Issue 64, 1st Quarter 2012

NEW SECURITY CHALLENGES

SAUDI CYBER STRATEGY REMEMBERING GENERAL SHALI

JOINT FORCE QUARTERLY

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 2012		2. REPORT TYPE		3. DATES COVERED 00-00-2012 to 00-00-2012	
4. TITLE AND SUBTITLE				5a. CONTRACT NUMBER	
Joint Force Quarterly. Issue 64, 1st Quarter 2012				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) National Defense University,Joint Force Quarterly,260 Fifth Avenue, S.W. (Building 64, Room 2504) Fort Lesley J. McNair,Washington,DC,20319				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF: 17. LIMITATION O				18. NUMBER	19a. NAME OF
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	ABSTRACT Same as Report (SAR)	OF PAGES 156	RESPONSIBLE PERSON

Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std Z39-18

Issue 64, 1st Quarter 2012

Editor Col William T. Eliason, USAF (Ret.), Ph.D. Executive Editor Jeffrey D. Smotherman, Ph.D. Supervisory Editor George C. Maerz Production Supervisor Martin J. Peters, Jr. Senior Copy Editor Calvin B. Kelley Book Review Editor Lisa M. Yambrick Visual Design Editor Tara J. Parekh Copy Editor/Office Manager John J. Church, D.M.A Copy Editor/Office Manager John J. Church, D.M.A Copy Editor Sarah R. Frank Internet Publications Editor Joanna E. Seich Design Nick Crawford, Guy Tom, U.S. Government Printing Office Printed in St. Louis, Missouri by

NDU Press is the National Defense University's cross-component, professional military and academic publishing house. It publishes books, journals, policy briefs, occasional papers, monographs, and special reports on national security strategy, defense policy, interagency cooperation, national military strategy, regional security affairs, and global strategic problems.

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

COMMUNICATIONS

Please visit NDU Press and *Joint Force Quarterly* online at ndupress.ndu.edu for more on upcoming issues, an electronic archive of *JFQ* articles, and access to many other useful NDU Press publications. Constructive comments and contributions are important to us. Please direct editorial communications to the link on the NDU Press Web site or write to: Editor, *Joint Force Quarterly* National Defense University Press 260 Fifth Avenue, S.W. (Building 64, Room 2504) Fort Lesley J. McNair Washington, DC 20319

Telephone: (202) 685-4220/DSN 325 FAX: (202) 685-4219/DSN 325 Email: JFQ1@ndu.edu JFQ online: ndupress.ndu.edu

> 1st Quarter, January 2012 ISSN 1070-0692



JFQ Dialogue

- 2 Letter to the Editor
- **4** From the Chairman
- 8 Total Commitment to the Total Force By Bryan B. Battaglia

<u>Forum</u>

- **10** Executive Summary
- **12** An Interview with James F. Amos
- **18** The Joint Enabling Capabilities Command: A Rarity within the Conventional Force *By Walter E. Carter, Jr.*
- 24 Joint Task Force Odyssey Dawn: A Model for Joint Experience, Training, and Education By Gregory K. James, Larry Holcomb, and Chad T. Manske
- **30** SpaceCRAF: A Civil Reserve Air Fleet for Space-based Capabilities By David C. Arnold and Peter L. Hays

Special Feature

- 40 War Is a Moral Force: Designing a More Viable Strategy for the Information Age By Peter D. Fromm, Douglas A. Pryer, and Kevin R. Cutright
- 47 The Future of Influence in Warfare By Dennis M. Murphy
- 52 Security Cooperation: A New Functional Command By Randal M. Walsh

Commentary

- 60 The Civil-Military Gap Need Not Become a Chasm By Ike Skelton
- 67 Integrating Human Rights and Public Security: The Challenges Posed by the Militarization of Law Enforcement By Rebecca Bill Chavez
- 75 A Saudi Outlook for Cybersecurity Strategies Extrapolated from Western Experience By Naef Bin Ahmed Al-Saud



Features

- 82 Military Confrontation on the Korean Peninsula By Kongdan Oh and Ralph Hassig
- 91 Assessing Chinese Intentions for the Military Use of the Space Domain By Paul Oh
- 99 "Going Out": Is China's Skillful Use of Soft Power in Sub-Saharan Africa a Threat to U.S. Interests? By JoAnne Wagner
- **107** Slicing the Onion Differently: Seapower and the Levels of War *By Robert C. Rubel*
- **115** The High-energy Laser: Tomorrow's Weapon to Improve Force Protection By Aaron Angell
- **123** Targeted Killing, the Law, and Terrorists: Feeling Safe? By Mark David Maxwell

Interagency Dialogue

131 U.S. Strategy in Southeast Asia: Power Broker, Not Hegemon *By David J. Greene*

Recall

135 How Are Great Leaders Made? Lessons from the Career of General John Shalikashvili (1936–2011) By Andrew Marble

Book Reviews

- 143 In War's Wake Reviewed by David A. Anderson
- **144** The Diffusion of Military Power Reviewed by Clark Capshaw
- **145** A Transformation Gap? Reviewed by Alex Grynkewich
- **146** The Clausewitz Delusion Reviewed by John T. Kuehn
- **147** Red Star Over the Pacific Reviewed by Eric Setzekorn

Joint Doctrine

148 Joint Force Development Vision: Adapting to New and Future Realities *By George J. Flynn*



ABOUT THE COVERS

Front cover: Marine prepares to jump from rooftop after shots were fired during Operation *Eastern Storm*, a major offensive to root out the Taliban-led insurgency in the Upper Sangin Valley region of Kajaki Sofla District, Helmand Province, Afghanistan (Benjamin Crilly/U.S. Marine Corps). Table of contents shows (left to right) Marine M777 howitzer kicks rocks and dust during fire mission (Jeff Drew/U.S. Marine Corps); Navy shooter mirrors trainer to launch F/A–18F aboard USS *Enterprise* (Jared M. King/U.S. Navy); Airmen lock down AIM–120 missile on F–15 Eagle during load crew competition at Nellis Air Force Base, Nevada (Daniel Hughes/U.S. Air Force); and Soldier searches building under construction in Baghdad enabling withdrawal of U.S. forces from Iraq (John S. Laughter/U.S. Army).

JFQ

PUBLISHER

GEN Martin E. Dempsey, USA

PRESIDENT, NDU VADM Ann E. Rondeau, USN

ADVISORY COMMITTEE

Col Michael F. Belcher, USMC Marine Corps War College Maj Gen Joseph D. Brown IV, USAF Industrial College of the Armed Forces LTG Robert L. Caslen, Jr., USA U.S. Army Command and General Staff College RADM John N. Christenson, USN Naval War College Brig Gen Stephen T. Denker, USAF Air Command and Staff College LtGen George J. Flynn, USMC The Joint Staff VADM William E. Gortney, USN The Joint Staff Maj Gen (select) Scott M. Hanson, USAF Air War College RADM Douglas J. McAneny, USN National War College MG Gregg F. Martin, USA U.S. Army War College Col Royal P. Mortenson, USMC Marine Corps Command and Staff College John A. Nagl Center for a New American Security VADM Daniel T. Oliver, USN (Ret.) Naval Postgraduate School ADM James G. Stavridis, USN U.S. European Command Maj Gen (select) Joseph S. Ward, Jr., USAF Joint Forces Staff College

EDITORIAL BOARD

Richard K. Betts Columbia University Stephen D. Chiabotti School of Advanced Air and Space Studies Eliot A. Cohen The Johns Hopkins University COL Joseph J. Collins, USA (Ret.) National War College Mark J. Conversino Air War College Aaron L. Friedberg Princeton University Col Thomas C. Greenwood, USMC (Ret.) Office of the Secretary of Defense Douglas N. Hime Naval War College Mark H. Jacobsen Marine Corps Command and Staff College Daniel T. Kuehl Information Resources Management College Col David Lapan, USMC The Joint Staff Col Jerome M. Lynes, USMC (Ret.) The Joint Staff Thomas L. McNaugher Georgetown University Kathleen Mahoney-Norris Air Command and Staff College Col Mark Pizzo, USMC (Ret.) National War College James A. Schear Office of the Secretary of Defense LtGen Bernard E. Trainor, USMC (Ret.)

CONTRIBUTIONS

Joint Force Quarterly 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 the address on the opposite page or by email to JFQ1@ndu.edu "Attention A&R Editor" in the subject line. For further information, see the guidelines on the NDU Press Web site at ndupress.ndu.edu

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.

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.

ndupress.ndu.edu

LETTERS

To the Editor—The most recent issue of *Joint Force Quarterly* (Issue 63, 4th Quarter 2011) contained many well-written articles that provided recommendations for improving today's joint processes and stimulating thought throughout the joint force. However, it appears that many articles were written with a disregard for the current national fiscal situation. Inevitably, pressure to reduce spending in an effort to control the national deficit will force the Nation and Department of Defense (DOD) to make some tough decisions over the next decade.

Despite the turnover of several key leadership positions over the past year, including the Secretary of Defense and Chairman of the Joint Chiefs of Staff, the message on the fiscal issue has been both clear and consistent: the joint force needs to challenge status quo thinking and eliminate inefficient or outdated processes that are no longer necessary. The trade space is well defined: maintaining inefficiency will result in a loss of military capacity. Given the unequivocal guidance and gravity of the options, it was surprising that experts on and in the joint force and on Capitol Hill did not use the 25th anniversary of the passage of the Goldwater-Nichols Department of Defense Reorganization Act of 1986 as an opportunity to assess the successes and limitations of this watershed legislation.

Several of the articles in JFQ also demonstrate somewhat constrained thought. It appears that joint practitioners have accepted the fact that Goldwater-Nichols created a box within which we now must try our best to operate, occasionally making minor improvements wherever practical. The innovative thinkers behind Goldwater-Nichols, whether one agrees with the outcome or not, were not as constrained in thought or action; they demonstrated bold thinking by challenging the assumptions of the day, and they implemented true reform. Today, the joint force is faced with a different set of challenges that may be even more complex than those of the early 1980s.

Achieving significant reform, particularly when it involves downsizing an organization as large as DOD, is a monumental task. It is difficult to conduct the objective analysis even to begin the process. Program managers, with the full support of the defense industry, will claim that Soldiers and Marines will surely die if their programs are terminated. Legislators do not want to risk reelection by appearing soft on defense or advocating cutbacks in programs that will result in lost jobs in their respective districts. Process owners and organization staffs will not step forward to recommend their respective concerns be terminated, as it would surely have a personal financial impact. There is no incentive in place to stimulate cooperation to scale back or terminate processes that were spawned during the Cold War or global war on terror. Therefore, it is important to recognize that many obstacles will be emplaced to defend the status quo.

Perhaps one naturally occurring consequence of jointness among senior leaders and practitioners was to foster a sense of group-think that now inhibits critical analysis of the effects of Goldwater-Nichols. Additionally, a challenge for military officers desiring to speak or write critically of Goldwater-Nichols is that their arguments can be easily dismissed as mere Service parochialism. Being stigmatized as antijoint in today's military environment is the equivalent of being branded a communist in the McCarthy era. To overcome these factors, the contrarian analytical method of red-teaming must be continually applied to how we think, assess, and write about existing doctrine, processes, and organizations. Red-teaming is the ideal method for challenging an organization's plans, programs, and assumptions.

Despite the litany of statements from senior defense officials that all options are currently on the table, it is evident that many in the joint force are not seizing this opportunity to assess which joint processes are working efficiently and which need to be reduced or eliminated. Accomplishing this will again require innovative thinking on the level of Goldwater-Nichols-which begins with challenging both underlying assumptions and processes created during an era of practically unconstrained spending. Certain factors may serve as drivers of inefficiency; however, they will not be identified and corrected if they go unchallenged. Briefly, I will use several articles from JFQ 63 to apply this method.

In Linking Military Service Budgets to Commander Priorities, Mark A. Gallagher and M. Kent Taylor present a well-developed argument on a better approach to align combatant command (COCOM) requirements to Service budgets. However, two fundamental issues must be addressed before undertaking this analysis. First, does the Joint Capabilities Integration and Development System (JCIDS), a key component of the argument, provide an adequate return on investment? Before one can answer this question, one must fully identify and calculate the cost of all military, civilian, and contractor support used to manage the process, as well as the cost of overhead needed to navigate through the system. As a recent study from the Institute for Defense Analyses noted, over the past decade, JCIDS did not alter any solution originally proposed by a military Service, nor did it appear that the process has added value to the front end of the acquisition process for the programs examined. JCIDS also overlaps with the cumbersome Defense Acquisition Process and Planning, Programming, Budgeting, and Execution System. This inefficient triad drives decisionmaking that is measured in years and decades compared to similar processes in the private sector measured in weeks or months. Does JCIDS contribute to unnecessary inefficiency?

Second, is the COCOM model still valid to prepare and organize for the full range of military operations that the joint force undertakes today? An organization model with a pedigree dating to the Cold War may no longer be appropriate (or affordable) to counter today's global security challenges. Since 1986, the DOD mission has evolved from containment and preparing for fullscale war to a new approach that emphasizes outreach and partnership capacity development, yet the COCOM organizational model remains largely unchanged.

Some may argue that the COCOM model is the best organizational model, but no one can argue that it is not an expensive layer of the defense bureaucracy. As the Defense Business Board reported in 2010, the 10 COCOMs were staffed by 98,000 personnel, with a budget of \$16.5 billion—an amount slightly greater than the annual military expenditure of the state of Israel. Do these large, cumbersome organizations provide the joint force with the agility to prepare for and conduct military operations, or have they evolved into ineffective requirements-generating machines? Could much of the workload done at the COCOMs be accomplished more efficiently through a division of labor between the Joint Staff and Service headquarters rather than maintaining separate four-star commands? Perhaps the thought-provoking recommendations of *Harnessing America's Power* will provide the impetus for COCOM reform.

No serious discussion of joint processes and organizations is complete without mentioning the Joint Operational Planning and Execution System (JOPES). While having an established process for contingency and crisis action planning is essential for preparing military forces for and conducting operations, that process is complex and inefficient in its current form. Again, one must assess the end-to-end costs to conduct joint operational planning, which include personnel, training, and data support systems. Does the U.S. taxpayer get an adequate return on investment for this process?

Despite having a robust staff and mature plans in place at U.S. Central Command prior to Operation Iraqi Freedom, the staff still required additional Service augmentation to make final preparations and, in the end, Secretary of Defense Donald Rumsfeld chose not to use JOPES fully to deploy the joint force to Iraq. While personal decisionmaking contributed to the outcome, one has to question the overall effectiveness of this process. It would be interesting to compare the cost of planning for Iraqi Freedom with the cost of planning for much larger operations during World War II. How does JOPES compare? If the Services and Joint Staff worked collaboratively on developing and maintaining joint operational plans, could this process be simplified? Does JOPES remain unchanged because it provides the means to justify end strength?

In *The Joint Officer: A Professional Specialist*, Scott A. Carpenter provides a thorough review of the joint specialty officer system and raises several interesting questions. However, Commander Carpenter notes the growing need and high demand for joint officers that necessitate having a separate specialty without identifying the root cause. Since Goldwater-Nichols was passed 25 years ago, a significant amount of joint growth has occurred. I find it peculiar that while total force structure has shrunk significantly since 1986, the mechanism used to integrate Service capabilities has grown inversely proportionally.

When analyzing joint manning, what lessons can be drawn from the closure of U.S. Joint Forces Command? When the command was disestablished, several organizations were eliminated with no apparent effect on joint readiness or performance during two ongoing wars. Was there a validated requirement for creating these organizations, or were they created simply to facilitate joint officer development? How many similar offices and organizations still exist? As part of the ongoing efficiency efforts, DOD needs to conduct a cost-benefit analysis of all joint organizations to validate the need for so many joint officer billets; perhaps this will suppress the appetite for future growth. Finally, the practice of randomly creating joint qualified O-6s to develop the largest pool possible is no longer supportable and fiscally irresponsible when one considers the \$500,000 price tag to punch the purple ticket.

After 25 years, we should use this opportunity to evaluate our investment in becoming joint. Goldwater-Nichols was not written to reorganize DOD merely for the sake of change; it was an effort to reform the behavior, organization, and outcomes of military action by forcing leaders to think and operate jointly. Increased investments immediately after the passage of Goldwater-Nichols could be justified in order to properly resource the reformation of the processes and organizations of the day. One flaw with the efforts to implement joint reform was that the conditions of success were not clearly articulated. Reform is neither continuous nor enduring; the endstate must be clearly defined. That raises a question: how joint must we be for Goldwater-Nichols reform to be considered a success? If full jointness is the desired endstate, perhaps we should be so bold as to consider eliminating the current military departments and creating a single military department with five

Service branches for land, naval, air, special operations, and cyber/space. While I am not a proponent of this extreme option, we must recognize that trying to balance the Services' independence with integrated joint requirements is inefficient by its very nature. DOD will be forced to make some tough decisions over the next decade. Two extreme outcomes may be either to scrap the joint concept in place today and return to a Service-centric model, or go for full integration. It appears that we are currently somewhere in the middle with no clear method to assess the right amount of jointness.

Over the past 18 months, I have been involved in identifying Service-level efficiencies, and as part of this effort, I have had the opportunity to discuss this topic with former senior leaders and members of think tanks. One issue frequently raised is the negative effects of Goldwater-Nichols and its role as a cost driver. I find it perplexing that the great minds of the joint force, particularly those who have observed joint growth over the past 25 years, are not assessing jointness in the context of today's fiscal environment.

The intent of Goldwater-Nichols was to improve the operational effectiveness of our nation's military, but over time, jointness has taken on a life of its own. How effective Goldwater-Nichols has been over the past 25 years is still out for debate, but now the more relevant question may be, "How much jointness can we afford?" The original Goldwater-Nichols supporters could not have predicted the size and cost of the bureaucracy that the act spawned, nor could they have predicted the dire fiscal situation the Nation would find itself in two decades after winning the Cold War. Had these factors been known at the time, it is questionable whether Goldwater-Nichols would have passed in its current form or been implemented to the extent it has been. Given the current size of our national debt and growing pressure to reduce the defense budget, this is the opportune time to assess if Goldwater-Nichols/joint reform is needed. We need to be asking some tough questions to get the process started.

> —Robert P. Kozloski Efficiencies Analyst Department of the Navy

From the Chairman

Moving Forward Together

ith good reason, we are a proud force. The 10 years since 9/11 stand among the most searing in our military's history. We have persevered through a decade of war, keeping our homeland safe and advancing our national interests abroad. Our all-volunteer joint force is our nation's decisive advantage. The American people trust us to stay that way.

Our joint force faces three profound transitions in the coming years. We will

transition from war to a more competitive and complex peace. We will transition from abundant resources to more constrained budgets. And many military men and women and their families will transition to civilian life. Any one of these would be difficult. Taken together, they will test our leadership at every level.

We will pass this test, and we will do it by focusing our efforts in four areas. I will soon publish a pamphlet on these key efforts and encourage you to read, discuss, and debate them. I need your support, and I challenge you to do what you can in your corner of our wonderful profession to improve these areas. To this end, let me briefly describe the four areas and why they are essential to our future.

Achieving National Objectives in Current Conflicts

In this decade of conflict, we stabilized Iraq when it was thought to be impossible. We reversed Taliban momentum while



building a new army in Afghanistan. We helped protect the Libyan people as they turned the page in their history. And we have pursued al Qaeda to the edge of strategic defeat.

Yet al Qaeda and its affiliates, while increasingly isolated, remain a threat. We must pursue them relentlessly. We must remain committed to the development of Iraq's security forces, and we will meet that commitment through a normalized relationship and the Office of Security Cooperation–Iraq. Through the International Security Assistance Force and our international partners, we will provide the assistance that Afghan forces need to protect the Afghan people while becoming stronger and more self-sufficient.

Wherever we send America's sons and daughters, we must continue to provide them the support and the resources necessary to do their jobs.

Developing Joint Force 2020

We are developing today the joint force that our nation will need in 2020. This force

will operate in a global security environment that will be more competitive and therefore more dangerous and complex. As we determine what this joint force should look like, we must offset our tightened budgets with more innovation and integration.

We must reexamine historically distinct mission sets. In Iraq and Afghanistan, general purpose forces worked collaboratively with special operations forces. We should continue to build toward greater interoperability and interdependence. We have learned that





cyber and intelligence, surveillance, and reconnaissance capabilities offer the potential for asymmetric advantage. They will continue to grow in importance. The last decade has been focused and prioritized on the Middle East. The next will see accelerating demographic, economic, and military shifts into the Pacific. We will adjust



Family and friends greet Sailors returning to Naval Station Pearl Harbor, Hawaii

to this shift but remain engaged throughout the world.

Moving forward, we will reexamine and revise the relationships among Active, Guard, and Reserve forces of our military. And we will need to be even more joint—pushing interdependence deeper, sooner.

Finally, in light of a new fiscal reality facing our nation, we will need to get smaller to stay strong. The scope and variety of our missions will demand leadership, creativity, and institutional courage. We will make hard choices, invest strategically where needed, and always put the needs of the Nation first. Finally, we will keep the force in balance with the people, training, and equipment to get the job done.

Renew Our Commitment to the Profession of Arms

After 10 years of war, it is time for us to reflect on not only the lessons of war, but also who we are. We have an opportunity—indeed an *obligation*—to improve our profession by truly understanding and internalizing the lessons of the past 10 years. We must understand, adapt, and promote the knowledge, skills, and attributes that define us as a profession. We will continue to reform and leverage the professional military education enterprise to advance the profession of arms. Above all, we must remain a *learning organization*.

Leadership is the core of our profession. We must all be leaders of consequence beyond our battalion, our squadron, our ship, our unit. We must develop leaders who can adapt and innovate in complex environments. The organization that wins the future is the one that learns and adapts more quickly.

Keep Faith with Our Military Family

Our military family—men and women in uniform, veterans of all generations, and their loved ones—has fought harder and sacrificed more over the last decade than many will ever know. They have shown remarkable commitment, strength, and resilience. They remain the heart and soul of our force.

Ten years of war have strained our family, and impending budget cuts have cast uncertainty among the ranks. The wars have left wounds both seen and unseen, the burden stretching far beyond the Active-duty force.



Family and friends hold American flags as Indiana National Guardsmen return from year-long deployment in Afghanistan

Repeated deployments have upended families, employers, and communities. No aspect of the military family has been unaffected, no corner of the country untouched.

We are strong, and we are resilient, but we must never take this for granted.

Keeping faith means recognizing the military family's extraordinary contributions and sacrifices, supporting them in the ways they need most, and preserving the trust between us. In doing so, we must constantly learn, adjust, and improve how we will meet the long-term needs of those who defend the Nation.

Looking Ahead

The American people have bestowed upon us a sacred trust. The past 10 years have proven that our joint force has earned this trust in a most extraordinary way. The next 10 years and beyond will demand the same. We will win the present and secure the future. We will affirm the profession of arms and build our next generation of leaders. We will stand by our military family. This is our nation's call. This is our time to answer. **JFQ**

MARTIN E. DEMPSEY General, U.S. Army Chairman of the Joint Chiefs of Staff





Airman's family reunites upon return from tour in Iraq

Total Commitment to the Total Force

By BRYAN B. BATTAGLIA

Marines wait for dust to clear after destroying abandoned compounds that blocked views from security post

s the newly appointed Senior Enlisted Advisor to the Chairman, I would like to use this inaugural column to introduce my position and communicate several important points.

First, allow me to express my professional appreciation and gratitude to you and all military families for what you do each and every day across the globe. I am extremely honored to serve our total force in this capacity.

In the Chairman's letter to the joint force and as reiterated throughout this issue of *Joint Force Quarterly*, you will see that General Dempsey identifies four key themes. Regard-



Sergeant Major Bryan B. Battaglia, USMC, is the Senior Enlisted Advisor to the Chairman of the Joint Chiefs of Staff and Senior Noncommissioned Officer in the U.S. Armed Forces.

less of Servicemember status or category, each of us has a defined role, responsibility, and professional obligation within these themed areas.

In order for us to continue to achieve our national objectives, we will reshape and refine a force that remains ready, relevant, capable, trained, and educated to handle whatever emerging requirements that our nation requires of its Armed Forces. As we reshape the force to meet the challenges of 2020, we will maneuver through some fiscal and organizational changes. I expect that as a result of these adjustments, all elements of doctrine, organization, training, materiel, leadership, personnel, and facilities will be touched in some way, shape, or form. We must realize, however, that fiscal and organizational changes are nothing new to our rank and file. When we last trekked a similar path, many of our experienced operational leaders were company-grade officers and midgrade noncommissioned/petty officers. As we were led then, today, it is our duty, obligation, and responsibility in leading our allvolunteer force through like modifications.

The Chairman has asked for each of us to *renew our commitment to the profession of arms*. I do not take his use of the word *renewal* to mean that something is broken or even about to expire. I interpret this word to mean that through a decade of battlefield exposure, our force has



Foundation



Clockwise from top left: Coast Guard Commandant thanks Pearl Harbor survivor for his service (U.S. Coast Guard/Patrick Kelley); Sailors and villagers carry injured boy during humanitarian assistance mission Continuing Promise 2011 in Costa Rica (U.S. Navy/Jonathen E. Davis); Airmen demonstrate building assault at Eglin Air Force Base (U.S. Air Force/Samuel King, Jr.); and Sailor hugs children after returning from deployment aboard USS Abraham Lincoln (U.S. Navy/Brian Morales).

gained a great deal in tactical and operational art, combat resiliency, and lessons learned-but only if we seize these opportunities will they deliberately reflect on and improve our profession. I am reminded of something that a former commander of mine, General James Mattis, once said: "Sometimes, the best way to grab a new idea is to read an old book." And these old books that he and the Chairman refer to are stored in the repositories of our lessons learned.

I also believe that we can renew our commitment by returning to some basics, such as the creeds and oaths that guide our loyal and dedicated membership in the profession of arms. For example, I believe strongly that every enlisted Servicemember should know the enlistment oath by memory. The powerful words contained in this special oath trace back to the founding of our military and truly capture our pledge to this great profession. One does not have to wait for the occasion for which an oath was written in order to recite it. There are many other traditions within your individual Service branches, such as the code of conduct, Service creeds, and fight songs, that play significant roles in renewing our commitment to the profession.

Our ongoing and future energies toward professional development of the total force provide great opportunity for the enlisted corps. Time and again, our outstanding enlisted Servicemembers display their values and credentials both in garrison and on the battlefield. It is no secret that the talent pool throughout the noncommissioned officer/petty officer corps is deep.

To that end, the Chairman and I encourage you to express your talent, art, and experience on paper via articles submitted to this journal and other military publications. From operating in garrison to employment of fullspectrum operations, from logistical movement to site exploitation, the list is endless. By sharing your ideas beyond the lifelines of your individual commands, you will make a much larger difference-and impact.

Upon assuming this office, I saw the lifeline in the execution of my duties embedded in my office motto: Total Commitment to the Total Force. I am confident that you all understand what total commitment is, but let me touch on what I mean by total force. From the military infant, to the young teenager enrolled in junior ROTC, to the Servicemember in uniform, we are all members of the total force. From the spouse to the military retiree residing in one of our rest homes, or as a lifelong member of the American Legion chapters located across America, you, too, are members of the total force. And perhaps most of all, spouses who have lost loved ones are lifetime members of the total force. Put another

way, everyone in our total force belongs to a family, so when we speak of military family, we speak of the total force. I welcome you to adopt and embrace this motto as we continue to take care of our own.

Our military families continue to make great sacrifices and have demonstrated exceptional stamina and resiliency. We recognize that it takes a special family to endure the frequency and length of separations, to move from school to school and town to town, and to shoulder the uncertainty as they wait for the return of their loved ones in uniform. We shall keep faith with our military families, as our support and commitment to them remain embroidered in the cloth of the nation that we wear. In the words of the Chairman, you are "the heart and soul of our force." JFQ



President Obama awards Medal of Honor to SFC Leroy Petry, USA, July 12, 2011

uring my military career, I was fortunate enough to serve for a number of years in the North Atlantic Treaty Organization Airborne Early Warning Force as both an aircrew and a staff officer, eventually serving at Supreme Headquarters Allied Powers Europe (SHAPE) in Belgium. Apart from the wealth of different cultures I was exposed to as a young officer, one of the required portions of every staff action that was reviewed by headquarters leadership was a paragraph entitled "Views of Others." At the time, the Alliance had 16 member nations and was in the process of offering direct membership in the Alliance or the Partnership for Peace Program.

This relatively small requirement on every staff paper served leadership and the Alliance well over the decades of endless issues and their staffing. I am uncertain which nation or Supreme Allied Commander Europe may have initiated the practice, but I have often wondered how much better informed U.S. leadership at all levels might have been if our system had a similar requirement. The key was the requirement to air the view, no matter how close to or far from the recommendation of the staff. On several occasions, I witnessed an Allied senior officer accepting my boss's call on a tough issue even after heated argument where national views clashed because the decisionmaker explained how that different view was considered and why another won the day. In the end, the decision made by the senior leader and how he explained his weighing of these different views improved the outcome. Over the course of a tour at SHAPE, I saw how this

simple wisdom and practice made willing teammates out of officers from nations that otherwise would never have agreed to work together. I have found that same concept, seeking out the views of others, essential to forward progress of the joint force as well.

The longer I serve as editor of Joint Force Quarterly, the more I seek out "the views of others," and the contents of this issue are no exception. One author in particular is His Royal Highness Brigadier General Naef Bin Ahmed Al-Saud of the Royal Saudi Army. The General holds a doctorate from Cambridge University and is a 2002 graduate of the National War College. We are fortunate enough to have two articles from him on his country's approach to cyber-related issues, with the first of the two appearing in this edition on cybersecurity. His second article focuses on the Kingdom's approach to social media, which is an ongoing line of discussion in all aspects of policymaking in the United States and around the world. Hopefully, both American and international readers will find these articles thought-provoking enough to send us their views on these and other topics that face their nations' security forces.

JFQ is also honored to welcome a new leadership team to the Office of the Chairman of the Joint Chiefs of Staff. General Martin Dempsey, USA, became the 18th Chairman on September 30, 2011, and he provides us with his initial thoughts in his inaugural From the Chairman column. Just moments after becoming Chairman, General Dempsey presided at his first official ceremony by installing Sergeant Major Bryan Battaglia, USMC, as the



Senior Enlisted Advisor to the Chairman of the Joint Chiefs of Staff. General Dempsey stated that he always had a senior noncommissioned officer (NCO) showing him how to navigate the difficulties of leadership at every level of command in his career and found SgtMaj Battaglia to be exactly the right choice to continue that tradition of setting the General straight in his new job. Readers of *JFQ* know SgtMaj Battaglia from issue 62 and his article on today's professionals in the military.

Given his significant abilities to communicate with the written word, *JFQ* is honored to provide SgtMaj Battaglia with space to contribute his experiences and ideas along with those of the Chairman beginning with this issue. Since the joint force is composed of officers, NCOs, enlisted, and civilians, I hope both of these leaders will reach an ever-expanding audience through these pages. Given the challenges of completing combat overseas and addressing the changes ahead for the force, I am sure that they will always have something important to say.

The Forum has the second of a series of interviews with the Joint Chiefs. General James Amos, the 35th Commandant of the U.S. Marine Corps, shares his views on how the Corps relates to the joint force. Accompanying this senior leader view are three others of how jointness supports operations, training, and space capabilities. First, Rear Admiral Walt Carter, USN, former commander of the Joint Enabling Capabilities Command (now operating under U.S. Transportation Command), discusses one of the most successful efforts from the former U.S. Joint Forces Command. Next, with the Libyan air campaign just ended, a trio of officers with firsthand experience, Lieutenant Colonel Gregory James, USA, Colonel Larry Holcomb, USMC, and Colonel Chad Manske, USAF, suggest that U.S. joint planning, education, training, and exercise programs were validated by the success of Operation Odyssey Dawn. In a new twist on an established airlift operational concept, Colonel David Arnold, USAF, recommends the development of a Department of Defense program for civilian space assets modeled on the Civil Reserve Air Fleet.

ELIASON

As we enter a new era of reduced combat commitments overseas and significantly reduced financial resources for the Defense Department, the Special Feature provides three thought-provoking articles on the future of warfare. From Fort Leavenworth, Lieutenant Colonel Peter Fromm, USA (Ret.), Major Douglas Pryer, USA, and Major Kevin Cutright, USA, suggest that we should consider war as a moral force in order to design a more viable strategy for combat in the 21st-century information age. Next, Professor Dennis M. Murphy from the U.S. Army War College discusses the power of influence in future combat operations, suggesting that information operations and influence must become integral parts of U.S. planning and execution processes in the field. Once again showcasing some of the best thinking and writing in the joint professional military education (JPME) programs today, Major Randal Walsh of the 1st Marine Division, a 2011 graduate of the Naval War College, suggests that the joint community needs to formalize ongoing security cooperation efforts through the establishment of a functional combatant command dedicated to that end.

In Commentary, the Honorable Ike Skelton, former U.S. Representative for Missouri's 4th Congressional District who continues to serve the cause of JPME, discusses his views on the continuing concern of the civil-military gap. Next, a new arrival to the faculty of the U.S. Naval Academy, Rebecca Bill Chavez, provides an important discussion of the militarization of law enforcement, which she believes poses significant challenges to the process of integrating human rights and security. In the first of a pair of articles appearing in this and the next issue of JFQ, His Royal Highness Brigadier General Naef Bin Ahmed Al-Saud, who is the principal officer responsible for cyber planning and policy in the Saudi Ministry of Defense, discusses his nation's approach to cybersecurity. In the April issue of JFQ, he will return to discuss a related but different issue of social media and networking policies that his nation has implemented. His views, which align in many ways to those of the United States, also provide a different perspective given the sweep of events in that region since the Arab Spring of last year.

In Features, three articles discuss various aspects of Asia's security environment while another three discuss seapower



and the levels of war, the potential application of high-energy lasers to the battlespace of the future, and the legal dimension of targeted killing. The first of the Asian security articles comes from two world-renowned Korea experts, Dr. Kongdan Oh, of the Institute for Defense Analyses and a Nonresident Senior Fellow at the Brookings Institution, and Dr. Ralph Hassig, of the University of Maryland University College. They take on the never-ending cycle of military and political confrontation on the Peninsula by suggesting a long-term approach for South Koreans to adopt, which assumes their way of life will prevail in time. Next, from his experience at the U.S. Army School of Advanced Military Studies, Major Paul Oh, USA, provides an excellent assessment of the People's Republic of China's efforts in space from a military perspective. In one of the top essays in the 2011 Secretary of Defense National Security Essay Competition, JoAnne Wagner, the Department of State's Deputy Director for Pakistan and a 2011 graduate of the National War College, provides an insightful answer to the question of China's intentions in Africa.

The second set of articles in this quarter's Features includes a much-needed review of one of the last remaining areas for the Navy to explore and develop: the operational level of war. Captain Robert Rubel, USN (Ret.), Dean of Naval Warfare Studies in the Center for Naval Warfare Studies at the U.S. Naval War College, discusses an important survey of the state of operational art and science from a Navy perspective, which is sure to become a "must read" in JPME classrooms. Another recent advanced school graduate, this time from the School of Advanced Warfighting at Quantico, Major Aaron Angell, USMC, explores the dimensions of a battlespace with laser weapons that he believes are much closer to reality than we might think. Given the pace

of other technological developments in recent years, the joint force would be well served if thinking through the implications and applications of these technologies is done in advance of their appearance in combat. In the final Features article, a top essay from the 2011 Chairman of the Joint Chiefs of Staff Strategic Essay Competition by Colonel Mark Maxwell, USA, a judge advocate and a 2011 graduate of the National War College, lays out the legal arguments surrounding the practice of targeting terrorists and asks whether this practice has actually made the United States safer.

This issue brings back an important section on Interagency Dialogue with another winning essay from the 2011 Chairman of the Joint Chiefs of Staff Strategic Essay Competition. David Greene is a career Foreign Service Officer with the State Department and a 2011 graduate of the National War College. He argues that the U.S. role in Southeast Asia is one of power broker, not hegemon, as it shapes policy in relation to other states in the region.

As promised in the last issue, Recall provides Dr. Andrew Marble's article, which gives a deeper understanding of the life and career of General John Shalikashvili, the 13th Chairman of the Joint Chiefs of Staff. As always, we offer several outstanding book reviews, along with the joint doctrine update. Included in the joint doctrine update is an article by the Joint Staff Director of Joint Force Development (J7), Lieutenant General George Flynn, USMC, that provides the vision for his division, which is today one of the largest on the Joint Staff, encompassing many of the remaining Suffolk, Virginiabased portions of the former U.S. Joint Forces Command. Key to this vision is the effort they will be investing to achieve their mission of supporting the Chairman and the joint warfighter through joint force development in order to advance the operational effectiveness of the current and future joint force. One of the main focus efforts of J7 will be seeking to improve joint education. The entire joint force will be supporting this important work.

At *Joint Force Quarterly*, we remain steadfastly fixed on bringing the very best in thinking and writing on topics that have impact on the entire joint force, those views of others that are so important to all of us in these times of constant change for the joint team. **JFQ**

-William T. Eliason, Editor





General James F. Amos, 35th Commandant of the U.S. Marine Corps

James F. Amos

JFQ: On a number of occasions, you have remarked that you were surprised to have been selected as Commandant. How has your perspective changed now that you are sitting as the Commandant?

Col William T. Eliason, USAF (Ret.), interviewed General Amos at his Pentagon office.

General Amos: I was surprised because we've got 235 years of doing business one way in the Marine Corps. Until General [Alfred M.] Gray [29th Commandant of the Marine Corps], all of the previous Commandants had been infantry officers—and General Gray was an artillery officer. So I certainly had no expectations of becoming Commandant. When I tell people that, it's usually couched with, "I wasn't out seeking this job; I wasn't politicking for this job; and I wasn't looking for this job." I was busy being the Assistant Commandant. I was surprised when I was asked because we've never before had a Commandant from a community other than ground combat arms. I have a lot of love for the Marine Corps and I had no desire to try to be a "glass ceiling breaker."

Fast-forward: I've been in this job now for 8 months, and I think I've settled in. I feel

really good about the Marine Corps and what we do for our nation as its crisis response force. When I look at the last 12 months at all the things the Nation has asked us to do, I feel a great sense of pride at the accomplishments of our Marines and Sailors. Many people don't realize how many other missions we've accomplished outside of Afghanistan in that timeframe.

A little more than a year ago, we had the 15th Marine Expeditionary Unit [MEU] off the coast of Pakistan assisting flood victims ashore. We sent the 26th MEU 30 days ahead of schedule to relieve the 15th MEU of their flood relief duties. On September 9, 2010, elements of the 15th MEU embarked on the amphibious warship USS Dubuque, recaptured the MV Magellan Star from Somali pirates, and rescued the 11-man crew. Later in January, we took 1,400 Marines off the 26th MEU and put them ashore in Afghanistan to reinforce the success of the previous fighting season-all the time the rest of the MEU was still flying combat operations off of amphibious ships into Afghanistan and continuing Pakistani flood relief operations.

As trouble brewed in North Africa, the 26th MEU left their 1,400-Marine ground combat element in Afghanistan, sailed to the Mediterranean Sea, and linked up with the majority of 1st Battalion, 2d Marines, in Souda Bay, Crete-who had deployed there with less than 20-hours notice from Camp Lejeune, North Carolina. With a full complement of Marines, the 26th MEU took station off the coast of Libya and began flying combat missions in support of Operation Odyssey Dawn. A few days later, these same Marines from aboard the USS Kearsarge rescued a downed F-15 pilot. This mission of two STOVL [short takeoff and vertical landing] AV-8B Harriers, two CH-53Es, and two MV-22 Ospreys briefed, launched, and recovered that pilot in less than 90 minutes.

That same month, the Japanese experienced a terrible earthquake and tsunami that devastated one of their nuclear reactors, and we sent Marines from Okinawa to help with that emergency response and recovery.

From the 2004 Indian Ocean tsunami, to Hurricane Katrina in 2005, to the 2006 NEO [noncombatant evacuation operation] in Lebanon, and Haitian earthquake in 2010, we've demonstrated that we are America's expeditionary crisis response force, and I'm very pleased with that. I think our stock is high. The Marine Corps is a wonderful institution with great young men and women who are almost always held in high regard. It's a true honor to sit at the top of this organization.

JFQ: You just returned from a rather intense visit to Afghanistan. Seeing firsthand the many pressures of the mission for the Marines there, what surprised you about your visit?

General Amos: It wasn't a surprise, but I came away feeling better and better about what's going on. Most of my experience on the ground in combat has been in Iraq, and so I've passed in and out of Afghanistan for the last 3 years. I've watched Helmand Province in Regional Command Southwest steadily improve over time. At the end of the day, Helmand is not going to look like an American city or county, but I've seen areas that were once very, very dangerous change into much safer villages with open marketplaces and schools. Marjah is a classic example.

On February 15, 2010, Operation *Moshtarak* started in Marjah, and the whole world watched it because it was the first major operation as a result of the plus-up of 30,000 U.S. forces. It was a tough fight from February to June, and there was nothing easy about it. Marjah's not so much of a city as it's a big agricultural county, and it was just loaded with IEDs [improvised explosive devices] and Taliban. People began to doubt if it was going to turn.

I tell the Marines, think about what the press was saying in June and July, and even

in August 2010—they were saying it can't be done. But it started turning in September and October. Just last Christmas [2010], Sergeant Major Carlton Kent [16th Sergeant Major of the Marine Corps] and I were there, walking through the streets of Marjah in camouflage utilities wearing no body armor at all. Marjah is almost turning out to be a model for how it can be done in Afghanistan. They actually paved a road in Marjah about a month ago—*paved a road*. Markets are open. They have about 2,700 kids going to school now, including girls. None of that was there in February 2010.

So I look at that and I'm optimistic. I agree with what Dave Petraeus has saidthat it's fragile and reversible. I think that's accurate. But it's reversible only if we haven't trained the Afghan army, if we haven't trained the Afghan police, if we haven't set standards and respect for rule of law and given them a sense of confidence that one day we're going to be gone, and they can do this on their own. But what I was seeing in the leadership of the police and the Afghan army was pretty impressive. They've got a corps commander down there who is former mujahideen, and he is a tough guy. He's got three brigades, and there is no doubt in their mind that they do their mission-none. We just need to make sure all that we've done is sustainable. I think it is.

