must be strategic in conception and scope. It therefore must encompass the whole-of-government while employing the full range of synchronized IW functions in order to defeat an adversary's unconventional warfare activities."52 None of the current doctrinal options, traditional warfare, IW, or UW fully addresses state-sponsored irregular threats and strategies. Whichever doctrinal route is chosen, the key is to understand that the United States is engaged in a different type of war, probably not the one the Department of Defense (DOD) is best prepared to fight. Updated doctrine and authorities are required to compete and win.

In addition to doctrine, the authorities required to operationalize doctrine are a critical component in developing an operational approach. Homeland defense and homeland security authorities are especially relevant to the discussion of irregular attacks employed against the homeland. Homeland defense is focused on defending against state-sponsored attacks, while homeland security is focused on preventing criminal and terrorist acts.53 Without question, interagency cooperation is important for both; DOD is the lead for homeland defense, while the Department of Homeland Security is the lead for homeland security. Historically, homeland defense has focused on defending the air and maritime approaches from air and missile attack, as these were the primary military threats to the homeland.

Under the new paradigm, however, enemies use indirect tactics to easily bypass conventional air and maritime defenses. Policymakers have a difficult time discerning what constitutes a statesponsored irregular attack, possibly using transnational criminal organizations, cyber hackers, or other third parties as

JFQ 93, 2nd Quarter 2019 Pelleriti et al. 109

surrogates versus a criminal or terrorist act. The distinction is extremely significant, however, when discussing homeland defense versus homeland security authorities. Under a new homeland defense framework, DOD could become the supported instead of supporting agency to counter state- or VEO-sponsored irregular attacks. Almost without saying, interagency cooperation and coordination would be critical for a national-level IW strategy, but DOD roles and authorities could and should be significantly expanded to counter indirect attacks.

These may seem like extreme, even radical, ideas to some, but history has proved that to survive and thrive, nations must understand and fight the wars they are in, not the wars they prepare for or hope to fight. The enemy always gets a vote, and it is not currently in 2+2+1's best interest to challenge the United States in traditional combat. A much more pragmatic approach is to disrupt, degrade, sabotage, and subvert the Nation over time using irregular strategies. The evidence outlined herein indicates that this is exactly what is occurring. To counter these efforts, the United States must understand the irregular fight it is in and develop the doctrine and authorities required to compete and win. America's future as a free and prosperous nation may very well depend on it. JFQ

Notes

- ¹ Joint Publication (JP) 1, Doctrine for the Armed Forces of the United States (Washington, DC: The Joint Staff, March 25, 2013, Incorporating Change 1, July 12, 2017), I-6.
 - ² Ibid., X.
- ³ National Security Strategy of the United States of America (Washington, DC: The White House, December 2017), 3.
- ⁴ JP 3-05.1, *Unconventional Warfare* (Washington, DC: The Joint Staff, September 15, 2015), vii.
- ⁵ JP 3-05, *Special Operations* (Washington, DC: The Joint Staff, July 16, 2014), X.
- ⁶ National Security Strategy of the United States of America, 25.
 - ⁷ Ibid., 3.
 - 8 Ibid., 12.
- ⁹ Summary of the National Defense Strategy of the United States of America: Sharpening the