I've even seen progress in Sangin, which has been a tough battle. We lost more Marines in Sangin than we have anywhere else in Afghanistan. And yet things have

General Amos speaks to Marines at Forward Operating Base Payne, Helmand Province, Afghanistan



FORUM | Interview

settled down significantly there. Others like Nawa, Lashkar Gah, Delaram, and even Now Zad, which had been under complete Taliban control for about 4 ½ years, have improved. About a year and a half ago, we cleaned Now Zad out, and the district governor and army came in. Now kids there go to school. So now even Now Zad is one of the proof-of-concept areas.

Does the Afghan system need to model America? No, it can't. Theirs is a tribal system. A short vignette: there was a tribal chief from northern Sangin near the Kajaki Dam area who told our two-star commander on the ground that he didn't care about electricity—he just wanted a road. He said it doesn't have to be a paved road, but that he'd just like to have a road where the people from his tribe could transport their vegetables and sell their goods. He just wanted to have some fresh water and some security so that his tribe could be free to move around. That's all he wanted. So we're not Westernizing Afghanistan.

At the end of the day, I'm optimistic. I know it can be done. I really feel good about what the joint force is doing all across Afghanistan—it really probably is the best joint team I've ever seen in my life. **JFQ:** Given those impressions and what you have learned as one of the Joint Chiefs, how will the experiences of these wars—first Iraq, and now Afghanistan—impact the Marine Corps' role in a post-Iraq, post-Afghanistan security environment?

General Amos: When the Marine Corps comes out of Afghanistan, we're going to reset the force and get back to our role as America's crisis response force. Even with our commitments in Iraq and Afghanistan over the past 10 years, we've shown that we can do anything. We did crisis response in Japan during their tsunami/nuclear crisis and also off of Libya during Operation Odyssey Dawn. Now, we didn't put forces on the ground in Libya, but we wanted to send a very strong signal with our NATO [North Atlantic Treaty Organization] partners to the rest of the world that the United States is a leader. So we sent amphibious warships off their coast, and then we flew airplanes out of Aviano and other places when the no-fly zone began to be enforced. That's what we do.

We can also go ashore for a protracted period of time, just like we did in Iraq and Afghanistan, and I make no apologies for that because we were directed to do that by the President of the United States—as we've done throughout our 236-year history. But America funds a Marine Corps in order to have an immediate crisis response force—what I call a hedge force. When we start thinking about where the world's going over the next two decades, America may want to try to influence things so that we do more war prevention instead of war intervention. I think America buys a Marine Corps to be out there on ships, forward deployed and forward engaged, to be its insurance policy.

When you take a look at where we're headed fiscally—within the Federal Government, the Department of Defense, and the Service budgets—you naturally start thinking about areas where you can take risk as a nation. We can't afford to have everything. So we need to ask what it is we can afford. Everything else becomes a function of risk. So the question is, how much risk is acceptable, and is there a way we can mitigate that risk. The Marines provide our national hedge for risk.

We maintain a high state of readiness, and we fight very hard every year to avoid pressure to bring the Marine Corps' readiness down to what is becoming tiered readiness in other Services—where units return home and their readiness is reduced to 50 percent of what it should be only to be rebuilt with people, training, and equipment for future

General Amos congratulates Marine after awarding him Purple Heart at Forward Operating Base in Musa Qal'eh District, Afghanistan



AMOS

deployments. That works, I think, for probably most forces, if you're on some kind of systematic deployment cycle. But for us, when a Sendai happens or a Libya happens, you can't look around and say, "Okay, we'd like to send in the Marines," and then have the Commandant say, "You know, that's great, I'm really happy to hear that. It's going to take me about 60 days to build a force and cobble that together, and then get a quick training package put together, and then we'll be ready to go." No, we want to be able to do it today. We respond to today's crisis with today's force, today. I just talked to the [National] War College and told them that in real-world crises, as opposed to academic wargames, it's not always immediately clear what the National Command Authority should do. So we first establish our presence and then begin to figure it out. That's why America has a Marine Corps. We are a hedge against risk. We buy time for the national leadership to determine what the next step is.

I'd like to go down that path a little bit because I think it's an important point. As we start getting into budgets and roles and missions, it's important to understand that I don't want the Marine Corps to do the roles of the other Services. For instance, the Air Force's domain is in the air, space, cyber, and it's the greatest air force in the world, second to none. The Army's domain is the land, half a million strong, and they're pretty damn good. The Navy's domain is the sea, both on it and below it. Those three domains all overlap like a Venn diagram. So then you ask, how does the Marine Corps fit into that. We Marines don't really have a domain-we have a lane, and that lane is crisis response. I told my fellow Service chiefs, I'm not interested in poaching on your domain at all. But ours is a lane that cuts across all of these domains. If there is some duplication, I think it's not only affordable, it's necessary.

If a nation is going to have flexibility in war planning and in engagement, some duplication is what we want. What we don't want to have is just-in-time delivery capability. It works well if you're Federal Express or Wal-Mart, but for a commander on the ground or the National Command Authority, it doesn't solve their problem.

Also, I am more than happy to be the enabler for some type of coalition force or some other type of joint force or interagency capability. I don't have to be the lead dog. But because we're forward deployed at a high state of readiness, and have all our logistics with us, and we're trained and willing to live pretty austerely, we're ideally suited for crisis response and enabling future operations and follow-on forces.

JFQ: You have spoken publicly of the recent force structure review you directed and how you view the Corps in the immediate and near future as building a "middleweight force." Can you tell us what this means in support of national security policy?

General Amos: It's interesting, because unless you put it in context, people will come away with whatever their interpretation is. When we sat down to define this expeditionary force in readiness, we had to start with what we thought the world was going to look like in the next few decades, post-Afghanistan. When I was down at Quantico as a three-star, I worked combat development issues and wrote General [James] Conway's strategy and vision for 2025. We spent almost a year trying to predict what the future security environment would look like. Strategically, you've got to have some sense of what the world is going to look like before you make decisions. You're not going to get it right, but you can't afford to get it completely wrong. So based on that, we said, "What should the Nation, the Department of Defense, the Marine Corps do in that kind of environment? What is our contribution?" And that's where we began to develop a mission statement for the Marine Corps as an expeditionary force in readiness, forward deployed and forward engaged, ready to respond to today's crisis with today's force. We're a middleweight force able to get there quickly, but with enough punch to be able to carry the day upon arrival.

When I talked with Secretary [Robert] Gates about this early on, he said, "Jim, I see the Marine Corps' value to the Nation as the force that's kind of in the middle of the range of military operations." He said, "As you build a Marine Corps in a post-Afghanistan environment, focus your efforts primarily in the center, where everything kind of comes together." It's the most likely environment we're going to operate in-hybrid warfare, fourth-generation warfare-it's almost a nexus of different types of things that are going on. Some are more dangerous than others and some are more humanitarian. He said, "I want you to build a force that takes some risk on the high end of the range of mili-



tary operations. Let's build a force that's going to be flexible for our nation for the most likely kinds of things we're going to do."

And so we did. In the force structure review, we examined the future security environment, and our mission statement, and built a middleweight force—one that found the sweet spot between special operations and heavy conventional forces and complements the capabilities of both. So when you look at it in that context, that middleweight force still has the capability to work at the low end, and also still has the capability to work at the high end. In many ways, we will be even more capable than the force today, but smaller from 202,000 down to 186,800.

JFQ: You and the other chiefs have been given guidance to cut an additional \$400 billion from the Defense Department budget in the coming years. What can you tell us about how this will impact the Marine Corps?

General Amos: I'm not sure yet because we're working our way through this thing, and I suspect that by the time this article is published, we'll have a lot of history on it. I've got my staff focused on looking at how these predicted budget cuts will impact us in personnel, operations and maintenance, and procurement.

I think the really good news is that Secretary Gates has begun this effort with a strategy review and now Secretary [Leon] Panetta and my fellow Service chiefs are attacking it head-on. It's important that people understand that this isn't a math problem. You have to begin with strategy, and then introduce

FORUM | Interview

math and reality into the strategy, and that gets back to the risk we talked about earlier. The whole concept of risk and how you hedge against it is so critically important. If you understand that, then you can make good decisions down the road. But we need to begin with strategy. My sense is that we're going to get into the issue of how much is enough, and what is it that our nation absolutely has to deliver. That is, if we ever fail at being able to do these things around the world that our nation absolutely has to be able to do, we will have failed at our mission, and our nation may fail at being a superpower. So let's parse out roles and missions across the Services and avoid fear of overlap. There needs to be some overlap within the joint force for flexibility and to provide options. The good news is that the Service chiefs are all friends. Budget battles have a way of testing friendships, but I think everyone here is approaching this from a joint perspective, which is refreshing.

JFQ: One of the areas all Services are working hard to improve is in energy cost reductions. Can you discuss some of the efforts the Corps has undertaken both at home and in combat to address this challenge?

General Amos: The effort of trying to change our energy culture began around 2009 at our bases and stations where we've had notable success. For example, at Barstow, California, one of our two big depots, we have a one-megawatt wind turbine and are developing a large solar power project. At Marine Corps Recruit Depot San Diego and several other bases, we've placed solar panels on many of the buildings. At Miramar, there's a big county refuse dump on the southwest corner of the airfield where we're installing a landfill gas generator to produce power for the base. We are also exploring geothermal resources in Southern California. I feel pretty good about where we're headed.

In 2009, General Conway started looking at the idea of reducing our energy requirements in deployed environments. He started asking how we could make ourselves more combat effective by improving efficiency and reducing the number of generators and amount of fuel. Something around 70 percent of the lift that comes into Helmand Province, Afghanistan, is carrying water and fuel, and the rest is dry goods. We thought, we're along the Helmand River Valley—maybe we can make our own potable water. Now we are. We thought, we're in an area that certainly has a lot of sunshine—maybe we can use solar power. Now we do. How do we heat and cool our tents? We've tried spraying foam on the tents—it just doesn't work well. Then we tried using radiant liners in our tents and found they make a dramatic difference. We had 4,000 generators running on the ground in Afghanistan when we started this. Many were running at about 15 to 20 percent capacity, sucking up fuel. So, on our larger bases, we figured how to network them together into a grid.

We set up an experimental site in Quantico and stood up an expeditionary energy office in the Pentagon led by one of our absolutely brightest colonels. He's connected with [the Defense Department] and industry, and we had a "show-and-tell" where big and small corporations from across the country came and showed us their products. We ended up evaluating about 16 products, and sent 6 of them out to Twentynine Palms, trained the Marines on them, and took them to Afghanistan.

Radios and batteries are a big deal to us; if you go out for a 4-day patrol, you have to carry a lot of batteries. Now we don't have to. We have these solar panels that roll up. They're lightweight, and each weighs just a few pounds. Marines on patrol will have one or two stuffed in their kits. So when they go out on patrol, they don't need as many batteries, saving weight. When they get to where they're going, they lay out the solar blankets, plug them in, and run the radios off them. I think we're making progress.

The goal is to create a more capable force: lighter than today, less dependent on liquid and battery logistics, with greater operational reach at less risk. We aim to reduce our energy use by 50 percent by 2025, and I think we'll do it well before that. We're just on the cusp of this; we're about to do another one of these expeditionary energy evaluations with small suppliers, select the products that seem to have the most promise, and take those products down to Twentynine Palms and give them to a unit to train with.

Think about this. If you go out on a logistics patrol right now or a convoy resupply, and you leave Camp Leatherneck and head to the southern part of Helmand, it's 4 days down and 4 days back—in some cases being interdicted along the way with IEDs while you're hauling stuff. If you could reduce the number of vehicles you have by 50 percent, that's 50 percent fewer young men and women who are exposed. I think that's pretty significant.

We're trying to change the Marine Corps to a culture of efficiency, and that takes a while but it's changing. We recently had a battalion in Sangin, Afghanistan—in the middle of all the fighting—that deployed with all this solar gear. About halfway through the fighting, they break it out to see if it worked. They became addicted to it because they didn't have to carry as much weight, and it made their lives a lot easier. So I think the transition to a cultural mindset of valuing resource efficiency is probably easier for today's generation of Marines than it would be for my generation.

JFQ: As a member of the Joint Chiefs, can you give us your impression on the future of jointness and what, if any, work remains to be done to achieve the goals of Goldwater-Nichols?

General Amos: My sense right now is that there's a greater willingness and understanding and appreciation for what the joint community brings. Institutionally, each of our Services has at one time or another dug in and said, "This is mine, and I'm the only guy that can do this mission, and I'm going to make sure I'm the only guy that can do this mission." The fact is, there's so much going on, and everything is so expensive today, that it drives us to a joint solution for just about every problem. It doesn't matter if what's happening is off the coast of Libya, or in Afghanistan, or in Japan. It drives the joint force to come together to accomplish the mission. My sense is that we're better than we've ever been.

I think there's a willingness and an appreciation and understanding from all Service chiefs that there's goodness to this. We don't have to sit around and become territorial and wring our hands. I think some of that played out in 2002-2003 with the air piece of OIF-I [Operation Iragi Freedom I], where we all began to understand and appreciate each other's abilities that the joint force could capitalize on. I think the danger right now could be that, and I'm a big Goldwater-Nichols guy, is that I see a potential for forcing a decision to be made that doesn't make any sense in an effort to call it joint. I'm not being a hypocrite. I'm saying we've come so far now, and I think we're getting pretty close to where we ought

to be. What we wouldn't want to do is say that every single thing we do from now on has to be joint. I think OIF I was a tipping point in joint operations. I think people try to think it was *Desert Shield/Desert Storm*. I think there was still enough parochialism going on then. I don't sense that now—not one bit. There's plenty of room for everybody, and if we all have capabilities, we can put them together, and the outcome is pretty significant. I feel good about that.

JFQ: With some 10 years of combat, all Services are experiencing a number of concerns with the long-term health of their Servicemembers and their families. Can you offer us some of your thoughts on what the Defense Department and the Marine Corps in particular are doing well and what more needs to be done to address the concerns you may have on this issue?

General Amos: When we started bringing back our wounded, our medical care was second to none, and it's still that way. We can save lives. I never hear anybody talk about not getting the right kind of medical care; 99 out of 100 families all say the care is great. We're lacking with the families. You've got two entities here. You've got the young Marine, Airman, Sailor, Soldier who comes back through Landstuhl into one of the major facilities and then you have the families. If it's a minor injury, and everything is going to be fine, then life kind of becomes normal again, but I know mothers who have lost their jobs because they didn't leave their wounded son's side because he needs an advocate. So we weren't prepared for that.

Different organizations have come along to help. We have one in the Marine Corps called the Injured Marine Semper Fi Fund that was founded because of the need to take care of families. We also formed the Wounded Warrior Regiment to take care of the Marines themselves. My sense is we're doing a pretty good job of taking care of our wounded warriors.

One thing to note is that the nature of the wounds today is significantly different. We worked hard to get through the burns and all the things we were seeing from Iraq—the IEDs with fuel packed around them and accelerants and propane that were burning the Marines. Today, we have 15 Marines that have lost at least 3 limbs—11 triple amputees and 4 quad amputees with no limbs at all. A large number of them are married. We've got young wives now trying to take care of their wounded husbands and it's very difficult. Even when it comes to just household stuff, basic cleanliness and just living—that spouse has to do everything for them. The needs of these triple and quad amputees are vastly different than those of our other wounded, and we haven't quite worked our way through that yet. It's become clear to me that this is a different category of wounded, and this is going to take an extraordinary effort. We're going to have to change some laws and some procedures.

For instance, we have a policy now where we provide a stipend to non-military/non-family attendants to care for a wounded person, and it's really just there to pay their expenses. If you're a spouse, you don't qualify for it. So we're dealing with one young sergeant, a triple amputee, his wife's a nurse, and they have two young children. They're from another country, their family lives outside the United States, and she's a wonderful wife, and he's a great young sergeant. She wants to make some income for their family because she can't work now-all she does is take care of the husband, and she takes care of the two children. They need some help here. We need to recognize that triple and quad amputees are not the same as some other injuries, and there's a psychological penalty to this not only to the wounded warrior who's missing limbs, but to the family members who have to take care of them.

Just this morning, I learned of a young wife who's talking about taking her life.

Not because she doesn't love her husband, but because it's come to the point where it's overwhelming her; she didn't know what to do. We need to change that. The system is not set up for that. In the next few weeks, I'm going to get some of the folks from the VA [Department of Veterans Affairs], Tricare, some of the Service reps in here, and we're going to discuss this. I'm more than prepared to go to Congress with this, because if you even mention something like this to Congress they're going to help you.

The other point I want to tell you is that there's so much capability on the civilian side of medicine across the United States. In some cases, they don't even know how they can help because they don't know that there's a need. But once they find out, they volunteer their medical services, their hospitals and medical teaching universities, their material, their bed spaces, their surgeons, and their nurses. There's an enormous capability of untapped goodness across this country. There's some who think that the Department of Defense is going to solve all of these major medical issues with our wounded, and I think that's wrong. I know a lot of these folks in the civilian medical community, and they feel it's their way to contribute to the defense of our nation. They may not wear the uniform, but love helping, and in some cases, it doesn't cost the Department of Defense a dime. I think there's more that can be done by the American medical community, and I think they want to do it. JFQ



Commandant gives pep talk to Marine team participating in Wounded Warrior Games in Colorado Springs



Joint Communications Support Element members board C-17 Globemaster III carrying relief supplies to Haiti from MacDill AFB, Florida

The Joint Enabling Capabilities Command A Rarity within the Conventional Force

By WALTER E. CARTER, JR.

ver the past decade, the Department of Defense (DOD) has watched the Joint Enabling Capabilities Command (JECC), which was initially conceived as the Standing Joint Force Headquarters (SJFHQ) prototype, mature into a fully functioning joint command validating its mission and capabilities through numerous successful deployments. Today's JECC is a collection

of high-demand joint capabilities ready to immediately support joint force commander requirements worldwide.

The JECC has supported every major military operation since 9/11—from contingency missions in Iraq and Afghanistan to humanitarian assistance and disaster relief missions in Haiti and Pakistan. Moreover, many may not realize that the JECC offers a military officer the opportunity to gain an unprecedented level of joint experience in every area of operations across the globe.

These two statements not only make the JECC unique but also are the reason the

Rear Admiral Walter E. Carter, Jr., USN, was Commander of the Joint Enabling Capabilities Command (JECC) from July 2009 to August 2011. JECC is currently commanded by Rear Admiral Scott Stearney, USN. command has been so successful. There is no other DOD organization offering a joint force commander both the depth of joint knowledge and the remarkable level of joint expertise gained from experience in the full spectrum of military operations.

To fully understand the unique nature of the JECC and the critical capabilities the command can bring to the joint warfighter, it is necessary to take a brief look at its evolution and crisis participation since its inception.

The Operational Challenge

Historically, creating a joint task force (JTF) has come with its share of forming and planning difficulties. Typically, a Service two- or three-star headquarters will be designated as the JTF for a crisis or contingency and will receive augmentation from the Services to fill the capability gaps within the JTF. Most situations require JTFs to be established rapidly, and the lag time in receiving augmentation, coupled with the inexperience of augmentees in joint operations, has proven an ineffective and unsuccessful model.

The search for a solution to this warfighter challenge began in 2000. Following a series of joint wargames and experiments at U.S. Joint Forces Command (USJFCOM)— Rapid Decisive Operations Wargame 2000, Millennium Challenge 2000, and Unified Vision 2001—the SJFHQ concept emerged as a possible remedy. The concept consisted of a core element of 58 personnel trained in joint warfighting disciplines and available on short notice to increase the operational effectiveness of a JTF headquarters.

Following Millennium Challenge 2002, in which the SJFHQ concept was tested and further refined, DOD tasked USJFCOM to develop a prototype SJFHQ and build the necessary policies and procedures to assist the geographic combatant commands (GCCs) in implementing the concept. SJFHQs were established at every GCC, with the exception of U.S. Central Command (USCENTCOM), from 2003 to 2005. The USJFCOM SJFHQ focused on the USCENTCOM area of operations in addition to augmenting the other SJFHQs during operational missions as their units were formed and trained.

> lessons learned from initial deployments demonstrated that the expertise provided by the SJFHQ was only a small portion of the capabilities required by a joint force commander when establishing a JTF

Subsequently, the USJFCOM prototype evolved into an operationally capable headquarters deploying to a variety of missions, including assistance for JTF Katrina, 2006 Doha Asian Games, JTF Lebanon, Combined Disaster Assistance Center–Pakistan, Combined JTF–Horn of Africa, and Task Force Ramadi.

None of these operations, however, required the USJFCOM SJFHQ to deploy an entire core element. Instead, the SJFHQ deployed smaller, tailored groups ranging from just a few personnel to groups as large as 30. Lessons learned from these initial deployments demonstrated that the expertise provided by the SJFHQ was only a small portion of the capabilities required by a joint force commander when establishing a JTF. Other capabilities, such as public affairs and communications, were also requested regularly from organizations such as the Joint Public



U.S. military troops meet with Civil Affairs multifunctional team leadership from UN on earthquake humanitarian relief operations in Cap-Haitien, Haiti

warfighter. The JECC had seen the demand signal for capabilities such as public affairs and communications increase as joint force commanders became aware of the availability of those high-demand, critical resources. The JECC made these joint capabilities more visible and accessible to the joint force commander. Additionally, the JECC fostered unity of purpose and effort among the various organizations, which was advantageous for the joint force commander, who now only needed to make one call to request a tailored team of capabilities.

Affairs Support Element (JPASE) and Joint

Communications Support Element (JCSE).

USJFCOM leadership decided to streamline

the process and establish an organization to

oversee all the capabilities that a joint force

transitioning the SJFHQ into the JECC was

the requirement to provide value to the joint

One of the most significant catalysts for

commander may require.

Proof of Concept

On October 1, 2008, the JECC officially stood up as a separate command. The SJFHQ became a Joint Deployable Team (JDT) consisting of experts in plans, operations, knowledge management, intelligence, and logistics. Additional capabilities came from the inclusion of JPASE, JCSE, and an Intelligence–Quick Reaction Team¹—all designated as joint enabling capabilities.

As the JECC filled requests for assistance, two main themes emerged, setting the organization apart from other first responder units: the JECC's "scalable" nature, and the "deployability" and "employability" of its personnel. The JECC made a significant effort to ensure that these attributes were the focus of the command. Organizational constructs were designed, red-amber-green readiness cycles were initiated, and codified processes were developed to track requirements and document each individual's readiness to deploy.

A Ready JEC package (RJP) was developed, allowing teams to be modular, scalable, and tailored to the mission and the requestor's



Joint Public Affairs Support Element arranges CNN interview on military assistance for transporting U.S. citizens from Lebanon during 2006 Israel-Hizballah conflict

needs. The RJPs, which are still in use today, include elements from each of the JECs and are able to deploy within days of notification. The RJP undergoes a 45-day assumption process to prepare the unit and its personnel for deployment. It assumes an alert posture for a 3-month period. If a deployment is initiated within that timeline, a mission-tailored team is chosen from the RJP to deploy for the operation. The deployment of an RJP automatically initiates the formation of a new RJP, assuming sufficient resources remain.

Correspondingly, the process for obtaining JECs has been modified. A standing Global Response Force Execution Order was established, allowing a designated number of personnel from each of the JECs to deploy for a crisis or contingency operation with the USJFCOM commander's approval; formal approval from the Secretary of Defense (SECDEF) was not needed, increasing the speed and efficiency of these capabilities to respond on short notice.

To ensure JECC members on the RJP were always ready to deploy, the command adopted stringent deployability and theaterentry requirements and instituted a comprehensive program to ensure that members adhered to weapons qualifications, medical immunizations, and standard paperwork (that is, wills and power of attorney documents) and tracked the progress/completion of each.

The JECC also tracked employability requirements to document the readiness of a

course became a predeployment requirement for all new JECC members.

The JECC focus on scalable, deployable, and employable personnel revamped the day-to-day operations of the command and ensured that the joint force commander would receive a team tailored to the mission, flexible enough to adapt to any requirements, and ready to deploy as soon as requested.

Joint Enabling Capabilities

The JDT, JPASE, and JCSE are currently organized as subordinate commands under the JECC, and each offers a unique capability to the joint force commander, which enhances the effectiveness, efficiency, and time required to stand up an operational headquarters.

Joint Deployable Team. The JDT, headquartered in Norfolk, Virginia, is a flexible employment package of experienced joint planners who possess expertise in the planning and execution of the full range of joint military operations. JDTs are teams of readily deployable and experienced joint planners with expertise in operations, plans, knowledge management, intelligence, and logistics.

The JDT is composed of trained and ready joint officers (O–4 through O–6), taskorganized to each request in order to meet mission requirements. Each JDT member has a baseline understanding of JTF forming and the joint operation planning process and is a subject matter expert in his respective field of study. The JDT offers a world-class team of

the JECC focus on scalable, deployable, and employable personnel ensured that the joint force commander would receive a team tailored to the mission

person to execute the mission downrange. Two avenues were identified to assist in the employability of JECC members. The first was active participation in GCC-led exercises, which provided members a chance to use their skills in a simulated environment and to interact with likely mission partners. The second was completion of an in-house JECC course: the Joint Enabling Capabilities Planners Course, which provides baseline training in the joint operation planning process to ensure that a JECC member arriving at a JTF is ready to operate in an environment without any additional training or direction. The planning planners and operators who understand and integrate the whole-of-government approach through the building and sharing of information between interagency and multinational partners and GCC staffs.

When deployed, the JDTs form rapidly and provide the joint force commander with trained staff personnel from numerous disciplines who bridge the JTF manning challenge.

Joint Public Affairs Support Element. The JPASE, headquartered in Suffolk, Virginia, provides the joint force commander with a trained, equipped, scalable, and expeditionary joint public affairs capability.

CARTER

JPASE is a close-knit cadre of civilian and military communication experts on call to respond to a wide range of contingencies anywhere in the world. As a first responder, JPASE is the only rapidly deployable joint public affairs unit in DOD providing the joint force commander with an exceptional capability to achieve his communications objectives. When not deployed, JPASE military personnel gain invaluable experience and insights through mission-rehearsal and GCC exercises around the world.

JPASE creates expeditionary teams to provide a ready, turn-key joint public affairs unit, and trains support teams. Additionally, JPASE supports public affairs training to joint staffs during major exercises, seminars, and schools.

The JPASE role as an operational capability is significant as joint force commanders understand the value of a trained team of professionals who can hit the ground running and require little time to acclimate to the operational environment, especially in an evolving technological world where news reporters often arrive before the military. JPASE's early entry capability enables the joint force commander to immediately gain and maintain the initiative in the information domain.

In their training mission, JPASE members participate extensively in the combatant command-led exercises and are fully involved throughout the entire joint exercise lifecycle to ensure public affairs requirements are planned and developed. JPASE provides training during these exercises to enable joint force commanders and their staffs to meet continuously evolving information environment challenges in their respective theaters of operations. In addition to providing training on how to develop a communications strategy, JPASE provides guidance on integrating strategic communications to build conduits between strategic and operational public affairs.

Joint Communications Support Element. The JCSE, headquartered at MacDill Air Force Base in Tampa, Florida, rapidly delivers secure, reliable, and scalable command, control, communications, and computer (C⁴) capabilities to GCCs, U.S. Special Operations Command, and other agencies. JSCE provides essential C⁴ support, ranging from small mobile teams to full-sized JTF headquarters deployments to immediately establish and then expand the communications capability of a JTF headquarters. JCSE can access the full range of DOD and commercial networks.

As one of the first capabilities needed on the ground during an emerging operation, JCSE has built a reputation as an essential, dependable capability. To keep up with an four different GCCs (U.S. Pacific Command, U.S. Southern Command, U.S. European Command, and U.S. Africa Command). The DJC2 is a deployable communications package (including tents and generators) that can support a full JTF of up to 1,500 users

deployable Joint Command and Control systems have been used during both Chairman of the Joint Chiefs of Staff exercises and real-world deployments

ever-changing communications infrastructure, JCSE has invested in up-and-coming technologies that have enabled it to offer consistently lighter, faster, and more deployable communications packages. For instance, JCSE initiated the use of the Everything over Internet Protocol communications architecture, which allows its initial communications packages to be commercially air-transportable and easily accessible in the field. This technology allows JCSE's range of communications packages to be tailored to the mission. A basic package used to support only 4 users during the initial stages of an operation, for example, could be scaled to support up to 1,500 users without any interruption to service and only minor modifications and a few additional pieces of equipment.

JCSE is also tasked with the readiness and operation of the Deployable Joint Command and Control (DJC2) systems in with unclassified/classified network access. JCSE maintains detachments of 16 to 24 members responsible for the operation and employment of these systems for each of these GCCs. In addition, JCSE maintains three surge teams of 12 members each, also trained on the DJC2 system, who can move into any of the detachments if extra support is needed. The DJC2s from each GCC have been used during both Chairman of the Joint Chiefs of Staff exercises and real-world deployments.

The accessibility to a broad range of essential capabilities, coupled with the ability of the JECs to deploy within hours, has proven to be a model that successfully meets joint force commanders' requirements. In fact, as the JECC continued to refine procedures and develop operations documents after its initial establishment, the operational tempo began to pick up speed and further validated the JECC position as a critical DOD asset.



JECC Joint Deployable Team plans for Pakistan disaster relief

A Capability for Any Mission

From contingency missions to humanitarian assistance/disaster relief operations, the JECC is prepared to deploy. The following are accounts of two of the most notable deployments—each a completely different mission set—to briefly illustrate the full range of military operations to which the JECC can respond.

ISAF Joint Command. In July 2009, Lieutenant General David Rodriguez, USA, then deputy commander of U.S. Forces–Afghanistan, specifically requested JECC support to assist in establishing the International Security Assistance Force (ISAF) Joint Command (IJC), the three-star North Atlantic Treaty Organization (NATO) headquarters in Afghanistan, which he would eventually command. The JECC sent a tailored team of 24 JDT and 13 JCSE members with skills in operations, plans, knowledge management, and communications to Kabul to serve as a bridging mechanism during the critical initial formation period until permanent manning was received.

The JDT was fully integrated with the staff throughout the duration of the deployment. There was tremendous effort and emphasis on partnership, both with NATO partners and the Afghans. The JDT worked directly with Afghan partners on many projects, including the production of the IJC Campaign Operation Order.

The overall mission expectation was for the IJC to form, plan, and achieve initial operating capability to command and control the ISAF Regional Commands in full-spectrum counterinsurgency operations. Following initial operating capability, the IJC would expand across the future operations and plans horizons and execute a full IJC staff battle rhythm to achieve full operating capability. With the assistance of the JECC, the IJC reached initial operating capability on October 12, 2009, and reached full operating capability on November 12, 2009. The team redeployed shortly after reaching full operating capability. This deployment was a milestone for the JECC as the establishment of the IJC was exactly the kind of mission that the JECC was designed for: a short-duration bridging solution until the joint manning requirements were met.

JTF Haiti. Shortly after the 7.0 magnitude earthquake hit Port-au-Prince, Haiti, in January 2010, U.S. Southern Command requested a variety of capabilities from the JECC in support of disaster relief efforts. Within days, JCSE, JPASE, and JDT rapidly



Joint Public Affairs Support Element Media team conducts CNN interview during Operation *Unified Response* in Haiti

deployed and supported Operation *Unified Response* and the standup of JTF Haiti.

JCSE members were some of the first responders, deploying within hours of notification to establish and maintain communications connectivity at Port-au-Prince International Airport, U.S. Embassy Haiti, JTF Haiti headquarters, and various medical support facilities at designated locations around the country. In addition to small communications packages initially deployed in support of the operation, JCSE deployed the DJC2 package, which provided the primary means of communications for the entire JTF Haiti staff.

Five JPASE members responded the following day by providing JTF Haiti with experts who served as liaisons to coordinate among the Embassy, interagency organizations, and DOD assets. JPASE also employed the Digital Video and Imagery Distribution System to support senior-leader interviews and the transmission of electronic media to outlets around the world.

Immediately following JPASE, the JDT deployed 12 members to provide operations, logistics, and knowledge management capabilities while establishing JTF Haiti headquarters. JDT members provided operational planning expertise in the standup of JTF Haiti and were fully integrated in key positions. They supported several high-priority planning and execution efforts as numerous staffs (U.S. Agency for International Development, U.S. Embassy, United Nations, and nongovernmental organizations) came together to support relief efforts.

The JECC team was a key component in the standup of JTF Haiti and provided critical functions lost as a result of the earthquake.

JECC Success Around the Globe

In addition to these two operations, JECC expertise has been requested by all GCCs, and each command has gained valuable experience on every continent just within the past 2 years. The JECC has deployed in support of:

■ U.S. Pacific Command in 2011 for Operation *Tomodachi/Pacific Passage*—the humanitarian assistance/voluntary authorized departure missions following the earthquake and tsunami in Japan

■ U.S. Africa Command in 2011 for Operation *Odyssey Dawn*, the U.S. mission supporting the international response to the crisis in Libya

U.S. Southern Command in 2011 for Operation *Continuing Promise*, a humanitarian assistance mission in Central and South America

U.S. Northern Command in 2010 for Operation *Deepwater Horizon*, a disaster relief effort on the Gulf Coast

U.S. European Command in 2010 for an operational-level headquarters planning mission

CARTER

• USCENTCOM in 2009 to assist in the establishment of JTF 435 and in 2010 for follow-on support to Combined Joint Interagency Task Force 435 and humanitarian assistance efforts following the massive flooding in Pakistan.

Additionally, JCSE has been continuously deployed in support of missions for USCENTCOM and U.S. Special Operations Command for Operation *Iraqi Freedom* since March 2003, Operation *Enduring Freedom* since March 2002, and Operation *New Dawn* since September 2010.

Employing a Total Force Concept

One of the keys to JECC success is its incorporation of Reservists into each of its subordinate commands. The JECC relies heavily on the talent of its Reserve Component members for mission success. In fact, almost every deployment in JECC history has contained a blend of both Active-duty and Reserve forces.

JECC Reservists bring experiences from their civilian backgrounds, which are valuable during operational missions. The JECC is able to tap into the expertise of Reservists with specific industry skill sets, bringing a wide array of talent that might not be available if the command was limited to Active-duty military.

Servicemembers in the JECC represent all four Services, including Active and Reserve personnel, and are fully integrated, creating a total force unit that trains and deploys together. The total force concept also provides Reservists with an opportunity to expand their knowledge with participation in a joint unit. The JECC provides Service-specific capability training, which allows both Active and Reserve members to gain a better understanding of what each Service provides. This additional training enhances the proficiency of members when deployed and brings the joint force commander a highly skilled package of capabilities not found elsewhere in DOD.

Reservists assigned to the JDT assume an alert posture for a 90-day period to respond to short-notice deployments. Each Reservist assigned to the JDT assumes this alert posture once every 18 months, providing flexibility and predictability. In addition to the experience gained by deploying in support of GCC requirements, JDT members are afforded a broad range of training and education in joint and multinational matters. All JDT personnel, including Reservists, receive extensive training in joint planning and are offered the opportunity to attend the joint professional military education II course in Norfolk, Virginia, NATO and allied nation planning courses, and other U.S. Government courses. In addition to the joint credit earned, following a 2- to 3-year The unique opportunities and the deployment model for Reservists have proven an attractive program to a wide range of candidates, allowing the JECC to build a pool of highly skilled, highly motivated Reservists to choose from for deployment during both training and operational requirements.

the JECC is able to tap into the expertise of Reservists with specific industry skill sets, bringing a wide array of talent that might not be available if the command was limited to Active-duty military

assignment with the JDT, an individual's Service can expect to receive back a competent, broadly experienced joint officer who can not only plan but also lead a team of planners in solving complex problems and developing executable plans and orders.

JCSE offers an opportunity for communications-based Reservists to develop a working knowledge of the most advanced communications technologies on the market and be a part of an organization dedicated to continually developing cutting-edge communications equipment packages for the joint warfighter. The JCSE mission supporting special operations forces and high-level operations with unique communications requirements attracts the most highly skilled network and system administrators, satellite and field radio operators, and data network specialists.

Reservists with JPASE are primarily tapped to participate in exercises but may be called on for real-world operations requiring crucial public affairs and strategic communications skill sets. As mentioned, JPASE expertise is usually required at the earliest stages of a crisis or contingency operation. The opportunity to participate at the onset of a major operation and influence the direction of the public affairs program allows JPASE Reservists to develop their proficiencies and bring their civilian knowledge into play at an influential stage.

Additionally, since the JECC mission spreads across all six GCCs, both Active and Reserve members from all the JECs have an opportunity to participate in exercises and real-world operations in multiple areas of operation. It is not uncommon for JECC members to have operated in three or four GCC areas during their JECC assignment.

The Way Ahead

In the midst of the JECC's high operational tempo, the JECC officially transitioned to U.S. Transportation Command (USTRANSCOM) on July 1, 2011, as a result of the Secretary of Defense's April 27, 2011, decision to disestablish USJFCOM. Additionally, as part of continued DOD efficiencies, the GCCs were directed to stand down their SJFHQs by October 1, 2011. The JECC was tasked to assume the mission for the former SJFHQs, giving the JECC responsibility for a global mission.

As the JECC settles into its new position under USTRANSCOM and assumes missiontailored capabilities previously assigned to the GCC SJFHQs, the command's vision remains unchanged. The JECC will maintain a strong focus on preparing teams for deployments across the full spectrum of military operations. In addition, the JECC will continue to recruit highly skilled members of both the Active and Reserve Components to bring even more expertise and knowledge to the joint force commander.

As the requirements for global operations evolve, the JECC will continue to improve the efficiency and effectiveness of its enabling capabilities for global response. The command will strive to continue developing and maintaining the highest quality JECC members and sustaining their deployability as they look forward to future joint force requirements. **JFQ**

NOTE

¹ The Intelligence–Quick Reaction Team has since been removed from the JECC as a result of the USJFCOM disestablishment. B–1B Lancer departs Ellsworth Air Force Base, South Dakota, on fleet's first combat sortie from continental United States to targets overseas, Operation *Odyssey Dawn*

Distribution of the second sec

Joint Task Force Odyssey Dawn A Model for Joint Experience, Training, and Education

BY GREGORY K. JAMES, LARRY HOLCOMB, and CHAD T. MANSKE

peration *Odyssey Dawn* began on March 19, 2011, under the provisions of United Nations Security Council Resolutions (UNSCRs) 1970 and 1973,¹ which authorized states, among other things, to take necessary actions to protect Libyan civilians from government regime violence, enforce an arms embargo, freeze Libyan authorities' assets, and impose a no-fly zone.

Earlier, on March 3, 2011, U.S. Africa Command (USAFRICOM) stood up Joint Task Force Odyssey Dawn (JTF OD) under the command of Admiral Samuel Locklear III, commander of U.S. Naval Forces Europe– Africa. Initially, its mission focused on humanitarian assistance tasks supporting the evacuation of U.S. and third country nationals from Libya, enforcement of a maritime exclusion zone, and enforcement of a no-fly zone. On March 17, following approval of UNSCR 1973, JTF OD began coordinating with coalition forces from both North Atlantic Treaty Organization (NATO) and non-NATO countries "to conduct military operations to protect the civilian population from attack or threat of attack."²

Two days later, on March 19, 2011, following direction from President Barack Obama, the joint task force began kinetic operations in Libya. Within 3 weeks of its standup, JTF OD conducted a coalition air campaign against Libya's integrated air defense system and subsequently went on to attack and halt the Libyan government advance against rebel-held population centers. During that time, the coalition lost no aircraft to enemy action but lost one aircraft to mechanical failure and successfully recovered both pilots. On March 31, JTF OD transferred command and control of the coalition to NATO, thus successfully achieving both military objectives received from the President and Secretary of Defense.³

This article argues that the success of Operation *Odyssey Dawn*, despite its complexity, validates joint planning processes,

Lieutenant Colonel Gregory K. James, USA, is Deputy Director for Plans (J5), U.S. Special Operations Command–South. Colonel Larry Holcomb, USMC, is assigned to 4th Marine Division. Colonel Chad T. Manske, USAF, is a Military Fellow at the Council on Foreign Relations. joint education foundations, joint training opportunities, and joint exercises. It examines the genesis, standup, and operation of JTF OD, to include the challenges—or lessons observed—and strengths through the lens of the JTF's use of the Joint Operation Planning Process (JOPP). Finally, this article provides recommendations and observations with U.S. Sixth Fleet Commander, was the joint force maritime component commander; Major General Margaret Woodward, Seventeenth Air Force Commander, was the joint force air component commander; Brigadier General Christopher Haas, USA, Special Operations Command Africa, was the joint special operations task force commander; and

contingency plans for Libya were outdated by 10 years because relations between the United States and Libya had improved over the years

respect to the challenges and strengths for the enhancement of the joint force's ability to conduct future operations.