- American Military's Competitive Edge (Washington, DC: Department of Defense, January 2018), 2.
 - 10 Ibid., 3.
- ¹¹ Dean Cheng, "Chinese Lessons from the Gulf Wars" in *Chinese Lessons from Other Peoples' Wars*, ed. Andrew Scobell, David Lai, and Roy Kamphausen (Carlisle Barracks, PA: Strategic Studies Institute, 2011), 159.
- ¹² Qiao Liang and Wang Xiangsui, Unrestricted Warfare: China's Master Plan to Destroy America (Venice, CA: Shadow Lawn Press, 2017).
- ¹³ Carl von Clausewitz, *On War*, trans. and ed. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1984), 75.
 - ¹⁴ Qiao and Wang, *Unrestricted Warfare*, ix.
- ¹⁵ Tony Balasevicius, "Looking for Little Green Men: Understanding Russia's Employment of Hybrid Warfare," *Canadian Military Journal* 17, no. 3 (Summer 2017), 20–22.
- ¹⁶ Qiao and Wang, Unrestricted Warfare, 31.
 - 17 Ibid., 32-34.
- ¹⁸ M.R. Perreault, "Unrestricted Warfare in Chinese and Iranian Foreign Policies: Is the Phoenix Walking into the Red Dragon's Footsteps?" Canadian Forces College, 2015, 8–18.
- ¹⁹ "Islamic Revolutionary Guard Corps (IRGC)," Counter Extremism Project, available at <www.counterextremism.com/threat/islamic-revolutionary-guard-corps-irgc>.
- ²⁰ Mark Galeotti, "The 'Gerasimov Doctrine' and Russian Non-Linear War," *In Moscow's Shadows*, July 6, 2014, available at https://inmoscowsshadows.wordpress.com/2014/07/06.
 - ²¹ Ibid.
 - ²² Ibid.
- ²³ Balasevicius, "Looking for Little Green Men," 23.
- ²⁴ Sergey G. Chekinov and Sergey A. Bogdanov, "The Nature and Content of a New Generation War," *Military Thought*, no. 4 (2013), 12–23.
- ²⁵ Teodor Frunzeti, "Conventional and Unconventional in Military Actions," *Strategic Impact*, no. 4 (2012), 6–13.
- ²⁶ U.S. Army Special Operations Command (USASOC), Counter-Unconventional Warfare White Paper (Fort Bragg, NC: USASOC, September 26, 2014), 4.
 - ²⁷ Ibid.
- ²⁸ Ralph Little and Paul Pilliod, *Drug Warfare: The Confluence of Jihadist and China* (Jacksonville: North Florida High Intensity Drug Trafficking Areas Assessment 2017-1, August 2017), 9.
- ²⁹ Joseph D. Douglass, Jr., Red Cocaine: The Drugging of America and the West (London: Edward Harle, Ltd., 1999), 11.
- ³⁰ National Drug Threat Assessment 2017 (Washington, DC: U.S. Drug Enforcement Administration, October 2017), 65.
 - ³¹ Little and Pilliod, *Drug Warfare*, 9.
 - 32 Douglass, Red Cocaine, 15.

- ³³ Qiao and Wang, *Unrestricted Warfare*,
- ³⁴ USASOC, Counter-Unconventional Warfare White Paper, 3.
 - 35 Little and Pilliod, Drug Warfare, 2.
 - ³⁶ Ibid., 5.
- ³⁷ Holly Hedegaard, Margaret Warner, and Arialdi M. Miniño, *Drug Overdose Deaths in the United States, 1999–2016*, NCHS Data Brief No. 294 (Washington, DC: Department of Health and Human Services, December 2017), available at <www.cdc.gov/nchs/products/databriefs/db294.htm>.
- ³⁸ President's Council of Economic Advisors, *The Underestimated Cost of the Opioid Crisis* (Washington, DC: The Executive Office of the President, November 2017), 1.
- ³⁹ James P. O'Leary, "Economic Warfare and Strategic Economics," *Comparative Strategy* 5, no. 2 (1985), 179–206.
- ⁴⁰ Harold Furchtgott-Roth, "5G, Economic Warfare and How to Win," *Forbes*, February 5, 2018, available at <www.forbes.com/sites/haroldfurchtgottroth/2018/02/05/5g-economic-warfare-and-how-to-win/#33d713b03c4d>.
 - 41 Ibid.
- ⁴² Government Accountability Office (GAO), *Rare Earth Metals in the Defense Supply Chain*, GAO-10-617 (Washington, DC: GAO, April 1, 2010), 18–29.
- ⁴³ Emily Tamkin, "10 Years after the Landmark Attack on Estonia, Is the World Better Prepared for Cyber Threats?" *Foreign Policy*, April 27, 2017, available at https://foreign-policy.com/2017/04/27/10-years-after-the-landmark-attack-on-estonia-is-the-world-better-prepared-for-cyber-threats/.
 - 44 Ibid.
 - ⁴⁵ Ibid.
- ⁴⁶ Paul D. Shinkman, "America Is Losing the Cyber War," *U.S. News and World Report*, September 29, 2016, available at <www.usnews.com/news/articles/2016-09-29/cyber-warshow-the-us-stacks-up-against-its-digital-adversaries>.
 - ⁴⁷ Ibid.
- ⁴⁸ Field Manual 3-05.130, *Army Special Operations Forces Unconventional Warfare* (Washington, DC: Headquarters Department of the Army, September 2008), 1-1.
 - 49 Ibid., J-2.
 - 50 Ibid.
 - 51 Ibid.
- ⁵² USASOC, Counter-Unconventional Warfare White Paper, 9.
- ⁵³ JP 3-27, *Homeland Defense* (Washington, DC: The Joint Staff, July 29, 2013), I-2.



Fire for Effect

The Evolution of Joint Fires

By J. Mark Berwanger

n September 28, 2018, Joint Publication (JP) 3-60, Joint Targeting, was revised and signed by the Director of Joint Force Development, and JP 3-09, Joint Fire Support, is in the final stages of its revision, tentatively scheduled to be signed in the fall of 2019. While the level of effort put into the revision of both of these

be many who will claim joint doctrine falls short in providing the joint force with the necessary fires- and targeting-related doctrine to properly integrate and synchronize all capabilities needed to accomplish the commander's intent.

The next step in the evolution of firest commander.

documents is commendable, there will

The next step in the evolution of fires should involve a cultural change and expanded understanding of the concept, including all offensive capabilities used to influence an adversary, regardless of the originating weapon system, thereby allowing the targeting process to be

have been honing their ability to influence the United States, using their full range of traditional and nontraditional military capabilities. The United States, however, continues to struggle with how to properly incorporate the totality of its own offensive capabilities. The daily news cycle is driven by the desired effects of U.S. adversaries operating below the level of armed conflict, but until change in U.S. military culture and perception takes place, the joint force's complications associated with integrating and synchronizing

fully realized. For some time, adversaries

Commander J. Mark Berwanger, USN, is a Joint Doctrine Analyst in the Joint Doctrine Analysis Division, Joint Force Development, Joint Staff J7.

JFQ 93, 2nd Quarter 2019 Berwanger 111



Scout snipers with 3rd Battalion, 3rd Marine Regiment, Marine Air-Ground Task Force-6, provide long-distance fire support while conducting the Air Assault Course during Integrated Training Exercise 2-19 aboard Marine Corps Air-Ground Combat Center Twentynine Palms, California, February 9, 2019 (U.S. Marine Corps/Victor A. Mancilla)

the full complement of capabilities will remain. Currently, there is no consensus on how to fully describe and fully encompass the magnitude of military capabilities that can be brought to bear in a coordinated effort to accomplish a mission.

Joint doctrine is considered the standardized foundation for military leaders and planners to use when employing the joint force. It is the "fundamental principles and overarching guidance for the employment of the Armed Forces of the United States. This represents the evolution in our warfighting guidance and military theory that forms the core of joint warfighting doctrine and establishes the framework for our forces' ability to fight as a joint team."1 Throughout the operating joint force, terms like kinetic and nonkinetic or lethal and nonlethal are used. Some of these terms (lethal and nonlethal) are found in doctrine and

some of them (kinetic and nonkinetic) are not. Some of these terms are used correctly (in accordance with doctrine), and some of them are not. For example, the phrase *nonlethal weapon* is often used to describe any weapon that creates a nonlethal effect. However, nonlethal weapon is defined in joint doctrine as a "weapon, device, or munition that is explicitly designed and primarily employed to incapacitate personnel or materiel immediately, while minimizing fatalities, permanent injury to personnel, and undesired damage to property in the target area or environment" (that is, beanbag guns or tear gas).2

Many terms are not defined in doctrine purposely because the dictionary definition is sufficient. The reason behind the appearance or absence of certain "contentious" terms in joint doctrine is that doctrine development is a deliberate,

detail-based process. In order for information to be updated/added to joint doctrine, it must be shown to be extant in the joint force. The opposite of extant practice would be a concept, until it is proved and accepted (see Joint Concept Integration and Development System). Also, there must be consensus among the key voting members of the joint doctrine development community before information can be added or changed. Examples of voting members include combatant commands and the individual Services. This is the simple answer to why kinetic is not found anywhere in joint doctrine; currently, there is no consensus among the community regarding the definition of kinetic and how it should be used in joint doctrine, even though the term is widely used across the joint force. Ultimately, this does not prevent the joint force from using the term anyway.