Odyssey Dawn's origins resulted from the mounting violence of the Libyan regime against its citizens in mid-February 2011. This violence included the use of lethal force against unarmed protestors. Subsequently, around the third week in February, the United Nations passed a unanimous resolution—UNSCR 1970—condemning those actions. UNSCR 1970 was a nonpunitive document calling for an end to the violence and urging Libyan authorities to respect human rights, permit the safe passage of humanitarian supplies, and lift restrictions imposed against the media. It also imposed an arms embargo and implemented sanctions upon key Muammar Qadhafi regime figures, among other things. Collectively, this resolution's tenets became the basis for the United States to lead a coalition of 11 nations in planning for operations enforcing it.4

JTF OD was established at Naval Support Facility Capodichino near Naples, Italy.5 Its mission paralleled the provisions of UNSCR 1970.6 Following approval of a subsequent resolution-UNSCR 1973-JTF OD quickly shifted focus from humanitarian assistance, mobility, and nonkinetic patrolling to an air campaign that first established air supremacy over the theater of operations, then successfully prevented the Qadhafi regime from committing mass atrocities against rebel-held cities in Libya. The command relationships established for the operation included a joint command element consisting of a commander, foreign policy advisor, deputy commander, chief of staff, and a senior enlisted advisor.7

In making up the component commander team, Vice Admiral Harry Harris, Brigadier General Michael Callan, Seventeeth Air Force Vice Commander, led the air component coordination element.8 No joint force land component commander (JFLCC) was designated for this operation, which is addressed later. The J-staff for Odyssey Dawn consisted of directorates J1 through J7, J9, Public Affairs, judge advocate, surgeon, comptroller, and chaplain.9 The leads and deputies of these directorates were primarily Air Force and Navy officers, the exception being the chief chaplain who was an Army officer. Twenty-eight U.S. and 10 foreign liaison officers (all from Italy, France, and the United Kingdom) supported the J-staff. Additionally, 12 members from U.S. Joint Forces Command's Joint Enabling Capabilities Command's (JECC's) Joint Deployable Team (JDT) augmented the J-staff and liaison officers in their planning efforts, beginning with the JOPP and other processes.¹⁰

The JOPP and crisis action planning, as outlined in Joint Publication 5-0, Joint Operation Planning, provide an ordered, analytical, and logical framework for creatively and critically planning joint operations. This process begins with a study of the operational environment, problem identification, and framing of the process for subsequent mission analysis. To understand the environment in Libya, the most logical place for the JTF to begin was with existing contingency plans. Unfortunately, contingency plans for Libya were outdated by 10 years because relations between the United States and Libya had improved over the years-so much so that the U.S. Department of State had removed Libya from its list of states sponsoring terrorism. Thus, the 6-hour compressed planning effort that ensued with both the USAFRICOM J3/4 and the JECC JDT was without the benefit of a recent contingency plan.11

Planning for the maritime exclusion zone (embargo), establishment of a no-fly zone, and potential strike options were discussed during the JOPP.¹² The fleshing out of flexible deterrent options was within the day-to-day skill sets of USAFRICOM planners; however, USAFRICOM had yet to face a kinetic operation since its standup.¹³

Shortly after establishment, the JTF headquarters element began planning.14 From Naples, Italy, the JTF OD staff relocated aboard the U.S. command and control ship USS Mount Whitney in the Mediterranean on March 11, 2011. On March 14, shortly after the ship was under way, the JTF headquarters became certified.15 Once out to sea, JTF OD staff conducted an "accelerated" JOPP as they received indications, warnings, and political objectives-the latter in the form and substance of the signed UNSCR 1973 and President Obama's speech.16 The JTF transformed concepts of operations into plans in only a few hours with the goal of beginning kinetic strike operations on the evening of March 19. The JTF established a battle rhythm upon completion of the first evening's strikes, incorporating the sound principles of earlier planning efforts. They also formed a joint interagency coordination group and conducted daily meetings led by the foreign policy advisor, Ambassador Lee Feinstein.¹⁷ According to the JECC, despite compressed planning timelines and processes, the results and products served their ultimate purpose in producing comprehensive plans translating to effective strikes and desired outcomes.18



British liaison officer updates commander, Joint Force Maritime Component, on Joint Task Force Odyssey Dawn aboard USS *Mount Whitney*

Challenges and Strengths

With the preceding understanding of the genesis of Operation *Odyssey Dawn* and the JTF planning efforts, let us now turn to some of the JTF's planning and execution challenges and strengths. The following are



four challenges—or lessons observed—and five strengths, respectively, of JTF OD planning and execution.

Vague Strategic Guidance. Due to complexities inherent in modern joint operations, planners often receive vague strategic guidance (multiple Operation Odyssey Dawn after action reviews reflected this fact). Nonetheless, the JTF's planning efforts resulted in positive outcomes, including a successful embargo, destruction of key regime air defenses, and protection of key population centers.19 The JTF also faced an evolving military mission (from mostly humanitarian and mobility operations to kinetic operations) with associated changes in objectives and endstates. Key to the positive outcomes was the unrestrained creativity of the USAFRICOM planning staff who continued to proactively ask themselves "Then what?" questions while planning. This helped them anticipate potential courses of action.²⁰ Key to the success of this effort was the quality of the officers, shaped by their experiences and grounded in quality joint and Servicespecific military education. Success was also a result of the foreign policy advisor's and interagency community's involvement in interpreting the President's and Secretary of State's speeches and intent with regard to the political and strategic objectives and how they translated to wielding the military instrument of power.

Absence of a Designated JFLCC. The rationale for not having a JFLCC in JTF OD rested on the assumption that America would not commit its own ground troops to any contingency operation in Libya. However, the U.S.-led coalition ended up conducting operations against Libyan ground forces. Hindsight tells us that having dedicated ground force expertise on the JTF staff developing concepts of operations would have provided needed situational awareness. The situation could be remedied in future situations with a small staff of 20 personnel versed in land warfare.²¹ JTF OD compensated for the lack of dedicated land component planners by leveraging qualified J-staff personnel and liaison officers.22

Battle-rostering. Though USAFRICOM stood up JTF OD, personnel came from multiple combatant commands, nations, and governmental agencies. Furthermore, many of the personnel populating JTF OD had never worked together before, either in training or in previous crisis operations. These facts presented a potential challenge to the JTF's ability to work efficiently from a cold start. Ideally, force providers receive sufficient lead time to identify the correct military specialties and personnel to fill vital billets for a JTF staff. Key to this process is the need to identify an acceptable blend of experience, education, and training. Given the joint nature of American warfare today, many personnel have either the joint education or the joint experience

necessary to fulfill their duties as part of a JTF. Our joint force also benefits from its broad experience in coalition warfare and, by design, from the interoperability gained as a member of NATO. The current depth of experience and training in the joint force helped JTF OD achieve success despite the absence of a battlerostered staff, and despite the inherent complexities of joint and combined operations.²³

JTF Headquarters Staff Composition and Location. That the JTF commander was also the four-star commander of U.S. Naval Forces Europe (NAVEUR) and U.S. Naval Forces Africa (NAVAF) had a positive bearing on the synergy, focus, and coordination of the operation's planning and outcomes. Some may question the logic of designating an already dual-hatted four-star component commander as the ITF commander, but in this instance it was a plus.²⁴ In addition to commanding NAVEUR and NAVAF, Admiral Samuel Locklear commanded NATO's Allied Joint Force Command, Naples, which gave him instant credibility to lead coalition forces and proved beneficial for the handoff of the mission to NATO, under Operation Unified Protector, at the end of March. Finally, the JTF deputy commander, joint force maritime component commander and his deputy, air component coordination element, and 23 of 28 U.S. liaison officers were also on board USS Mount Whitney facilitating clearer communications and synergy among the planning staff.

JAMES, HOLCOMB, and MANSKE

Combatant Command Overlap. It is commonly thought that the more personnel and equities involved in the planning process, the more convoluted, confusing, and timeconsuming it is. This is normally a truism, and in this case, there were two distinct combatant commands involved: U.S. European Command (USEUCOM) and USAFRICOM. This friction was eased, however, as the established combatant command (USEUCOM), with its own forces and a history of working Africa issues, worked in conjunction with a newer, less established combatant command (USAFRICOM) with a smaller staff and fewer personnel. For JTF OD, these commands' staffs integrated and complemented one another, producing a result exponentially greater than the sum of its parts.²⁵ Key to this result seemed to be the close preexisting relationships built by corresponding functional areas across each combatant command as well as a foundation of joint education and training by its members.26

Regional Exercises. Robust regional exercises positively contributed to Operation Odyssey Dawn's outcome. USEUCOM conducts a yearly three-star joint and combined exercise called Austere Challenge, which enables Service components to execute fullscale operations at the JTF level. The planning, execution, and relationship-building of such an exercise cannot be overstated. This exercise in particular had a catalyzing effect upon JTF OD since many of the key players had exercised and worked together during previous Austere Challenge events.27 Thus, when it came time to constitute the JTF OD team, a high level of comfort and confidence in the leadership group facilitated accelerated planning efforts by which everyone became synchronized. Another positive outcome of this approach was the complete airing out of the coalitions' national needs, objectives, and interests prior to their commitment to the operation. Despite the time-consuming negotiating process that history has shown this to be, an established exercise foundation made it easier for the transition to a NATOcontrolled operation at the end of March.28

U.S. Government and Military Involvement. According to the JTF command team, the involvement of multiple levels of the U.S. Government and military was a strength in both planning and execution.²⁹ Modern communications technology such as the TAND-BERG secure video-teleconferencing system allowed multiple entities to communicate diverse perspectives bearing constructively on the planning, decision making, and execution aspects of the operation. $^{\rm 30}$

Coalition and Team-building. During the early March planning efforts as the coalition began to form and subscribe to the objectives of the operation, it became clear that years of joint exercises, training, and education at the senior military levels made a positive difference during planning and execution.³¹ Nine of the 11 coalition nations/ members were part of NATO, and it was evident that this operation constituted as quickly and smoothly as it did because of "decades of NATO existence and cooperation."32 Just as joint exercises, training, and education enhanced multiple levels of involvement as noted above, modern communications (for example, electronic chat, email, and video-teleconferencing) also enhanced the team-orientation aspects of the operation's

that intent was well understood before indepth planning progressed further.

Flexibility and Adaptability. Early in the planning process, the JTF made it clear to the planners and staff that they would adhere to the mission objectives derived directly from UNSCR 1973.33 In doing so, component command planners had a clear understanding of the foundation from which to plan and harmonized with one another for mission success. The components' understanding allowed flexibility to plan and execute and served as one of the greatest strengths of the JTF staff during Operation Odyssey Dawn.34 It also quickly enabled a smoother transition of the operation to NATO control. Because the United States conducted its operations through adherence to the provisions of UNSCR 1973, and communicated that intent through the chain of command up front, legitimacy-a principle of

commanders' involvement in the back-and-forth dialogue enhanced team-building and ensured that intent was well understood before in-depth planning progressed further

execution. This not only affected the speed by which planning and execution at the JTF level occurred, but it also more precisely allowed commander's intent to project directly from the commander to key leaders daily, and sometimes multiple times a day. Commanders' involvement in the back-and-forth dialogue enhanced team-building and ensured joint operations—became the foundation for coalition buy-in and sustained involvement.

Recommendations and Observations

While these challenges and strengths offer a foundation for discussion, they also help validate the strengths of our JTFs joint education, training, exercises, and



FORUM | Joint Task Force Odyssey Dawn



experience—and lead to the following recommendations and observations.

Vague Strategic Guidance. There is nothing new about the uncertainty associated with strategic guidance. Ensuring that foreign policy advisors and interagency personnel stay engaged in contingency and crisis action planning efforts, however, helps mitigate the risk of military planners being out of synch with national leadership. It also keeps them aimed at a whole-of-government approach. This was demonstrated during Operation Odyssey Dawn as the JTF's foreign policy advisor employed his understanding of the political and strategic objectives coupled with his experience in guiding the JTF to success.

Absence of a Designated JFLCC. JTFs should consider the composition of the adversary when forming its own structure, even if ground troops are not employed on the friendly side. Filling every key position of a JTF staff will enhance understanding of the operational environment and can multiply the effects and outcomes of the planning process and subsequent operation execution. In future operations where U.S. ground forces are not employed, consideration of a JFLCC team to conduct planning and provide input covering some or all of the functions is essential.

Battle-rostering. More time spent in identifying a minimum level of joint education, training, and experience of potential JTF staff personnel for participation on a JTF staff will enhance productivity and smooth planning processes and subsequent planning cycles. It will also serve to strengthen the joint force. Additionally, battle rosters with

the extent possible, JTF component commanders should be geographically and physically located in close proximity to one another—preferably together—to enable better communications and higher quality planning. In this operation, the majority of the key commanders and staff, except the joint force air component commander and joint special operations task force, were collocated aboard the USS *Mount Whitney*, which contributed greatly to unity of command and unity of effort.

Combatant Command Overlap. Continue to identify and send the maximum number of key personnel working on joint and combatant command staffs to joint education schools where thinking and planning come together in the ideal preparatory laboratory for the planning and conduct of future joint operations. In cases in which combatant commands share forces as directed by the Unified Command Plan, combatant command staffs must deconflict manpower requirements during contingency and crisis action planning.

Regional Exercises. Both tangible and intangible value results from conducting large-scale exercises led by three- and four-star officers. However, the availability of time, resources, manpower, and funding often drive real-world combatant command priorities, resulting in cancelling these exercises. Operation *Odyssey Dawn* validated the importance of exercises such as Austere Challenge because of the joint, coalition, and NATO training return on the investment. Continuation of three- and four-star exercises should remain high on a combatant commander's and Service component commander's list of priorities.

U.S. Government and Military Involvement. Operation Odyssey Dawn reinforced the need to continue striving for personnel outside

ensuring that foreign policy advisors and interagency personnel stay engaged in planning efforts helps mitigate the risk of military planners being out of synch with national leadership

the appropriate and required skill sets should be pre-identified during contingency planning and readily available when crises occur.

JTF Headquarters Staff Composition and Location. Continue identifying officers with a broad resume of joint education, training, and experience to fill critical command and leadership positions on JTF staffs. To the military serving as part of the joint planning and execution community—particularly nonmilitary interagency personnel—to attend U.S. military joint professional military education schools and courses. Likewise, DOD should consider increased participation of military personnel in other U.S. agency/ department education (for example, the Foreign Service Institute). The more personnel who possess this education, the better the common understanding of terminology, processes, and value such personnel will be to the JTF, which will likely result in planning from a more common framework.

Coalition and Team-building. Continue ensuring that robust and flexible communications are part of JTF deployment kits. Senior leaders also need the proper training to use information systems to their full potential. Though there were minor communications and computer connectivity challenges for the JTF from aboard USS Mount Whitney, most issues were easily surmountable.35 Commander's intent is also easier to communicate and understand when key personnel and planners operate in as close physical proximity as conditions permit.

Flexibility and Adaptability. The final observation, which is tied to the first insight above, is that once JTF military planners receive clear political and strategic objectives, they quickly synchronize in the direction the planning effort should take. The flexibility and adaptability that the joint force possesses is a valuable force multiplier worth continued cultivation in our joint doctrine, education, exercises, and whole-of-government approach.

USAFRICOM successfully executed its first major contingency operation. Notwithstanding its short duration of active kinetic operations, Operation Odyssey Dawn achieved the limited military objectives directed by the President and Secretary

of Defense in support of UNSCR 1973. Contributing to that success was the strong combination of joint education, training, and experiences that the JTF headquarters staff possessed. Relationships built by members of the JTF OD team throughout the course of their careers, including joint and combined assignments, laid a foundation for the trust demonstrated by senior leaders of the coalition.36 These factors allowed a U.S.-led coalition to "go from nothing to kinetic strike operations in a mere three weeks,"37 while controlling and sustaining the speed and pace for weeks thereafter. The combination of these factors, accumulated throughout the careers of our military personnel, still serves as an overwhelming strength worthy of continued emulation. JFQ

NOTES

¹ United Nations Security Council Resolution 1970 is available at <http://daccess-dds-ny.un.org/ doc/UNDOC/GEN/N11/245/58/PDF/N1124558. pdf?OpenElement>.

² Available at <www.naveur-navaf.navy.mil/ odysseydawn/index.html>.

³ Interview with Joint Enabling Capabilities Command's (JECC's) Joint Deployable Team (JDT) members Commander John Menoni, Lieutenant Colonel Richard Hughes, and Lieutenant Commander Haley Dunn, July 20, 2011. Eleven other JECC JDT members went to work/liaise on the U.S. Africa Command (USAFRICOM) staff.

⁴ Major General Mark Zamzow, USAF, and Joint Task Force Odyssey Dawn Deputy Com-





mander, "Ensuring Freedom's Future-Recent Contingency Ops in USAFE," briefing, slide 19.

⁵ Telephone interview with Major General Mark Zamzow, August 8, 2011; and "Ensuring Freedom's Future," slide 18.

6 "To conduct military operations to protect the civilian population from attack or threat of attack, in accordance with United Nations Security Council Resolution 1973; to establish a no-fly zone to help prevent mass atrocities; and to enforce an arms embargo to prevent the flow of arms and armed mercenaries from being used against civilians," available at <www.naveur-navaf.navy.mil/ odysseydawn/index.html>.

⁷ "Ensuring Freedom's Future," slide 26.

9 Ibid.

¹⁰ JECC JDT interview.

¹¹ Ibid. Confirmed also by interview with

Zamzow.

12 Ibid

13 Ibid. The JECC noted that "USAFRICOM was not trained, organized or staffed for a hot war" going into the planning effort.

¹⁴ "Ensuring Freedom's Future," slide 18.

- ¹⁵ JECC JDT interview.
- ¹⁶ Ibid.

17 Ibid.

¹⁸ Ibid.

19 Zamzow interview.

²³ JECC JDT interview; Zamzow interview. ²⁴ Ibid.

²⁵ Zamzow interview.

²⁶ Ibid. Zamzow was convinced that the value of joint education, and specifically joint professional military education II, was the greatest factor in this outcome.

³⁰ Ibid. Zamzow noted that being under way limited the number of key players who could be physically present due to berthing space or other reasons for key discussion during planning and execution. He noted that USS Mount Whitney's communications capabilities were exceptional and served as a force multiplier in daily discussions.

³⁴ Ibid.

³⁶ Ibid. Zamzow noted that preexisting relationships between American and coalition officers from either professional military education courses and/or joint/combined assignments facilitated the operation's success.

37 Ibid.

⁸ Ibid.

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

²⁷ Ibid.

²⁸ Ibid.

²⁹ Ibid.

³¹ Ibid.

³² Ibid.

³³ Ibid.

³⁵ Ibid.

Air Force attack controller establishes communications with tactical operations center during Task Force Redhorse engagement in Parwan Province, Afghanistan

Space CRAF A Civil Reserve Air Fleet for Space-based Capabilities

By DAVID C. ARNOLD and PETER L. HAYS

n a May 2010 speech at the Eisenhower Memorial Library in Abilene, Kansas, Secretary of Defense Robert Gates predicted a new future for the Department of Defense (DOD) after a "gusher of defense spending" that followed the attacks of September 11, 2001. "Military spending on things large and small," he stated, "can and should expect closer, harsher scrutiny. The gusher has been turned off, and will stay off for a good period of time. . . . [I]t's a simple matter of math."¹ Echoing these themes in February 2011, the DOD top weapons buyer, Under Secretary of Defense for Acquisition, Technology, and Logistics Ashton Carter, stated, "We are entering a new era in defense [where] we won't have the ever-increasing defense budgets of the past decade and need to be attentive to the nation's other needs.... Currently about half of our prime contract spending is in the services sector."²

To increase flexibility in the uncertain international environment that lies ahead, DOD must shift how it uses space to support warfighter needs from buying systems to buying capabilities. U.S. Government shortfalls in meeting warfighters' space-based requirements exposes risks in the years ahead, necessitating a new government approach based on the Civil Reserve Air Fleet (CRAF) system for presenting space-based capabilities. If DOD starts considering moving bits across the heavens as space cargo, it can adopt a system already in place for air cargo to prepare for the contingency operations that we cannot predict. This new approach will reduce costs and inefficiencies and forge closer relationships with commercial space providers, and in doing so will increase agility, sustain the space industrial base, and enhance deterrence.

Colonel David C. Arnold, USAF, is assigned to the Department of Defense Executive Agent for Space Staff (DODEASS), Deputy Under Secretary of the Air Force (Space). Dr. Peter L. Hays is a Senior Analyst with SAIC supporting DODEASS.

New National Space Policy Drives Changes

A month after Gates's speech, President Barack Obama released his National Space Policy. Part of the reason for the new policy, officially designated Presidential Policy Directive 4 (PPD 4), was recognition at the highest levels of the government that space is now critical to the American way of life.³ The policy laid out several guidelines for the commercial space sector:

purchase and use commercial space capabilities and services to the maximum practical extent when such capabilities and services are available in the marketplace and meet government requirements

modify commercial space capabilities and services to meet government requirements when existing commercial capabilities and services do not fully meet these requirements and the potential modification represents a more cost-effective and timely acquisition approach for the government

• explore the use of inventive, nontraditional arrangements for acquiring commercial space goods and services to meet government requirements, including measures such as public-private partnerships, hosting government capabilities on commercial spacecraft, and purchasing scientific or operational data products from commercial satellite operators in support of government missions

develop government space systems only when it is in the national interest and there is no suitable, cost-effective U.S. commercial or, as appropriate, foreign commercial service or system that is or will be available

■ refrain from conducting government space activities that preclude, discourage, or compete with U.S. commercial space activities, unless required by national security or public safety

pursue potential opportunities for transferring routine, operational space functions to the commercial space sector where beneficial and cost-effective, except where the government has legal, security, or safety needs that would preclude commercialization.⁴

Increased international engagement is also a major part of PPD 4. The second goal states that the United States should expand international cooperation on mutually beneficial space activities to broaden and extend the benefits of space, further the peaceful use of space, and enhance collection and partnership in sharing of space-derived information.⁵

Just 7 months after the announcement of the President's policy, Secretary Gates and Director of National Intelligence James Clapper released a strategy to implement the policy for national security space assets.⁶ In this strategy, they not only acknowledged governmental dependence on space but also recognized the domain's changing nature: "Space, a domain that no nation owns but on which all rely, is becoming increasingly congested, contested, and competitive."7 To develop a U.S. space industrial base that is "robust, competitive, flexible, healthy, and delivers reliable space capabilities on time and on budget," the national security sector needs to "explore a mix of capabilities with shorter development cycles to minimize delays, cut cost growth, and enable more rapid technology maturation, innovation, and exploitation."8

The President's space policy also issues implementation guidance for international approaches to the executive branch agencies with responsibilities for space programs. This includes trying to strengthen U.S. space leadership, identifying areas for potential international cooperation, and developing transparency and confidence-building measures.9 With the United States "going it alone" in space less frequently and relying more on partners, space capabilities will become more resilient, dispersed, and easily replenished because they use state-of-the-world technology. State-of-the-art constellations also can be augmented with state-of-the-world capabilities to make these important capabilities more resilient. These state-of-the-world capabilities

a Luxembourg-flagged satellite that carries U.S. military communications when such an attack could constitute an attack on the North Atlantic Treaty Organization? Why would an adversary attack a satellite when its own military is a customer of that provider? Alliance dynamics can lead to lowest common denominator outcomes, but more cooperation with allies and commercial partners at the very least means adversaries have more potential enemies to sort out. Since commercial SATCOM platforms typically support a host of international users including U.S. forces, the political costs and escalatory risks of carrying out attacks on those assets might deter an opponent from disrupting SATCOM unless the conflict escalated to a higher level.10

During the 2009 Schriever Wargame, the use of commercial systems was important in maintaining military space capabilities as coalition assets were degraded or denied during the scenario. However, government decisionmakers did not have mechanisms to allow the coalition to make best use of commercial assets. In addition, the adversary recognized the value of commercial assets and effectively used them for their own purposes against the allied coalition by buying up the spot market before the coalition could. According to the Joint Force Component Commander for Space Lieutenant General Larry James, USAF, "the results clearly showed the need to develop better concept[s] of operations for integrating commercial capabilities and to have 'on the shelf' plans and agreements that allow this utilization during heightened tensions and hostilities. It also reconfirmed the need to better manage

alliance dynamics can lead to lowest common denominator outcomes, but more cooperation with allies and commercial partners means adversaries have more potential enemies to sort out

could be partners' capabilities such as an ally's satellite communications (SATCOM) constellation or a multinational partnership such as the Wideband Global SATCOM (WGS) constellation. The state-of-the-world capabilities could be better integrated into U.S. capabilities than allied capabilities are today.

Another advantage of improved cooperation at the state-of-the-world level is that international cooperation complicates an adversary's targeting calculus. Why attack commercial satellite communication capabilities and how we procure these services.³¹¹

A case can be made for both government and industry that closer cooperation is mutually beneficial. As the two work together, increases in technical capability would lead to capacity increases, which would reduce cost per bit transmitted and received; security of communications would increase through focused beams; space situational awareness about adjacent



payloads would increase, which would decrease radio frequency interference or blue-on-blue jamming from adjacent satellites using the same frequencies; and new products would be exploited faster and more cheaply, such as the new mobile services sector for communications-on-the-move supporting highly mobile warfighters.

Also, as government and industry work more closely, there could be technical and programmatic resource management improvements: industry could fill in unused gaps in coverage, increasing the number of users per transponder and providing more antennas for special users; industry could exploit switchable military-commercial frequencies to sustain their sales through low periods of government use, enabling more flexible and efficient resource management. Both sides could also develop alternative business arrangements for investment or sharing, leading to decreased costs for operations, sustainment, and, eventually, their entire enterprise, whether military satellite communications (MILSATCOM) or remote sensing. Some of these approaches, however, would

require the government to use some commercial processes to meet government equities.¹²

While some DOD leaders have concerns about the department's dependence on the private sector, others appreciate a close government-industry relationship: "At the end of the day, it's a great thing," stated General James Cartwright, former Vice Chairman of the Joint Chiefs of Staff, responding to a question from a defense reporter about whether the military's dependence on commercial bandwidth is "good, bad or unimportant." Diego in February 2010. "The good news is that the industry is leading that. I don't have to go invent it."¹³

Commercial Marketplace Is Ready

Global commercial space capabilities are significant and growing steadily. There were 23 commercial launches worldwide in 2009 and 22 during 2010. In the geostationary market, demand averages about 20 satellites per year (or about 15 launches annually after accounting for dual-manifested

the United States is no longer competitive in providing commercial launch services, having ceded this role to Europe's Arianne and Russia's Proton

"As we move to more exquisite sensors, the demand for high-definition video is substantially greater, so we have to move to mediums and compression algorithms that will allow us to do that," he said after remarks during the Armed Forces Communications and Electronics Association conference in San missions) and has remained fairly stable.¹⁴ Global satellite industry revenues, dominated by satellite services, totaled \$160.9 billion in 2009 while all global space activity (including government spending) rose 5 percent in 2010 to \$168.1 billion while all global space activity (including government spending) climbed 7.7 percent to \$276.52 billion in 2010.15 Europe and the United States remain the leaders in providing commercial services from space, but with China's return to the commercial launch marketplace and other countries' development of heavy launchers, most notably India, this leadership will change. In launch, this has already occurred as the United States is no longer competitive in providing commercial launch services, having ceded this role to Europe's Arianne and Russia's Proton. United Launch Alliance, the only current U.S. commercial launch provider, launches both the Boeing Delta IV and Lockheed Atlas V evolved expendable launch vehicles, but it has unattractive prices to commercial customers.

The commercial marketplace is mature and efficient, especially with respect to SATCOM, growing more so in remote sensing and ground operations. Closer governmentcommercial cooperation offers the potential for cost savings, greater availability of different space capabilities, more rapid throughput of information, and service provider diversity. It also offers improved mission assurance and technology risk reduction, as well as prospects for strengthening deterrence against attacks by increasing the number of actors that potential attackers must confront.

The U.S. military has become dependent on commercial SATCOM (COMSATCOM) capabilities to supplement its own. Prior to Operation Enduring Freedom, the U.S. Central Command area of responsibility was predominantly supported via military satellite communications (MILSATCOM). There were limited commercial SATCOM links via commercial terminals during the late 1990s and early 2000s. SATCOM requirements were mainly short duration and only in support of the no-fly zones over Iraq; thus, needs were met via MILSATCOM resources and not commercial SATCOM leases.16 Today, industry experts estimate that 80 percent of all satellite bandwidth used by DOD is purchased by the Defense Information Systems Agency (DISA) from commercial SATCOM companies.17 This percentage is expected to decrease in the near future as DOD launches organic MILSATCOM systems, such as WGS and Advanced Extremely High Frequency (AEHF), and if DOD adds military transponders as hosted payloads on commercial spacecraft. In the long run, commercial requirements may further decrease as U.S. forces return to their garrisons.

New, organic MILSATCOM will meet some needs currently filled by COMSAT-COM. For example, the first WGS satellite provided more bandwidth than the entire Defense Satellite Communications System (DSCS) constellation, which the WGS constellation is designed to replace. Peter Stauffer, director of the Wideband SATCOM Division at the U.S. Army's Space and Missile Defense Command, spoke about WGS improvements over DSCS. "WGS provides a quantum leap in capabilities-not only in throughput but in operational flexibility," he stated. "The ability for the warfighter to exchange information faster using higher data rates, and more efficiently, with the ability to reach different locations simultaneously is part of the inherent capability of WGS. Data, full motion video, maps, voice and imagery will be received and transmitted by warfighters at all levels-tactical, operational and strategic."18 When the WGS constellation is complete, currently planned at six satellites, it is expected to be in use for a decade or more. Similarly, the first AEHF satellite will provide more capacity than the entire Milstar constellation, providing protected, anti-jam, high-data-rate communications. The Pentagon's Selected Acquisition Reports outline six satellites in the AEHF constellation. The first satellite will provide a five-fold increase in the number of terminals serviced, according to Colonel William Harding, vice commander for the organization that oversees MILSATCOM procurement at the Space and Missile Systems Center.19 Both SATCOM systems included Allies in the developmental phases of the programs.

However, although new organic MIL-SATCOM capabilities will make the U.S. Government less dependent on commercial


FORUM | SpaceCRAF



SATCOM in future steady-state operations, the requirement to have a surge capability remains. In fiscal year (FY) 2008, DOD spent \$924.8 million on commercial SATCOM.²⁰ The bulk of this expenditure was for commercial SATCOM services bought on the spot market; these are 1-year leases for commercial service funded by nonrecurring annual defense appropriations. Yet even as the United States curtails long-term overseas operations in favor of more short-term contingency deployments, warfighters have an ever-increasing appetite for communications bandwidth and other space-related products and services. For example, the Secretary of Defense directed 65 MQ-1 and MQ-9 orbits by 2013 in support of ongoing operations in Afghanistan. These remotely piloted vehicles are entirely dependent on commercial SATCOM for operations and delivery of intelligence.²¹ In March 2011, the Pentagon terminated DOD access to popular streaming video Web sites including YouTube at the request of U.S. Pacific Command to meet the needs of the military in operations following the Japanese earthquake/tsunami because there was not enough bandwidth available.²²

The advantage of the spot market is its flexibility: services can be bought or sold for immediate or future delivery and prices closely follow demand and availability. These attributes are also disadvantages: the spot market allows the government to buy bandwidth as needed but costs are unpredictable. Relying on the spot market for future bandwidth delivery is highly speculative and exposes the government to the risk of unfavorable changes in bandwidth costs. Industry estimates suggest that more than 70 percent of the commercial bandwidth acquired by the U.S. military is paid for via supplemental funding poured into the spot market instead of being a line item in each Service's annual budget. This approach is not an incentive to reduce costs and may actually drive up costs.

The U.S. Navy is the only Service that has a budget line for commercial SATCOM because Navy officials understood a long time ago that being out of communications while operating at sea would make it harder to compete for MILSATCOM. As a result, the Navy permanently turned to commercial nantly has used supplemental funds in the past while the Air Force's hybrid approach uses both programmed and supplemental funds. In recent years, according to a DOD report delivered to Congress in 2010, the majority, "around 75%," of funds for SATCOM were supplemental funds and used to support operations in Iraq and Afghanistan.²⁴

In most cases, DOD components use COMSATCOM not by choice but because MILSATCOM is unavailable when it is most needed.²⁵ It is time for DOD actions to match the President's and Secretary of Defense's intentions with actions because the one thing that cannot be predicted is the contingency operation: an operation in Darfur, an earthquake in Haiti, a tsunami in Indonesia. Why buy so much additional capability for contingencies that cannot be predicted? DOD prefers to own its own capabilities outright rather than

even as the United States curtails long-term overseas operations, warfighters have an ever-increasing appetite for communications bandwidth and other space-related products and services

satellite communications for some requirements and made the strategic decision to budget for these requirements.²³ The Army and Air Force, however, approach contingency SATCOM differently. The Army predomilease them, determining that government satellites cost significantly less than leasing commercial capabilities. But DOD demands are driven by conflicts, which are always subject to change, and in this way DOD cannot contract

ARNOLD and HAYS

long-term services.²⁶ Contingency requirements are less predictable over the long haul than are peacetime requirements, but they are just as significant to mission accomplishment.²⁷ Yet for years the government has been buying on the spot market to support immediate space needs, most often SATCOM. The time to prepare for contingency operations for an increasingly expeditionary military is today, not when the crisis happens.

SpaceCRAF Concept

A unique and significant part of the Nation's air mobility resources is the Civil Reserve Air Fleet.²⁸ Selected aircraft from U.S. airlines, which are contractually committed to the CRAF program, augment DOD airlift requirements in emergencies when the need for airlift exceeds military capability. A similar program could be developed for DOD space requirements that would implement significant portions of the President's space policy as well as reduce dependence on the spot market for communications purchases, the government's addiction to exquisite technologies, and its need for access to spacelift.

CRAF is a better approach than buying a massive fleet of dedicated airlifters because it reduces costs and forges close relationships with commercial air service providers to achieve a regular, habitual relationship through exchanges of information, data, and personnel. The greatest advantage for the government is the ability to diversify operations while ensuring effective and efficient use of organic military airlift. Commercial airlift companies can gain greater insight into and predictability about government actions that often seem inconsistent to outsiders.

Using commercial practices as the base for state-of-the-world national security space requirements, the government could achieve CRAF-like advantages by reducing costs and forging closer relationships with commercial space-based capability providers to achieve a regular, habitual relationship that is not dependent on the spot market. A CRAF-like program would also reduce inefficiencies in budgeting, contracting, technology, requirements, and launch needs, and in doing so decrease costs, increase agility, sustain the space industrial base, and enhance deterrence.

CRAF has three main segments: international, national, and aeromedical evacuation.²⁹ The international segment is further divided into long-range and short-range sections and



FORUM | SpaceCRAF

the national segment into the domestic and Alaskan sections. Assignment of aircraft to a segment depends on the nature of the requirement and the performance characteristics needed. The long-range international section consists of passenger and cargo aircraft capable of transoceanic operations. The role of these aircraft is to augment the Air Mobility Command's (AMC's) long-range inter-theater C-5s and C-17s during periods of increased airlift needs. Medium-sized passenger and cargo aircraft make up the short-range international section supporting near offshore airlift requirements. The aircraft in the Alaskan section provide airlift within U.S. Pacific Command's area of responsibility, specific to Alaska needs. The domestic section is designed to satisfy increased DOD airlift requirements in the United States during an emergency.

The airlines contractually pledge aircraft to the various segments of CRAF, ready for activation when needed. To provide incentives for civil carriers to commit aircraft to the CRAF program and to assure the United States adequate airlift reserves, the government makes peacetime DOD airlift business available to civilian airlines that offer aircraft to the CRAF. DOD offers business through the International Airlift Services Contract. For FY 2007, the guaranteed portion of the contract was \$379 million. AMC estimates that throughout FY 2007, it also awarded more than \$2.1 billion in additional business that was not guaranteed but was additional business that went to CRAF carriers.³⁰ As of May 2007, 37 carriers and 1,364 aircraft were enrolled in the CRAF. This included 1,273 aircraft in the international segment (990 in the long-range international section and 283 in the short-range

international section), and 37 and 50 aircraft, respectively, in the national and aeromedical evacuation segments and 4 aircraft in the Alaskan segment. These numbers fluctuated on a monthly basis.

Similarly, the SpaceCRAF should have three main segments: satellite communications, remote sensing, and launch. The SATCOM segment could be further divided into the various military frequency bands. Assignment of spacecraft to a band would depend on the nature of the requirement, expected levels and likelihood of emergency use, spacecraft capabilities and capacities for on-orbit systems and systems in development, and performance characteristics needed (for example, large bandwidth, secure links, and so forth). The remote sensing segment could be similarly subdivided by the various available resolutions or methodologies (for example, electro-optical



or synthetic aperture radar). The spacelift segment could be subdivided by lift capabilities or launch site.

To join CRAF, an air carrier must maintain a minimum commitment of 30 percent of its CRAF-capable passenger fleet and 15 percent of its CRAF-capable cargo fleet. Aircraft committed must be U.S.registered, and carriers must commit and maintain at least four complete crews for each aircraft. Carriers with aircraft whose performance does not meet minimum CRAF requirements are issued a certificate of technical ineligibility, so they can still compete for government airlift business. To participate in the SpaceCRAF program, the commercial service providers would contractually pledge transponders in the various military frequency bands of SpaceCRAF, ready for activation when needed.

To provide incentives for commercial carriers to commit transponders to the SpaceCRAF program and to assure the United States adequate SATCOM reserves, the government would make peacetime DOD SATCOM business available first to commercial SATCOM companies that offer transponders to the SpaceCRAF. DOD currently offers business through the Future COMSATCOM Services Acquisition (FCSA) program but DOD is already experiencing sticker shock in new costs, seeing as great as a 300 percent increase in commercial satellite communications cost. FCSA is a recent agreement with DISA, through which the General Services Administration manages the purchase of satellite services for Federal agencies.³¹ DOD also purchases services through the program.³² FCSA may be a good start, but many believe that it is just a short-term acquisition fix rather than a more explicit strategic commitment by DOD to the commercial SATCOM industry upon which it relies, an approach accepted so far only by the Navy, which has chosen to budget annually for spot market SATCOM purchases to support the fleet.33

Three stages of incremental activation allow for tailoring an airlift force suitable for the contingency at hand. Stage I is for minor regional crises, Stage II is for major theater war, and Stage III is for periods of national mobilization. The commander of U.S. Transportation Command (USTRANSCOM), with approval of the Secretary of Defense, is the activation authority for all three stages of CRAF. During a crisis, if AMC has a need for additional aircraft, it would request that the USTRANSCOM commander take steps to activate the appropriate CRAF stage. Each stage of activation is only used to the extent necessary to provide the amount of civil augmentation airlift needed by DOD. When notified of call-up, the carrier must have its aircraft ready for a CRAF mission 24 to 48 hours after the mission is assigned by AMC. The air carriers continue to operate and maintain the aircraft; however, AMC directs aircraft missions.

A good place to start to build a SpaceCRAF capability is SATCOM. To join SpaceCRAF, companies must maintain a certain minimum commitment of its SpaceCRAF-capable fleet. The standard in air cargo is 30 percent, and that could be applied as 30 percent of available bandwidth for SATCOM or 30 percent of available time for remote sensing, for example. Spacecraft committed need not be U.S.-registered satellites-currently the only U.S.-flagged COMSATs belong to SiriusXM, DishNetwork, and DirecTV, which are only over North America-but would certainly need to have a U.S. license to broadcast. Carriers with spacecraft whose performance does not meet minimum SpaceCRAF requirements would be issued a certificate of technical ineligibility, so they can still compete for government SATCOM business if they have a U.S. license. Three stages of incremental SpaceCRAF activation would allow for

of commercial SATCOM augmentation needed by DOD. When notified of call-up, the commercial provider response time to have its transponders ready for a SpaceCRAF mission would be 24 to 48 hours after the mission is assigned by DISA. Vendors would have to be willing to preempt other paying customers so that the government could use the capability, potentially knocking off important commercial traffic, possibly including a basketball tournament or the Super Bowl. The commercial carriers would continue to operate and maintain the spacecraft with their resources; however, DISA would assign the communications traffic across the transponders.

In today's congested and contested space environment, information security is a paramount concern, and numerous procedures would remain in effect to ensure the SATCOM carriers with which DOD contracts afford the highest possible level of information security to DOD SATCOM traffic. Prior to receiving a SpaceCRAF contract, all carriers must demonstrate that they have provided substantially equivalent and comparable commercial service for 1 year before submitting their offer to operate for DOD. All carriers must be fully certified and licensed Federal Communications Commission carriers and meet the stringent standards of Federal Information Security Regulations pertaining to commercial SATCOM.

in today's congested and contested space environment, information security is a paramount concern

tailoring a SATCOM capability suitable for the contingency at hand. Stage I would be used for minor regional crises, Stage II would be used for major theater war, and Stage III would be used for periods of national mobilization. The Secretary of Defense would delegate SpaceCRAF activation authority to the commander of U.S. Strategic Command (USSTRATCOM) for all three stages. During a crisis, if DOD has a need for additional SATCOM, an agency would request the USSTRATCOM commander to take steps to activate the appropriate SpaceCRAF stage. Each stage of the SpaceCRAF activation would only be used to the extent necessary to provide the amount

To ensure fitness to participate in the SpaceCRAF program, a DOD survey team, composed of experienced and skilled space and communications professionals, would perform an on-site inspection of the commercial SATCOM carriers. This team would conduct a comprehensive inspection that includes the carrier's spacecraft manuals, training facilities, crew qualifications, maintenance procedures, quality control practices, and financial status to maximize the likelihood that the carrier would perform well. After passing this survey, the carrier would be certified by DISA before receiving a contract. DOD analysts, likely at DISA, then would continue to monitor the carrier's

FORUM | SpaceCRAF

information security record, operations and maintenance status, contract performance, financial condition, and management initiatives, summarizing significant trends in a comprehensive review. These initiatives and surveys would be further supplemented by an open flow of information on all contract carriers between DISA and DOD through established liaison officers.

Communications, while the largest, is only one of the commercial space markets. Until recently, only a few nations had remote sensing capability. Today, anyone with access to the Internet and a credit card can task commercial imagery satellites to photograph their house or a military formation in the desert. Actor George Clooney is a frequent user of commercial remote sensing in his work in Darfur. Privately funded and publicly accessible, the Satellite Sentinel Project (SatSentinel.org) allows Clooney to buy pictures of military movements in the impoverished nation. "I'm not tied to the U.N. or the U.S. government, and so I don't have the same constraints. I'm a guy with a camera from 480 miles up," Clooney states.34

The United States has forged close relationships with many commercial remote sensing providers, using their capabilities to fill coverage gaps, even while the commercial providers continue to support the requests of business, agriculture, mining, and other commercial needs. In the case of a remote sensing SpaceCRAF, there are two U.S. vendors-GeoEye and Digital Globe-and several international providers of commercial remote sensing (CRS) capabilities, which are closely aligned with friendly national governments. Several companies, many foreign, provide electro-optical or synthetic aperture radar images with resolutions that were available only to governments just a decade ago. A situation could be arranged that would allow DOD or the Intelligence Community to add additional taskings to these extra-U.S. CRS providers, most likely in the form of higher payments-much as a first-class ticket costs more than coach on the same flight. If two customers wanted time on the satellite at exactly the same moment, the higher payer would get the capability.

In no way is the U.S. commercial launch industry as robust as U.S. aviation, even as weak as the airlines are. U.S. commercial launch revenues rose slightly in 2008 to \$1.1 billion, but the U.S. share of worldwide launch revenues declined from 31 percent in 2007 to 28 percent in 2008. Meanwhile, U.S. satellite manufacturing revenues declined from \$4.8 billion in 2007 to \$3.1 billion in 2008 while its market share fell from 41 percent of the world total in 2007 to just 29 percent in 2008.35 These data point to a waning industrial base that, once gone, will be nearly impossible to rebuild as jobs and technologies migrate to other sectors or move abroad and contribute to other nations' space capabilities. DOD is increasingly affected by the shrinking industrial base in the United States, as well as work going overseas to foreign companies and competitors, a major concern in President Obama's space policy.36 Therefore, a CRAF-like capability for launch services is much more problematic given the current state of the industry. There were no commercial COMSATs launched from the United States in 2011. However, one could imagine that if the launch industry bounced back, a SpaceCRAF-like capability could be envisioned that would bump payloads off manifests or add payloads to boosters for multi-satellite deployments.

Changes are coming in the way that the United States gets astronauts to space, and these changes may benefit the military-commercial partnership and someday lend themselves to a more SpaceCRAF-like arrangement. The National Aeronautics and Space Administration's (NASA's) announced plan, called Commercial Orbital Transportation Services (COTS), will buy seats for astronauts aboard commercial launchers and resupply the International Space Station using nongovernmental rockets. COTS commercial partners are responsible for the overall design, development, manufacturing, testing, and operation of their systems; NASA plans to purchase these services competitively once they become available. NASA's Commercial Crew and Cargo Program Office is working with industry to provide reliable, cost-effective cargo and crew transportation services that can serve existing markets and help develop new markets, possibly launching a new era for commercial space.37 "If ROSCOS-MOS [the Russian Federal Space Agency] can do it, U.S. industry can, too," stated NASA Administrator Charles Bolden.³⁸ COTS could end up being the launch portion of the Space-CRAF program.

Just as the U.S. national airlift capability is provided from military and commercial air carrier resources, so too is the national space capability provided from military and commercial space resources. Equally important, interdependent military and civil space resources must be able to meet defense surges for mobilization and deployment requirements in support of U.S. defense and foreign policies. The advantages of a CRAF-like program for space-based capabilities include reducing costs through lower dependence by DOD on the spot market for leased SATCOM; offering commercial providers a more predictable commitment; and improving technology as commercial providers introduce upgrades faster than DOD. U.S. forces will not remain garrisoned overseas in the large numbers that they have been for the last decade, and the U.S. military's reliance on commercial providers will likely decrease as well, but the need for surge capability available through a CRAF-like program will remain. The President's space policy declares the ends for our strategy to provide effects from space for our warfighters. SpaceCRAF is but one of the ways to ensure they have what they need when they need it. JFQ

NOTES

¹ Robert M. Gates, "Eisenhower Library (Defense Spending)," Remarks delivered at Abilene, KS, May 8, 2010, available at <www. defense.gov/speeches/speech.aspx?speechid=1467>.

² Quoted in Colin Clark, "Carter Signals OKs for Smaller Mergers," February 9, 2001, available at <www.dodbuzz.com/2011/02/09/carter-signals-moredefense-mergers-announces-sectoral-studies/>.

³ National Space Policy of the United States of America (Washington, DC: The White House, June 28, 2010), available at <www.whitehouse.gov/ sites/default/files/national_space_policy_6-28-10. pdf>.

⁶ Broadly, *national security space* can be defined as all those space missions that support national security, from the seemingly routine such as secure communications and assured position, navigation, and timing to the more exotic such as surveillance and reconnaissance from space.

⁷ "National Security Space Strategy (Unclassified Summary)," i, available at <www.defense.gov/ home/features/2011/0111_nsss/docs/NationalSecuritySpaceStrategyUnclassifiedSummary_Jan2011.pdf>.

⁴ Ibid., 10.

⁵ Ibid., 4.

ARNOLD and HAYS

⁸ Ibid., 7.

⁹ National Space Policy, 6–7.

¹⁰ Forrest E. Morgan, *Deterrence and First-Strike Stability in Space: A Preliminary Assessment* (Santa Monica, CA: RAND, 2010), 16.

¹¹ Larry D. James, "Schriever V Wargame: The Boundaries of Space and Cyberspace," *High Frontier*, August 2009, 13, available at https:// newafpims.afnews.af.mil/shared/media/document/AFD-090827-008.pdf>.

¹² Joe Vanderpoorten, "Crack the Commercial SATCOM Paradigm–Hosted Payload Workshop," presentation, April 6, 2010.

¹³ Barry Rosenberg, "DOD's reliance on commercial satellites hits new zenith," February 25, 2010, available at <www.defensesystems.com/ Articles/2010/03/11/Cover-story-The-Satcom-Challenge.aspx>.

¹⁴ Federal Aviation Administration (FAA), 2010 Commercial Space Transportation Forecasts (Washington, DC: FAA, May 2010), 1, available at <www.faa.gov/about/office_org/headquarters_offices/ast/media/launch_forecasts_051810. pdf>.

¹⁵ Satellite Industry Association and Futron Corporation, *State of the Satellite Industry Report* (Bethesda, MD: Futron Corporation, June 2011), 8; and Space Foundation, *The Space Report 2010: The Authoritative Guide to Global Space Activity* (Colorado Springs: Space Foundation, 2010), 6.

¹⁶ Ron Dixon, "USCENTCOM Commercial SATCOM Overview," December 5, 2006, available at <www.sia.org/2007DoDSatcomWorkshop/ Tuesday/DoD/CENTCOM.ppt>.

¹⁷ Rosenberg.

¹⁸ Ed White and Andy Roake, "First Wideband Global SATCOM Satellite goes operational," April 28, 2008, available at <www.army.mil/article/8815/ First_Wideband_Global_SATCOM_Satellite_goes_operational/>.

¹⁹ Amy Butler, "USAF Plans for AEHF Launch Next Week," *Aviation Week*, August 5, 2010, available at <www.aviationweek.com/aw/generic/ story_generic.jsp?channel=defense&id=news/ asd/2010/08/04/07.xml&headline=USAF%20 Plans%20For%20AEHF%20Launch%20Next%20 Week>.

²⁰ U.S. Strategic Command J6, "Memorandum for the Acting Deputy Assistant Secretary of Defense for Command, Control and Communications Policies and Programs and Space Programs, Subject: FY08 Commercial Satellite Communications (COMSATCOM) Usage Report," Offutt AFB, NE, March 31, 2010. The figures for fiscal year (FY) 2008 are the most current available. Fixed satellite services accounted for 72.3 percent of the total expenditures in FY 2008; expenditures increased by 34.8 percent (from \$355.5 million in FY 2007 to \$482.7 million in FY 2008); and bandwidth increased 13.6 percent (from 6.5GHz in FY 2007 to 7.4GHz in FY 2008). ²¹ Michael B. Donley and Norton A. Schwartz, "United States Air Force Posture Statement 2011," Presentation to the Committee on Armed Services, United States House of Representatives, February 17, 2011, 2, available at <www.posturestatement. af.mil/shared/media/document/AFD-110301-088. pdf>.

²² "US military blocks access to video websites, cites Japan earthquake viewing, bandwidth issues," *The Washington Post*, March 15, 2011, available at <www.washingtonpost.com/us-militaryblocks-access-to-video-websites-cites-japanearthquake-viewing-bandwidth-issues/2011/03/14/ ABJW2lV_story.html>.

²³ Rosenberg.

²⁴ Department of Defense (DOD), "Investment and Acquisition Strategy for Commercial Satellite Capabilities Report," June 3, 2010, 2.

²⁵ Ibid., 11.

²⁶ Ron Jost, Deputy Assistant Secretary of Defense for C3/Spectrum/Space, comments to the Commercial SATCOM Owner/Operator Principals Meeting, Washington, DC, March 15, 2010. ²⁷ DOD, 12.

²⁸ "Factsheet: Civil Reserve Air Fleet," available at <www.amc.af.mil/library/factsheets/ factsheet.asp?id=234>. Descriptions of CRAF are taken from this document.

²⁹ Used primarily to support the evacuation of casualties from operational theaters to hospitals in the continental United States, clearly the aeromedical evacuation segment does not have a corollary for space. These aircraft are also used to return medical supplies and medical crews to the theater of operations.

³⁰ Sandy Halama, email to author, Subject: "Re: CRAF," March 9, 2011.

³¹ Turner Brinton, "Pentagon Seeing Sharp Price Increases for Commercial Satcom," *Space News*, March 21, 2011, 11.

³² Elizabeth Montalbano, "GSA Releases \$5 Billion Satellite Communications RFP," *Information Week*, July 9, 2010, available at <www.informationweek.com/news/government/enterpriseapps/showArticle.jhtml?articleID=225702772&cid =RSSfeed_IWK_News>. This leverages more than \$5 billion in purchases in commercially available satellite communications frequency bands, including L, S, C, X, Ku, extended Ku, Ka, and UHF.

³³ Rosenberg.

³⁴ John Avlon, "A 21st-Century Statesman," *Newsweek*, February 21, 2011, available at <www. newsweek.com/2011/02/20/a-21st-century-statesman.html>.

³⁵ Satellite Industry Association and Futron Corporation.

³⁶ National Space Policy, 5.

³⁷ "Commercial Crew and Cargo Program Office (C3PO)," available at <www.nasa.gov/ offices/c3po/about/c3po.html>.

³⁸ Charles F. Bolden, Commercial Space Transportation Advisory Committee, May 19, 2010.





for the Center for Transatlantic Security Studies



Transatlantic Perspectives 1

NATO Partnerships and the Arab Spring: Achievements and Perspectives for the 2012 Chicago Summit

by Isabelle François

In this inaugural issue of the Transatlantic Perspectives series of occasional papers, the author highlights the synergy between the North Atlantic Treaty Organization's (NATO's) new, more flexible and efficient partnership policy and its response to the Libyan Crisis. The paper points to some of the challenges facing the Alliance in the context of Operation Unified Protector and in further developing partnership with nations south of the Mediterranean. Finally, the author offers recommendations in preparation for the next NATO Summit (May 2012, in Chicago), so as to make best use of Alliance partnerships if the Allies decide to develop a new strategic direction in the region.



Visit the NDU Press Web site for more information on publications at ndupress.ndu.edu

ISAMORAL FORCE



DESIGNING A MORE VIABLE STRATEGY FOR THE INFORMATION AGE

BY PETER D. FROMM, DOUGLAS A. PRYER, and KEVIN R. CUTRIGHT

A thought is a thing as real as a cannonball.

-Joseph Joubert

ince World War II, the United States has spent far more on national defense than any other country. In fact, America currently spends nearly as much on defense as the rest of the world combined.¹ However, such spending has not meant that the Nation has fared well in war.

The Vietnam War, for instance, was the first great harbinger of change. In this deeply tragic conflict, America lost its sense of *moral* purpose and will to fight, effectively abandoning an ally to a brutal, determined enemy that it could not defeat.

After Vietnam, there was Beirut in 1983 and then Mogadishu in 1993—brief, bloody incidents followed by moral routs. America's interventions in Lebanon and Somalia were "moral routs" not because Servicemembers were involved in war crimes, but because leaders made morally unaware decisions at all levels of command. At the national command level, congressional debates and resolutions did not support these ventures. In the country itself, substantial portions of the population perceived U.S. military actions as blatantly partisan, unfair, and culturally ignorant.

The Gulf War seemed to signal a return to America's winning ways, but this victory rang hollow when the war proved to be only the first campaign of a much longer conflict that America would wage in Iraq today. In Afghanistan, despite America's exorbitant expenditure of blood and treasure, its Taliban enemies have actually grown stronger in recent years. America's worst setbacks in the "Long War" against terrorism have not been defeats on the physical battlefield; they have been revelations of "extraordinary renditions," specious interpretations of international laws, detainee abuses at Abu Ghraib and other facilities, and murders in Haditha, Mahmudiya, and elsewhere.

Sadly, the decisions of U.S. strategic leadership set the conditions for many of these moral failures. The key to understanding why these decisions led to failure is realizing that there is actually very little difference between having a sense of moral purpose and possessing the will to fight. When decisions lead one side to lose the former, this side inevitably loses the latter as well.

For strategy to work in our age, it must possess solid moral and political legitimacy. This essay seeks to explore ways to improve

Lieutenant Colonel Peter D. Fromm, USA (Ret.), is the Supervisory English Editor for *Military Review*. Lieutenant Colonel Douglas A. Pryer, USA, is Intelligence Chief for Task Force 2010 in Kabul, Afghanistan. Major Kevin R. Cutright, USA, is a student at the U.S. Army Command and General Staff College. moral awareness and psychological understanding of war as an aspect of American strategy. It argues that the best way to win constructive peace in any future conflict is for American forces to display a focused consistency of justifiable action at all levels.

for strategy to work in our age, it must possess solid moral and political legitimacy

War Is a Moral Force

According to Carl von Clausewitz, the "effects [in war] of the physical forces and the moral are completely fused, and are not to be decomposed like a metal alloy by a chemical process."2 The term moral here and elsewhere in this article refers to both its ethical and psychological denotations, which experience and language inextricably connect.3 The reason for these two meanings is that perceived right action and consistency in word and deed are the psychological glue holding together a community, even the community of states. Shared perceptions of right action bind individuals to groups and groups to communities. The moral approbation (or psychological approval) at the root of stable communities is the natural result of acting rightly. Approbation, it bears repeating, leads to peace.

There are two ways of thinking about such approbation as it feeds moral and political legitimacy. There is the pursuit of right action in accordance with accepted norms, which incidentally and typically results in approbation. Then there is the practical pursuit of approbation, which incidentally and typically results in right conduct. Rightness and practicality merge in philosophical pragmatism, and together they form a grammar of approbation for specific actions. To put it another way, approbation is a response to the communication that comes from actions.

Approbation may mean little to the strategic realist. Realists often connect notions of pragmatism with the idea that ethical concerns are secondary to what they imagine as strategic necessity in pursuit of "victory" or in pursuit of national interests. For the strategic realist, sometimes such imagined "victory" itself becomes the moral object rather than the means to a moral end. Seeking approbation in such cases may even seem like a bad idea to the strategic realist. When General Douglas MacArthur famously uttered in his farewell address at West Point that "there is no substitute for victory," he fed the fantasies of those realists who imagine "decisive victory" at all costs. Yet at what moral cost can military victory be a success worthy of the name? Can it be victory if the cost is one's moral worth? Or if the Nation's honor is destroyed? Or if the war results in far greater loss of life and human dignity than could have conceivably occurred without the war? At some point, ethics intrude upon the realist's vision.

The justifications for the atom bombs dropped on Hiroshima and Nagasaki illustrate the need to give moral answers to operational questions. The bombs ended the Pacific war before an ostensibly necessary U.S. invasion that would have led to millions more casualties, military and civilian. What side of this debate one comes down on does not matter; the fact the moral justification occurred is the point. All else about war supervenes upon the perceived moral necessity of any given conflict and any given military action in a conflict. Post hoc analysis always frames victory as a morally worthy endeavor. Even for the realist, approbation has to be sought, and has to be derived, from the situation. Victory must mean moral success, ethically and psychologically. That is, victory is fundamentally about hearts and minds.

More importantly, strategists of the realist ilk must face the growing reality that this fused grammar of psychological and ethical meaning is becoming harder and harder to separate in the modern age. If the bulk of casualties in a conflict are collateral, in what sense can a military force claim that the casualties are unintended and hope to be believed? When everyone has a cell phone camera that records a disproportionate operation, how can a military escape moral judgment and strategically counterproductive censure? Evidence must support the fact that a military action was taken to avoid noncombatant harm, not to inflict it.

Actions that meet this test win moral approbation. More than being popular, more than winning some kind of marketing campaign, such approbation assumes some kind of objectivity that is not merely "crowd-sourced" ethics. What we call "moral approbation" represents multiple moments of reasoning on the same subject, even if the reasoning is inexact and varying across contexts. There may be ethical limits to moral approbation, but its power cannot be ignored.

Theoretical Bases Briefly Elucidated

When Field Manual (FM) 3–24, *Counterinsurgency*, was published in December 2006, it catapulted ideas about moral efficacy in strategy back into the forefront of military doctrine. *Legitimacy* is this doctrine's key concept. "Victory is achieved," the manual declares, "when the populace consents to the government's legitimacy and stops actively and passively supporting the insurgency."⁴ With this formulation, FM 3–24 reiterates the primacy of war's moral dimension that ancient and modern Eastern and Western theorists have repeatedly called out.

Carl von Clausewitz's On War is the Western analog to the politico-strategic disposition that military thinkers find in the wisdom emanating from ancient China-from thinkers like Sun Tzu, Lao Tzu, Confucius, and Mencius. Perhaps one does not at first approach Clausewitz as a moral philosopher, yet he is that. In On War, Clausewitz describes war in an idealized, amoral form. War involves the use of "utmost exertion" by states to achieve political ends, he says, without emphasizing that the political is also the moral.⁵ However, Clausewitz understands that moral moderation is necessary in war. The use of violence, he says, is tempered when intelligent minds "take into account the human element" and discern a "more effectual means of applying force."6 Social conditions, political limitations, and other sources of moral "friction" all serve to

Field Manual 3–24, Counterinsurgency, catapulted ideas about moral efficacy in strategy back into the forefront of military doctrine

temper war's violence. Via such practical constraints, real wars—wars as they must actually be fought and strategized—are won.

This practical understanding of war's moral-political qualities stemmed from Clausewitz's deep appreciation for the role of human nature in war. Continental philosophy acted as a lens through which he understood his and others' experiences. Enmeshed in philosophy, perhaps reluctantly, his muse was Platonic (the concept of the human

SPECIAL FEATURE | War Is a Moral Force

psyche—*pathos*, *logos*, and *ethos*—from Plato's *Phaedrus* serves as Clausewitz's centerpiece, the "paradoxical" or "wonderful" trinity). Clausewitz echoes Plato's Socrates, who was also a soldier, and one whose Peloponnesian War experience shaped his approach to politics and morality.

As a revolutionary, Mao Zedong echoed Clausewitz, directly advocating moral legitimacy to obtain political legitimacy using both experience and theory: "the masses will certainly come over to us. The Koumintang's policy of massacre only serves to 'drive the fish into deep waters."⁷⁷ Mao's political metaphor intentionally echoes moral implications found in Mencius, the 4th-century BCE thinker: "If, among the present rulers of the kingdom, there were one who loved benevolence, all the other princes would aid him by driving the people to him. Although he wished not to become sovereign, he could not avoid becoming so."⁸

Mencius expresses the moral and political theory informing both Taoist thought about war (Sun Tzu and Lao Tzu) and his own Confucian traditions supporting the political hierarchy of Chinese culture. Subsequent Eastern military philosophy, including the later Japanese, Korean, and Chinese medieval commentators, echoes both Sun Tzu and Mencius. For example, "*Tu Mu* [commenting



The Power of Personal Example

In the grammar of action, human beings are in general agreement about what constitutes "right." The story of Mahmoud provides one real example.

When Mahmoud first volunteered in 2006 to be an interpreter for coalition forces in Iraq, he struggled with whether he was going against his religion and country.¹⁰ Born in Iraq, but more recently a citizen of Jordan for his family's safety, he felt the compulsion of his The power of individual Servicemembers to affirm the legitimacy of their presence by setting a positive example cannot be overstated. Thanks largely to ubiquitous communications technology, this same dynamic now applies equally to both conventional and unconventional wars. Ensuring that such examples consistently occur is one of the greatest challenges for the U.S. military.

Legitimacy and the Law

Samuel Huntington famously described the unique expertise of the military profession as the "management of violence."11 If the moral dimension is war's most important dimension, where, then, should military professionals applying violence begin when considering the grammar of action? The best starting point is moral agreement. Although what the right action is for a given situation is not always clear, and nowhere is there complete solidarity on some moral questions, there is general agreement on standards of right and wrong. In war, that agreement is embodied in the Just War Tradition (JWT).¹² We pay homage to this agreement every time we stoop to cover up something. As Michael Walzer observes in Just and Unjust Wars, "The clearest evidence for the stability of our values over time is the unchanging character of the lies soldiers and statesmen tell. They lie in order to justify themselves, and so they describe for us the lineaments of justice. Wherever we find hypocrisy, we find moral knowledge."13 Moral variations

the power of individual Servicemembers to affirm the legitimacy of their presence by setting a positive example cannot be overstated

on Sun Tzu]: The Tao is the way of humanity and justice; 'laws' are regulations and institutions. Those who excel in war first cultivate their own humanity and justice and maintain their laws and institutions. By these means, they make their governments invincible."⁹

Military theorists, East and West, have always been concerned about moral strategy and the reality of creating enemies by failing to act with moral and political legitimacy. The difference today is that legitimacy is more likely to be based on shared moral perception: a growing global moral solidarity. In the modern age, the narrative of "victory" is more likely to be grounded in a story that makes its way around the planet at the speed of light. That narrative will hinge on a grammar of observed actions, not so much upon attempts at manufacturing or controlling the discourse. culture to scorn all Westerners. He reported to a U.S. military base in Anbar Province thinking that, if nothing else, working closely with the Americans would allow him some influence on their treatment of his fellow citizens.

His internal debate ended after a bomb destroyed a nearby bridge in Ramadi, wounding many Iraqis. All the interpreters on the base were ordered to the camp's hospital. Mahmoud and his friends watched the Americans treat the wounded with diligence, urgency, and genuine care. He saw Soldiers respond to a nurse's cry for blood by immediately setting their gear down and rolling up their sleeves. From this event, he realized he would not have to try to steer Americans toward helping the Iraqis: their good intentions were clear. This realization proved an epiphany for Mahmoud, moving him to become a wholehearted American ally. experienced in cultural relativism belie the great commonality of moral solidarity in the world embodied in international law.

As it deals with the conduct of war, the JWT is expressed in the "law of armed conflict," which is amply supported in current Army doctrine if not yet in Army training.14 Beyond the actual conduct of war, the tradition also governs when a nation can justly choose to go to war. The conditions include just cause, proportionality, reasonable chance of success, public declaration of war, declaration by a legitimate authority, last resort, and right intention. Importantly, they derive from reason and are universally self-evident in principle even if contentious in application. For example, that a political instrument as deadly and destructive as war should be employed only as a last resort is obvious, as is the idea that governments violating this tenet make themselves targets for retributive justice from other states.

Wars often start without meeting these conditions. Nonetheless, the conditions must be met if any war is to long remain legitimate in the eyes of an increasingly informed and connected world, one with an ever-increasing solidarity of moral opinion. Since it is questionable that an occupying force can generate a politically legitimate outcome from a war that is itself deemed immoral in conduct, current Army doctrine rightly extols the importance of adhering to the law of armed conflict.

That just war conditions are absent from this same doctrine is glaring. Although just war conditions involve political decisions outside of the U.S. military's control, these decisions are certainly not beyond the influence of the senior U.S. military leaders whose job it is to craft successful strategy. Moreover, properly accounting for the delegitimizing effects of a war that is popularly deemed unjust enables the military leaders fighting it to better understand, report, and plan for the limited gains their forces may actually hope to achieve. More critically still, when military Servicemembers believe in their cause and have faith in the moral principles of their senior leaders and their interpretations of law, they may well be inspired to fight better and behave more ethically themselves.

Just war concerns are by no means the only morally relevant factors of a given war. For example, U.S. draft policies increased perceptions at home that the Vietnam War was illegitimate.¹⁵ However, the JWT provides us with authoritative understanding of actions that will always generate *moral repro-* *bation* (the psychological disapproval that a people give to an act or to a policy).

In his Clausewitzian analysis of Vietnam, *On Strategy*, Colonel Harry Summers advocates *selling* the Nation on a war to buttress national will.¹⁶ However, in the modern age, within a mature democracy with a free press, people cannot easily or long be manipulated. Attempts to seek approbation not earned by actions will eventually appear clumsy, ill-conceived, or transparently manipulative. The relevant truth will emerge in the grammar of actions, ultimately trumping the marketing of untruth, no matter how shiny its packaging.

A Moral Framework for America's Grand Strategy

When military strategists work in a moral vacuum, their products are likely to be dead on arrival. The impotence of amoral strategizing stems from the fact that moral qualities constitute the greater part of war's friction, a fact that has never held truer than in today's age of instant information dissemination.

A military strategy that recognizes and accounts for moral friction has to be built

for a reason: they intended to ensure that the Nation only went to war when elected representatives thought the war vital enough to vote for it—and thus be held accountable for it. Using these values as the starting point of strategic military intentions, we should strive to make our actions consistent with them. If tactical methods, campaign objectives, and strategic ends do not morally cohere, national strategy is undermined and delegitimized.

Effects-based Operations

How do we determine campaign objectives and tactical methods for achieving moral strategic ends? Until recently, effects-based operations (EBO) seemed to provide the answer. EBO originated as a good idea: rather than bomb targets based on their importance as isolated military objects, Air Force pilots bombed targets based on the effect that their destruction would have on what planners imagined to be a "closed" system. For example, it might be more efficacious to destroy a radar platform used by several air-defense weapons than to destroy one of the weapons themselves. Such quantitative analysis propelled the "shock and awe" bombing campaign of the second Gulf War, a campaign carried out

if tactical methods, campaign objectives, and strategic ends do not morally cohere, national strategy is undermined and delegitimized

on a grand strategy with an overarching message, one that generates genuine moral approbation. To devise a psychologically agreeable strategy for the American military, we need look no further than the U.S. Constitution, as John T. Kuehn suggests:

The goals for a uniquely American grand strategy are not the subject of a guessing game and never have been. The Preamble to the Constitution explicitly lists them: "establish Justice, insure domestic Tranquility, provide for the common defense, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity."¹⁷

In suggesting that the Constitution's inherently moral framework should serve as the foundation for a grand U.S. strategy, Kuehn also pinpoints the essence of what that strategy should be. The Founding Fathers gave war powers solely to Congress to cripple the command and control of Iraqi armed forces and to destroy the Iraqi leadership's will and ability to fight.

Although EBO has proven useful as a planning paradigm for the targeting of complex infrastructure and weapons systems, problems arose when EBO adherents tried to apply it to war's moral domain, a sphere that is inherently open and nonquantifiable. Because human beings ultimately choose to act not from external causes, but for reasons residing within their private mental realms, EBO's materialistic determinism proved largely impotent in helping planners properly account for human behavior. Furthermore, this impotency became almost absolute when planners considered social groups with their complex array of ranks, relationships, and cultural mores and the contingencies these factors engendered.

The lack of a focused moral awareness is perhaps the salient reason EBO fell from grace.¹⁸ Soon after General David Petraeus and

SPECIAL FEATURE | War Is a Moral Force

the moral epiphanies of FM 3–24 corrected the failures of American strategy in Iraq, General James Mattis, then commander of U.S. Joint Forces Command, greatly limited the scope of effects-based thinking. Petraeus and Mattis thus set the stage for a more adaptive, imaginative, and human-centric approach to warfare.

The Arrival of Design

The study of design methods in America can be traced to World War II and the use of novel, systematic approaches for finding solutions to the war's urgent technological problems. In the late 1950s, in the wake of the Soviet Union's Sputnik launch, interest in these methods continued to flourish amidst the feeling that American scientists and engineers lacked creativity. By the 1980s, the field had grown to become a coherent academic discipline, and the vast number of international journals and professional conferences on the subject today indicates that design research is booming.

Design methodologies today encompass architectural design, engineering design, art design, fashion design, social design, and program design (among others). The concepts, language, and techniques of these methodologies vary widely. What is common to all, institute developed a method called Systemic Operational Design (SOD) for the purpose of designing campaigns at the strategic and operational levels of war. Although SOD became influential, Israel's military never fully accepted it as doctrine. Instead, in April 2006, the Israel Defense Forces chose the EBO methodology as doctrine, simultaneously infusing this doctrine with SOD terminology.

Trying to combine effects-based thinking with little-understood SOD terminology proved to be a disaster. During Israel's 2006 war with Hizballah in Lebanon, Israeli forces fought a morally flawed campaign in which commanders and staffs had difficulty understanding assigned objectives.²¹ "The core of SOD may not be without merit," one historian of the war wrote, "but it is useless if it cannot be understood by officers attempting to carry out operation orders."²²

U.S. Army doctrine writers took Israel's painful lessons to heart, not only giving design primacy over EBO, but also seeking to ensure that design's terminology was clear, simple, and, where possible, linked to traditional operational terms. At first, as had been the case in Israel, design was associated with "operational art" and the development of theater-level campaign objectives. Then

design strives to turn technicians into leaders who appreciate their environments, including the moral terrain

though, is their attempt to create something new—a process that itself is routinely reconsidered and readjusted to seek the most efficacious approach. All designers strive to realize the moment's potentialities while working within the "art of the possible" toward the best outcome. The aim is to realize achievable ideas, not impossible dreams.

Herbert Simon, an early pioneer of design theory, defined design as "changing existing situations into preferred ones."¹⁹ Morris Asimow, another early pioneer, defined it as "decision making, in the face of uncertainty, with high penalties for error."²⁰ Collaboration is crucial to design methodologies because the ideas and experiences of the many, when properly fused, typically yield better outcomes.

Israel was the first country to introduce elements of design theory into military doctrine. In 1995, Brigadier General Shimon Naveh founded the Israeli military's Operational Theory Research Institute. The in March 2010, the Army published FM 5-0, The Operations Process. This manual recognizes that, on decentralized and complex battlefields, units at all levels can benefit from a creative design methodology that is "iterative, collaborative, and focused."23 The new methodology encourages commanders and staffs to seek a deep understanding of the operational environment so that the best feasible objectives are chosen. To reach these objectives, the methodology articulates a broad operational approach consisting of interrelated lines of effort (such as the restoration of good governance and essential services). Commanders and staffs regularly reassess their working assumptions, often with the help of an assumption-challenging "red team" as devil's advocate.24

Today, our Army stands poised to use design theory to achieve better outcomes in its endeavors, something global industry has been doing for decades. Nowhere are these better outcomes more needed than in war.

Moral Means to Moral Ends

The 1st-century historian Tacitus's selfconscious critique of the Romans in Britain, "where they make a desert, they call it peace," may be history's most concise and poignant comment about the only type of peace possible when a purely violent military force-a force lacking legitimacy-is used.25 While wars of annihilation may have been acceptable to the barely informed citizenry of a harsh, xenophobic empire, they are certainly not acceptable to the citizens of modern, information-empowered democracies. Witness the civil unrest and fall of three French governments during France's long, brutal war in Algeria in the 1950s and 1960s. Or examine our own nation's crisis over lurid media reports of carpet bombings, jungle defoliation, and incidents such as My Lai during the Vietnam War.

Colonel Douglas Macgregor has observed that "[American] politicians frequently substitute a fascination with direct action in the form of air strikes or special operations killings for strategy."26 This fascination demonstrates a lack of familiarity with the moral nature of strategy. Robert Kaplan similarly observes, "Sun Tzu notes that the best way to avoid war-the violent result of political failure—is to think strategically. The strategic pursuit of self-interest is not a cold and amoral pseudo-science, but the moral act of those who know the horrors of battle and seek to avoid them."27 When Kaplan speaks of "a cold and amoral pseudo-science," it is hard not to think of EBO.28

To effectively strategize and gain favorable outcomes from war, we must choose our wars carefully, and once engaged in war, we must wage it in a morally aware fashion. Military design helps us to wage war in such a fashion by addressing the cognitive agents of war as central to operational adaptation. The posture it thereby creates is inherently morally attuned, sensitive to cultural values. Design promotes our understanding of the proper conditions for assessing, acting, reassessing, and accounting for the moral friction of the operational environment.

To paraphrase Timothy Challans, design opens one's mind to recognizing the way people act in an open system in the real world, and it therefore brings us closer to a holistic understanding of war by making us consider human beings as something other than objects.²⁹ It draws planners away from preformatted categories. The degree to which this happens is up to them, but design removes a staff from "render and reduce" methods like the formal military decisionmaking process when framing a situation. Design attempts to get generals and field grade officers to stop doing sophisticated crew-drill in a vacuum and start rethinking when their brains' military muscle memories are no longer appropriate. Those who argue that design is just another process have fundamentally misunderstood its goals. Design strives to turn technicians into leaders who appreciate their environments, including the moral terrain.

Challans makes a strong argument that design can lead to better moral outcomes in war in "Tipping Sacred Cows: Moral Potential Through Operational Art."30 Challans says that design "is philosophically interpretive-not pretending to be scientific-it remains consistent with modern scientific practice and understanding because it refuses to proceed without accounting for evidence. It accommodates a moral posture."31 Design, therefore, has the potential to return the war machine to the wisdom of Ardant du Picq's assertion that "the human heart . . . is then the starting point in all matters pertaining to war."32 This return to wisdom will help bring a stable termination to our foreign conflicts. That is, if a conflict is just and all levels of command display a moral awareness and symmetry (which design enables by encouraging a fuller understanding of the environment), achieving a lasting, favorable peace becomes the "art of the possible."

Critically, a consistently moral approach in a war can prevent even the most violent of mistakes (to include those labeled as atrocities by world opinion) from turning into major defeats. Although sound training and a high degree of professionalism can limit such mistakes (and perhaps even prevent atrocities on the scale of Abu Ghraib altogether), horror is inevitable in war. Nonetheless, tragic incidents can be credibly called mistakes when there is an overarching moral strategy that includes assiduously moral tactics. A sound moral posture across all levels of command, from the national to the tactical level can overcome the international uproar created by heinous, isolated acts of individuals and small units.

Considering the overriding importance of war's moral dimension, the most important indicators of a war's progress are moral ones. Physical measurements, such as the rate of enemy attacks and the amount of enemy propaganda produced, are not nearly as relevant to success. Furthermore, if moral indicators are to be truly meaningful, they must go beyond quantitative measurements like voter turn-out and answer qualitative questions: do locals trust their local government? Do locals trust coalition forces? Is there greater justice than even toward his enemies," which, in tandem with his operational excellence, made him indispensable: "Victory like a shadow attend[ed] him wherever he went," and "he did not think it lawful, even to restore the liberty of his country, to kill a man without knowing a cause."³⁶

if we pay closer attention than our enemies do to moral considerations, we can be confident in a strategy that has the best chance of winning

before? Answers to these questions demand the deep study of and familiarity with the operational environment that design promotes.

The End of the Beginning?

During the Second Peloponnesian War, the great Theban commander Epaminondas met his death at the battle of Mantinea in 362 BCE in a stunning military victory that ended Spartan oligarchic domination. Epaminondas hoped to permanently squelch Lacedaemon's efforts to enslave their rebellious helots and to politically and economically dominate Greece. Thebes proved successful against Sparta. Nearly 2,000 years later, Michel de Montaigne rated Epaminondas "the most excellent of all" the great commanders of antiquity.33 Montaigne's admiration, according to Victor Davis Hanson, owed to the moral nature of Epaminondas's actions in a war to secure a politically just outcome.34 Epaminondas sought not Alexandrian glory but a peace that Hanson calls "one of the landmark moral events in [the Greeks'] collective memory."35 This admiration for Epaminondas underscores the general's "humanity, Epaminondas's example evokes the universal moral dynamic that Mahmoud witnessed in the American field hospital near Ramadi. Today, as in antiquity and in Montaigne's Age of Enlightenment, legitimacy represents the psychological hub of a lasting peace. For a modern democracy to create legitimate outcomes from war, its conflict must follow what is perceived to be a moral trajectory. Recognizing this reality as pragmatic, not idealistic, our military strategists must embrace it.

Despite its shortcomings, the Army's counterinsurgency manual represents just such an embrace, rejecting an era in which leadership dreamed that war's moral qualities could be trivialized. However, this salubrious doctrine must mark (to paraphrase Winston Churchill) only "the end of the beginning" of our military's inner struggle with a morally myopic vision of war.³⁷

Today, we must take stronger steps to ensure our leaders and Servicemembers possess the professional education, training, and role models they need to become moral

Supporter of Manuel Noriega waves Panamanian flag at Marines during Operation Just Cause



SPECIAL FEATURE | War Is a Moral Force

exemplars on the battlefield. We need to better define how to achieve and assess "legitimacy," to include fully incorporating a tradition that is internationally authoritative and centurieswise, that of genuinely just wars (and not wars with a cooked narrative). We need to fortify our nation's grand military strategy with the national values expressed in the U.S. Constitution. We must realize that the use of military "hard power" to pursue a political goal as a matter of national policy is no longer feasible unless that goal also possesses moral legitimacy, at home and amongst our coalition allies. Finally, we must understand that, if a lasting and desirable peace is to come from any war, the means and ends selected must possess moral symmetry—a symmetry that design methodology can help us achieve.

Too often, U.S. military professionals view moral considerations as an extraneous hindrance to war's conduct or they misapprehend the real moral object. Yet this is exactly where military professionals must look to obtain any meaningful "victory" from a war. Simply stated, if we pay closer attention than our enemies do to moral considerations, we can be confident in a strategy that has the best chance of winning a lasting, workable peace from a conflict. The alternative, which is the routine and bloody sacrifice of this peace upon the altar of moral friction, is unacceptable. **JFQ**

N O T E S

¹ Andrew Bacevich, *Washington Rules: America's Path to Permanent Wars* (New York: Henry Holt and Company, LLC, 2010), 25.

² Carl von Clausewitz, *On War*, trans. J.J. Graham (Ware, UK: Wordsworth Editions Ltd., 1997), 151.

³ The term *moral* in this essay always concerns the psychological approval or disapproval given an act based on the perception that the act is right or wrong.

⁴ Field Manual 3–24, *Counterinsurgency* (Washington, DC: U.S. Government Printing Office, 2006), 1–3.

⁵ Clausewitz, 8.

⁶ Ibid., 20, 7. The term *friction* is used throughout in the sense of Clausewitz's "paradoxical" or "wonderful" trinity in which forces of passion, reason, chance, and creativity shape war from its abstraction into real experience.

⁷ Mao Zedong, quoted in Richard H. Solomon, *Mao's Revolution and the Chinese Political Culture* (Berkeley: University of California Press, 1971), 220. That Mao the practitioner later violated his own practical philosophy after attaining his goals does not dilute his argument's logic. ⁸ Mencius, quoted in "A Single Spark Can Start a Prairie Fire," *Selected Works of Mao Tsetung* (Peking: Foreign Languages Press, 1967), available at <http://www.marx2mao.com/Mao/ SS30.html>. Mao refers to *Mencius*, Book 4, Part 1, chapter 9.

⁹ Sun Tzu, *The Art of War*, trans. Samuel B. Griffith (New York: Oxford University Press Paperbacks, 1971), 88.

¹⁰ Mahmoud was an interpreter during coauthor Major Kevin Cutright's deployment to Iraq, 2009–2010. Mahmoud's story occurred in 2007.

¹¹ Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge: Harvard University Press, 1957), 11.

¹² Many people equate cultural relativism and moral relativism with little thought, and they thereby dismiss the possibility of moral solidarity. The Just War Tradition is and has been universal; it grew up in the human condition, and it was as valid many thousands of years ago as it is today. The early Christian thinkers who articulated it in writing as just war theory in the West (before and through the Dark Ages) were working off millennia of tradition, and the work of the classical Greeks and Romans conveyed it to them in a mature form. China and India both employed the Just War Tradition long before the West finally wrote it down, and we can return to those societies to extract the "ought" from the commentary on the violations of the tradition in the "is" or the "was." Islamic conquerors also continually made reference to the "ought" by providing a pretext for war, one that stood outside the mere evangelist's perspective.

¹³ Micahel Walzer, *Just and Unjust Wars: A Moral Argument with Historical Illustrations* (New York: Perseus Books, 1977), 19.

¹⁴ Douglas A. Pryer, "Controlling the Beast Within: The Key to Success on 21st-Century Battlefields," *Military Review* (January–February 2011), 8.

¹⁵ Arnold R. Isaacs, *Vietnam Shadows: The War, Its Ghosts, and Its Legacy* (Baltimore: Johns Hopkins University Press, 1997), 35–47. *Vietnam Shadows* is a poetic, philosophically rendered study of the Vietnam War's moral dimension, as this war's moral battles have raged in America from the 1960s until the present day. Isaacs spent the last 3 years of the war in Vietnam as a correspondent.

¹⁶ Harry G. Summers, *On Strategy* (New York: Dell Publishing, 1984), 46, 50–52.

¹⁷ John T. Kuehn, "Talking Grand Strategy," *Military Review* (September–October 2010), 76.

¹⁸ Although not typically associated with effects-based operations, the U.S. military's flirtation with so-called enhanced interrogation techniques involved the same behaviorist, deterministic, and effects-based mindset. ¹⁹ Pieter E. Vermaas et al., eds., *Philosophy and Design: From Engineering to Architecture* (Dordrecht: Springer Press, 2007), 1.

²⁰ John Chris Jones, *Design Method* (New York: John Wiley & Sons, Inc., 1992), 3.

²¹ *Morally flawed* here refers to the international and national condemnation that Israel's military tactics attracted, to include its targeting of civil infrastructure (such as banks and schools) and its use of white phosphorous munitions and cluster bomblets.

²² Matt M. Matthews, *We Were Caught Unprepared: The 2006 Hezbollah-Israeli War* (Washington, DC: U.S. Government Printing Office, 2008), 64.

²³ Department of the Army, Field Manual 5–0, *The Operations Process* (Washington, DC: U.S. Government Printing Office, 2010), 7–9.

²⁴ On a staff, a "red team" effectively serves as an advocate of the design process. The team forces the staff to consider the assumptions underlying an operational approach and ensures that planning sections are cross-talking (that is, that the staff effort is sufficiently collaborative).

²⁵ Publius Cornelius Tacitus, *Agricola* ("De Vita Agricolae"), trans. Alfred John Church and William Jackson Brodribb, available at <www.fordham.edu/ halsall/ancient/tacitus-agricola.html>.

²⁶ Douglas Macgregor, "It's Time for Us to Leave Afghanistan," *Defense News*, May 25, 2009.

²⁷ Robert D. Kaplan, *Warrior Politics: Why Leadership Demands a Pagan Ethos* (New York: Vintage Books, 2002), 42.

²⁸ Kaplan wrote this prescient sentence in 2001 or 2002, before we had even started to think about counterinsurgency in Iraq.

²⁹ Timothy Challans, "Tipping Sacred Cows: Moral Potential through Operational Art," *Military Review* (September–October 2009), 28.

³⁰ Ibid., 19–28.

³² Ardant du Picq, "Battle Studies," *Roots of Strategy, Book 2* (Harrisburg, PA: Stackpole Books, 1987), 65.

³³ Michel de Montaigne, Chapter XXXVI, "Of the Most Excellent Men," *The Works of Michel de Montaigne*, ed. W. Hazlitt (Philadelphia: J.W. Moore, 1856), 375.

³⁴ Victor Davis Hanson, "Epaminondas and the Theban Doctrine of Preemptive War," in *Makers of Ancient Strategy*, ed. Victor Davis Hanson (Princeton and Oxford: Princeton University Press, 2010), 93–94.

³⁵ Ibid., 107.

³⁶ Montaigne, 376.

³⁷ Churchill's speech celebrating the British victory at El Alamein included these famous lines: "Now this is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning."

³¹ Ibid., 27.

THE FUTURE OF INFLUENCE IN WARFARE



U.S. Army (Daniel P. Shook)

By DENNIS M. MURPHY

nformation plays a prominent role in the history of U.S. warfare. From Winfield Scott's courting of the Catholic Church in Veracruz in 1847 to George Creel's Committee on Public Information in World War I, military and civilian leaders have long understood that information, and the influence it produces, can significantly enable the success of military operations. That is no different today. In fact, it is apparent from both current military operations and the environment in which they occur that information and influence as applied to military success will become increasingly important while significantly more complex in the future. First, consider importance. It seems clear that success in Afghanistan hinges on the ability to change behavior through influence. General Stanley McChrystal's initial

Professor Dennis M. Murphy serves as the Director of the Information in Warfare Group in the Center for Strategic Leadership at the U.S. Army War College.