It is noteworthy to mention that in the preface of any joint publication there is a statement under "Application" that states, "The guidance in this publication is authoritative; as such, this doctrine will be followed except when, in the judgment of the commander, exceptional circumstances dictate otherwise." While the term kinetic is commonly used across most combatant commands, the use of such a term does come with associated risk. When there is a lack of joint force consensus concerning a term, and therefore not resident within joint doctrine, there is the potential the term could be used dissimilarly, which could potentially carry serious implications.

During the revision process, a common response within the joint fires community was that clear doctrine is needed regarding how to integrate nontraditional capabilities with other more traditional ones. Theoretically, this is already answered in JP 3-60, which states that targeting is "the process of selecting and prioritizing targets and matching the appropriate response to them, considering operational requirements and capabilities."3 The targeting process requires a continuous analytic process to identify, develop, and affect targets to meet the commander's objectives and provides planners with access to detailed information on the targets, supported by the nominating component's analytical reasoning that links the targets with the desired effects. Targeting helps integrate and synchronize fires among the other joint functions (command and control, intelligence, movement and maneuver, protection, sustainment, and information).4 Additionally, JP 3-60 states:

The employment of capabilities and other activities that create nonlethal effects such as key leader engagement, civil-military operations, and military information support operations can help address these concerns. Nonlethal effects, including use of information-related capabilities (IRCs), can also influence adversary decisionmakers' choice of actions, local public opinion, and indirectly affect domestic and international support of the adversary. Nonlethal effects provide the joint force

commander a range of flexible options. The selection, availability, scalability, and effectiveness of capabilities and activities provide the joint force commander the means to engage targets throughout the operational environment.⁵

These passages from joint doctrine have not changed appreciably over past revisions, and the joint force continues to identify the need for doctrinal clarity with issues of integration and synchronization of capabilities.

Despite the limitations discussed, there have been many improvements to targeting doctrine. The recent changes to IP 3-60:

- clarify roles and responsibilities of components and joint force commander staffs during the joint targeting cycle (JTC)
- update and clarify the joint targeting coordination board's roles and responsibilities
- update and clarify the joint fires element's targeting roles and responsibilities
- update and clarify the joint fires targeting working group's roles and responsibilities.
- add discussion on coordination between components when one component, supported or supporting, engages time-sensitive targets within another component's area of operations
- update the target development discussion consistent with changes to Chairman of the Joint Chiefs of Staff Instruction 3370.01B, Target Development Standards
- consolidate and clarify the discussion of cognitive, control, and information characteristics
- add discussion clarifying the relationship between target lists and the no-strike list
- add new discussion on nonlethal effects estimates
- add new discussion for joint force maritime component targeting in appendix C, "Component Targeting Processes"

- add discussion on the integration of space operations in joint targeting in appendix C
- modify the name of Phase 6 of the JTC from "Assessment" to "Combat Assessment" and replace the phrase *targeting assessment* with *combat assessment* throughout the publication.

JP 3-60 does a reasonable job of being agnostic when it comes to determining which specific fires capability or solution should be used to achieve the desired effect on the target. This is a vitally important part of the JTC. The process begins with Phase 1, "Commander's Objectives, Targeting Guidance, and Intent" and it is only in Phase 4, "Commander's Decision and Force Assignment," just prior to employment, that a decision is made as to which specific capability will be used to achieve the desired effects on the target. Ideally, this is only done after every available capability has been considered for the intended target. This process is similar to the way that defense acquisition programs are run.

To get the best possible solution, in any advance problem-solving method, the process should not begin with a preconceived notion of what the answer will be. Instead, regarding an acquisition program, a capability gap is identified first, and a deep understanding of the requirements is established. Then the process looks to develop a product that will satisfy that gap, instead of designing a new piece of gear and then looking for a military problem to apply it toward.⁶ The JTC was designed to work much the same way.