SPECIAL FEATURE | The Future of Influence in Warfare

assessment of the situation there, published in August 2009, stated, "Strategic Communication makes a vital contribution to the overall effort [battle of perceptions] and more specifically to the operational center of gravity: the continued support of the Afghan population."¹ The transparency of the information environment and increasing access to information through any number of means, from satellite television to the Internet, portend that military operations will not only have the ability to shape the information environment, but also in turn risk being shaped by it.

Next, consider complexity. In a recent Small Wars Journal article, Lee Rowland and Steve Tatham, in their presentation on target audience analysis (TAA) and measures of effectiveness, make a strong case that influence operations are a complex business: "TAAwhen undertaken properly-is an extremely complex process and whilst its methodology is comparatively simple, its implementation is most certainly not."2 A discussion of the human behavior model in an article published in early 2010 in Parameters concludes the same: "A deep understanding of the human behavior model, specifically culture and how it informs emotion, is critical to obtaining behavior change that is driven by perception and attitude."3 Noted communication researcher Steven Corman joins the chorus when he describes a shift in academic thought on influence from one of "simplistic . . . to pragmatic complexity."4

The U.S. Government, and the military in particular, has gradually recognized the value and urgency of information to affect

what is lacking are commanders who understand the concept sufficiently to provide appropriate guidance, resources, and advocacy for IO staffs

national security since the attacks of September 11, 2001. Significant debate since then has informed the evolution and viability of concepts such as information operations (IO), strategic communications (SC), and public diplomacy.⁵ In fact, the military has moved beyond the apprentice stage to what could arguably be termed journeyman status as it relates to applying information to enable achievement of its objectives. But the importance and complexity of future influence operations will require master status. The U.S. military will achieve such mastery by getting its doctrine right; by building its intelligence capability to focus on enemy use of information as a weapon of choice; and, most importantly, by creating an organizational culture that embraces the criticality of using information to influence across the spectrum of future conflict.

Getting Doctrine Right

The concepts of IO and SC (the primary military influence processes) and their application have evolved in fits and starts over the past 10 years. Much debate in the midst of conflict has surrounded the meaning of these terms, the similarities and differences between them, and the responsibilities for each beyond theory and in practice.6 Add to this the recent emergence of cyberspace operations, and the confusion is understandable. Still, progress, while appearing glacial to many, is occurring. A new and clearer definition of information operations has been approved by the Department of Defense. A "Strategic Communication Capabilities Based Assessment" has been completed.⁷ Both of these efforts will lead to military doctrinal publications and directives that afford the opportunity to provide clarity and, more importantly, move these concepts to an understanding that enables mastery of the craft of applying information in order to influence.

An example of progress was reflected in the theme of the 2010 Worldwide Information Operations Conference: "Mainstreaming Information Operations, Normalizing Doctrine and Operations."8 In other words, how do you take IO out of the ether, where it appears as a new, bright, shiny object, and place it squarely into the realm of routine and recurring military operations? The same challenge exists for strategic communications and cyberspace operations. The answer to that question lies squarely in getting the doctrine right. In fact, if the military does not get the next iteration of influence-related doctrine correct over the next 2 years, the progress previously described will be significantly muted.

Doctrine is what drives the conduct of military operations. It is guidance that (as noted on the inside cover of all joint doctrine publications) "is authoritative [and] as such will be followed except when, in the judgment of the commander, exceptional circumstances dictate otherwise."9 Once doctrine is written and codified, Soldiers, Sailors, Marines, and Airmen read it and follow it. It becomes "truth." Given that this is the case, defining the correct audience for the doctrine is critical since the future of information in warfare should focus on movement to mastery of the concept. One may understandably default to the influence practitioner as the obvious audience for this doctrine. But the most important audience is the commander. The progress previously described is reflective of IO or SC staffs who really understand how to achieve effects in the information environment after 10 years of practice in war. What is lacking, however, are commanders who understand the concept sufficiently to provide appropriate guidance, resources, and advocacy for those same IO staffs, which makes all the difference in the world.10

First, the focus of commander-oriented doctrine must be on information effects, not IO or SC. Both are integrating processes that are often misunderstood and confused with the individual capabilities that they integrate. Adding further confusion are related processes and capabilities like the newly minted cyberspace operations. Information effects, on the other hand, are clearly understood by commanders. Effect is a doctrinally accepted term, a part of operational design.11 Commanders know that they must achieve information effects to enable achievement of military objectives. However, they may not understand the nuances of IO or the other related but different concepts. In general, doctrine focused on information effects must be incorporated into the currently understood areas of operational art, design, and science.

Second, IO, SC, and cyberspace operations are still terms that will be used. This proposed doctrine need not go into excruciating detail about the specific staff processes that they portend, but it must describe the relationship between them.

Some specific examples of what this doctrine should include are worthy of discussion. First, and arguably foremost, is the importance of considering influence in the development of commander's intent. Commander's intent drives both the planning and execution of military operations. It defines command ownership of the operation. A commander's intent that includes a desired information endstate (a defined attitude or behavior change for critical audiences at the conclusion of the operation) will drive the military course of action development, analysis, and selection. That is, the military actions will be undertaken in a fashion to achieve the standard operational endstate in a way that also allows the desired information-effect endstate to be achieved. Branch planning should also be considered in terms of influence. Branch

in order to achieve mastery in influence operations, one must move from being proactively reactive to becoming predictive

plans answer the question, "What if?" Given that our enemies routinely use influence to enable success, we should plan for an immediate response to their influence operations through branch planning in order to minimize our reaction time. Additionally, it is important to do a side-by-side comparison of the operational art, design, and science aspects of kinetic operations as compared to influence operations. This should clearly point out the requirement for an information endstate (the art), resources necessary for understanding the complexity of both human behavior and measuring influence effectiveness (the science), and the long-term nature of achieving influence effects (the design).

When the Joint Publication Information Effects in Joint Military Operations is available, it will go a long way toward normalizing future influence operations. It buys informed and educated commanders. That in turn makes the life of the influence staff easier since the commander can now provide appropriate guidance, resources, and advocacy. And that moves information in warfare to a level of mastery not previously seen or practiced. Still, that mastery requires an acute understanding of the enemy, who chooses to vote routinely with information effects as his asymmetric weapon of choice.

Know Thine Enemy

In the apprentice stage of employing influence operations, the commander and staff are proactive in considering the information environment and the required information effects in the planning process. Counterinsurgency, as a population-centric military operation, has driven commanders, over time, to focus on information effects during planning in both Iraq and Afghanistan.

In the journeyman stage, the commander and staff both plan to achieve their own information effects and quickly shift to being "proactively reactive" regarding unpredictable circumstances in the information environment. That is, consideration is also given in the planning process to the fact that unforeseen situations can, and often do, occur that have potentially adverse information effects on coalition forces. (Collateral damage, Abu Ghraib photos, and staged enemy disinformation come to mind.) Recognizing this, the commander and staff develop processes to immediately react to those instances if and when they occur. Information playbooks and battle drills are examples that are prepared to plan for the unforeseen but expected information wildcard as a result of branch planning.¹²

But in order to achieve mastery in influence operations, one must move from being proactively reactive to becoming predictive. This is a critical task, and certainly not an easy one since it speaks to the complexity of the information environment. Consider the importance of being able to predict an information effect planned by the enemy versus reacting to an unanticipated information wildcard employed by the enemy. Rowland and Tatham note that "an unintended incident . . . will have an immediate information effect on [the] target audience and a much slower return to *below* stasis."¹³ In other words, even if coalition forces are doing a



SPECIAL FEATURE | The Future of Influence in Warfare

good job achieving planned and intended information effects, the unexpected incident not only adversely impacts operations for the short term, but also never allows a return to the effects achieved before the incident. (One step forward, two steps back.)

a commander who embraces the value of information effects to military success will drive the unit to a similar recognition

So, how does one become predictive in order to cut the legs out from under enemy information effects? The answer lies in the often-overlooked but long-term Achilles' heel of influence operations: intelligence support. A highly publicized report coauthored by Major General Michael T. Flynn, the North Atlantic Treaty Organization intelligence director in Afghanistan, points out current intelligence flaws: "Our intelligence apparatus still finds itself unable to answer fundamental questions about the environment in which we operate and the people we are trying to protect and persuade."14 Only when the Intelligence Community develops the skill sets, a pipeline of experts, and, most importantly, organizational focus toward influence operations will coalition forces have a chance of being predictive regarding enemy use of information. The enemy has a well-established modus operandi (MO) using information as his strategic weapon of choice. In fact, American-born-turned-enemypropagandist Zachary Chesser recently made that MO rather simple to understand by laying out the 10 most effective ways to conduct enemy influence operations.15 That is not to say that predictive information analysis is always easy. As previously noted, intelligence based on the human behavior model, social psychology, cultural anthropology, and emotion is inherently difficult. But intelligence-gathering and analysis focused on both open sources and traditional and more complex sources will move friendly influence operations from proactively reactive and allow the possibility of being predictive and proactively *disruptive* before the fact.

The shifts to commander-focused information effects doctrine and intelligence focus on enemy influence operations work hand-in-hand toward forcing a change in organizational culture in support of fully integrated planning and execution of influence operations.

Organizational Culture

In 2009, Chairman of the Joint Chiefs of Staff Admiral Michael Mullen stated, "We have allowed strategic communication to become a thing instead of a process, an abstract thought instead of a way of thinking."¹⁶ It is this inherent "way of thinking" that defines the organizational culture of the U.S. military today, and in terms of wielding influence through SC, Admiral Mullen sees a basic flaw. This is not surprising since researchers note that organizational culture changes in a fairly slow, evolutionary manner.¹⁷ What commander-centric information doctrine and intelligence support to



information effects provide, however, are forcing functions to drive an organizational culture that embraces information effects as an inherent part of military planning and execution.

Within military organizations, the commander sets the tone, establishes the command climate, and drives the organizational culture. A commander who embraces and emphasizes the value of information effects to military success will drive the unit to a similar recognition. Doctrine that focuses on and directs commanders to provide initial guidance on desired information effects will result in planning and execution reflective of organizational change. A commander who identifies an information endstate in his intent implies to the staff and subordinates that information effects are important to mission success and must be considered throughout the planning, execution, and assessment processes.

Intelligence support follows this commander-driven change. With an information endstate defined, the intelligence staff determines most likely and most dangerous enemy *influence* courses of action. The staff then wargames against these scenarios and, in doing so, increases the opportunity to both predict the enemy's use of information and plan to prevent it from ever occurring.

Other standard military decisionmaking processes will follow with a routine consideration of influence on mission accomplishment. Priority Intelligence Requirements will necessarily consider collecting on the environmental factors that portend enemy influence operations. The Commander's Critical Information Requirements will raise time-sensitive influence activities to the commander's level for action, both to exploit friendly effects and blunt enemy effects.

Commander-centric doctrine on information effects, accompanied by intelligence support enabled by appropriate resources and focus on enemy influence activities, will drive organizational culture. If and when that occurs, the military will be well on its way to mastery in planning and executing influence operations and deterring and defeating the primary source of enemy power.

The information environment is a complex system that will become increas-

ingly important to the success or failure of military operations in the future. Progress has been made since 9/11 to both exploit information effects to enable success and to counter enemy asymmetric use of information as a strategic weapon of choice. But the criticality of information as power in future warfare means that if the U.S. military hopes to routinely succeed, it must master influence operations across the spectrum of operations. Commander-centric doctrine will help jump-start that mastery by allowing the commander to provide the appropriate and necessary guidance, resources, and advocacy to influence operations. Intelligence support must simultaneously shift focus from kinetic order-of-battle analysis to a balanced approach that considers collection and analysis of influence-related enemy capabilities as well.

As this command-directed and -focused planning and execution evolve, they will trickle down to the individual Soldier, Sailor, Marine, and Airman. When they inherently and proactively consider any and all of their actions in light of their influence effects, inculcation of the organizational culture toward and true mastery of influence operations will be achieved. In a world where information is ubiquitous and increasingly impacts military success, that cannot happen soon enough. **JFQ**

NOTES

¹ Stanley A. McChrystal, Headquarters, International Security Assistance Force Memorandum, "COMISAF's Initial Assessment," Kabul, Afghanistan, August 30, 2009, D–1.

² Lee Rowland and Steve Tatham, "Strategic Communication and Influence Operations: Do We Really Get 'It'?" *Small Wars Journal*, August 3, 2010, available at http://smallwarsjournal.com/blog/journal/docs-temp/483-tatham-rowland.pdf.

³ Dennis M. Murphy, "In Search of the Art and Science of Strategic Communication," *Parameters* 34, no. 4 (Winter 2009/2010), 111.

⁴ Steven R. Corman, Angela Trethewey, and Bud Goodall, "A 21st Century Model for Communication in the Global War of Ideas," Consortium for Strategic Communication, Report #0701, April 3, 2007, 9.

⁵ Information operations, strategic communications, and public diplomacy are related concepts that all in some way focus on informing, educating, and influencing audiences. Still, their nuanced differences remain difficult for the nonpractitioner to grasp, as evidenced by a U.S. Department of Defense front-end analysis in summer 2010, examining the lexicon and definitions of information operations and strategic communication, among others.

⁶ See Dennis M. Murphy, "The Trouble with Strategic Communication(s)," *IOSphere* (Winter 2008) for a detailed explanation of the lexicon and comparison of the terms *information operations* (IO) and *strategic communication* (SC).

⁷ The new definition of *IO* is an outcome of the Department of Defense front-end analysis (see note 5). The "Strategic Communication Capabilities Based Assessment" was conducted by U.S. Strategic Command during 2009–2010 and considered SC from doctrinal, personnel, and organizational perspectives, among other considerations.

⁸ The Worldwide Information Operations Conference is an annual event bringing together an international audience of approximately 500 IO practitioners, academics, and contractors to focus on both the progress and future of IO.

⁹ See Joint Chiefs of Staff, Joint Publication 3–13, *Information Operations* (Washington, DC: Joint Chiefs of Staff, February 13, 2006), i, among others.

¹⁰ The author has taught on the topics of IO and SC at the U.S. Army War College for the past 6 years. Over that period, senior military leader-students have increasingly recognized the importance of information effects to warfighting success. However, they anecdotally offer that even with successive tours of duty in combat zones, it takes an initial 4 months, on average, for commanders to put into place effective tactics, techniques, and procedures to compete in the information environment.

¹¹ Joint Chiefs of Staff, Joint Publication 5–0, *Joint Operation Planning* (Washington, DC: Joint Chiefs of Staff, August 11, 2011), III–18.

¹² Again, this should be planned using current military paradigms. In this example, branch planning is the appropriate mechanism. A branch answers the question "What if?" in military plans. See Joint Publication 5–0, II–18.

¹³ Rowland and Tatham, 6.

¹⁴ Michael T. Flynn, Matt Pottinger, and Paul D. Batchelor, "Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan," Center for a New American Security Working Paper, January 4, 2010.

¹⁵ Jared Brachman, "The Internet Jihad," *Foreign Policy*, available at <www.foreignpolicy. com/articles/2010/10/11/the_internet_jihad>.

¹⁶ Michael G. Mullen, "Strategic Communication: Getting Back to Basics," *Joint Force Quarterly* 55 (4th Quarter 2009), 2.

¹⁷ Christine A.R. MacNulty, *Transformation* from the Outside In or the Inside Out (Carlisle, PA: U.S. Army War College Center for Strategic Leadership, 2008), 22.

SECURITY COOPERATION A NEW FUNCTIONAL COMMAND

By RANDAL M. WALSH

We will continue to rebalance our military capabilities to excel at counterterrorism, counterinsurgency, stability operations, and meeting increasingly sophisticated security threats, while ensuring our force is ready to address the full range of military operations.

—U.S. National Security Strategy



USAID member and Department of Agriculture expert with Zabul PRT evaluate well in village near Qalat, Afghanistan

ver the past decade, the United States has conducted counterinsurgency (COIN) operations in two major theaters and participated in security cooperation (SC) operations worldwide to build partner capacity and defeat insurgents and terrorist networks. Successful COIN and SC operations hinge on the ability to fully integrate joint military and interagency capabilities to achieve strategic objectives. Recent operations in Iraq, Afghanistan, the Philippines, and elsewhere show that when SC operations are synchronized with military and interagency elements of national power, they can have a positive impact on security and stability. The current emphasis on SC at the strategic and operational levels reflects its significance; however, there is no Department of Defense (DOD) command responsible for integrated SC joint doctrine, training, interagency coordination, and worldwide force employment. Considering the importance of integrated SC operations and their relevance to the current global security environment, a new SC functional combatant command should be created that synchronizes joint, interagency resources and incorporates lessons learned during the past decade of SC and capacitybuilding operations.

Recent operations substantiate the importance of SC and capacity-building operations that fully integrate military and civilian capabilities to improve security and stability. The success and experiences of Provincial Reconstruction Teams (PRTs) show the utility of SC in the COIN environment and its potential to provide combatant commanders (CCDRs) a valuable tool to achieve operational objectives. Special Operations Forces (SOF) operations provide additional examples of how nontraditional civilian-military operations can be effective in COIN and SC. Security cooperation and capacity-building activities are being conducted around the globe in order to achieve national security objectives by intervening in failed or failing states. Integrated SC operations will be indispensable in the future global security environment, which Marine Corps Commandant General James F. Amos describes as a world where "failed states or those that cannot adequately govern their territory can become safe havens for terrorist, insurgent and criminal groups that threaten

Major Randal M. Walsh, USMC, is assigned to the 1st Marine Division and is a 2011 graduate of the Naval War College. the U.S. and our allies."¹ To improve stability and security in this environment, the United States must emphasize phase zero shaping operations through integrated SC in order to "dissuade or deter potential adversaries and to solidify relationships with friends and allies."² By improving security in troubled regions through integrated SC operations, the United States can prevent or reduce conditions that often lead to terrorist activity. The goals outlined in the National Security Strategy, National Defense Strategy, and statements by CCDRs emphasize this necessity.

Security cooperation is defined as "all Department of Defense [DOD] interactions with foreign defense establishments to build defense relationships that promote specific U.S. security interests, develop allied and friendly military capabilities for self-defense and multinational operations, and provide U.S. forces with peacetime and contingency access to a host nation."3 Recent experiences show that when integrated with civilian agencies, SC operations can have a dramatic impact on a host nation's ability to provide security and governance for its people. Although there are many examples of SC operations, there is no DOD central coordinating command responsible for integrated SC doctrine, training, and force employment. As a result, the potential for redundancy, lost institutional knowledge, insufficient doctrine, and insufficient coordination with various agencies exists. A joint forces SC functional combatant command would better posture the military and other U.S. Government (USG) agencies for the most likely future threat environments.

To make the case for a new functional combatant command that focuses on SC, this article initially provides a description of PRTs in Iraq and Afghanistan as an example of SC operations that integrate military and civilian capabilities. Next, it examines SC and COIN operations in the Philippines conducted by SOF. These operations reflect a more proactive approach to integrated SC and capacity-building without introducing major combat forces. After providing examples of recent integrated SC operations, a review of the current National Security Strategy and other USG policy documents shows that a new combatant command responsible for SC is relevant today. This article also illustrates how an SC command would serve to complement the Defense Security Cooperation Agency (DSCA). Lastly, it addresses recommendations and lessons learned that should be incorporated into a new SC functional combatant command.

Provincial Reconstruction Teams

The PRT concept was introduced in Afghanistan in 2002 to expand the reach and effectiveness of the Afghan central government without introducing significantly more troops in the International Security Assistance Force (ISAF) area of responsibility (AOR). As explained in U.S. Army Field Manual (FM) 3-24, Counterinsurgency Operations, "PRTs were conceived as a means to extend the reach and enhance the legitimacy of the central government."4 By 2003, PRTs were deployed in the ISAF AOR and comprised up to 100 Servicemembers and civilians with members of the State Department, U.S. Agency for International Development (USAID), and Department of Agriculture.5 Their mixture of members from DOD and other agencies was intended

by improving security in troubled regions through integrated SC operations, the United States can prevent or reduce conditions that often lead to terrorist activity

to provide unique capabilities and resources that could improve conditions throughout Afghanistan and enhance the effectiveness of the central government. Since they were first introduced, PRTs in Afghanistan have been under the direct control of the U.S. military and ISAF commanders.⁶ Although the Afghan government has successfully held elections, and conditions in the country have generally improved since the introduction of PRTs, the legitimacy of the national government is fragile, and violence and corruption remain.⁷ As a result, the capabilities PRTs offer will be needed well into the future.

PRTs were adopted in Iraq in 2005 and may be credited for much of the progress seen throughout the country. After major combat operations ended and a full-blown insurgency erupted, coalition forces recognized the need to employ PRTs to enhance security, stability, and governance in Iraq. PRTs in Iraq and Afghanistan are similar, but their composition and command and control vary. Unlike their counterparts in

SPECIAL FEATURE | Security Cooperation



Afghanistan, which are directly controlled by the military with guidance from the PRT Executive Steering Committee in Kabul, PRTs in Iraq were led by the Department of State. Like PRTs in Afghanistan, the teams in Iraq consisted of military and civilian personnel with members from the Departments of State, Justice, and Agriculture, and USAID. Iraq PRTs were assigned military officers, including civil affairs and Army Corps of Engineers personnel, as deputy leaders and liaison officers. Embedded PRTs were also created in Iraq and were smaller than normal PRTs with only 8 to 12 Servicemembers and civilians per team.⁸

Although different in composition and command structure, PRTs share the common goal of improving security, stability, and governance. They are also similar in that they require close integration of multiple USG agencies in order to be effective. Even though PRTs have been recently introduced in Afghanistan and Iraq, the concept is not new and has been seen in other forms over the years. Civil Operations and Revolutionary Development Support (CORDS) during Vietnam as well as recent SOF operations in the Philippines are also examples of operations that integrate civilian and military resources to build partner capacity and improve stability, security, and governance. Each example proves that when military and civilian operations are conducted in conjunction with each other, the results can be substantial.

Proactive Approach to Integrated Security Cooperation

Ongoing COIN and SC operations conducted by SOF in the Philippines can be compared to PRT operations since their aim is also to improve security, stability, and governance through multiple agencies in coordination with the host nation. Operation *Enduring Freedom–Philippines* (OEF–P) began in 2002 as one of the main fronts in the war on terror.⁹ What makes OEF–P operations different from those of PRTs is that they were initiated before major combat forces were needed and were conducted by highly specialized SOF. Their success reinforces the importance of proactive PRT-like SC operations that integrate military and civilian capabilities and are designed to counter conditions that lead to insurgent or terrorist activity.

In February 2002, Joint Task Force (JTF) 510 was established in the Southern Philippines in support of OEF–P to quell a growing insurgency. The Southern Philippines was "notorious for civil unrest, lawlessness, terrorist activity, and Muslim separatist movements" and required a comprehensive approach to COIN without the introduction of major combat forces.¹⁰ Using a mix of civilian, military, and host nation resources, JTF 510 employed what is known as the indirect approach to COIN. By acting "by, with, and through" the host nation, the JTF supported the Philippine government's efforts to defeat

when military and civilian operations are conducted in conjunction with each other, the results can be substantial the insurgency. Their approach called for "interactions between the host-nation government, the insurgents, the local populace, and international actors or sponsors."11 Unlike the PRTs discussed above, ITF 510 focused heavily on the employment of SOF to work with indigenous forces in order to establish security. Once the security situation improved, civil affairs units were introduced and the U.S. Navy construction task group commenced infrastructure projects. The key to the entire operation was the close coordination with the Department of State country team to "facilitate interagency planning and synchronization."12

Like PRTs, JTF 510 was successful using relatively small joint, interagency teams, which shows how synchronized SC operations can be effective in improving partner capacity to fight an insurgency. With a task force that consisted of only about 1,300 U.S. troops, JTF 510 achieved significant results. By focusing on building the capacity of the Philippine armed forces and emphasizing host nation, military, and USG agency cooperation, an insurgency has been mitigated. The fact that there is no functional combatant command to coordinate similar activities throughout the globe represents a shortfall in Washington's capacity to achieve its operational and strategic objectives of improving stability and security and building partner capacity.

Compelling Need to Institutionalize Security Cooperation

In the post-9/11 era, irregular threats facing the United States require a wholeof-government approach to prevent the emergence of unstable environments like the one in Afghanistan before 9/11. The best strategy in the 21st century is to keep terroristfriendly environments from surfacing by building partner capacity without introducing significant numbers of ground forces. The 2010 National Security Strategy (NSS) establishes the foundation for this approach and states that "our military will continue strengthening its capacity to partner with foreign counterparts, train and assist security forces, and pursue military-to-military ties with a broad range of governments."13 The National Defense Strategy captures the intent of the NSS by stating that "by helping others to police themselves and their regions, we will collectively address threats to the broader international system."14 The 2010 Quadrennial Defense Review Report reinforces this point and explains that "building the capacity of partner nations can help prevent conflict from beginning or escalating, reducing the possibility that large and enduring deployments of U.S. or allied forces would be required."15

The Secretary of Defense, CCDRs, and other Government agencies such as the Department of State and USAID have committed themselves to conducting SC with governments around the world to combat insurgencies and terrorist networks. A review of the National Security and National Defense Strategies and CCDR mission and posture statements reflects a focus of effort in this regard. For instance, in the National *Defense Strategy*, the Secretary of Defense emphasized that "our forces have stepped up to the task of long-term reconstruction, development and governance."16 It further states that the "U.S. Armed Forces will need to institutionalize and retain these capabilities, but this is no replacement for civilian involvement and expertise [and] we will continue to work with other U.S. Departments and Agencies, state and local governments, partners and allies, and international and multilateral organizations to achieve our objectives."17 This statement highlights the importance of multi-agency PRT-like or SOF units capable of building partner capacity through integrated SC.

Combatant commands have focused on capacity-building and SC. In the 2010 U.S. Africa Command (USAFRICOM) Posture Statement, General William Ward emphasized the importance of working "in concert with our interagency partners, such as the U.S. Department of State and the United States Agency for International

Development, to ensure our plans and activities directly support U.S. foreign policy objectives."18 He went on to stress that in order to meet our national defense challenges, a "holistic view of security" is needed that incorporates a whole-of-government approach. USAFRICOM applied this approach with the Department of State in the Africa Contingency Operations Training and Assistance program. This program is funded by the Department of State and supported by USAFRICOM and helps selected militaries in Africa to improve their capacity to

USSOCOM may serve as the most compelling example for creating a functional combatant command dedicated to SC

respond to crises.¹⁹ U.S. Southern Command (USSOUTHCOM) also incorporates a whole-of-government approach to address security challenges in its AOR. As stated in USSOUTHCOM's 2010 posture statement, "security will depend upon expanding cooperative engagement with multinational, multi-agency and public-private partners."20

U.S. Special Operations Command (USSOCOM) Strategy 2010 also underscored the importance of a "fully-integrated approach to security." In what it calls the "3-D Construct," USSOCOM aims to synchronize diplomacy, defense, and development in coordination with other instruments of national power. Their approach stresses "the integration and collaboration of each element [of national power] toward defined purposes . . . [and] requires all government



SPECIAL FEATURE | Security Cooperation

departments and agencies to operate and collaborate in concert in order to produce an effective approach to national security."²¹ Admiral Eric T. Olson, then commander of USSOCOM, explained to the House Armed Services Committee that SOF "are conducting a wide range of activities in dozens of countries around the world on any given day—at the request of the host tions and thousands of casualties warrant the creation of a command devoted to building partner capacity through integrated SC operations. Our failure to do so after the tough lessons in Vietnam reinforces this point.

Secretary of Defense Robert Gates has emphasized the requirement to integrate DOD, the Department of State, USAID, and

lack of a central coordinating authority represents a significant gap in the USG's ability to promote security and stability and build partner capacity

government, with the approval of the U.S. Ambassador and under the operational control of the [United States]."²² SOF are clearly dedicated to meeting today's security and stability challenges as proven by the success of JTF 510. Similar operations that integrate and synchronize military and civilian capabilities are necessary to respond to threats worldwide. Unfortunately, SOF lacks the resources to conduct operations on the scale necessary in the future security environment.

USSOCOM may serve as the most compelling example for creating a functional combatant command dedicated to SC. The founding of USSOCOM can be traced back to the April 24, 1980, failed attempt to rescue 53 American hostages held by Iran. The operation, known as Desert One, revealed DOD's lack of jointness in handling such difficult missions and highlighted weaknesses in SOF. The event also highlighted the need for a dedicated command capable of responding to complex scenarios such as terrorist threats and low-intensity conflicts. Subsequent events and congressional initiatives reinforced this requirement since some felt "strongly that the DOD was not preparing adequately for future threats ... [and] needed a clearer organizational focus and chain of command for special operations."23 USSOCOM was created in 1987 in response to these concerns. In addition to its Title 10 responsibilities and authorities, the 2004 Unified Command Plan required USSOCOM to synchronize DOD plans against terrorist networks and conduct global operations as necessary.24 Considering it took just one event to serve as the catalyst for establishing USSOCOM, it stands to reason that the last decade of COIN operaother USG agencies to meet the demands of the long war. Like the CCDRs described above, he fully recognized the requirement to integrate multiple agencies to be effective. He also recognized that the civilian and military instruments of national power were not designed to handle the complex threats faced by the United States today. As he put it, the "military was designed to defeat other armies, navies, and air forces, not to advise, train, and equip them [and]. . . the United States' civilian instruments of power were designed primarily to manage relationships between states, rather than to help build states from within."25 In order to adapt to the most likely security environment, it is time to institutionalize integrated SC in DOD.

Unity of Effort without Unity of Command

While there may be unity of effort to integrate military and civilian capabilities at the tactical and operational levels, DOD does not have a command dedicated to that effort with the capacity to respond to SC demands facing the United States and its allies. In other words, DOD lacks unity of command in integrated SC and capacity-building operations. Defense Secretary Robert Gates articulated this problem by stating that the "institutional challenge we face at the Pentagon is that the various functions for building partner capacity are scattered across different parts of the military [and] there has not been enough attention paid to building the institutional capacity (such as defense ministries) or the human capital (including leadership skills and attitudes) needed to sustain security over the long term."26 The solution may lie in a new command dedicated to facing the threats of

the 21st century that synchronizes joint, interagency SC, and capacity-building operations.

The need for capacity-building and joint, interagency SC efforts is clearly understood. Unfortunately, DOD has not structured itself to meet current and future SC and capacity-building demands. PRTs have been immersed in operations that combine DOD and other USG agencies to enhance stability, security, and governance in Iraq and Afghanistan, but they are only dedicated to those theaters and are relatively small. USSOCOM also has tremendous experience in the SC and capacity-building arena but lacks the capacity to address requirements worldwide. Considering the widespread emphasis on SC and capacity-building, it appears there is unity of effort. However, since there is no central command authority within DOD to maintain and coordinate operations like those conducted by PRTs and SOF, there is no unity of command.

Defense Security Cooperation Agency

DSCA provides even more relevance for an SC functional combatant command. DSCA exists to synchronize "global security cooperation programs, funding and efforts across OSD, Joint Staff, State Department, COCOMs [combatant commands], the services and U.S. Industry [and] is responsible for the effective policy, processes, training, and financial management necessary to execute security cooperation within the DOD."27 The agency oversees funding and education programs such as foreign military sales, foreign military financing, foreign internal defense, international military education and training, and humanitarian and civic assistance projects. With only 670 DSCA personnel worldwide focused mainly on military training, education, and financing, an SC command would serve as the operational arm of SC within DOD capable of supporting the global security cooperation effort.28

An SC command would provide DSCA a link among the strategic, operational, and tactical levels of SC operations and could deliver integrated interagency and military teams to conduct SC activities. As a source of funding and connection among key agencies, DSCA would be a key enabler for an integrated SC functional command. What an SC command could provide DOD and DSCA are tactical and operational SC capabilities with force employment options. In the same manner as USSOCOM provides highly trained forces to conduct special operations, an SC command could organize and train forces ready to conduct integrated SC operations and provide those forces to geographic CCDRs to execute their theater security cooperation plans. The command could maintain PRT-like SC forces capable of supporting DOD and DSCA strategic objectives. Several of USSOCOM's Title 10 authorities and responsibilities might apply to an SC command. For instance, an SC command could develop SC operations strategy and tactics, conduct specialized courses of instruction, validate requirements, and ensure SC force readiness.²⁹

Recommendations and Lessons Learned

Recognizing the importance of institutionalizing SC and capacity-building capabilities within DOD, it follows that the recent lessons learned must be captured in order to provide DOD a responsive and capable command ready to employ SC forces in joint, interagency, and multinational operations. Three primary recommendations must be considered if a new SC functional combatant command is to be successful. First, integrated SC operations require a central coordinating authority. Second, experiences have shown that joint, interagency doctrine must be created to guide SC operations. Finally, USG agencies supporting SC and capacity-building operations must be fully incorporated into the new command.

As explained above, the lack of a central coordinating authority to orchestrate SC operations for DOD represents a significant gap in the USG's ability to promote security and stability and build partner capacity. Although CCDRS, DOD, DSCA, and the Department of State all emphasize the need to conduct joint, interagency operations, a dedicated command structure has yet to be created. This has caused problems in recent operations. For instance, the diversity of PRTs "created challenges in maintaining a common mission and coordinating an increasingly diverse group of stakeholders."30 Although USSOCOM conducts integrated SC operations, it lacks the size and resources necessary to respond to the current and future security environment. A dedicated command would boost DOD's capability to employ SC forces and synchronize joint, interagency efforts.

Given the limited size of and high demand for SOF forces, Andrew Krepinevich proposed that:

the Army and its sister services must be prepared to conduct training and advising of host nation militaries and, where necessary, allied and partner militaries. If the Army's partners in the U.S. Government's interagency element—e.g., the State Department, intelligence community, USAID—prove unable to meet their obligations as partners in restoring stability, the Army must also be prepared to engage in operations to help restore the threatened state's governance, infrastructure, and the rule of law.³¹

He went on to explain that the Army should maintain a standing training and advisory force that is institutionalized in the Army through training and doctrine.³² On the other hand, U.S. Army Lieutenant General Peter W. Chiarelli believes that a separate low-intensity force is not required but that the United States "should consider increasing the number and adjusting the proportion of specialized units such as civil affairs, engineers, information operations, and others that play critical roles in stability operations."33 In each case, the importance of increasing U.S. capacity to meet global SC and capacity-building requirements is clear. A command to orchestrate those efforts makes sense.

New doctrine must be created to implement an SC functional combatant command that incorporates lessons learned throughout DOD and USG agencies. Since SC operations around the globe will entail "the proliferation of partner countries and growing diversity in areas of operations, there is an ever-greater need for central direction, coordination, and standardization."³⁴

Operations conducted by PRTs are one example of what new SC doctrine must address. Joint Publication (JP) 3–24, *Counterinsurgency*, states that:

a PRT is an interim interagency organization designed to improve stability in a given area by helping build the legitimacy and effectiveness of a HN [host nation] local or provincial government in providing security to its citizens and delivering essential government services.



SPECIAL FEATURE | Security Cooperation



... While the PRTs are primarily concerned with addressing local conditions, they also work on building and improving communication and linkages among the central government, regional, and local agencies.

While this definition may be useful, it does not establish sufficient doctrine for PRTs or similar integrated SC forces. As expressed by one scholar, "The recent accomplishments of PRTs in Afghanistan and Iraq deem them relevant, and future successes may depend on clearly delineated concepts relating to the broad scope of capabilities that PRTs bring to the table."³⁵

Fortunately, the foundation for joint integrated SC doctrine can be found in the *International Security Assistance Force (ISAF) PRT Handbook* and the Center for Army Lessons Learned (CALL) *PRTs in Iraq*, as well as the CALL *PRT Play-*

book.³⁶ U.S. Army FM 3–07.1, Security Assistance Operations, provides another source to create doctrine applicable to a new SC command. The 2007 U.S. Army International Security Cooperation Policy will provide yet another reference for SC command doctrine. Using these and other sources, DOD can establish the doctrine necessary to consolidate SC training, force employment, and interagency coordination. In addition to key elements of the sources mentioned above, the doctrine must specifically address interagency cooperation so that DOD can institutionalize relationships and lessons learned in recent SC and capacity-building operations.

One of the most critical lessons learned after years of operating in the SC environment is the need to fully incorporate civilian agencies to accomplish the mission. Robert Perrito, Coordinator of the Afghanistan Experience Project at the U.S. Institute of Peace, stressed that the United States must "match PRT military capabilities with a robust component of specially trained, adequately resourced, and logistically supported civilian representatives." Perrito compared the PRT effort with that of the Vietnam-era CORDS program, a

one of the most critical lessons learned after years of operating in the SC environment is the need to fully incorporate civilian agencies to accomplish the mission

civilian-military organization led by USAID and consisting mostly of civilians. The Department of State assigned hundreds of Foreign Service Officers to CORDS in an effort to improve conditions in Vietnam.37 A new SC command should maintain the ability "to field, on short notice, CORDS [type] groups capable of providing advice, mentoring, and support to the host nation's non-security institutions (including its civil administration and its legal, economic, and healthcare sectors)."38 Like PRTs, "CORDS groups would vary in size depending on the circumstances, but they should include military personnel, civilians made available from the interagency and expert personal services contractors."39 This ability will depend heavily on the involvement of civilian agencies. The emphasis on civilian involvement will be essential to the success of future SC operations and must be an integral part of a new SC functional combatant command.

Counterargument

Some might argue that USSOCOM exists to address the SC and capacity-building efforts described in this article. Others may argue that existing commands and the current DOD DSCA structure can meet SC demands. For instance, some say that current geographic CCDRs can apply the PRT concept or tap into SOF assets in response to SC or capacity-building requirements. However, as mentioned, USSOCOM lacks the size to conduct SC and capacity-building on the scale necessary today and in the future. Additionally, the PRT concept has yet to be institutionalized as reflected by the lack of doctrine and a central command to train, equip, and deploy PRT-like forces that are integrated with necessary civilian agencies. Although conventional forces may be capable of temporarily handling the SC and capacitybuilding role, they lack a central command authority to coordinate joint, interagency efforts necessary to meet SC demands. An SC functional combatant command could overcome these challenges.

In a RAND Corporation counterinsurgency study, Daniel Byman wrote, "The most obvious action for the United States to take in its COIN campaign is to anticipate the possibility of an insurgency developing before it materializes. Many of the recommended steps are relatively low cost and easy to implement, especially when compared with fighting a full-blown insurgency."⁴⁰

That statement emphasizes the necessity for the United States to be proactive in pursuing its National Security Strategy, and a new security cooperation functional combatant command may be one of the first steps to implement at relatively low cost yet have a tremendous impact. In what has been referred to as "persistent conflict," the United States and its allies will likely face the continuous complex challenges of failed or failing states that have the potential to become safe havens for insurgents or terrorist networks. In such an environment, the United States essentially finds itself in phase zero shaping operations, which are intended "to enhance international legitimacy and gain multinational cooperation in support of defined military and national strategic objectives."41 A new SC functional combatant command would focus on this phase of operations. A command dedicated to integrated SC could ensure that efforts throughout DOD and the USG are aligned with the strategic and operational SC objectives expressed in U.S. national security policy documents. A new SC command could also ensure that SC at the tactical level is conducted with forces that have the appropriate doctrine, training, and readiness necessary to succeed. Instead of introducing SC and capacity-building forces after major ground combat operations like those in Iraq and Afghanistan, a new SC command could orchestrate DOD and interagency efforts before conflict begins and before conditions arise that lead to terrorist activity or full-blown insurgencies. JFQ

NOTES

¹ 35th Commandant of the Marine Corps, *Commandant's Planning Guidance* (Washington, DC: Headquarters U.S. Marine Corps, 2010), 3, available at <www.marines.mil>.

² Joint Publication (JP) 3–0, *Joint Operations* (Washington, DC: The Joint Staff, March 22, 2010), IV–21.

³ JP 1–02, Department of Defense Dictionary of Military and Associated Terms (Washington, DC: The Joint Staff, January 31, 2011), 323, available at <www.dtic.mil/doctrine/new_pubs/ jp1_02.pdf>.

⁴ Field Manual 3–24, *Counterinsurgency* (Washington, DC: Headquarters Department of the Army, December 2006), 2–12, available at <www.fas.org/irp/doddir/army/fm3-24.pdf>.

⁵ Michael J. McNerney, "Stabilization and Reconstruction in Afghanistan: Are PRTs a Model or a Muddle?" *Parameters* 35, no. 4 (Winter 2005/2006), 32, available at <www.carlisle.army. mil/usawc/parameters/Articles/05winter/mcnerney.pdf>.

⁶ John H. Ebbighausen, "Provincial Reconstruction Teams and Good Governance," research paper, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 2010, 24.

⁷ U.S. Agency for International Development, *Provincial Reconstruction Teams in Afghanistan: An Interagency Assessment*, June 2006, 7, available at <http://pdf.usaid.gov/pdf_docs/PNADG252. pdf>.

8 Ibid., 39.

⁹ Gregory Wilson, "Anatomy of a Successful COIN Operation: OEF–PHILIPPINES and The Indirect Approach," *Military Review* 86, no. 6 (November–December 2006), 4.

¹² Ibid., 6.

¹³ National Security Strategy (Washington, DC: The White House, 2010), 12, available at <www.whitehouse.gov/sites/default/.../national_ security_strategy.pdf>.

¹⁴ National Defense Strategy (Washington, DC: Office of the Secretary of Defense, June 2008), 10, available at <www.defense. gov/.../2008%20national%20defense%20strategy. pdf>.

¹⁵ *Quadrennial Defense Review Report* (Washington, DC: Office of the Secretary of Defense, February 2010), 7, available at <www.defense.gov/ qdr/qdr%20as%20of%2029jan10%201600.pdf>.

¹⁶ National Defense Strategy, 17.

¹⁷ Ibid.

¹⁸ William E. Ward, Commander, U.S. Africa Command, "AFRICOM Posture Statement," March 2010, 11, available at <www.africom.mil/>.

¹⁹ "Africa Contingency Operations Training and Assistance (ACOTA)," *DISAM Journal of* *International Security Assistance Management* 3, no. 4 (December 2006), 5.

²⁰ Douglas M. Frazier, Commander, U.S. Southern Command, "Posture Statement of United States Southern Command," March 11, 2010, 2, available at <www.southcom.mil>.

²¹ Eric T. Olson, Commander, U.S. Special Operations Command, "Special Operations Command Strategy 2010," November 2009, 5.

²² Eric T. Olson, "Posture Statement of the United States Special Operations Command," March 3, 2011, 5.

²³ U.S. Special Operations Command, "History [of the] United States Special Operations Command," 6, available at <www.socom. mil/>.

²⁵ Robert M. Gates, "Helping Others Defend Themselves," *Foreign Affairs* 89, no. 3 (May–June 2010), 2–5.

²⁶ Ibid.

²⁷ Defense Security Cooperation Agency, "What We Do," available at <www.dsca.osd.mil/>.

²⁸ Beth McCormick and Scott Schless, "Building Partnership Capacity Through Education and Training: Key Efforts of the Defense Security Cooperation Agency," *DISAM Journal of International Security Assistance Management* 32, no. 1 (July 2010), 199.

²⁹ U.S. Special Operations Command, "SOCOM Factbook," 6, available at <www.socom. mil/socomhome/newspub/pubs/documents/ factbook.pdf>.

³⁰ McNerney, 38.

³¹ Andrew F. Krepinevich, *Strategy for the Long Haul: An Army at the Crossroads* (Washington, DC: Center for Strategic and Budgetary Assessments, 2008), 63.

³² Ibid.

³³ Peter W. Chiarelli, "Learning from Our Modern Wars: The Imperatives of Preparing for a Dangerous Future," *Military Review* 87, no. 5 (September–October 2007), 7.

³⁴ Robert M. Perito, "The U.S. Experience with Provincial Reconstruction Teams in Afghanistan: Lessons Identified," United States Institute of Peace, 13.

³⁵ William D. Frazier, "Provincial Reconstruction Teams: The Compelling Need for Joint Doctrine," research paper, Joint Military Operations Department, U.S. Naval War College, Newport, RI, 2009, 7.

³⁷ Perito, 14.

³⁹ Ibid.

⁴⁰ Daniel Byman, *Understanding Proto-Insurgencies*, RAND Corporation Counterinsurgency Study, Paper 3, ix, available at <www.rand.org/pubs/occasional_papers/2007/ RAND_OP178.pdf>.

⁴¹ JP 3–0.

¹⁰ Ibid.

¹¹ Ibid.

²⁴ Ibid., 16.

³⁶ Ibid., 13.

³⁸ Krepinevich.

THE CIVIL-MILITARY GAP

NEED NOT BECOME A CHASM

By IKE SKELTON

hen the United States won its independence from Great Britain, the American people had an underlying mistrust of large standing militaries, an attitude that continued down through U.S. history. This attitude was codified in Article I, Section 8, of the Constitution, which gives Congress the power to raise and maintain an army but places a strict term limit of 2 years on funding such an army. From 1776 through the Korean War, the U.S. Government called

on citizens to take up arms to fight. Upon the conclusion of each war, the Nation would shrink the military back to peacetime levels, and military members would return home to their civilian lives, much the way George Washington did after leading the Continental



SKELTON

U.S. Air Force (Scott M. Ash)

Army against British forces. The 20th-century requirements of the Cold War changed that pattern of build-up/draw-down, but with large standing forces and conscription during peacetime.

In 1973, with the end of the Vietnam conflict and great public distaste for the Vietnam-era draft, legislation transformed the military into an all-volunteer force. This had an impact on civil-military relations. This new force would be composed entirely of

it is the burden of political leadership to explain to the public what the military is doing and why it matters

individuals who made a choice to serve their country in peace and war, seeing military service as a career rather than a temporary job. Conscription had provided at least a rough bridge between the military and society. Most draftees ultimately returned to their civilian careers, but their military service gave the broader population a basic understanding of the military since individuals who would not have otherwise joined got a taste of the military life and mission.

The idea of citizen-soldiers is not unique to the United States. In 1957, West Germany introduced compulsory military service, which remained in effect until June 2011. A German Defense Ministry spokesman recently stated, "From the beginning, conscription was seen as a constitutional means of averting the militarism of the past by creating 'citizens in uniform' to bind the armed forces to the rest of society. Everyone had to serve."1 Without conscription, the tie between the military and society could weaken since fewer civilians would serve any time in the military. Most Americans no longer need to worry about family members or friends being drafted and thus are less likely to feel that the military in any way impacts their lives.

The military is a subset of society. Although they are still citizens, Servicemem-

The Honorable Ike Skelton, the former U.S. Representative for Missouri's 4th Congressional District, serves as Distinguished Professor of Practice in the Institute for National Security Ethics and Leadership at the National Defense University. He is a Partner with Husch Blackwell LLP in Washington, DC.



bers have some different values, such as a sense of duty, contribution to something larger, service to the country, and leadership. They are also held to higher standards in terms of physical courage in times of war. Society admires civilians who act bravely under duress, but such behavior is demanded of Servicemembers. A difference in values, knowledge, and experience between the military and society is inherent in the system and is not detrimental in and of itself. However, if the military and society move farther apart, that could have grave consequences for the military as the two sides struggle to communicate and understand one another. Columnist Richard Cohen described it well in arguing that the all-volunteer force "enables [the United States] to fight wars about which the general public is largely indifferent."² Thus, it is in the best interest of every American to work toward and maintain good civil-military relations to ensure that the military will have the support of the American people when it conducts operations on their behalf. However, good relations alone cannot achieve this end, and the reality is that the turbulent events of the past decade have taken a further toll on civilmilitary relations. It is the burden of political leadership, both the Commander in Chief and Congress, to explain to the public what the military is doing and why it matters.

Three key points should be understood about the state of civil-military relations in the United States today. First, there is a civil-military gap that is serious and growing. Second, there are two sides to the gap. Both the military and society have contributed to its creation and expansion, and both have a responsibility to work to narrow it. And third, there are steps that individual citizens, both military and civilian, can take to initiate change on their respective sides to pave the way for closer civilmilitary relations in the future.

Reducing the Gap

The civil-military gap has caught the attention of senior military officers and informed observers. Admiral Michael Mullen, former Chairman of the Joint Chiefs of Staff, addressed this issue in numerous speeches and articles, including at a conference on military professionalism hosted by the National Defense University in January 2011. He cautioned that "Our audience, our underpinning, our authorities—everything we are, everything we do, comes from the American people. And we cannot afford to be out of touch with them."³

The root of the problem is clear in the statistics: less than 1 percent of Americans are serving in the Armed Forces. Of those who have not served themselves, only a tiny percentage has direct connections to the military through family, friends, or coworkers. Under the draft, a wider cross section of society served in the military, and those who would not have otherwise joined were able to experience military life and carry it back to their civilian careers. Today, civilians who do not know anyone who serves are likely to feel disconnected because they do not understand what the military is, what it is doing, and how its activities affect their lives. As Cohen wrote, "The all-volunteer military has enabled America to fight two wars while many of its citizens do not know of a single fatality or even of anyone who has fought overseas."4 This is largely the result of the mindset that

COMMENTARY | The Civil-Military Gap

when the United States is at war, the military is handling it, so there is no need for ordinary civilians to take an active interest or to contribute to ensuring success in the conflict.

Also, the pace and operational requirements of military life give Servicemembers less time to engage broader society. This limits the opportunity for civilians and Servicemembers to form personal connections that would

for many Servicemembers, the opportunities to interact with civilians are limited by the demands of military life

foster communication and understanding between the two groups. The National Guard and Reserve are the men and women who deploy in service of the Nation, often multiple times, but then return to their civilian careers. Given their inherently greater involvement in civil society, the Reserve Components currently provide the strongest bridge between the two sides.

The existence of this gap, however, demonstrates that the potential crisis in

civil-military relations that was warned of in a 1999 study by the Triangle Institute for Security Studies is still a relevant concern today.⁵ The authors of the study, Peter Feaver and Richard Kohn, predicted that if the civilmilitary gap continued to widen, the military would develop a culture distinct from that of the society at large.

The lack of communication and understanding between the military and society could be detrimental to the military, as it could result in decreased support for ongoing wars, as Richard Cohen suggests we are seeing now. Decreased public support for war efforts amid larger economic difficulties could lead to reductions in the defense budget, increased difficulty in recruitment and retention, and even cuts in military benefits, personnel, training, and equipment. As the American public becomes more disconnected from the military, it will be less willing to lend full support to military endeavors. One of the lessons from Vietnam is that it is difficult and perhaps impossible to sustain a war effort without the understanding and active support of the people.

The growing gap in civil-military relations could have negative impacts on retention, in terms of both quality and quantity. Many of the most talented people may choose to leave the military sooner than they otherwise would if they believe their hard work, dedication, and service are not valued by society. Ultimately, if the military has trouble attracting and retaining high-caliber, intelligent, and motivated individuals, it may become something less than it is today. That has not happened yet, but it is something to watch out for.

This underscores the importance of coming to grips with the growing gap because this worrisome trend cannot be halted or reversed without going to the source of the problem. As current conflicts draw down and force structure shrinks even a little at the same time the general population increases, the percentage of Americans serving will decrease. Accordingly, society will be less likely to show the military the respect and gratitude it deserves.

This leads to the second key point. There are two sides to this gap and both must be examined to understand the problem. Following from that, there is work to do on both sides to narrow the gap.

Today, many in the military, and especially in the Army, are worn out. Between





the ongoing wars in Iraq and Afghanistan, recent involvement in Libya, and various humanitarian efforts, the military has been stressed and stretched. Servicemembers are spending a great deal of time away from home and thus are physically disconnected from life in the United States. When they are at home, they continue to carry a heavy work load to support those serving overseas, and at the same time they must catch up with their own families. Consequently, for many Servicemembers, the opportunities to interact with civilians are limited by the demands of

if military leaders are seen reaching out, it will send the message that the military values a good relationship between itself and society

military life. The Reserve Components are less hindered in their interaction, but since many Reservists are choosing to remain on Active duty, the demands of military life are stretching to affect the Reserves as well.

This fatigue is exacerbated by the increasingly negative public opinion toward the wars in which the United States is

involved. The attitude of the public is not only an abstraction; it can have a strong effect on individual soldiers. Servicemembers might not believe that society cares about their sacrifices. Those feelings might be intensified by calls for cuts in the defense budget. Feeling their service is not valued can lead individuals to withdraw further from civil society and seek the company of fellow Servicemembers who understand. This is not an unfamiliar problem. It was seen after the Vietnam War. Too many members of the Armed Forces adopted an "if they don't care about us, we don't care about them" attitude. Servicemembers must make a conscious effort not to fall victim to this mentality. To do so would adversely affect troop morale and intensify the problem.

On the other side, American society has a responsibility to reduce the gap. The feeling of being undervalued among Servicemembers stems from the fact that too much of the population takes the military for granted. In American society, there is a prevalent "out of sight, out of mind" mentality toward the military reminiscent of the sentiment of British society toward its military in the late 1800s. Rudyard Kipling captured this well in his poem "Tommy":

For it's Tommy this, an' Tommy that, an' "Chuck him out, the brute!"

But it's "Saviour of 'is country" when the guns begin to shoot.

The problem of the civil-military gap is self-perpetuating. As Servicemembers spend less time actively involved in their communities, the American population will become even more disconnected from them and less likely to invest the time to understand and gain an appreciation for the military. The two sides feed off each other, creating a cycle that must be broken before it becomes detrimental to both the military and the larger society.

A worst-case scenario would be the two sides giving up on each other, which leads to the third key point. Individuals on both sides of the gap must be proactive and take steps to be a part of the solution. If neither side takes action, the gap could widen into a chasm. There are multiple ways for both sides to communicate and reach out.

Suggestions for the Military

Commissioned and noncommissioned officers set the tone for subordinate commanders and troops. This is an important but too often neglected dimension of the command

COMMENTARY | The Civil-Military Gap

climate. These officers improve the climate through the examples they set. If leaders do not take time to become involved in the community, their subordinates are less likely to make doing so a priority. The words and deeds of leaders reflect their underlying attitudes, which in turn shape the attitudes and actions of the troops. If leaders speak negatively about civil society, they run the risk of reinforcing adverse or apathetic military attitudes toward the public. Commissioned and noncommissioned officers should set a tone of mutual respect between the military and society.

Setting the tone starts with the Joint Chiefs of Staff and carries all the way down. It would be beneficial if the Joint Chiefs required senior leaders, especially flag and general officers, to give a speech each quarter in a public forum. If reaching out to civil society is set as a priority at the highest level, then commissioned and noncommissioned officers will make the time to get involved in the community themselves and encourage or require their troops to do likewise.

Officers, general and flag officers especially, are in a position to impact society because they *are* the military leadership in the eyes of the public. If citizens see officers attempting to foster stronger ties between the military and the local community, they will be more likely to reach out in return and to respect and appreciate the work the military is doing. If military leaders are seen reaching out, it will send the message to the civilian community that the military values a good relationship between itself and society.

There are steps that officers and senior enlisted leaders can take to initiate change on the military side. At the outset, it is important that they are aware of the state of civil-military relations on the local level wherever they are stationed. They should then engage the community in two ways: first, through encouraging Servicemembers to play an active role in community life, and second, by inviting the community to get to know the military. To increase the presence of Servicemembers in the community, leaders should use their positions of authority to influence and encourage troops to get involved, whether it is joining a civic club, sending their children to an offbase school, or joining or coaching a sports team. The *type* of involvement is relatively unimportant. What matters is that the public sees Servicemembers and their families as active, contributing members of the community. Commanders should also make a point

of ensuring that motivated and charismatic individuals are assigned to community liaison roles at the base. Such individuals could prove extremely effective in building a strong outreach campaign and helping individual Servicemembers get involved.

As for inviting the public to learn more about the military, commanding officers could ensure that their respective bases host events each year that are open to the public. They could be ceremonies honoring achievements of individuals, or a military version of "show and tell." Here, too, the precise nature of the events is of little importance. What matters is to foster a sense of inclusion among local civilians.

Another way to reach out to society would be to grant returning troops extra leave, requiring them to return to their hometowns to talk about their experiences. These talks could take place in high schools, town hall meetings, or civic organization luncheons. If Servicemembers return to their hometowns and talk about what they do and their pride in it, their visits could generate understanding and respect and address the general lack of knowledge most civilians have about the military. As an added bonus, it could be a good platform for recruiting.



Suggestions for Civilians

The focus of improving relations from the civilian side should be on inviting the military into civilian life. Individual communities should make that effort. It could be as simple as inviting military personnel to speak about what the military is doing at high schools or civic clubs. Inviting Servicemembers to join civic clubs would make them feel like welcome members of the community. That could break

it is important that civilians not wait until Servicemembers have been injured in combat to show compassion

down the public's tendency to view the military as a distinct group doing a distinct job separate from the rest of society. It would help individual civilians to understand the role their country is playing in the international arena and see that the wars and humanitarian efforts in which the Nation is engaged are being conducted by citizens like themselves. It would also allow the public to see the extraordinary talent military members exhibit in their work.

Colleges and universities could increase the military presence through Reserve Officers' Training Corps (ROTC) units and recruiting. This would show the military that leaders in higher education welcome its presence on campus and encourage students to consider military service on completion of their educations. It would recognize the military as a legitimate career path that educated and motivated individuals should consider. It would lead students to see that the military is not a completely separate entity, but rather a group of individuals who were civilians before they decided to dedicate part of their lives to serving their country. This would not only increase the standing of the military in the eyes of civilians but also provide a larger recruiting pool for the Services to attract talented officers and enlisted personnel. Since the "don't ask, don't tell" legislation was repealed, there has been an increase in the presence of ROTC on private campuses. Yale and Columbia both welcomed ROTC back after the government moved to remove the discriminatory legislation.⁶ This is a step in the right direction, but civilian leaders should continue to advocate for the presence of ROTC programs on university campuses and Junior ROTC programs in high schools across the county.

There are other ways that civilians can directly support the troops and their families, and there are many opportunities. For example, they can donate money or volunteer their time and talents to help nonprofit organizations seeking to improve the lives of wounded veterans or support the families of deployed troops. Some organizations provide services and programs to help wounded veterans adjust and raise awareness for the needs of injured Servicemembers. Others seek to involve civilians in providing support to deployed military personnel, their families, and troops returning home. Being wounded in combat can change an individual's life forever. Civilians should show their gratitude for such sacrifices by improving the care for these individuals and helping them gain access to education and jobs.

At a "Stand Up for Heroes" dinner, Admiral Mullen spoke to the importance of caring for wounded veterans, explaining that:

it takes leaders throughout the country, community leaders to join together to make sure that our returning veterans... who offer such great potential are... identified.... They have such a great future to offer our country, and we [should] join together to make sure that their future is the vibrant one that they both deserve and certainly can generate.⁷

By donating to or volunteering with such organizations, civilians show those in the Armed Forces that their service and sacrifice are valued and that society is dedicated to ensuring that they receive the care and help needed to find employment and have productive lives.

However, it is important that civilians not wait until Servicemembers have been injured in combat to show compassion. Multiple nonprofit organizations allow citizens to "adopt" deployed troops. These organizations pair deployed registered Servicemembers with civilians who wish to support the individuals by sending letters and care packages. The idea is to ensure that personnel regularly receive mail from home, which makes them feel supported by the civilians they serve. This could increase the respect the military has for the civilian population since it demonstrates that civilians support deployed Servicemembers with whom they previously had no personal connection. Communication with adopted troops through letters and emails could also increase the public's general understanding of the military because it provides a way for



Former Chairman Admiral Mullen addresses conference on military professionalism at National Defense University

civilians to learn about the great work that Servicemembers are doing and the hardships they face. A family, civic club, or school class could adopt one or more individuals. This would raise awareness and get more civilians involved in actively supporting the people who comprise the military.

Another important way civilians can show support is by helping the troops' families while they are deployed. Some organizations provide emergency aid to the families in their times of need. Others offer financial assistance, child care, auto and home repair, and more. Donating to such causes shows the military that civilians are ready to be there for military families when the troops are not present. Knowing that their families are being cared for can reassure deployed Servicemembers, allowing them to focus on their jobs and safety instead of worrying about things back home. Other organizations send calling cards to deployed Servicemembers who need assistance phoning home. Something as simple as donating a calling card shows support for military families, easing the hardship of long separations. Civilians should remember that it is not only Servicemembers who are sacrificing, but their families as well.

The White House Joining Forces initiative, introduced by First Lady Michelle Obama and Jill Biden, provides more information on how civilians can get involved supporting troops and their families.⁸ The initiative allows civilians to donate to specific organizations, provides a medium to communicate with troops and their families, and allows civilians to learn about organizations that are working

COMMENTARY | The Civil-Military Gap



to support the troops with which they can get involved in their areas.

The Media Role

Journalists and the media make up a civil sector that could be particularly influential in improving civil-military relations because it provides a forum for the sides to learn about each other. Many civilians develop their opinions of the military from television and newspapers. Thus, journalists have a unique ability to inform and therefore shape public opinion. On a local level, the media tend to give coverage to the role the military is playing in that community. That is a good place for the military to showcase the achievements of its individuals and its involvement in the community. Thus, in cities and towns where bases are located, the media keep the public informed as to what the military is doing there.

But what about the media in communities that do not have a military presence? Do the media in such towns give coverage to the military? If so, what types of stories are run? How much coverage is given when a local

Americans should consider the role they want their military to play in the future

Guard unit deploys? There is a connection between media coverage and what local civilians know about the military. In areas that do not have a military presence, civilians are unlikely to hear much about the military or feel that it has an impact on their lives. However, officers can use the media to their advantage in such communities. One way officers can do that is by engaging editorial boards to inform news organizations about the fine work our men and women in uniform are doing.

The military tends to make the national news only when there is a great success or major failure. However, the media also give ample attention to human interest pieces, which provide an avenue for raising public awareness of the individuals and organizations working to improve the lives of veterans. Such coverage can also highlight what still must be done. It would be extremely beneficial for journalists on the national level to give more coverage to organizations that seek to help wounded veterans and deployed troops and their families. That would raise public awareness of the long-term implications of the sacrifices Servicemembers are making. It would also encourage civilians to donate money or time to support these causes.

Americans should also consider the role they want their military to play in the future. That point was raised by then Secretary of Defense Robert Gates last May as he warned against large cuts to the defense budget. He stated, "If we are going to reduce the resources and the size of the U.S. military, people need to make conscious choices about what the implications are for the security of the country, as well as for the variety of military operations we have around the world if lower priority missions are scaled back or eliminated."9 Cuts are being made, and civilians should think about the level of involvement in international affairs and the types of engagements they want the Armed Forces to be involved in. They should make their thoughts on these important issues known by contacting their Representatives and Senators, the civilian leaders who are in a position to make changes.

The Roman orator Cicero stated that gratitude is the greatest of all virtues. Today, the public may not show the military as much gratitude as it deserves. Society and the military must understand each other better if the civil-military gap is ever to narrow. Understanding will foster respect and therefore gratitude. Society must have greater exposure to the military in order to gain a greater understanding. Lack of knowledge often comes from lack of communication and vice versa. This is where both sides need to step forward. By reaching out to the community, Servicemembers can improve communication between the two sides, foster understanding of the military's role, and ultimately increase the appreciation American society has for the military and its mission. Civilians should welcome Servicemembers into their communities, support organizations that care for troops and their families, and take an active interest in defense policy and the defense budget.

The U.S. military was born from an all-volunteer force of 18th-century Minutemen, who took up arms to support a just cause while not surrendering their civilian identities. Civilians should remember that it is because of today's all-volunteer force that Americans do not need to worry about a husband, father, brother, or son being conscripted into military service. Servicemembers should respect the civilians they volunteer to serve while civilians should actively support the individuals who choose to serve so others need not make that sacrifice. The American people and members of the Armed Forces should be reminded that the military is composed of men and women who are both Servicemembers and citizens. JFQ

NOTES

¹ Alan Cowell, "The Draft Ends in Germany but Questions of Identity Endure," *The New York Times Global Edition*, June 30, 2011, available at <www.nytimes.com/2011/07/01/world/ europe/01germany.html?_>.

² Richard Cohen, "A Stranger's War," *The Washington Post*, January 4, 2011, available at <www.washingtonpost.com/wp-dyn/content/ article/2011/01/03/AR2011010304967.html>.

³ Michael Mullen, speech at National Defense University Conference on Military Professionalism, Washington, DC, January, 10, 2011, available at <http://www.jcs.mil/speech.aspx?ID=1517>.

⁴ Cohen.

⁵ Peter D. Feaver and Richard H. Kohn, Civil-Military Relations Study, Triangle Institute for Security Studies, available at <www.sanford. duke.edu/centers/tiss/research/cmr/civmilpublications.php>.

⁶ Clyde Haberman, "Renewed Respect for the Military," *The New York Times*, May 31, 2011, available at <http://cityroom.blogs.nytimes.com/2011/05/31/ renewed-respect-for-the-military/>.

⁷ Michael Mullen, speech delivered at the "Stand Up for Heroes" dinner, Washington, DC, June 16, 2011, available at <www.jcs.mil/speech. aspx?ID=1619>.

⁸ Joining Forces, available at <www.whitehouse.gov/joiningforces>.

⁹ Robert M. Gates, American Enterprise Institute Defense Spending Address, Washington, DC, May 24, 2011, available at <www.defense.gov/ speeches/speech.aspx?speechid=1570>.

INTEGRATING HUMAN RIGHTS AND PUBLIC SECURITY

THE CHALLENGES POSED BY THE MILITARIZATION OF LAW ENFORCEMENT

By REBECCA BILL CHAVEZ

n the wake of an attack against the military in the Mexican state of Michoacán in May 2007, soldiers went on a 3-day rampage. According to Mexico's National Human Rights Commission, members of the armed forces arbitrarily detained and held 36 people at a military base for up to 84 hours. The detainees suffered numerous abuses—including torture and rape—as part of an effort to obtain information about alleged links to drug-trafficking organizations. One of the detainees was burned, several were tied to posts, and one had his head submerged repeatedly into a bucket of water. The soldiers beat and raped four girls under the age of 18. In addition, soldiers entered more than 30 homes without warrants, causing property damage and injuring inhabitants.

Dr. Rebecca Bill Chavez is an Associate Professor of Political Science at the U.S. Naval Academy. During the 2009–2010 academic year, she served as Principal Strategic Advisor on Western Hemisphere Affairs for the Office of the Secretary of Defense for Policy.



COMMENTARY | Integrating Human Rights and Public Security

Unfortunately, such stories of human rights abuses by military personnel have increased since President Felipe Calderón assumed office in December 2006 and summoned the armed forces to lead the struggle against the violent drug-trafficking organizations that have wreaked havoc on society. Mexico is not alone in its inability to reconcile human rights and public security. A growing public security crisis in much of Latin America and the Caribbean has placed exacting pressures on security forces. The adage that desperate times call for desperate measures could spread as governments search for effective methods to fight the crime epidemic and public insecurity. Across much of the region, the inability of law enforcement to deal with the crisis has led to the deployment of troops to the streets. Police forces in many countries are overwhelmed and underfunded. Worse, police corruption is rampant, and police involvement in illicit trafficking has become commonplace. As a result, a diverse group of nations, including Brazil, Colombia, Guatemala, El Salvador, Honduras, and Mexico, has assigned law enforcement responsibilities to their militaries, and other nations will likely follow suit in the effort to stem the violence associated with powerful criminal organizations.1

The integration of human rights and public security into a single coherent agenda

is of critical importance. As the Mexican case illustrates so vividly, the militarization of law enforcement increases the potential for confusion and mistakes in the realm of human rights. While the United States should in no way encourage the expansion of the military's domestic role and should focus additional resources on strengthening police forces and judicial institutions, Washington cannot ignore the reinsertion of the armed forces into an internal security role.² Given the military's participation in past repression in Latin America and in recognition of the fact that military doctrine is not typically oriented toward the responsibilities of law enforcement, strong human rights programs within the armed forces of Latin America and the Caribbean are essential.3

This article makes the case that the reconciliation of human rights and citizen security is critical to the security and stability of the Americas and provides an overview of the daunting public security challenges in Latin America and the Caribbean that have led to military reinsertion. The article then demonstrates how the U.S. Southern Command (USSOUTHCOM) human rights division has advanced the human rights agenda in the region. It argues that the U.S. Department of Defense (DOD) should assume a greater role in the development of military human rights programs across the globe and draws lessons from the USSOUTHCOM experience that could inform human rights programs in the other regional combatant commands. The article concludes with a reminder that the military is not a long-term solution to public insecurity and that an effective plan must include police reform and the establishment

a diverse group of nations has assigned law enforcement responsibilities to their militaries to stem the violence associated with powerful criminal organizations

of the rule of law to address the impunity that plagues much of the region.

Why Human Rights Matter

In addition to the obvious moral and ethical reasons for respecting rights, attention to human rights is an essential component of an effective public security campaign. Former Secretary of Defense Robert Gates highlighted the need to reconcile rights and security during his 2009 address at the Halifax International Security Forum: "Strong human rights programs are vital when conducting military responses in complex environments ... security gains will be illusory if they



lack the public legitimacy that comes with respect for human rights and the rule of law." Unfortunately, the misperception that rights and security are contradictory goals is widespread.⁴ Barry McCaffrey reports that there is a common assumption that respect for an enemy's soldiers and its civilian populace can stand in the way of a successful military campaign.⁵ Instead, respect for human rights increases the efficacy of security forces, both military and law enforcement.

Human rights abuses undermine trust, public support, and cooperation, all of which are vital to an effective campaign to restore security. Violations undermine the necessary trust to get community collaboration. In fact, they have the potential to turn the populace against the military or police. Without trust, security forces lack access to vital intelligence. Where citizens have faith in security officials, they are more likely to share information. As we see from successful community policing programs in cities such as Bogotá and Rio de Janeiro, trust enables security forces to get closer to the population, so they can see and hear things that citizens are unwilling to discuss where human rights violations are the norm. On a related note, respect for rights is necessary to ensure that any progress in the arena of public security is lasting. As McCaffrey argues, violations create the need to "defend gains because of the enduring hostility from a civilian populace."6 The bottom line is that respect for rights leads to closer ties between the security forces and community and to increased social support for those forces.

Integrating human rights and public security is especially important in those Latin American nations where there is low confidence in the legal system and a history of traumatic interaction between the security



A failure to integrate rights and security could undermine democracy in Latin America. Where state actors, including security forces, violate the rights of citizens, the legitimacy of the democratic system is at risk. In particular, human rights abuses undermine the rule of law, a cornerstone of liberal democracy. The rule of law entails the equality of all citizens, including state agents, under the law and predictability in the application of rules and regulations. Security forces must be subject to the principle of legality in a rule-oflaw system. Recurrent deployment of troops to the streets has historically led to impunity for corrupt and abusive military personnel. Without a rule of law to protect human rights, citizens are unlikely to value democracy, and its legitimacy and even survival are at risk.

In addition, history provides an important lesson on the importance of integrating rights and security. Human rights issues do not go away, and citizens in much of Latin

recurrent deployment of troops to the streets has historically led to impunity for corrupt and abusive military personnel

forces and people. In much of the region, the relationship between the armed forces and society is fraught with distrust and fear. Trust-building mechanisms, which include respect for rights, are key elements to any strategy to restore citizen security. Furthermore, where military personnel violate rights, they aggravate the climate of lawlessness and impunity that allows violent criminal organizations to flourish. America continue to engage with the legacy of repressive military dictatorships. Abuses of the past continue to haunt societies long after they occur, as we see in Argentina, Chile, and Guatemala. Societal divisions have lingered, and the issue remains prominent.

Finally, human rights training can increase public and congressional support in the United States for military engagement with the armed forces of Latin America and the Caribbean. In the U.S. system of government, congressional supervision serves as an important, though imperfect, deterrent to abuses. In theory, security assistance from the United States is contingent on respect for human rights. Reports of human rights violations undermine congressional support for military-to-military engagement and aid.

The Public Security Crisis

The need for security is urgent and undeniable, and illicit trafficking activity has exacerbated regional and local crime problems. Survey data reveal that citizen insecurity is one of the top two public concerns in the region, and the need to combat crime has entered the political discourse from Mexico to Chile. According to the 2009 Latinobarometer survey, citizens from Chile, Costa Rica, El Salvador, Guatemala, Panama, Uruguay, and Venezuela found crime to be the most important problem facing their countries. Violent crime has had a detrimental impact on the quality of life and has eroded confidence in democracy. If governments fail to stem the tide of violence, citizens are likely to lose faith in democratic institutions and may ultimately opt not to defend them against authoritarian incursions.

As crime rates increase, pressure mounts for "strong" government action, which in many instances results in highly repressive and undemocratic measures.⁷ To ensure that citizen dissatisfaction does not undermine the legitimacy of democratic government, Latin American leaders must address the challenges posed by crime and
COMMENTARY | Integrating Human Rights and Public Security



violence, but they must also avoid using undemocratic means in the process.

It is important to understand the magnitude of the public security crisis that has led to military reinsertion in much of Latin America and the Caribbean. In Central The statistics reveal a grim reality. In 2009, the United Nations Development Program reported a homicide rate for Central America of 33 per 100,000 citizens, more than 4 times the global average of 8 per 100,000 and over 5 times the U.S. rate of 6 per

USSOUTHCOM is the only unified combatant command with a dedicated human rights division

America, the democratic transitions of the 1980s and 1990s sparked optimism that the isthmus would finally experience a break from its violent past. The optimism was short-lived, however, as Central America has yet to witness a new era of stability. Crime and insecurity remain a fact of everyday life. Illicit trafficking organizations increasingly move drugs, humans, and weapons through Central America and Mexico, and crime rates have skyrocketed. In addition, much of Central America suffers from an epidemic of gang (*mara*)-related violence. 100,000. The homicide rate is 77 per 100,000 citizens in Honduras; 66 per 100,000 in El Salvador; and 50 per 100,000 in Guatemala.⁸ The Guatemalan murder rate has more than doubled over the past decade. One indicator of the culture of insecurity that has enveloped Guatemala is the increasing reliance on private security personnel, who outnumber the police by a factor of five.⁹ Even Costa Rica and Panama, two countries that have long been considered exempt from the scourge of violent crime, saw their homicide rates double between 2000 and 2008.¹⁰

The violence is not limited to Mexico and Central America. The Venezuelan capital of Caracas has become infamous as the murder capital of the world with a staggering homicide rate of more than 130 per 100,000 citizens. Venezuela's overall murder rate is 57 per 100,000. Although the homicide rate in Colombia declined during Álvaro Uribe's presidency, it remains high relative to the rest of the world at 39 per 100,000 inhabitants. Brazil suffers a homicide rate of 25 per 100,000. The nations of the Caribbean have also experienced a spike in violent crime. In Jamaica, the homicide rate rose from 36 in 2003 to 58 per 100,000 in 2006. In the Dominican Republic, the homicide rate rose from 14 to 27 per 100,000 between 1999 and 2005, and the rate in Trinidad and Tobago more than quadrupled from 7 to 30 per 100,000.11

Potential Role of the U.S. Military

DOD can contribute to the development of robust human rights programs in the militaries of nations that have requested U.S. assistance in their struggle for public security.12 DOD should assume greater responsibility in human rights promotion efforts that focus on the intersection between respect for rights and the provision of security. Unfortunately, the department has not demonstrated a serious or consistent interest in human rights training programs.

USSOUTHCOM, which focuses on South and Central America and the Caribbean, is currently the only unified combatant command with a dedicated human rights division. The division has made a laudable effort to promote a military ethic of restraint, strong mechanisms of accountability, and increased transparency since its creation in 1990. At the end of the Cold War, USSOUTH-COM commander General Maxwell Thurman, USA, recognized the need to integrate human rights into the command's operational mission and to address the legacy of the past, when human rights were on the back burner. The human rights initiative came from within USSOUTHCOM rather than from DOD.

Today, the USSOUTHCOM program receives no dedicated funding from DOD, which limits its ability to secure the resources necessary to support its mission, thereby limiting its impact on the region. The division has relied on the commander's limited discretionary funds and has had to turn to the Joint Staff to fund human rights programs in Colombia. Given the lack of policy direction and dedicated funding from the Office of the Secretary of Defense, the USSOUTHCOM human rights program has no top cover other than moral certitude. Nevertheless, the division continues to promote programs based on the belief that the U.S. military and its

partners have much to learn from each other in the realm of human rights.

First and foremost, the USSOUTHCOM human rights division has an internal function. It is responsible for ensuring that all U.S. military personnel deploying to Central and South America and the Caribbean have received extensive human rights training, including instruction on international humanitarian law and the procedures for identifying and reporting violations. The internal function of the division is especially important in Latin America, where there is a deeply rooted distrust of the U.S. military. Cold War Latin America was characterized by repressive authoritarian governments supported by Washington, whom many viewed as a facilitator of the widespread human rights atrocities.

In addition to ensuring that all USSOUTHCOM personnel receive human rights training, the division directs members of the U.S. military to work with their regional counterparts in an effort to promote respect for human rights in Latin America and the Caribbean. The division's responsibilities include ensuring that human rights are integrated into all USSOUTHCOM exercises, operations, and training programs and serving as a liaison to other entities working on human rights issues, including the interagency community and nongovernmental organizations (NGOs).13

In recognition of the challenges posed by military insertion into domestic security, the USSOUTHCOM human rights division focuses on integrating respect for human rights into military doctrine and on rules for the use of force in nontraditional missions. When assistance is requested, the division supports Latin American and Caribbean

U.S. Air Force (Victoria



nations in the generation of rules, and it sponsors training programs that encourage rank-and-file troops to follow those rules. USSOUTHCOM Command Strategy 2020 highlights the importance of human rights training: "Some militaries are taking on internal security roles. USSOUTHCOM, in conjunction with others in the U.S. interagency [community], should help them shape these new security duties in ways that fully respect human rights and the rule of law."14

U.S. Southern Command has helped sponsor regional conferences with the goal of building regional consensus on the responsibility of military forces in protecting human rights. The inclusion of members of civil society groups provides an opportunity for defense officials and military members to interact closely with civil society representatives and to address mutual suspicions. For instance, a 2009 conference in Guatemala drew representatives from 22 nations and major Guatemalan and international human rights organizations. The 5 days of dialogue provided a unique opportunity for Guatemalan military and human rights advocates to discuss sensitive issues that continue to haunt their country as it recovers from the 36-year civil war that was marked by egregious human rights abuses.15

The Human Rights Initiative (HRI) exemplifies the USSOUTHCOM effort to foster a culture of respect for human rights within the armed forces of the region. In the 1990s, USSOUTHCOM and the Inter-American Institute for Human Rights, an NGO based in Costa Rica, co-hosted two regional conferences on the role of security forces in defending human rights that led to consensus on the need to institutionalize a regional human rights program. The effort became known as the Human Rights Initiative.¹⁶ Between 1997 and 2002, USSOUTHCOM sponsored a series of six seminars involving military representatives from 34 countries along with members of prominent NGOs; this effort led to the Consensus Document, a military human rights program with specific plans of action and measures of effectiveness. The Consensus Document now serves as a model for doctrine, training, internal control systems, and cooperation with civilian authorities. The document presents the HRI mission: "To prevent and sanction violations of human rights and international humanitarian law by members of the military and security forces and create zero tolerance on the part of these institutions for any violations which its members may commit."17

COMMENTARY | Integrating Human Rights and Public Security

To help countries implement the model program, the USSOUTHCOM human rights division turned to the Center for Human Rights Study, Analysis, and Training, another NGO based in Costa Rica, which serves as the Secretariat for the HRI. The Secretariat signs a memorandum of cooperation with the Defense Ministry of each country that commits its military to the HRI. So far, Bolivia, Colombia, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Panama, Peru, and Uruguay have signed memoranda of cooperation. The Conference of Central American Armed Forces, a regional organization, has also made a formal commitment to implement the HRI. Like other USSOUTHCOM human rights efforts, however, the HRI would benefit from formal DOD support.

Building a Global Defense Department Human Rights Program

Given the complex nature of emerging challenges throughout the world, the need for military human rights programs will only increase. Nontraditional threats such as public insecurity and terrorism impact every corner of the globe, elevating the urgency of integrating respect for human rights into military doctrine and of developing and adhering to rules for the use of force. Based on his experience, McCaffrey concludes that poor understanding of the complexities of unconventional war is an institutional problem that sets the stage for human rights abuses.¹⁸ DOD should develop and fund a robust human rights program that would include all six regional combatant commands.

As it assumes a greater role in the promotion of human rights, DOD can build and improve upon the USSOUTHCOM model. The evolution of the command's program during the past two decades provides important lessons for the other regional commands. First, any successful military human rights program requires support from above. Without dedicated funding, the impact of the program will be limited. In the case of USSOUTHCOM, the human rights program has been internally driven and has depended entirely on the command's leadership and personnel since it receives no formal support from DOD. Though well-intentioned, intermittent programs are not enough to make a lasting difference. As General Douglas Fraser, USAF, explains, an effective human rights program "must be enduring-not episodic."19

Second, any military human rights program should have both an internal and

external mission. It is essential that all U.S. military personnel deploying abroad receive intensive human rights training. Just as U.S. military personnel must respect human rights in Latin America and the Caribbean, it is essential that the military respect human rights as it conducts counterterrorism operations in other regions. Indeed, Joint Publication 3–07.1, Joint Tactics, Techniques and Procedures for Foreign Internal Defense (FID), emphasizes that "In many FID combat situations, the moral high ground may be just as important as the tactical high ground." The Abu Ghraib scandal served as a powerful reminder that abuses by U.S. military personnel undermine support as well as claims to the moral high ground. Respect for human rights is as important in the battle against terrorism as it is in the struggle against criminal organizations. As President Barack Obama declared during his 2009 acceptance of the Nobel Peace Prize, "America-in fact, no nationcan insist that others follow the rules of the road if we refuse to follow them ourselves. For when we don't, our actions appear arbitrary and undercut the legitimacy of future interventions, no matter how justified."

Third, DOD personnel must recognize that theirs is not the lead U.S. Government agency in promoting human rights and that a whole-of-government approach is essential. The Department of State leads overall U.S. Government efforts to advance human rights, and DOD plays a supporting role. Any DOD human rights program must be limited to working with the military and requires close coordination with the State Department, U.S. Agency for International Development, and other U.S. Government agencies. Recognition of its auxiliary position has been critical to the USSOUTHCOM division's operations in Latin America. Indeed, interagency coordination and constant dialogue with Country Teams have been central to the division's success. The division's civilian deputy chief, Leana Bresnahan, and her team stress the importance of not "veering into the State Department's lane."20 Moreover, as we learned from the School of the Americas's

given the complex nature of emerging challenges throughout the world, the need for military human rights programs will only increase experience during the height of the Cold War, the State Department must have the authority to oversee USSOUTHCOM programs. That is essential for all military initiatives, not just human rights programs.

Fourth, the USSOUTHCOM experience illustrates the importance of partnering with other nations and NGOs. In some parts of the world, the U.S. military carries historical baggage and lacks credibility. In the case of the USSOUTHCOM division, collaboration with the two Costa Rican NGOs has been essential to the Human Rights Initiative and has demonstrated that it is not a unilateral U.S. initiative but rather a multilateral program. In addition to the formal relationship with the Costa Rican NGOs, USSOUTHCOM's continuing efforts to include members of international and regional civil society groups in conferences, exercises, and training programs have facilitated open dialogue between members of the armed forces and NGO representatives.

A human rights program at U.S. Northern Command (USNORTHCOM), which is responsible for North America, including Mexico, would help Mexico address the challenges associated with the military's counternarcotics mission. As discussed earlier, the increasing number of abuses by Mexican soldiers undermines the effort to counter illicit trafficking networks. During his tenure as USNORTHCOM commander, General Victor Renuart, USAF (Ret.), expressed interest in creating a human rights division based on the USSOUTHCOM model.

Leaders from U.S. European Command (USEUCOM), U.S. Central Command, and U.S. Africa Command have also reached out to USSOUTHCOM for guidance on human rights issues. Moreover, based on his experience as USSOUTHCOM commander from 2006 through 2009, the commander of USEUCOM and North Atlantic Treaty Organization Supreme Allied Commander Europe, Admiral James Stavridis, is pushing for greater human rights engagement with militaries in Europe. During his tenure as U.S. Pacific Command commander, Admiral Timothy Keating, USN (Ret.), pushed for security cooperation programs that focused on military respect for human rights.

Judicial and Police Reform

DOD has the potential to play an important supporting role in broader U.S. Government efforts at human rights promotion. In a 2009 speech outlining the Obama administration's human rights agenda, Secretary of State Hillary Clinton declared, "We will use all the tools at our disposal, and when we run up against a wall, we will not retreat with

until nations have the institutional capacity to hold criminals accountable for their actions, citizen security is impossible

resignation or recriminations, or repeatedly run up against the same wall, but respond with strategic resolve to find another way to effect change." The U.S. military could be a potent tool to advance the administration's human rights agenda and to effect the change that Secretary Clinton has called for not only in Latin America and the Caribbean, but also across the globe.