The commander's objectives are understood first. A target is identified that if manipulated or influenced could create the effects that will achieve the commander's intent. Then the targeting process attempts to match the best capabilities with that specific target. Yet it is still currently difficult (nearly impossible) for joint force planners to integrate their IRC capabilities with other, more traditional capabilities earlier in the targeting process. All too

JFQ 93, 2nd Quarter 2019 Berwanger 113



Using Dazzler nonlethal weapon and blank rounds, Embarked Security Team on board USNS *Rainier*, along with Sailors on board Coastal Riverine Squadron Three's Riverine Command Boats, defend from simulated attack as *Rainer* departs to support ships for RIMPAC 2016, Joint Base Pearl Harbor-Hickam, Hawaii, July 24, 2016 (U.S. Navy/Martin Wright)

often, the IRC and traditional targeting working groups are held separately and only joined or integrated at the decision board level. Examples of these separate working groups include the information operations working group, which is often separate from the joint targeting working group. In many instances, planners come to these working groups having already identified the capability to use against a proposed target and the desired effect. The remaining tasks are to receive commander approval and synchronize the effort. While this process works, it is inherently flawed and contrary to the genesis behind the targeting cycle. Since warfighters are creatures of habit, they inherently fall back on what comes naturally. Cyber warriors will naturally look for cyber targets having already decided that a cyber weapon should be used—similar to the way bomber pilots will look for targets that they believe would best be serviced by a bomber. Instead, all warriors should integrate

earlier in the targeting cycle and consider all capabilities as possible "fires" providers. Only after all capabilities have been considered should a force allocation recommendation be made to the joint force commander.

Arguably, the issue resides in the fires culture and what has traditionally been considered fires. Furthermore, according to JP 3-09, "Joint targeting is a fundamental task of the fires function that encompasses many disciplines and requires participation from all joint force staff elements and components. The purpose of joint targeting is to integrate and synchronize joint fires into joint operations by utilizing available capabilities to create a specific lethal or nonlethal effect on a target." Other key definitions are provided to fully understand the background of the issue:

 Fires: The use of weapon systems or other actions to create specific lethal or nonlethal effects on a target.⁸

- Joint fires: Fires delivered during the employment of forces from two or more components in coordinated action to produce desired effects in support of a common objective. See also fires.⁹
- Scheme of fires: The detailed, logical sequence of targets and fire support events to find and engage targets to support the commander's objectives.¹⁰
- Joint fires observer: A trained Servicemember who can request, adjust, and control surface-to-surface fires, provide targeting information in support of Type 2 and 3 close air support terminal attack control, and perform autonomous terminal guidance operations.¹¹
- Munitions: Munitions are used to create desired effects on targets. The joint force commander may issue guidance on the use or restricted use of unique weapons or certain munitions types (for example, cluster

munitions or mines) and may prioritize the allocation or use of joint operations area-wide systems like the Tomahawk missile or the Army Tactical Missile System for specific purposes.¹²

 Munition: A complete device charged with explosives; propellants; pyrotechnics; initiating composition; or chemical, biological, radiological, or nuclear material for use in operations including demolitions.¹³

Culturally, the joint force understands what has traditionally been considered fires and how to apply the JTC to traditional fires. At first glance it appears that the definition of fires supports the solution-neutral approach to targeting as discussed. Nevertheless, once the first layer of fires is peeled back, the current understanding of the joint function is rooted in what is traditionally considered a weapon and weapon system. As described in doctrine, the joint force "engages" targets by "employing" weapon systems, which "deliver" munitions. Munitions are traditionally described by their type (for example, cluster munitions or mines)14 and defined in doctrine as "a complete device charged with explosives; propellants; pyrotechnics; etc."15 This definition resonates through the traditional thought process on how conflicts are fought, and why many planner-level working groups are separated and stovepiped. Traditional weapons systems (a rifle) employ munitions (bullets) to create an effect (deceased enemy combatants).

With this in mind, it should come as no surprise that traditional capabilities work through traditional working groups and boards, while nontraditional IRCs work through their own working groups and boards, and the two try to deconflict from each other after most of the force allocation decisions have been made, instead of synchronizing and integrating early—the way the targeting cycle is designed to function. Admittedly, there are other barriers to bringing all the capabilities together in one room, namely classification issues. But this issue is easily overcome; in order to conduct the targeting process, only the knowledge



Barbados servicemember shoots nonlethal rounds with M32 grenade launcher during exercise Tradewinds 2016, at Twickenham Park Gallery Range, Jamaica, June 24, 2016 (U.S. Marine Corps/Justin T. Updegraff)

that an effect could be achieved, and to what extent, is necessary. The specifics on how the effect is achieved may remain protected while still allowing the process to run its course.