Although human rights programs are important, any effective long-term strategy to combat public insecurity must allocate significant resources to restore integrity to the judicial system and to law enforcement. This will not be an easy task. The rule of law in much of Latin America is weak, and the courts are considered ineffective and politicized in most countries. Until nations have the institutional capacity to hold criminals accountable for their actions, citizen security is impossible. Impunity plagues much of the region,²¹ and each nation must give priority to reforming the justice system and building investigative and prosecutorial capacities.

An overhaul of law enforcement is also critical. With the exception of Chile and Uruguay, trust in the military is notably higher than trust in the police. In Mexico, for instance, trust in the armed forces is 27 points higher than trust in the police.²² Training, funding, and professionalizing law enforcement is a necessary condition for public security in the democracies of Latin America and the Caribbean. Improved hiring standards and vetting procedures are vital. Only after the police have the capacity and incentives to meet their legal responsibility of providing public security will governments relieve the military from the internal security mission. **JFQ**

NOTES

¹ Governments from both ends of the political spectrum have turned to the military,

as illustrated by the conservative Presidents Felipe Calderón of Mexico and Álvaro Uribe of Colombia, and by El Salvador's first leftist president, Mauricio Funes. During the drafting of the Salvadoran Peace Accords in 1992, the political party of President Funes, the Frente Martí para la Liberación Nacional (FMLN), was a strong advocate for posse comitatus laws. FMLN members consider the 1992 separation of military and police functions as a significant FMLN accomplishment. The accords led to the creation of a national police with its own academy separate from the Ministry of Defense. President Funes's decision to overlook posse comitatus provisions illustrates the depth of the internal security challenges in El Salvador.

² Even with strong human rights programs, however, the deployment of the armed forces to supplant the police should not be viewed as a long-term solution. Prolonged periods of military involvement in domestic security could undermine the fragile democracies of the region. Despite the constitutional subordination of militaries to civilian control throughout Latin America, the armed forces enjoy a high degree of institutional autonomy. The military's internal security role could weaken civilian authority and lead to military involvement in other areas of domestic politics. See J. Mark Ruhl, "Curbing Central America's Militaries," *Journal of Democracy* 15, no. 3 (July 2004), 142.

³ George Withers, Lucila Santos, and Adam Isacson, *Preach What You Practice: The Separation of Military and Police Roles in the Americas* (Washington, DC: Washington Office on Latin America, 2010), 25–26.

⁴ Jerry M. Laurienti, *The U.S. Military and Human Rights Promotion: Lessons from Latin America* (Westport, CT: Praeger Security International, 2007), 12.

⁵ Barry R. McCaffrey, "Human Rights and the Commander," *Joint Force Quarterly* 9 (Autumn 1995), 12.

⁶ Ibid., 11.

⁷ Orlando J. Pérez, "Democratic Legitimacy and Public Insecurity: Crime and Democracy in El Salvador and Guatemala," *Political Science Quarterly* 118, no. 4 (Winter 2003), 638.

⁸ Homicide statistics available at <www.unodc. org/unodc/en/data-and-analysis/homicide.html>.

⁹ U.S. Southern Command (USSOUTHCOM) Advisory Panel trip to Guatemala, discussion with Embassy officials, U.S. Embassy, Guatemala City, July 14, 2010.

¹⁰ United Nations Development Program (UNDP), *Opening spaces to citizen security and human development: Main findings and recommendations*, Human Development Report for Central America 2009–2010 (n.c.: UNDP, October 2009), 13, available at <http://hdr.undp.org/en/reports/ regional/latinamericathecaribbean/irdhc-2009-2010-summary.pdf>. ¹¹ United Nations Office on Drugs and Crime and the Latin America and the Caribbean Region of the World Bank, *Crime, Violence, and Development: Trends, Costs, and Policy Options in the Caribbean*, Report 37820, March 2007, 8–9, available at <www.unodc.org/pdf/research/ Cr_and_Vio_Car_E.pdf>.

¹² The requirement to train partner nation military forces on human rights is well established in U.S. military doctrine. See, for example, Department of Defense Directives 5111.1, 5111.07, and 5111.13, and Joint Publication 3–07.1, *Joint Tactics, Techniques and Procedures for Foreign Internal Defense* (Washington, DC: The Joint Staff, April 30, 2004).

¹³ Leana Bresnahan, personal interviews by author, USSOUTHCOM headquarters, September 22, 2009, and January 11, 2010; James G. Stavridis, *Partnership for the Americas: Western Hemisphere Strategy and U.S. Southern Command* (Washington, DC: NDU Press, 2010), 113–118.

¹⁴ General Douglas M. Fraser, USSOUTH-COM Command Strategy 2020: Partnership for the Americas, July 2010, available at <www.southcom. mil/aboutus/Documents/Command_Strategy_2020.pdf>. General Douglas M. Fraser, USSOUTHCOM commander, views human rights promotion as a core element of the command's mission. His commitment was evident during a July 14–17, 2010, trip to Guatemala with the USSOUTHCOM Advisory Panel. He devoted an evening to an intimate dinner with leading Guatemalan human rights activists and panel members at the Ambassador's residence, which facilitated a frank discussion about human rights and the military.

¹⁵ Bresnahan.

¹⁶ Stavridis, 119–124.

¹⁷ The Consensus Document presents the mission of the Human Rights Initiative: "To prevent and sanction violations of human rights and international humanitarian law by members of the military and security forces and create zero tolerance on the part of these institutions for any violations which its members may commit."

¹⁸ McCaffrey, 12.

¹⁹ Personal interview by author with General Fraser, August 16, 2011.

²⁰ Bresnahan.

²¹ For instance, both Guatemala and Mexico face a staggering impunity rate of 98 percent. The rate in El Salvador hovers around 95 percent, and 93 percent in Venezuela. See Julieta Martínez, "Impunidad obliga a las personas a huir," *El Universal* (Mexico), February 28, 2011; United Nations International Commission Against Impunity in Guatemala, press conference, New York City, February 24, 2009, available at <www.un.org/News/ briefings/docs/2009/090224_CICIG.doc.htm>; Jane's Sentinel Security Assessment, *Region: South America*, December 10, 2010.

²² Pérez, 2-3.

Former Chief of Naval Operations meets Royal Saudi Naval Forces sailors and marines during visit to Royal Saudi Naval Forces patrol boat HMS *Al-Yarmook*

As

Van

5

A SAUDI OUTLOOK FOR **CYBERSECURITY STRATEGIES**

EXTRAPOLATED FROM WESTERN EXPERIENCE

By NAEF BIN AHMED AL-SAUD

n the 21st century, countries across the globe have come to rely on complex computer networks that form the infrastructural backbone of even the most basic necessities of life, including electric power grids, global finance, food distribution, medical care, clean drinking water, petroleum production, and most types of communication. The protection of such networks, known as *cybersecurity*, is among the highest priorities in the civilized world, alongside planning and operations for major contingencies, including antiterrorism and land warfare.

In many countries, given the typical mandate for militaries to protect civilian infrastructure from physical attack, cybersecurity responsibilities divided between military and civilian leadership structures appear to overlap and cause confusion, particularly in times of crisis. Cybersecurity encompasses some of the most vital national security issues that may be

His Royal Highness Brigadier General Naef Bin Ahmed Al-Saud of the Royal Saudi Army holds a doctorate from Cambridge University and is a graduate of the National War College. His professional focus includes military special operations and international diplomacy. faced by top civilian leaders and military commanders from the United States, as well as the North Atlantic Treaty Organization (NATO) and other friendly nations—especially including Saudi Arabia, which is located in one of the world's most strategic energy resource regions.

The Saudi understanding of cybersecurity is largely derived from the American and European experience in such deployments, both defensively and counteroffensively. Saudi Arabia aims to develop a deeper understanding of the American and Western policy formulation and decisionmaking experiences that are relevant to those top leaders in the Kingdom who are concerned with such vital defense parameters. Thus, it is necessary to observe the strengths and perceived vulnerabilities, as well as the proactive measures, of the United States and other Western nations in response to incidents and intrusions and to analyze them in terms of long-term cybersecurity development considerations pertaining to the Kingdom. Therefore, this article discusses recent developments; U.S. cyberstrategy mission implications for the Kingdom; future development factors toward indigenous Saudi multibillion-dollar investments in cybersecurity infrastructure, institutions, and support services; and the need for substantial long-term Saudi funding—corresponding to Saudi high employment levels in cybersecurity, which are directly related to credible national security objectives and defenses against real-world threats.

Recent Developments

In the aftermath of the successful U.S. special operations force mission in Abbottabad, Michael Clarke, director of the Royal United Services Institute in London, observed that "we are getting close to the Hollywoodesque situation in which a U.S. president might be in a position to direct an operation tactically at the lowest levels."¹ The world's most advanced armies are converging military special operations with advanced technology over ultra-complex networks that must be protected by effective cybersecurity, and Saudi Arabia aims to be among those in

the Saudi understanding of cybersecurity is largely derived from the American and European experience

COMMENTARY | A Saudi Outlook for Cybersecurity Strategies

the forefront, while gaining from the experiences of its friends and allies in the West.

What factors determine when a particular cyberwar starts or ends? International experts in cybersecurity do not seem to fully agree, so it is challenging for government policymakers to understand all of the pertinent criteria for making decisions.2 In November 2010, General Keith Alexander, commander of U.S. Cyber Command (USCYBERCOM), told Congress that the engagement rules were not clear about what sort of cyber attack would precipitate a U.S. response.3 These unknown factors trigger other directly related parameters. Western government institutions such as USCYBERCOM and the United Kingdom's Cyber Security Operations Centre are intended to protect the military and the government.4 Yet as stated in a November 2010 Chatham House report, On Cyber Warfare, "In cyberwarfare, the boundaries are blurred between the military and the civilian, the physical and the virtual, and power can be exerted by states or non-state actors, or by proxy." Experts indicate that economic dynamics underpinning cyberspace conflicts may directly impact the way wars are fought in the future. The Chatham House report further points out that "in cyberwarfare it is extremely difficult to direct precise and proportionate force; the target could be military, industrial or civilian."5 Accordingly, Saudi Arabia would like to know more about Western defense planning against national security damage due to attacks on civilian industries vital to national security, such as banking, electricity, and energy.

In March 2011, an Internet company, EMC's RSA Security, which provides the heavily used SecurID system to U.S. Federal

trillions of dollars of Gulf-derived petroleum transactions will continue to be recorded via the computer networks of the financial world

agencies including the Department of Defense (DOD), found "certain information" had been "extracted."⁶ According to the company, this type of information theft could result in a subsequent successful attack.⁷ Since RSA has multimillion-dollar contracts to provide DOD with network security, Saudi Arabia may prefer to find out more about whether USCYBER-COM stepped in immediately, or the private company's own experts retained the lead in defensive maneuvers and offensive countermaneuvers. These matters would help to address the lines of support between military and civilian cybersecurity defense responsibilities as well. Such insights may have critical impacts on development of the Kingdom's own cybersecurity capabilities under Saudi government coordination, with significant potential assistance from USCYBERCOM and top international private specialists.

Lieutenant General Rhett Hernandez, commander of U.S. Army Cyber Command, indicates that cloud computing could reduce many risks from decentralized hosted systems, though other increased risks may appear if networks with greater centralization are hacked, thus highlighting the need to achieve "the right balance between centralization and decentralization."⁸ Coincidentally, such balanced wisdom of spreading work beyond single sources was reinforced by the April 2011 reports of large-scale cloud computing data breaches at some of the largest global private enterprises, Sony and Amazon.⁹

Analogously, civilian government cyberdefenses have also been routinely breached. In late March 2011, the European Union headquarters was subjected to a significant cyber attack that appeared to be statesponsored. It occurred right before the start of the European Union Summit.¹⁰ According to Patrick Pailloux, director general of the French National Agency for Information Systems Security, "No single infrastructure system is safe enough."11 In early March 2011, the French government was the victim of a cyber attack that accessed and spied on numerous classified documents on roughly 150 computers in the French finance ministry with what would appear to be sensitive details about international aspects of France's economic policy.12 This took place before the Group of 20 nations were to meet under French leadership.

In a related context to economic policy, some Western experts appear deeply concerned that there is "not much, if any, cyber-war defense planning going on in the financial world" and possibly insufficient protection for stock exchanges or financial institutions if they come under cyber attack.¹³ National security incidents pertaining to international economics and finance are no joke. The 2007 cyber attack launched against Estonia and its two primary banks, possibly by another state, still resonates as a glaring example of how a country's banking and financial services may be shut down for many days or longer. One reported concern could include "Stuxnet-type worms that might be insinuated into financial networks. Such worms can wreak havoc slowly and methodically by corrupting financial data without creating immediate alarm."¹⁴

These types of issues pertaining to international finance may turn out to be directly relevant to Saudi national interests since a large proportion of sovereign assets intended to be invested toward securing the future of Saudi citizens are held in instruments traded on global financial markets, often in the custody of major international financial institutions. Over the long term, trillions of dollars of Gulf-derived petroleum transactions will continue to be recorded via the computer networks of the financial world. Hypothetical vulnerabilities in Western cyberwarfare defense plans might not remain a perpetual abstraction to America and the West, or to the Kingdom and regional governments, in proactive protection of their citizens.

Roughly analogous infrastructural attack scenarios could also apply to petroleum pumping stations, shipping, and other assets in the Gulf region. Gulf governments may therefore contemplate some hypothetical developments, such as rogue international oil brokers outside the Gulf region who could conceivably hire hackers to interfere with the petroleum infrastructure while betting on oil price trends. That could damage the credibility of large sectors of global financial markets.

The Kingdom and other Gulf countries may want to consider how to determine when USCYBERCOM would make the decision to focus its resources-whether before or after invitation by Gulf governments—and how the chains of command would intersect among sovereign nations and allies. Tangentially, as former Defense Secretary Robert Gates reflected concerning NATO, "On cybersecurity, the alliance is far behind. ... Our vulnerabilities are well known, but our existing programs to remedy these weaknesses are inadequate."15 Basically, the Secretary made it clear that there are serious weaknesses in NATO's computer network defenses-throughout the command structure. Thus, Saudi Arabia is highly interested in observing what transpires in Washington, so the Kingdom does not find itself needing

AL-SAUD



the American President and Congress may need to clarify laws and policies to permit the U.S. military to protect critical infrastructure

to reinvent the wheel by revisiting cybersecurity bottlenecks that may be resolved by the United States. As a result, the Kingdom may also wish to pursue regulations toward financial incentives for Saudi businesses to invest—indigenously—in the Kingdom's own large and growing needs for cybersecurity as well as in a private Saudi cyber insurance industry, with rules supporting responsibilities between the Ministry of the Interior and Ministry of Defense along with the Kingdom's other institutions.

Pentagon Cyberstrategy Mission Implications for the Kingdom

Most of the U.S. Government's computer networks may be presumed to be under Pentagon control,¹⁶ while most of the important economic targets to be defended are inside the United States, such as financial networks, hydro infrastructure, electrical power grids, and petroleum and other energy distribution. Saudi Arabia would like to learn about the experience that America derived from defending such vital economic infrastructure from cyber attacks in order to maximize its own effective management responsibilities concerning the government's computer systems and the Kingdom's economic targets.

Under rules announced in October 2010, President Barack Obama approved using the U.S. military's cyberwarfare expertise if computer networks are attacked inside the United States and the Department of Homeland security directs the work.¹⁷ Lieutenant General Hernandez points out:

Cyber Command is responsible for the defense of the dot-mil domain space and when directed to do so, to support the Department of Homeland Security in defending [America's] critical infrastructure. Cyber Command uses a defense in depth approach that is executed by each of our Armed Services.... This defense against cyberwarfare is focused on DOD infrastructure.¹⁸

According to the January 2011 cybersecurity report issued by the Center for Strategic and International Studies (CSIS), the American President and Congress may need to clarify laws and policies to permit the U.S. military to protect critical infrastructure.19 In May 2011, 2 years after President Obama declared that even American nongovernmental computer networks are strategic national assets, the White House released a new proposal for cybersecurity laws that would require industries crucial to America's security and economy to ensure that their computer systems are secure. The proposed laws also encourage greater access for public and private businesses to consult with the Department of Homeland Security, which

provides cybersecurity for the U.S. Government's nonmilitary computer systems.²⁰ Coincidentally and fortuitously, like the Kingdom's top leadership, U.S. Congressmen still appear to be interested in finding out more concerning how USCYBERCOM would meet its broad mission, given the extent of serious vulnerabilities in cyberspace.²¹ Similarly, Saudi Arabia would like to consider the coordination of responsibilities between the Saudi Ministry of Defense and other security institutions, along with computer systems of vital economic targets, which may deserve national security protective designation inside the Kingdom.

With such issues in mind, former Deputy Secretary of Defense William Lynn pointed out that in 2008 a foreign intelligence agent deployed a flash drive in order to affect U.S. military computers including those used by U.S. Central Command to manage combat in Afghanistan and Iraq.22 According to Lynn, "It was a network administrator's worst fear: a rogue program operating silently, poised to deliver operational plans into the hands of an unknown enemy." The Pentagon's response was Operation Buckshot Yankee, which was a turning point for America's strategy toward cyberdefense.²³ This means that Middle East battlefield experiences may have been crucial in redirecting the U.S. military toward cyberdefense.

Deputy Secretary Lynn observed that if only a dozen computer programmers find a vulnerability, they can threaten America's global logistics network, steal operational plans, damage intelligence-gathering, and interfere with the delivery of weapons to their targets.²⁴ By now, national defense institutions recognize that cyber combat is another form of devastating asymmetrical warfare, potentially resulting in large casualties inflicted by "rogue warriors" who do not need a false religious ideology to coordinate and create chaos for the civilized world. Deputy Secretary Lynn reassured readers that the United States has developed systems against intrusion that are "part sensor, part sentry, part sharpshooter."25 Thus, it may be highly relevant for the top brass in Gulf defense ministries to receive additional insights from other friendly military institutions, particularly USCYBERCOM, about effective track records of such systems' deployment in order to be equipped to confidently report back to the senior leadership echelons in Gulf governments. Lynn revealed that many intrusions are more like espionage than acts of war.26 Saudi Arabia would like to

COMMENTARY | A Saudi Outlook for Cybersecurity Strategies

find out more about the criteria the United States considers as it coordinates responsibility for various intrusions between intelligence institutions and defense resources.

Deputy Secretary Lynn indicated that deterrence may need to be focused on denying benefits to the attackers rather than retaliating. This is due to the typical pattern of hackers designing attacks by compromising servers in neutral countries.²⁷ Here is a hypothetical scenario that is of serious interest to Saudi Arabia. If hackers were to compromise servers in a neutral country in order to interfere with Aramco computer systems, it could be considered a Saudi national security threat—perhaps country assistance would tend to be toward Saudi civilian and military computer systems, whether incident-by-incident or under preexisting agreement.

The former Deputy Secretary observed that military supply lines involving private companies often require defense institutions to use basically unclassified networks on the open Internet.²⁹ Military analogies to related civilian experiences may be appropriate, as DOD has detected counterfeit hardware in its procurement programs.³⁰ Microsoft and other companies have been working on "riskmitigation strategies" against dangerous codes to keep them out of global supply chains, and

there may be countries—specifically India and China—that will train more capable computer scientists than the United States

roughly analogous to the U.S. national security threat of aggregated large-scale, offshore, taxbased fraud against the U.S. Treasury.²⁸ If the Kingdom were to request assistance from the United States and other friendly countries, it could possibly be at the time of the incident or the principals might prefer that a preexisting agreement would already be in force between the countries. The Kingdom may aim to discover more about some main factors used to measure how intrusive U.S. or other foreign Lynn made it clear that the U.S. Government needs to do the same.³¹ The United States and Saudi Arabia also acquire weapons systems and supplies from other countries. The Kingdom would like to know more about how the U.S. military's global supply chains, reaching to other countries, may be deemed subject to effective "risk mitigation strategies." Ultimately, America's military global supply chains directly affect the Kingdom, which is negotiating to purchase complex American



weapons systems worth up to tens of billions of dollars, presumably incorporating highly relevant proportions of components from private industry vendors. According to the Western media, the Kingdom is deemed to be the largest purchaser of American arms.³²

In this context, the Ministry of Defense was highly interested in the Defense Advanced Research Projects Agency's research on identifying rogue microchips, as well as in outcomes from the U.S. Army Research Office conference dealing with "kill switches" in 2011.33 The direct relevance to the Kingdom's cybersecurity of kill switches, which may be routinely manufactured within microchips, includes the potential for remotely shutting down computer networks or weapons systems controlled by computer networks, whether they are linked to the Internet or accessed from radio signals via extremely small antennas that may be easily hidden and are virtually undetectable within the microchips.34

Such issues are important to the Kingdom since it faces its own unique threats, including anti-Islamic terrorists and copycats. Here is just one basic scenario. In the Stuxnet incident, Western cybersecurity experts may appear to have detected a hidden Hebrew reference.35 Building on that, if native Arabicspeaking hackers were to use "trap doors" or other methods encrypted by references to aspects of Arab culture, leading to logic programming patterns for which Western encryption experts may not grasp the full implications, Saudi cyberwarriors and other Arab experts would need to be the ones providing such highly specific guidance to friendly governments.

In terms of non-Western cultures, Deputy Secretary Lynn appears to indicate that over the next couple of decades there may be countries—specifically India and China that will train more capable computer scientists than the United States.³⁶ Therefore, Arab computer scientists should also be recognized as among the world's best.

This is the dawn of a new century, a time when cybersecurity will be absolutely vital to the national security of civilized nations. Therefore, it is extremely important to note that, centuries ago, the Arab world gave Western civilization higher mathematics and science. Neither computer technology nor the Internet could exist without those gifts from Arab minds. Today, contemporary Arab minds also claim the international respect they deserve. We should be confident that Arab talents are fully

AL-SAUD

available. A significant proportion of such vital economic output should be created by Arab minds, particularly including the Kingdom. In coming years, cybersecurity is likely to be worth billions of dollars in the defense budgets of Gulf countries, and possibly tens of billions of dollars or more.

Another absolutely relevant factor is that extensive employment in high technology may need to be among the vital objectives of Saudi economic planning, and particularly its national security objectives. Saudi Arabia aims to encourage the United States and other friendly governments to work with the region toward these results.

Now we must focus on the other side of the equation-where threats originate. If native Arab-speaking hackers are involved in cyber attacks, it may make sense not only to neutralize the system vulnerabilities by which they entered, but also to recruit the bad guys by "flipping" them to the side of the good guys. Consider a brief case study involving Google, one of the world's most respected Internet companies, which has suffered severe cyber attacks originating from both inside and outside the United States. Some reports even suggest that one or more foreign governments may have been behind the attacks on Google's computers. So the company appears to have made it a point to recruit individuals with hacking talents in order to strengthen its own defenses. Obviously, Google follows Sun Tzu's advice: "Keep your friends close and your enemies closer."

The Kingdom would also look to flip Arab hackers, particularly given extensive positive Saudi experience in keeping friends close and enemies closer. This theme is consistent with Saudi Arabia's successful rehabilitation program for former radical militants. It is likely that U.S. Cyber Command may have significant opportunities to rehabilitate Western hackers, if they are identified, by offering them legitimate employment-potentially in hunting down other hackers. This is the 21st-century cybersecurity version of "Set a thief to catch a thief." The Kingdom will likely be willing to share its own highly successful technical and psychological insights in flipping troublemakers with USCYBERCOM and institutions such as the National Defense University.

Future Development Factors

The top Western and other international information technology (IT) corporations already have a significant presence in the Kingdom and have helped to set up highly sophisticated computer networks for the country's defense and economic infrastructure including electric power grids, water supplies, oilfield maintenance, and petroleum pipelines to shipping terminals. They have years of significant experience dealing with "soft power" factors such as Saudi institutions and culture, as well as other critical issues. Those IT corporations may be a major source of insight—both for and from—the Saudi government, including the Ministry of Defense.

So in terms of evolving and achieving particular objectives in cybersecurity and information assurance, the Kingdom's leadership may consider numerous multibilliondollar options over the long term, possibly including:

 direct discussions with major international corporations with significant cybersecurity backgrounds

close cooperation with USCYBER-COM, possibly roughly analogous to programs run by the U.S. Government for foreign military sales at the acquiring country's request

■ training programs and other considerations that may be provided by institutions such as the National Defense University

■ a hybrid approach involving iterations of these options.

To attain the necessary manpower objectives to secure superlative cybersecurity expertise, Saudi Arabia may encounter challenges similar to those already faced by America and the West. A November 2010 report by the Center for Strategic and International Studies made it clear that the United States is facing a severe shortage of skilled cybersecurity experts. According to Central Intelligence Agency Clandestine IT Office founding director Jim Gosler, the United States has only around 1,000 cybersecurity experts with sufficiently high skills, while 10,000 to 30,000 are needed.37 This may mean that, extrapolating from relative population sizes, the Kingdom may need to train up to 3,000 Saudi cybersecurity experts with the highest skills and experience-in addition to addressing potential future needs for tens of thousands of trained Saudi cybersecurity personnel for basic compliance matters.

The CSIS report further indicates that although cybersecurity is a growing field, only some of its practitioners "know what they are doing."³⁸ Accordingly, in the United States, "the current professional certification regime is not only merely inadequate; it creates a dangerously false sense of security" for reasons that include credentials that demonstrate expertise in documentation of compliance with statutes and policy, in contrast to far more sophisticated expertise in preventing attacks, responding to them, and mitigating risks.39 Western commentators have suggested that cybersecurity credentials may need to go beyond professional certification toward licensing and thereby subjecting the field to regulation, so service buyers are more able to evaluate what they would be acquiring.⁴⁰ Given such difficulty in evaluation, Saudi Arabia may need to pay careful attention to the highly significant difference between the cyber elite-including "hunters" who are able to look deep into computer networks, tracking attackers⁴¹—and the Kingdom's future tens of thousands of substantially less qualified "certification" graduates, who may turn out to be quite suitable and necessary for roles in cyber compliance and cyber documentation, but are not fully qualified as "cyberwarriors"42 (and other descriptive accolades) for responding to cyber attacks.

The November 2010 CSIS report stated that in cybersecurity:

Most importantly, training and certifications need to be connected to real jobs in the current marketplace [and] new challenges. This criterion also recognizes it will take time to implement the model.... Potential employers and purchasers of cyber security services need to be assured that certification processes have intellectual rigor and are not unduly biased by the economic interests of particular providers.⁴³

international information technology corporations have years of significant experience dealing with "soft power" factors such as Saudi institutions and culture

Such direct implications for Saudi Arabia, as for the United States and the West, are that real-world job requirements and cyber challenges may need to dictate higher parameters of training, certification, and so on, rather than merely assuming that training or certification would conversely meet real-world

COMMENTARY | A Saudi Outlook for Cybersecurity Strategies

job requirements. After all, in the Kingdom as well as in America and the West, unemployment and unsuitability for real-world employment are major policy concerns that need to be addressed by real-world solutions-not only in the growing realm of cybersecurity, but also throughout the respective economies.

The CSIS report makes clear that those who exploit weaknesses by launching cyber attacks against America (and presumably other civilized countries in the West and elsewhere across the globe) "are every bit as smart as we are" 44-and "while much is being done, our adversaries are growing in number and capability. We must redouble our efforts."45 Nonetheless, the CSIS report may have inadvertently overlooked the reality that adversaries-against America, the West, the Kingdom, and other countries-may often be top-down thinkers rather than bottom-up graduates of certification courses, licensing regulation, or other more structured and more sophisticated cybersecurity career paths. The CSIS report recommends cybersecurity career trajectories apparently like those of medical careers and specializations, with clear skill sets that may be more effectively evaluated by those who need to purchase medical or, analogously, cybersecurity services.46

However, the CSIS medical analogy may not necessarily resolve the most crucial cybersecurity concerns. Medical doctors tend to learn by rote memorization and repeated procedures; the typical (even complex) problems that patients go to medical specialists for are usually not unique. Doctors typically apply their understanding as derived from numerous other cases and case studies to prescribe solutions that worked for patients before. By contrast, in cybersecurity and cyberwarfare, many attacks intended to be the most devastating may be designed to be unique. Stuxnet is a good example. Therefore, one problem with streamlining cybersecurity careers by certification and licensing regimes is that it may

in cybersecurity and cyberwarfare, many attacks intended to be the most devastating may be designed to be unique

inadvertently create vulnerabilities in civilized governments because cybersecurity personnel may be vulnerable to thinking alike, or "groupthink." By contrast, as in nature, cross-breeding tends to improve the stock. It would appear that international cyberterrorists who launch damaging cyber attacks tend to be mavericks, intentionally outmaneuvering those with more structured backgrounds, methods, and thinking patterns, and their potential devastation may have something to do with the notion that they did not necessarily start by graduating from certification or licensing programs with oversight boards that may inadvertently encourage structured thinking "inside the box."

Conclusion

Cybersecurity is a fundamental national security priority for the United States as well as allies and friends including NATO and Saudi Arabia. One Western observer pointed out that just a few years ago, only militaries had large weapons systems capable of causing large-scale damage-but now, anybody with enough computer skills can create chaos within major economies.⁴⁷ Western experts indicate that the world's next arms race may be about computer codes instead of fire-



power.48 For numerous reasons—including the probability that the fate of the global economy relies on Saudi Arabia, which heavily deploys computer networks to maintain productivity in one of the world's most strategic energy producing regions-strong commitment to Saudi cybersecurity is paramount.

To reiterate, Robert Gates recognized that existing programs to address cybersecurity vulnerabilities are not adequate.49 His observation was made in the context of the American alliance with NATO computer network defenses, and may also pertain to other friendly nations including Saudi Arabia. In recent years, vital infrastructural areas of the United States and European countries appear to have been attacked by other nations, which in some instances may have attempted to hide "trap doors" and other dangerous vulnerabilities for future cyber assaults. Cyber attacks may grow at accelerated rates with increasing scales of potential destruction.

In the United States, it would appear that most government computer networks may be within DOD jurisdiction,⁵⁰ while many vital economic infrastructural networks tend to be under separate civilian government or private control, whether supporting financial institutions, water distribution and treatment facilities, electric power grids, petroleum and other energy transportation, or other enterprises. The Kingdom, along with other friendly nations including NATO, will need to understand more about the lines of demarcation in the United States and the West between civilian and military cybersecurity responsibilities for defending such economic networks and their international links.

Such international links elicit recognition that, according to former Deputy Defense Secretary Lynn, in the near future many countries, including China and India, may produce more highly trained computer scientists than the United States.⁵¹ Likewise, Arab minds and Arab talents deserve recognition. If emerging regions may produce significant numbers of computer scientists, they may also be sources of cyber attacks. The Middle East and particularly the Gulf may remain a significant concern for international cyberwarfare-particularly in the aftermath of Stuxnet and its possible hidden programming reference to foreign (non-Western) culture. Legitimate Saudi and other Arab cyber talent will need to become even more focused in this global arena-for reasons that include the reality that many

AL-SAUD

future cyber threats may require indigenous Saudi and other Arab expertise since the ulterior significance of such threats may not be fully understood by Western or other non-Arab experts. A substantial percentage of world trade, including energy supplies, is transacted through the Kingdom and may therefore require multibillion-dollar, longterm investments in Saudi cybersecurity.

Nonetheless, American and other Western experts cited in media reports have made clear that a significant proportion of Western cybersecurity practitioners does not necessarily appear to know what it is doing in terms of addressing major threats, even though many may be graduates of certification programs.⁵² Therefore, a major government policy

if emerging regions may produce significant numbers of computer scientists, they may also be sources of cyber attacks

challenge for Saudi government institutions will be to acquire a deep understanding of the American and Western experience to ensure that such large investments in cybersecurity infrastructure, institutions, and support services are not merely theoretical but must be directly related to pragmatic job skills deployable as measurable assets against real-world cybersecurity threats. The tremendous investment potential for sophisticated indigenous multibillion-dollar cybersecurity requirements, which should fuel Saudi high employment in such ultra-high technology, may deserve to be an integral national security objective of the Kingdom's long-term economic plans. **JFQ**

His Royal Highness Prince Naef Bin Ahmed Al-Saud would like to recognize I.K. (Asa) Sabbagh, Jr., for his research, analysis, and other significant contributions in drafting this article.

NOTES

¹ Royal United Services Institute Director Michael Clarke, quoted by Daniel Dombey, James Blitz, and Peter Spiegel, "Warfare: An advancing front," *Financial Times*, May 9, 2011.

² Bruce Schneier, "It will soon be too late to stop the cyberwars," *Financial Times*, December 2, 2010. ³ Joseph Menn, "Rules of engagement for cyberwars see slow progress," *Financial Times*, December 28, 2010.

⁴ "How to thwart cyberwarriors," *Financial Times* (editorial), January 23, 2010.

⁵ Paul Cornish et al., *On Cyber Warfare*, Chatham House Report (London: Royal Institute of International Affairs, 2010), 37, available at <www.chathamhouse.org/sites/default/files/public/ Research/International%20Security/r1110_cyberwarfare.pdf>.

⁶ Ellen Nakashima, "U.S. Agencies respond to cyberattack on information security firm," *The Washington Post*, March 23, 2011.

7 Ibid.

⁸ Harrison Donnelly, ed., "Cyberspace in Support of Full Spectrum Operations," interview with Lieutenant General Rhett A. Hernandez, commander, U.S. Army Cyber Command, *Military Information Technology* 15, no. 3 (April 2011), 17–18, available at <www.MIT-kmi.com>.

⁹ "Cloud computing's growing pains: Break-ins and breakdowns: The lessons from Sony's big security lapse and Amazon's cloud-computing outage," *The Economist*, April 28, 2011. ("Firms that use cloud-based systems should be looking at ways to distribute work across multiple providers.")

¹⁰ Warren Getler, "Are We Ready for a Financial Cyber Attack?" *The Wall Street Journal*, March 31, 2011.

¹¹ Max Colchester and Gabriele Parussini, "France Investigates Attack on Computers," *The Wall Street Journal*, March 7, 2011.

¹² Ibid.

¹³ Getler.

¹⁴ Getler cites Michael Chertoff for the idea that Stuxnet-type worms could be deployed against financial networks.

¹⁵ Thom Shanker, "Pentagon Will Help Homeland Security Department Fight Domestic Cyberattacks," *The New York Times*, October 20, 2010.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Correspondence for attribution from U.S. Army Lieutenant General Rhett A. Hernandez to author, April 20, 2011.

¹⁹ Center for Strategic and International Studies (CSIS) Commission on Cybersecurity for the 44th Presidency, *Cybersecurity Two Years Later* (Washington, DC: CSIS, January 2011), 10, available at <http://csis.org/publication/ cybersecurity-two-years-later>.

²⁰ "Fact Sheet: Cybersecurity Legislative Proposal," Washington, DC, The White House, May 12, 2011, available at <www. whitehouse.gov/the-press-office/2011/05/12/ fact-sheet-cybersecurity-legislative-proposal>.

²¹ Thom Shanker, "Cyberwar Chief Calls for Secure Computer Network," *The New York Times*, September 23, 2010.

²² Brian Knowlton, "Military Computer Attack Confirmed," *The New York Times*, August 25, 2010, available at <www.nytimes.com/2010/08/26/ technology/26cyber.html>.

²⁴ Ibid.

²⁶ William J. Lynn III, "Defending a New Domain: The Pentagon's Cyberstrategy," *Foreign Affairs* (September–October 2010), available at <www.foreignaffairs.com/articles/66552/ william-j-lynn-iii/defending-a-new-domain>.

²⁸ America's own War of Independence in the latter 18th century was catalyzed by the national security imperative to fight against illegitimate siphoning of American tax dollars offshore, as demonstrated by the Boston Tea Party.

³¹ Ibid.

³² Craig Timberg, "Gates has 'warm' meeting with Saudi Arabia's King Abdullah," *The Washington Post*, April 5, 2011.

³³ "High-tech warfare: Something wrong with our **** chips today: Kill switches are changing the conduct and politics of war," *The Economist*, April 7, 2011.

³⁴ Ibid.

³⁵ Arthur Bright, "Clues emerge about genesis of Stuxnet worm: Biblical and historical references hint the Stuxnet worm may be of Israeli design," *Christian Science Monitor*, October 1, 2010, available at <www.csmonitor.com/World/terrorism-security/2010/1001/ Clues-emerge-about-genesis-of-Stuxnet-worm>.

³⁷ Karen Evans and Franklin Reeder, A Human Capital Crisis in Cybersecurity: Technical Proficiency Matters (Washington, DC: CSIS, November 2010), available at http://csis.org/files/publica-tion/101111_Evans_HumanCapital_Web.pdf>.

⁴¹ Definition of *hunters* provided by Evans and Reeder, 2.

⁴² *Cyberwarriors*, as the term is used by Evans and Reeder, 8.

⁴⁸ Richard Falkenrath, "From Bullets to Megabytes," *The New York Times*, January 26, 2011.

⁴⁹ Thom Shanker, "Pentagon Will Help Homeland Security Department Fight Domestic Cyberattacks," *The New York Times*, October 20, 2010, available at <www.nytimes.com/2010/10/21/ us/21cyber.html>.

⁵¹ Lynn.

⁵² Evans and Reeder, vi, 3.

²³ Ibid.

²⁵ Ibid.

²⁷ Ibid.

²⁹ Lynn.

³⁰ Ibid.

³⁶ Lynn.

³⁸ Ibid., vi.

³⁹ Ibid., vi, 3.

⁴⁰ Ibid.

⁴³ Ibid., 17.

⁴⁴ Ibid., 5.

⁴⁵ Ibid., 19.

⁴⁶ Ibid., 17.

⁴⁷ Schneier.

⁵⁰ Ibid.

Korean People's Army soldiers watch Panmunjom Joint Security Area

MILITARY CONFRONTATION

By KONGDAN OH and RALPH HASSIG

he two Koreas have had a long history of military confrontation, and there is little reason to expect that relations will improve in the near future. Over the last few years, both the Democratic People's Republic of Korea (DPRK) and the Republic of Korea (ROK) have strengthened their armed forces, and as a result of the 2010 North Korean attacks in the West Sea, this military buildup is likely to continue and may even accelerate. Acknowledging this reality, the best that can be hoped for is to limit the violence that often springs from confrontation, and to continue to seek ways to resolve confrontation before the point of violence is reached.

States in Confrontation

Confrontation may be defined as two states opposing each other politically, socially, economically, or militarily in an explicit manner. Outbreaks of military confrontation make news headlines, but the core issue on the Korean Peninsula is political confrontation, reinforced by social and economic differences. This means that military confrontation will continue until the two Koreas have found a way to eliminate the oppositional aspects of their political systems; even if that should happen, relations will remain rocky as long as their social and economic systems are incompatible.

Confrontation is not without its benefits. When two individuals, groups, or countries confront each other, they become aware of different opinions, values, and ways of doing things. The danger is that confrontation will lead to violence or to a defensive hardening of positions rather than to an

Kongdan Oh is a Research Staff Member at the Institute for Defense Analyses. Ralph Hassig is an Adjunct Professor of Psychology at the University of Maryland University College. A version of this paper was presented at the RINSA-Konrad Adenauer Foundation International Conference on February 15, 2011.



openness to accommodation. In the case of the two Koreas, North Korea is the more defensive and hostile.

That said, it is difficult to argue with the proposition that there is room for only one government on the Korean Peninsula. The Korean people are a homogeneous race and culture. Many families remain separated by the political border established at the end of World War II. In the long term, any talk of establishing a federation of two separate but equal Koreas makes little sense, especially if people are not free to move from one part of Korea to the other. Given the dismal history of North Korea's socialism, South Korea is going to be the more economically successful, and given the universal desire for individual freedoms, it is also going to be the kind of society where most Koreans would prefer to live.

The essence of *political* confrontation is that both Korean governments claim jurisdiction over the entire peninsula. The South Korean government recognizes all people who live in North Korea as citizens, and the North Korean government considers the government in Seoul to be an illegitimate American puppet regime, routinely referring to the "persons in authority" of that government as traitors to the Korean nation.

Economic confrontation has its roots in the incompatibility of centrally managed socialism in the North and loosely managed capitalism in the South. Not only are the two economic systems different, but also the eco-

U.S. Air Force (James Mossman)

nomic conditions are widely divergent and growing more so all the time. In 1990, South Korea's per capita gross national product was 5 times larger than North Korea's (\$5,569 vs. \$1,031); in 2000, the South's per capita gross national income was 12 times larger (\$9,628 vs. \$757); and in 2009, it was 18 times larger (\$17,175 vs. \$960).¹ Moreover, the economic resources of the two Koreas are different, although complementary, with the North being the logical place for heavy industry and resource extraction and the South being more suitable for farming and trade.

Underlying *social* confrontation are dramatic differences in individual freedoms. In the North, the Korean Workers' Party shapes the community and is above the law; party

FEATURES | Military Confrontation on the Korean Peninsula

guidance takes precedence over the rights of individuals. It was Kim Il-sung who said, "Our judicial organs are a weapon for carrying out the functions of the dictatorship of the proletariat"2-by which he meant "dictatorship of the leader and the party." In the South, the individual must often defer to the community but still retains many rights, and no group or organization is above the law. The kind of economic and social life South Koreans lead would be completely unacceptable to the leaders of the North. As more North Koreans try to survive by going into business for themselves, they often find themselves guilty of a host of economic offenses-such as "Crimes of Undermining the Economic Management Order," including "individual commercial activities" (Article 110 of the criminal code) and "pocketing money or objects by doing illegal work or transport" (Article 120)-that are punishable with prison sentences.3

Military confrontation is most visible in the face-off of forces along the Demilitarized Zone (DMZ), with the Joint Security Area at Panmunjom being the closest point of contact between the two forces. A more active form of confrontation occasionally occurs along the Northern Limit Line (NLL) that defines the sea border, which is less visible than the well-marked and mined



land border and is also a matter of some dispute.