In previous conflicts, it may have been possible to focus mainly on traditional capabilities and targeting while sprinkling on IRCs as an afterthought. However, this is not the world of warfare anymore, and arguably never was. Adversaries have been using information as a weapon for quite some time and their prowess is only increasing. The increased focus placed on information-related capabilities is evident from the creation of the newest joint function, information; U.S. Cyber Command's activation as a combatant command; the creation of a separate Space Force; as well as the focus of "competition short of armed conflict" found in the Joint Concept for Integrated Campaigning (and the subject of the forthcoming Joint Doctrine Note, "Competition Continuum"). Among many national defense documents, the amount of attention and focus all the other nontraditional capabilities are currently receiving is paramount. The speed of information is only increasing, and the effects of nontraditional capabilities are felt globally. It is difficult for a traditional military planner to consider something like a social media post (for instance, a

tweet) as munition and something like a blog as a weapon system, but this is the needed change in military thinking and doctrine that is required to bring the joint force in line with the Chairman's focus and strategy.

The Joint Concept for Integrated Campaigning, which is gaining so much attention and popularity, agrees that the Department of Defense is already being outpaced by adversaries who are currently capable of integrating all of their offensive capabilities. According to the concept, "adversaries will continue to creatively combine conventional and nonconventional methods to achieve objectives by operating below a threshold that would invoke a direct military response from the United States while retaining the capability to engage in more conventional armed conflict."16 The concept also places a large emphasis on integrating and synchronizing joint force capabilities and activities. One of the "interrelated elements" comprising the central idea behind integrated campaigning is "Employ the Integrated Force and Secure Gains." Under this element is the required capability to "synchronize joint force and foreign partner activities in an integrated campaign construct."17 The concept goes on to state, "The factors of integrated campaign design allow for an informed

JFQ 93, 2nd Quarter 2019 Joint Doctrine 115

application of joint force capabilities and strengthen the alignment of the instruments of national power. The factors work in conjunction with existing methodologies to assist the joint force in achieving U.S. policy aims." Throughout all the strategic-level documents, the same conclusion can be found—all capabilities need to be integrated in order to achieve the optimal desired effects.

Until the definition, utilization, and cultural understanding of "fires" is updated to include all offensive capabilities, regardless of the weapon system they originate from, the integration and synchronization problem will remain. The JTC is designed to provide the optimal solutions, but stovepiping capabilities prevents the process from being fully realized. Instead of trying to achieve consensus on a specific term like kinetic, the joint doctrine development community and the joint force should focus on the primary warfighting function that is responsible for delivering the effects necessary to achieve the commander's objectives. Without doing so, the same complications of synchronization and integrations will be manifested repeatedly and will continue to be brought up during joint exercise after action reports as well as feedback received during joint fires-related publications revisions. The capabilities are extant and efforts are ongoing to use the JTC the way it was designed. The missing piece now is the formalization of the idea that all capabilities need to be considered. To do this, all offensive capabilities should be considered under the fires function and thereby equally considered during the targeting process. Similar to a concept developing into the next major military acquisition program, the solution cannot already be assumed. Incorporating the integration and synchronization of all offensive capabilities allows joint planners, through the JTC, the ability to recommend an optimal solution to achieve the desired effects, enhancing how fires are understood at the fundamental level. It will refocus the joint warfighting community and open the eyes of those who have been constrained

Joint Publications (JPs) Under Revision (to be signed within 6 months)

JP 1-0, Joint Personnel

JP 2-0, Joint Intelligence

JP 3-(number not yet assigned), Information

JP 3-05, Special Operations

JP 3-09, Joint Fire Support

JP 3-10, Joint Security Operations

JP 3-31, Command and Control for Joint Land Operations

JP 4-09, Distribution Operations

JP 4-10, Operational Contract Support

JP 6-0, Joint Communications System

JPs Revised (signed within last 6 months)

JP 1, Doctrine for the Armed Forces of the United States

JP 3-02, Amphibious Operations

JP 3-11, Operations in Chemical, Biological, Radiological, and Nuclear Environments

JP 3-28, Defense Support to Civil Authorities

JP 3-29, Foreign Humanitarian Assistance

JP 3-72, Nuclear Operations

JP 4-0, Joint Logistics

JP 4-04, Contingency Basing

JP 4-05, Joint Mobilization Planning

by compartmented ideologies. Then joint force commanders will truly know what it means to "fire for effect." JFQ

Notes

¹ Joint Publication (JP) 1, Doctrine for the Armed Forces of the United States (Washington, DC: The Joint Staff, March 25, 2013, Incorporating Change 1, July 12, 2017).

² JP 3-28, *Defense Support of Civil Authorities* (Washington, DC: The Joint Staff, October 29, 2018).

³ JP 3-60, *Joint Targeting* (Washington, DC: The Joint Staff, January 31, 2013).

⁴ Ibid.

⁵ Ibid., II-17.

⁶ Defense Acquisition Guidebook (Fort Belvoir, VA: Defense Acquisition University, 2017), available at <www.dau.mil/tools/ dag/>.

- ⁷ JP 3-09, *Joint Fire Support* (Washington, DC: The Joint Staff, December 12, 2014).
 - ⁸ Ibid.
 - 9 Ibid.
 - 10 Ibid.
- ¹¹ JP 3-09.3, *Close Air Support* (Washington, DC: The Joint Staff, November 25, 2014).
 - ¹² As described in JP 3-09.
- ¹³ JP 3-42, *Joint Explosive Ordnance Disposal* (Washington, DC: The Joint Staff, September 9, 2016).
 - ¹⁴ JP 3-09.
 - ¹⁵ JP 3-42.
- ¹⁶ Joint Concept for Integrated Campaigning (Washington, DC: The Joint Staff, March 16, 2018), available at <www.jcs.mil/Portals/36/Documents/Doctrine/concepts/joint_concept_integrated_campaign.pdf?ver=2018-03-28-102833-257>.
 - 17 Ibid.
 - 18 Ibid.

116 Joint Doctrine JFQ 93, 2nd Quarter 2019

CALL FOR ENTRIES

for the

2019 Secretary of Defense and 2019 Chairman of the Joint Chiefs of Staff

Essay Competitions

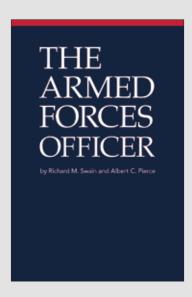
Are you a professional military education (PME) student? Imagine your winning essay published in a future issue of *Joint Force Quarterly*, catching the eye of the Secretary and Chairman as well as contributing to the debate on an important national security issue. These rewards, along with a monetary 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 2018–2019 academic year. Students are encouraged to begin early and avoid the spring rush. Final judging and selection of winners take place May 2019, 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/



New from NDU Press The Armed Forces Officer

2017 • 212 pp.

From the Foreword by General Joseph F. Dunford, Jr., Chairman of the Joint Chiefs of Staff:

"In 1950, the great Soldier-Statesman George C. Marshall, then serving as the Secretary of Defense, signed a cover page for a new book titled *The Armed Forces Officer*. That original version of this book was written by none other than S.L.A. Marshall, who later explained that Secretary Marshall had 'inspired the undertaking due to his personal conviction that American military officers, of whatever service, should share common ground ethically and morally.' Written at the dawn of the nuclear age and the emergence of the Cold War, it addressed an officer corps tasked with developing a strategy of nuclear deterrence, facing unprecedented deployments, and adapting to the creation of the Department of Defense and other new organizations necessary to manage the threats of a new global order.

"This new edition of *The Armed Forces Officer* articulates the ethical and moral underpinnings at the core of our profession. The special trust and confidence placed in us by the Nation we protect is built upon this foundation. I commend members of our officer corps to embrace the principles of this important book and practice them daily in the performance of your duties. More importantly, I expect you to imbue these values in the next generation of leaders."

Available at ndupress.ndu.edu/Media/News/Article/1159223/the-armed-forces-officer/

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:





Visit us online at: https://ndupress.ndu.edu







Flickr