Although military confrontation is not active most of the time, the atmosphere is heated by a war of words. The North Korean media insist that South Korea (as well as the United States and Japan, for that matter) is in the final stages of preparing an attack, and U.S.–ROK military exercises are routinely characterized as preparations for war, as in this statement from 2011:

In the past, the United States and South Korea have ceaselessly revised and supplemented the plans for a war of northward aggression and perfected the "Key Resolve" and "Foal Eagle" joint military exercises reflecting them as a completed operation of northward aggression... Recently, North-South relations have come to face an extreme catastrophe and this has led to the creation of an acute confrontational phase on the Korean peninsula.⁴

In one bizarre example of North Korean propaganda, the press even depicts Kim Jong-il as being involved in some kind of wartime conflict:

During the fatherland liberation war [the Korean War], Chol Ridge served as an important military place.... Whenever Marshal Kim Jong II, another brilliant commander produced by Korea in the 20th century and son of guerrillas, passes the ridge, the idea and grit of the Korean People's Army has been further hardened.... Not escorted by tanks or armored cars, he has passed the ridge and crossed rivers for forefronts without eating or sleeping. By doing so, he has devotedly tided over the crisis of the country and the revolution, winning one victory after another in the war without gun-report.⁵

For its part, the ROK government's references to North Korea are much less incendiary, even though it designates the DPRK government and military as an "enemy" (and formerly as the "main enemy").

When states confront each other, they are not necessarily fighting. In fact, most of the time, confrontation is passive. It could even be argued that as long as two armies openly face each other, a kind of balance exists in that the respective forces are deployed in such a way that any attack is likely to be met by a successful counterattack. A classic case is the balance of power between the United States and the former Soviet Union during the Cold War era. Those two forces were carefully calibrated, with adjustments on one side countered by adjustments on the other. Neither side believed it could prevail in an all-out war, and neither side had strong motivation to change the status quo.

Military forces standing at the ready can provide a state with certain advantages apart from serving as a deterrent against attack. Even when a large standing army drains the civilian economy, certain sectors of the economy do benefit from it. Moreover, political leaders who are strong on defense almost always gain in popularity. And in a controlled society like North Korea's, the public belief that the country is on the brink of war (as the North Koreans have been told

the kind of economic and social life South Koreans lead would be completely unacceptable to the leaders of the North

for decades) helps rally the people to their government and distracts them from their difficult lives. North Korea even uses its confrontation with South Korea to get attention from other countries that are concerned about peace and stability in the region.

If the ultimate goal of military confrontation on the Korean Peninsula were total victory over the other side while keeping one's own losses to a minimum, war would be unthinkable. Unfortunately, even if a fullscale attack would be prohibitively costly, it is always possible that a small military skirmish could escalate into the unthinkable war that neither side wants.

When Military Forces Are Not Balanced

Another danger of military confrontation is that a lack of balance or symmetry in forces may lead one state to believe that it holds some military advantage that could be exploited by an attack. A comparison of the two Koreas reveals numerous asymmetries, some seeming to benefit the North, others the South. What is important is not where the benefit lies but where each country *believes* it lies.

The North now has a few small *nuclear weapons* that it repeatedly threatens to



employ in an all-out war. The South does not have nuclear weapons but does shelter under the U.S. nuclear umbrella of more than 5,000 weapons.⁶ One would expect that North Korea would view the nuclear balance as decidedly in South Korea's favor. But that is not the whole story, for the North can decide when and if it wants to use nuclear weapons, whereas the South cannot. Moreover, the leaders of North Korea, especially top military officers, are probably less concerned about the consequences of using nuclear weapons than are the Americans.

Conventional forces are unbalanced in terms of type, quantity, and quality. U.S. forces available to assist South Korean forces further complicate any calculations of balance. The following are estimates.⁷

South Korea has fewer active-duty soldiers than does North Korea (687,000 vs. 1.1 million), and fewer tanks (2,700 vs. 3,500), artillery pieces (5,000 vs. 10,000+), and combat aircraft (555 vs. 590). South Korea also has fewer submarines (12 vs. 63) and fewer ships (130 vs. 350), but it has more large ships (44 vs. 8). In terms of quality and training, South Korea holds a decided advantage in all weapons systems (except small coastal combat boats).

How the two forces would fare in various battle scenarios is difficult to say, but in a sustained conflict, especially with the support of U.S. forces, most observers outside of North Korea believe the South would ultimately destroy the North's forces, starting with its air force (if it chose to fight). What is important to consider when estimating the likelihood of a North Korean attack is whether the North's leaders actually see things this way and whether their outcome calculations are based on events in a major conflict or a limited conflict scenario.

North Korea's *special forces* are believed to number about 200,000 compared to less than 20,000 South Korean special forces. The role of DPRK forces would be to open a front inside South Korea, bypassing the conventional defense lines. Taking these forces into consideration, it becomes even more difficult to predict the short-term outcome of battle, although in the long term, South phases of combat, South Korea's frontline forces would be relatively vulnerable to North Korea's artillery, and all ROK forces might be vulnerable to DPRK special forces.

North Korea is a country seemingly always on the brink of war. Its leaders may truly believe they are in danger of being attacked. Given the likelihood that they would lose a lengthy war, their *military policy* is offensive in nature, stressing the need to attack a potential aggressor before coming under attack themselves. This preference for

a lack of balance or symmetry in forces may lead one state to believe that it holds some military advantage that could be exploited by an attack

Korean-U.S. forces would almost surely prevail because special forces can disrupt but not defeat the South Korean forces. Even if they expect that their forces will be bested by South Korean forces, the North Korean generals may believe they hold a short-term advantage if they use their special forces to strike quickly and then negotiate for a ceasefire before being hit by the superior South Korean-U.S. conventional forces.

North Korean forces are dug in, many of them in mountainous terrain. Except for the *mobility* of the forward-based forces that would try to penetrate South Korean defenses, the North Koreans would have to rely on fighting in place in a defensive posture. South Korean forces are more mobile, especially considering that they would enjoy air superiority, but in the initial preemption adds an important destabilizing element to the balance of forces on the peninsula. The North Korean media have also boasted that their army and people will fight to the death, lending a dangerous suicidal note to North Korean threats.

South Korea is filled with high-value targets, the best case being Seoul, which is within range of North Korean artillery. In this sense, the superiority of South Korea's economy counts as a wartime military disadvantage because the South Koreans would lose much greater value in the early days of fighting—hence, the repeated North Korean threats to turn Seoul into a "sea of fire." North Korean cities are smaller, and both military and civilian facilities are sadly in need of repair anyway. A good example would be North Korea's largest building—the

FEATURES | Military Confrontation on the Korean Peninsula

unfinished Ryugyong Hotel—the destruction of which would be an absolute boon to the North Koreans by saving them the cost of tearing it down.

The value of individual lives is discounted in a dictatorship like North Korea's. Decisions about war and peace, like everything else, are made by the leaders as they consider what will benefit them personally. Witness how well Kim Il-sung survived his disastrous decision to launch the Korean War and how Kim Jong-il made it through the Arduous March period of the 1990s. The Kim regime might again be willing to lose millions of its people in a war if it felt it could improve its own security. In South Korea, a government decision that proved costly to the people would be immediately followed by a repudiation of the government and quite possibly punishment of its leaders.

The two Koreas have very different *military alliances*. The ROK–U.S. alliance is solid, and U.S. forces would likely play an important role from the beginning of any large-scale conflict. The relationship that the DPRK has with China is not a military alliance, and the North Koreans probably would not expect the Chinese to come in on their side as they did during the Korean War. This lack of support dramatically influences their wartime options, forcing them to launch a strong first strike and then hunker down and hope that the Chinese can convince the Americans and South Koreans to abandon their counterattack.

The two Koreas have different approaches to *military decisionmaking*. In the South, the civilian leadership would make the final decisions about warfighting (in conjunction with decisions by American civilian and military authorities). In North Korea, the top members of the Kim regime would make the initial decisions without being held accountable to anyone. However, after the first days of the war, by which time the North's communications links might be cut, combat would probably be directed by low-level military officers, who would be unlikely to take a strategic view of war or be concerned about North Korea's international reputation.

South Koreans are doing well under the status quo and want only to live in peace and continue to pursue prosperity. North Korea is by nature a revolutionary country: neither the leaders nor the masses can be satisfied with the status quo. The regime has frequently told its people that reunification must be accomplished to fulfill the behest of Kim Il-sung, and soldiers have been told that "a war is the inevitable way to accomplish a historic reunification," although perhaps such slogans are simply meant to boost morale.8 In any case, most military provocations come from the North rather than the South, and North Korea is probably the state that will decide if and when future confrontations take place.



The History of Military Confrontation

Although it has been almost 60 years since the Korean War ended, the Korean Peninsula has witnessed hundreds of smaller military actions, the majority of them initiated by the North (see table 1). Almost without exception, these acts of violence have been unpredictable. North Korea routinely issues threats against the South, so much so that they do not serve as a signal that something is about to happen. The North Korean military actions have absolutely no chance of leading to victory over South Korea, so they must serve other purposes, such as probing military defenses, increasing political tension, blackmailing for rewards, sending a political message, or simply keeping the South Korean government and military off balance. It is also possible that

in South Korea, a government decision that proved costly to the people would be followed by a repudiation of the government and quite possibly punishment of its leaders

some of these military actions are the direct result of frustration felt by Kim Jong-il, for when a dictator becomes angry, he can vent his anger without fear of personal consequences.

For the most part, the impact of these actions has been short-lived, serving more to solidify the cohesiveness of the South Korean people and gain the assistance of South Korea's allies than to weaken the government. At the same time, the actions have hurt the reputation of North Korea in the international community, although its reputation is already so poor that the ability to inflict further damage on it is minimal.

Given the hierarchical nature of North Korean governance, it must be assumed that virtually all of the military actions (except kidnappings) have been planned or authorized at the highest levels of government, and in that sense they can be considered state-sponsored provocations (and in most cases terrorism, because they are not intended to defeat the South Koreans but only to scare them). To the extent that the actions are meant to send a political message to South Korea, that message is so general in nature that it is little more than a political statement:

OH and HASSIG

"We don't like you." The attacks in the West Sea (in 1999, 2002, 2009, and 2010) send a more specific message: namely, that North Korea claims jurisdiction over that area. However, if the North Koreans think this is the way to get South Korea to negotiate a new border agreement, they are sadly mistaken.

Prospects of Future Military Provocations

Political confrontation on the Korean Peninsula continues, and North Korea's fortunes continue to decline. It is not realistic to expect that the North Korean regime will meekly accept its dismal destiny and wither away. Instead, it will maintain efforts to reverse its political and economic fortunes while keeping a dictatorial hold on its people. The use of its military forces for domestic social control and as a way to get the attention of the international community is a natural way for the self-styled "military-first" regime to pursue its goals. The historical pattern of alternating provocations with requests for talks will surely continue. Talks will in turn be used to solicit

the North Korean regime will maintain efforts to reverse its political and economic fortunes while keeping a dictatorial hold on its people



Table 1. Post–Korean War Military Actions on the Peninsula in Descending Order of Seriousness		
Event	Details and Years	
Open attacks	by North Korean airplanes against Republic of Korea (ROK) or U.S. airplanes or ships (1965, 1968, 1969, 1999, 2002, 2003); torpedoing of the <i>Cheonan</i> (2010), artillery at- tack on Yeonpyeong (2010)	
Commando raids	against the Blue House (1968); on the east and west coasts (1968, 1969, 1975, 1980, 1981, 1985)	
Submarine incursions	1996, 1998	
Military infiltration across demilitarized zone (DMZ)	1969, 1970, 1976, 1979, 1980, 1992, 1995	
North Korean intrusions across military demarca- tion line	1996, 1997	
Assassination missions against ROK authorities	1974, 1983	
Tunneling under DMZ	discovered in 1974, 1975, 1978, 1990	
Airplane hijackings	1958, 1969, attempted in 1971; Korean Air Lines bombing in 1987	
Kidnappings and boat hijackings	too frequent to list; according to the ROK government, 3,835 South Koreans have been abducted since the end of the Korean War, with 517 still held in North Korea	

Sources: Various, including Dick K. Nanto, North Korea: Chronology of Provocations, 1950–2003, Report for Congress (Washington, DC: Congressional Research Service, Updated March 18, 2003); estimates of South Korean abductees from South Korea's Ministry of Unification, cited by Yonhap News Agency, October 4, 2010.

FEATURES | Military Confrontation on the Korean Peninsula

aid and political support for the regime. An obvious alternative behavior would be for North Korea to steadfastly pursue a peaceful, nonthreatening international policy, but while such a policy would elicit far more aid and support than a provocational one, it would risk losing the regime's control over its people, and in North Korea as everywhere else, domestic politics trumps international politics.

Past evidence suggests that Kim Jong-il, like his father, is a rational decisionmaker, although the younger Kim is sometimes moved by his emotions. Little is known about the designated successor Kim Jong-un. His youth and inexperience, and the already prominent role given to the top generals, suggest that the military may exert more influence on decisionmaking in the future even while remaining under the control of the party. While the military has outside interests in the form of foreign trading companies, it is probably less in touch with and less concerned about international relations than are the government and party, and may therefore be less likely to take into account long-term consequences of conflict.

In the next few years, several factors are likely to prompt Pyongyang to engage in further provocations. For one, it is likely that Kim Jong-il's decisionmaking powers are declining along with his health, leading to more risky behavior. Common symptoms of cognitive decline include stereotyped thinking, impairment of judgment, greater reliance on earlier personality traits, and difficulty in checking impulses. In a dictatorship like North Korea's, a complicating factor is that the people around Kim hesitate to correct or restrain him for fear of being reprimanded or punished for their interference. Also, it can be difficult for them to know whether or not to intervene because a leader in declining health may have some good days and some bad days, even though he is not clearly incapacitated.⁹

Another factor that may make the North Korean leadership more dangerous in the years ahead is the likelihood that contending factions in the power structure, jockeying for a favorable position with Kim Jong-un, may attempt to prove their loyalty by initiating aggressive actions. Moreover, the regime's longstanding promise to make the year 2012 a materially lucrative celebration of the founder's birth may force it to risk more provocations in order to blackmail the international community into granting foreign aid.

And then there is the undeniable fact that weapons continue to become more lethal. Any nuclear weapons that the North Koreans may possess should be considered usable. North Korea's continued progress with missile development makes it possible to deliver nuclear weapons over a longer distance. As for the special forces, transportation and weaponry (for example, torpedoes on small submarines) will continue to be developed, making these forces more lethal as well.

In sum, the motivation for North Korea to engage in active confrontation continues and may even increase, and the resources that could be employed in those confrontations are becoming more deadly. Without the Cold War constraints that China and the former Soviet Union indirectly placed on North Korea, the regime could indeed engage in "rogue" behavior. The years ahead may be the most dangerous time for the two Koreas since the Korean War.

Dealing Quickly with Provocations and Conflict

In the short term, Seoul's goal must be to limit Pyongyang's propensity for resorting to military force. The basic principles for discouraging bad behavior are well known. According to the "law of effect," desirable responses (by a person or a state) followed by rewards will tend to occur again under similar circumstances; undesirable responses that are ignored will eventually disappear (because they are not worth the trouble of making); and undesirable responses that are followed by punishment will quickly disappear.

Provocations (undesirable responses) should be followed immediately by a punishment that is appropriate in strength and

Leader	Country	Fate
János Kádáar	Hungary	Deposed 1988; died 1989
Erich Honecker	East Germany	Deposed 1989; arrested for corruption and manslaughter
Gustáv Husák	Czechoslovakia	Deposed 1989; expelled from party 1990; died 1991
Todor Zhivkov	Bulgaria	Deposed 1989; expelled from party; arrested for embezzlement
Wojciech Jaruzelski	Poland	Deposed 1990; charged with crimes committed while defense minister
Nicolae Ceauşescu	Romania	Deposed 1989; executed

Table 2. Fates of Socialist Dictators

character to the nature of the bad behavior ("punishment to fit the crime"). The punishment should be strong enough to materially reduce the chances that a similar provocation will be launched in the future. How strong the punishment needs to be is always a matter of guesswork, but past experience can provide guidelines. It is known, for example, that condemnation from the United Nations has no effect on North Korea and thus does not count as punishment; sanctions resolutions are likewise largely ineffective. Threats of future punishment are absolutely useless.

The usual recommendation is to supplement punishment for bad behavior with rewards for good behavior (sticks and carrots). Unfortunately, in North Korea's case, history suggests that the kind of rewards the international community offers-food, money, medicine-will be siphoned off by the North Korean elites, thereby strengthening the regime without changing its nature or helping the North Korean people. If this is the case, such rewards may temporarily reduce the likelihood of provocations but will have the opposite long-term effect. At the very least, proffered rewards should be subject to withdrawal so that if the regime resumes its bad behavior, it will no longer enjoy the benefits it received for good behavior. For example, food aid can be easily ended if the regime is using it for its own benefit, but money received from the South Korean businesses in Kaesong cannot be stopped without putting an end to the Kaesong project. Not surprisingly, work at the Kaesong Industrial Complex was not suspended even while North Korea was attacking South Korea in the West Sea.

condemnation from the United Nations has no effect on North Korea and thus does not count as punishment; sanctions resolutions are likewise largely ineffective

Reward and punishment principles were developed and refined in psychology laboratories. In the real world, it is not so easy to make immediate and appropriate responses to provocations, especially when those provocations can come at any time, in almost any form, and from almost any direction. It costs too much to be ready to respond immediately to all possible attacks, so delayed responses must be accepted as a practical alternative.

The principle of strong and immediate punishment encounters another obstacle in the form of the danger of military escalation. If the military response to a provocation is immediate counterattack, it will be difficult for North Korea in turn to quickly respond because military decisions will have to be made on the spot. That is, the North Koreans will encounter the same response problems as the South Koreans. In any case, the international community is likely to consider an immediate South Korean counterattack as a justifiable response to North Korean provocations. However, if the South Korean military response is delayed, it becomes retaliatory in nature and may not only draw international criticism but may also be treated by North Korea as a separate attack (that is, a provocation) to which a new response will have to be made.

If a delayed South Korean counterattack on North Korea seems likely to escalate violence, the South, the more exposed of the two to attacks, might end up receiving more punishment than it delivers. One way South Korea could sidestep this dilemma is to respond asymmetrically. This is in fact what South Korea did after the attacks on the ROK navy ship Cheonan and on forces stationed on Yeonpyeong Island, for which it was not prepared to make an immediate military response. Instead of delivering a strong counterattack, the government initiated economic sanctions and information warfare, although these responses were uncertain and uncoordinated.

North Korea is a military-oriented state primed for war. Launching a military attack on North Korea (apart from a defensive response) is playing to its strength. On the other hand, North Korea is perennially poor, and its leaders feel the need to keep their people ignorant and under control. South Korean responses in the form of economic punishment and information warfare may be more useful in discouraging North Korean attacks than bombing a few military installations, and these nonkinetic forms of response would be less likely to trigger further military action on the part of the North Koreans. In fact, such responses may confront the North Korean leaders with their own dilemma because the generals would be less concerned about South Korea's economic sanctions or information warfare responses than would the political leadership, so the North Korean

decisionmakers might be divided in their recommendations for subsequent action.

Moral considerations should also guide decisions about how to respond to North Korean provocations. The use of counterforce results in military and civilian casualties, but the victims are not the people who ordered the initial attack. If the response is economic, North Korean leaders will be hurt less by economic sanctions than the people, but the resulting widespread economic hardship can also help alienate the people, thus weakening the leaders' hold on power. Better yet, bombarding North Koreans with information that could weaken the regime will not hurt anybody except those who are part of the leadership structure.

Discouraging Provocations in the Long Term

Military provocations are not made randomly. In North Korea, as in other states, military action is initiated, in the final analysis, in order to achieve political goals-in this case, survival as a dictatorial state, a goal that has not changed since before the Korean War. By this calculation, in order to eliminate military confrontation, it would be necessary for the nature of North Korean politics to fundamentally change. In the United States, the Obama administration has endorsed "behavior change" rather than "regime change." The South Korean Sunshine Policy under Presidents Kim Daejung and Roh Moo-hyun was explicitly based on the idea that engagement with North Korean leaders would change their behavior in the direction of opening and reform.

It is doubtful if Kim Jong-il or his father has ever seriously considered instituting political reforms or dramatic economic reforms. The fate of former socialist dictators (see table 2) and their reforming successors provides the clear lesson that reforms sweep away whoever is in power. With these examples before him, Kim Jong-il has not heeded Mikhail Gorbachev's famous advice to Erich Honecker in 1989 that "life punishes those who delay." Gorbachev himself disappeared from political life, as did most of the first generation of reformers. Kim Jong-il has delayed, and he remains in power.

Rather than hoping that the Kim regime will commit political suicide, it seems more realistic to promote a change in regime, even though this policy is not politically popular in South Korea or the United States. In order to weaken the regime, any aid or engagement with the North Korean people that goes through the leadership and strengthens that

FEATURES | Military Confrontation on the Korean Peninsula



leadership should be viewed with skepticism. Likewise, any political or economic rewards offered to North Korea in return for nuclear disarmament carry the danger of strengthening the current regime. It could be argued that a North Korea without nuclear weapons is almost as dangerous to foreigners as a North Korea with nuclear weapons. The North Korean people would arguably be better off if their government gave up the weapons in return for the economic aid that would undoubtedly follow from such a decision, but it is doubtful if the government would want its people to become economically comfortable enough to turn their attention to politics. So it is highly unlikely that the Kim regime can be tamed. Kim and his supporters will take whatever is on offer while at the same time resisting political and economic change.

The first part of North Korea's oft-stated two-part solution to conflict on the Korean Peninsula is for South Korea to reject all outside influences and settle Korean affairs "by our own efforts," which is to say, in a political contest between the North's one-party system and the South's multiparty system. The second part of the solution is for the United States to relinquish its hostile attitude and make a "bold switchover" in its relations with North Korea, including recognizing North Korea's sovereignty, pledging nonaggression, and not obstructing its economic development.10 North Korea has made more specific demands-for example, that a peace treaty be signed officially ending the Korean War and that the NLL be redrawn-but it is difficult to believe that any agreements, large or small, would change the longstanding nature of the Kim regime. Rather, the regime would simply come up with new demands.

The incompatibility of the political, economic, and social systems of the two Koreas is a continuing threat to peace and stability on the peninsula. Military confrontation is an extension of political confrontation. Until the North Korean political system changes, South Korea's best hope for peace is to limit the North's employment of its forces in active engagements.

When North Korea attacks South Korea, punishment should be meted out quickly and in proportion to the attack. In making more delayed responses, South Korea should play to its strengths, which are economic, political, and social in nature. Thus, after making an immediate military response, South Korea should follow up with economic sanctions and "information attacks" that will have a potentially long-lasting, punitive impact on North Korea's leaders.

The Kim regime in Pyongyang lives by the sword and, since the Korean War, has thrived by the sword; it will die by the ballot box. South Korea should not simply respond to North Korean attacks but should work toward the day when the North Korean people are free to change the nature of their political system. This is a battle that South Korea should wage constantly, not simply waiting for North Korea's next military provocation.

Given the nature of politics in a democracy, leaders find it difficult to pursue long-term policies that have little chance of immediate success because the electorate wants quick results. The South Korean government has sometimes been pushed into announcing impending actions against North Korea that it might prefer not to take. Then after public attention has dissipated, these plans are cancelled. A good example is the government's reversal of plans to resume propaganda broadcasts beamed across the DMZ to North Korea. The public also expects to be completely protected from harm, but the hard reality is that North Korea will almost certainly continue to provoke South Korea militarily, and more lives will be lost. This is not the fault of the South Korean government; rather, it is the cost of living in a dangerous neighborhood. JFQ

NOTES

¹ 1990 statistics from Eui-Gak Hwang, *The Korean Economies* (Oxford: Clarendon Press, 1993), 120; 2000 statistics from Yonhap News Agency, December 20, 2001, citing South Korea's National Statistical Office; 2009 statistics from Yonhap News Agency, January 5, 2011, citing Statistics Korea.

² Kim Il-sung, "For the Implementation of the Judicial Policy of Our Party," in *Kim Il-sung*, *Works* 12 (Pyongyang: Foreign Languages Publishing House, 1983), 182.

³ The full text of North Korea's criminal code was published by Yonhap News Agency, December 8, 2004. Some articles of the code have since been revised, but apparently not those cited here.

⁴ Un Chong-chol, "Offensive Exercises for Northward Aggression under the Signboard of 'Defense Training' under the Rubric 'Extremely Dangerous Commotion of Provocation,' Which Brings Fiery Clouds of War to the Korean Peninsula," *Nodong Sinmun* (electronic edition), KPM Web site, March 1, 2011.

⁵ "Moving Story Associated with Chol Ridge," KCNA, October 6, 1999.

⁶ Donna Miles, "U.S. Declassifies Nuclear Stockpile Details to Promote Transparency," May 3, 2010, U.S. Department of Defense Web site, available at <www.defense.gov/npr/>.

⁷ Estimates from various sources, including the International Institute for Strategic Studies, *The Military Balance, 2008* (London: International Institute for Strategic Studies, 2008), 387–391.

⁸ "The Mt. Paektu Gunstock Will Never Forgive It," *Chosun People's Army*, June 16, 2010.

⁹ Jerrold M. Post and Robert S. Robins, "The Captive King and His Captive Court: The Psychopolitical Dynamics of the Disabled Leader and His Inner Circle," *Political Psychology* 11, no. 2 (1990), 331–351.

¹⁰ For example, "U.S. Urged to Adopt Policy of Peaceful Co-existence with DPRK," KCNA, January 17, 2005; "DPRK FM Spokesman on U.S. Rumor about Dialogue," KCNA, January 15, 2003.

Tianlian I–01 data relay and tracking satellite mounted on newly developed Long March 3C carrier rocket at China Xichang Satellite Center

ASSESSING CHINESE INTENTIONS FOR THE MILITARY USE OF THE SPACE DOMAIN

he continuing rise of Chinese political and military power has made Americans increasingly suspicious of China's intentions in the space domain. For many, the 2007 antisatellite (ASAT) test was the smoking gun that proved China's ultimate desire to challenge American space dominance.1 Other experts, however, have cautioned against jumping to such conclusions and have proposed that a more benign intent lies behind China's actions in space.² This article argues that understanding Chinese intentions requires examining the current schools of military thought vying for influence within China's policymaking apparatus. The dominant school should yield the most influence in decisions regarding the devel-

By PAUL OH

opment of Chinese space capabilities, and hence the direction of their military space policy. Such an examination suggests that the Local War school of thought has most influenced formulation of a military space policy with the primary intention of reinforcing China's regional hegemony.

This examination consists of two parts. First, the article categorizes China's military schools of thought into the People's War school, Local War school, and Revolution in Military Affairs school, and examines the development of distinctive technology, doctrine, and organization that each school may theoretically support. Each school and its developments are then associated with a particular strategic military posture vis-àvis its potential adversaries. The Local War school, for example,

will theoretically champion a "globally defensive" posture vis-à-vis the United States, but a "locally offensive" posture vis-à-vis its neighboring countries. In the second part, two case studies depicting China's increased activities in space are examined: the Antisatellite Program and the Manned Space Program. Each case study will highlight that these programs are producing capabilities that support a "locally offensive" posture. The article therefore posits that the dominant influence in the formulation of China's military space policy is the Local War school, which is concerned primarily with China's regional status and does not directly challenge American

Major Paul Oh, USA, is a Division Planner for the 25th Infantry Division.





space dominance through weaponization of that domain.

Chinese Schools of Thought

People's War. Like in other militaries, various schools of thought within the People's Liberation Army (PLA) vie for influence on how to equip, train, and organize its military formations. The first school of thought, the People's War (*renmin zhanzheng*), has been the foundation of China's military thinking since its formulation in the 1930s and 1940s by Mao Zedong.³ The basic concept revolves around defending the mainland from a more advanced, invading enemy by taking advantage of China's inherent strengths of a large population and vast land mass. Operationally, People's War is translated into the strategy traditional fighting skills of speed, surprise, deception, and stratagem.⁵ Although this school does not shun technological advancement, the focus remains on the role of the population and the ability to mobilize the people and industry to support the People's Army.⁶

The space domain has limited value in the type of war envisioned by the People's War school of thought. Followers of this school are not hostile to the use of space, but believe that committing China's limited resources to space weaponization would be a costly mistake. They are against the idea of challenging American space hegemony. Not only would challenging the Americans not be aligned with the core of the military strategy of "active defense,"⁷ but also other priorities

the space domain has limited value in the type of war envisioned by the People's War school of thought

of "active defense."⁴ While trading space for time, Chinese forces would employ their

such as economic development would suffer in a potential space arms race.

This is not to say that People's War adherents would not welcome technological advances stemming from space programs that improve China's strategic defense. They may promote, for example, the development of the Long March V rocket, which is essential for the Chinese to enter the next phase of the manned space program.8 Research into these launch vehicles may aid the development of air defense and ballistic missile defense. In terms of doctrine and organization, the People's War school would yield few developments regarding space. Because space is not fully integrated into fighting People's War, there would be little need to revamp the warfighting doctrine of the PLA. Changes would also likely be minor in the reorganization of the PLA structure.

Local War. The Local War school of thought has been heavily influenced by Deng Xiaoping and the lessons Chinese learned from their experience in Vietnam and later the American experience in the Persian Gulf. The Local War school envisions the People's Liberation Army transforming from a "manpower-intensive, technologically backward force into a quantitatively smaller, qualitatively better, technologically advanced force" able to compete against regional adversaries.⁹ This school of thought has evolved since its inception and remains in the mainstream discourse. In the Military Strategic Guidance of 1993, Jiang Zemin stated that the Chinese military should be ready to fight "local, limited war . . . under high technology conditions." Impressed by *Desert Storm*, Jiang Zemin modified the guidance in 2002 to state that the Chinese army should now be prepared to fight a limited war "under conditions of informatization."¹⁰

In the Local War scenario, the adversary is not necessarily a superpower. The war is on China's periphery and not a defense against a deep invasion. There is no time to mobilize, and China seeks a quick military decision by committing rapid reaction forces to defeat its adversaries.¹¹ The war is limited, short, and intense, and units fight jointly using combined arms that integrate advanced technology, to include space technology. Regional force protection may be required to defend Chinese islands or western China or protect Beijing's interests in the South China Sea.

The technology that this school may promote includes space assets that enhance intelligence, surveillance, navigation, and communications, as well as network technology to link this information.¹² Satellites and the information they provide will help to achieve the goal of fighting regional adversaries under conditions of informatization.

The doctrine for space operations will emphasize the symbiosis between space systems and information systems. The need for achieving information dominance (*zhi xinxi quan*) is linked to achieving space dominance (*zhi tian quan*).¹³ Doctrine will highlight the need to fully leverage the capabilities of modern command and control, surveillance, and reconnaissance systems to integrate operations (*zhengti zuozhan*) in all domains of warfare.¹⁴ Organization-wise, this school will not advocate any change in structure regarding space operations, but it may seek ways to better integrate the different services to work more effectively together.

Revolution in Military Affairs. The Revolution in Military Affairs school of thought is the newest among the three schools. The Chinese interest in the Revolution in Military Affairs dates back to 1994 as they saw potential adversaries capitalizing on technological advances.



93

FEATURES | Assessing Chinese Intentions

Although this school did not have much influence in the policymaking realm prior to 1999, it seemed to have gained greater influence with the new millennium. The Revolution in Military Affairs school of thought advocates a more drastic departure from the other schools, calling for development of offensive capabilities that can challenge American supremacy.

The scenarios for war envisaged by the Revolution in Military Affairs school involve conflict with a superpower.15 This school seeks to defeat an adversary that is far superior militarily. The People's Liberation Army can try to close the military gap, but Revolution in Military Affairs advocates warn that trying to match American technology will only result in China falling further behind.¹⁶ Instead, the People's Liberation Army should concentrate its efforts on developing leap-ahead technology and asymmetric capabilities to execute preemptive operations or asymmetrical warfare that can paralyze a superior force. In August 1999, then-President Jiang Zemin called for an accelerated development of an "Assassin's Mace" weapon, which is representative of the type of investment that this school advocates.17

Given this logic, it is not surprising that this school of thought views space as essential to achieving its goals. Some American hawks have repeatedly cited Chinese analyst Wang Hucheng, who stated, "Attacking an American space system may be an irresistible and most tempting choice."¹⁸ This school sees warfare in space as unavoidable. As the *Science of Military Strategy*, a core defense document, states, "It seems that space warfare will be inevitable in future wars and that [the] space offensive is likely to be a new strategic offensive pattern in the future."¹⁹

The technology that the Revolution in Military Affairs school may promote is the development of counterspace assets. The 2007 testing of the direct ascent ASAT missile may be an indicator that the PLA is serious about the development of such weapons. Other technologies may also be developed for this purpose, to include kinetic and directed energy weapons. Certain Chinese analysts have promoted development of killer satellites, space-based antiballistic missiles, and space landmines.²⁰ The doctrine that this school of thought may advocate would center on using space capabilities for asymthe Revolution in Military Affairs school seeks to defeat an adversary that is far superior militarily

metrical attacks or preemptive warfare. A body of Chinese literature promotes a possible offensive mission of "attacking an adversary's space assets in order to diminish its regional warfighting capability."²¹ The Revolution in Military Affairs school may support the development of a whole new organization to conduct space warfare; *Hong Kong Journal* stated that China has been secretly preparing a "space war experimental team" that could lead to the formation of a new service.²²

Strategic Military Posture. Each of these schools is associated with distinctive "strategic military postures," defined as how the PLA seeks to strategically array its military against potential adversaries given the capabilities that the developments in technology, doctrine, and organization produce. The People's War school champions a globally defensive posture.²³ The



SIAS

developments in technology, doctrine, and organization produce space capabilities that lag behind both the United States and its regional neighbors because this school envisions a war that is fought with "active defense." The Local War school champions a globally defensive posture vis-à-vis the United States, but a locally offensive posture vis-à-vis neighboring countries. The development of space capabilities matches or exceeds those of China's regional neighbors, but does not seek to match those of the United States. The Revolution in Military Affairs school champions a globally offensive posture. The development of space capabilities matches or exceeds those of the United States because members of this school envision a future war with the Americans.24

Case Studies

The following case studies—the antisatellite program and the manned space program—show that the developments in space capabilities have been for a locally offensive posture and hence highlight the dominant influence of the Local War school.

The Antisatellite Program. On January 11, 2007, the People's Liberation Army destroyed a Chinese weather satellite with a direct ascent ASAT missile. The missile was a two-stage, solid fuel SC–19 *Fengyun–1C* fired from a mobile transporter-erector-launcher.²⁵ Impressively, the missile intercepted the satellite during the ascent trajectory instead of on its descent, revealing the increased sophistication of the overall guidance and control systems. With this test, China became the

lite effort provides a better picture of what Chinese intentions for space may be.

Though research on such weapons started earlier, Chinese interest in antisatellite capabilities gained momentum in the 1990s with the increased influence of the Revolution in Military Affairs school of thought.29 It seemed a perfect Assassin's Mace weapon, a relatively cheap capability within the reach of Chinese technological development that could strike at a vital support mechanism used by superior military forces. Technology-wise, nonnuclear kinetic-energy weapons are relatively cheap and easy to employ. China could use a small, groundlaunched kinetic kill vehicle that could reach satellites in low Earth orbit. China has also researched options for high-energy laser weapons. Other ideas investigated included high powered microwave weapons, microsatellites that attack other satellites, and use of a spacecraft.30

Many analysts have pointed out that China's antisatellite program decisions have not been made in a vacuum. These activities coincided with a more aggressive American stance on the use of space and the failure of Chinese diplomats to make any headway on ensuring the nonmilitarization of space.³¹ From the Chinese perspective, the American intentions to dominate this domain had been clear. The George W. Bush administration supported a robust military program and conducted several space wargames to ensure American preeminence in space. Concurrently, China and Russia have sought a comprehensive arms control approach to

the technology that the Chinese have used for disrupting space systems from the ground is easily acquirable and relatively inexpensive

other country besides the United States and Russia with tested antisatellite capabilities.²⁶

The success of the test sent shockwaves through the American defense establishment. The Chinese satellite was orbiting at 500 miles altitude, the same altitude as many U.S. spy satellites.²⁷ China's regional neighbors, notably India, also took notice. The Indian Army Chief of Staff, General Deepak Kapoor, concluded that his country must also "optimize space applications for military purposes."²⁸ As impressive as this event was, however, analyzing the test within the context of the overall Chinese antisatelspace security for a number of years.³² Some analysts have concluded that the 2007 launch was diplomatic in nature, intended to put pressure on the United States to negotiate a treaty.³³

On January 11, 2010, the Chinese news agency *Xinhua* announced a successful test of a land-based missile defense system. This time, a HQ–19 surface-to-air missile equipped with a new exo-atmospheric kinetic kill vehicle destroyed another missile in outer space. The public announcement of this test was carefully choreographed. The Chinese seemed to be sending a nuanced message. On one hand, the test coincided with the American arms sales to Taiwan³⁴ and the 3-year anniversary of the 2007 antisatellite test. The technology used for this procedure surpassed that needed to attack a satellite and could easily be applied for that purpose. On the other hand, the test was not officially and technically an antisatellite test and did not directly provoke the Americans or the international community.

Technology, Doctrine, Organization. The technology that the Chinese employed in both the ASAT and missile defense events was hardly state of the art. The improvements in Chinese antisatellite capabilities have shown gradual but steady progress since the 1980s. But the overall technology that the Chinese have used for disrupting space systems from the ground is both easily acquirable and relatively inexpensive.35 Any nation with missile technology could theoretically develop such capabilities. The technology used in 2007 only marginally surpassed that of the American air-launched miniature vehicle system test in 1985 and the Soviet co-orbital system tests from 1963 to the 1980s.36

The advances in technology have also not noticeably changed doctrine and organization. There is increasing interest in space within the People's Liberation Army, but the doctrine governing military space operations remains unclear and unset.37 Much has been written about the use of asymmetric capabilities in space, but these writings have remained outside of the mainstream discourse. There has also been no corresponding buildup of antisatellite weapons in PLA organizations. If China chooses to do so, it could build a substantial number of antisatellite weapons.38 Similarly, China has yet to establish a space force to oversee such a development and deployment. China has not followed the Soviet model of building organizations with the arsenal to challenge American dominance.

Though the antisatellite problem is a cause for concern, the capabilities that the Chinese are seeking in their technological, doctrinal, and organizational developments lag behind those of the United States. The type of technology employed may be associated with those advanced by the Revolution in Military Affairs school, but the organizational and doctrinal developments necessary to challenge American hegemony have not followed. Though the success of

FEATURES | Assessing Chinese Intentions

the 2007 test may have signaled the rise of the Revolution in Military Affairs school, in reality China has been content with simply demonstrating its technology. Even in the 2010 antiballistic missile test, the Chinese were careful not to send an overly hostile signal by targeting another satellite.

To its neighbors, however, China demonstrated capabilities that match or exceed those of every country in the region except Russia. The technology demonstrated, even if not accompanied by doctrinal and organizational developments, was enough to rival the space capabilities of the surrounding nations. The message of these demonstrations may have been for the region. The capabilities developed by the Chinese are not enough to signal a globally offensive posture vis-à-vis the United States, but are more than enough to signal a locally offensive posture vis-à-vis its regional neighbors. This is a clear indicator of the influence of the Local War school.

Manned Space Program. September 27, 2008, was a historic day in China as Zhai Zhigang performed his country's first spacewalk. The People's Liberation Army taikonaut used handholds to maneuver along the exterior of the Shenzhou VII spacecraft during China's first extravehicular activity in space.³⁹ This spacewalk was another crucial step in China's manned space program designed to spearhead the country's effort to reach great power status. Many in the United States have framed these efforts as a Trojan Horse to instill military capabilities behind the façade of civilian technological endeavors.40 China, however, has defended its program by likening it to the American Apollo program. It has framed these efforts as a route to gain national prestige as well as to

Chinese analysts do not understand the American reaction to their comparatively smaller manned space program

signal wealth, commitment, and technological prowess.⁴¹

Chinese efforts to send their taikonauts to outer space began in 1992. Then-President Jiang Zemin initiated and championed a program labeled *Project 921*. Chinese leaders recognized that a manned space program could greatly benefit a nation. China had studied the benefits of the American *Apollo* program, which included the rise of domestic pride, international prestige, development of technology for both civilian and military use, expansion of science and engineering programs in universities, and ultimately industrial and economic development.⁴²

Officially, the Chinese have divided their manned space program into three phases.43 The first phase, which the Chinese have completed, was the launching of taikonauts into space. The Chinese began experimenting with unmanned Shenzhou flights in 1999, and launched Shenzhou II in 2001 and Shenzhou III and IV in 2002. On October 14, 2003, they launched Shenzhou V, carrying China's first spaceman. The launch of Shenzhou VI followed on October 12, 2005.44 Phases Two and Three are still unfinished. Phase Two consists of establishing a space laboratory. The challenges associated with this phase include mastering of new skills such as extravehicular activities as well as rendezvous and docking procedures between space lab and spacecraft.45 Finally, Phase Three will consist of constructing a permanent 20-metric-ton space station orbiting Earth by 2020. This stage is contingent on the development of a new heavy-lift launch vehicle, Long March V.46

One cause for America's concern with the Chinese manned space program is the heavy involvement of the People's Liberation Army. Initially, China did not separate the military and civilian aspects of the space programs, thinking that a single program would be more efficient. China has separated the two in recent years, but the extent of PLA control over the civilian aspects of the program is unknown. A civilian body called the State Council is the ultimate authority guiding space policy. Under it, the 2^d Artillery is responsible for functions like security, logistics, and facilities, and the taikonauts come from the ranks of the PLA Air Force. Military commanders have overseen the manned space program and also have gone on to sit on the Chinese Military Commission, which oversees the State Council.47

Because of the heavy involvement by the People's Liberation Army and China's relative opacity, the United States has been concerned about the application of technological developments for military use. The first big area of concern is the development of rocket technology. The *Long March* rocket history is similar to that of the U.S. *Delta*, *Atlas*, and *Titan* commercial launchers, which were originally intended for use as intercontinental ballistic missiles.⁴⁸ Advances in navigation and tracking, in-orbit maneuvering, and computational analysis resulting from the manned space program can all be used to increase offensive capabilities, to include evading antiballistic defenses.

The second big area is the use of spacecraft to increase surveillance and reconnaissance capabilities. *Shenzhou V* reportedly carried military equipment, causing some analysts to conclude that this mission was primarily used for military surveillance.⁴⁹ *Shenzhou VII*, according to the annual Pentagon report to Congress, deployed *Banxing–1*, a small imaging satellite with application for counterspace.⁵⁰ Some analysts emphasize this potential for the manned space flights and the future manned space station to be used for both defensive and offensive military space missions.

Some Chinese analysts do not understand the American reaction to their comparatively smaller manned space program. They point out that the United States and the Soviet Union both used military launch pads and servicemen for their manned programs.51 The worry about the advances in ballistic missile capabilities also seems misplaced. The Shenzhou launch vehicle is the liquid-fueled Long March 2F carrier rocket that requires 20 hours to fuel. Hence, they provide neither the flexibility nor the mobility of American missiles. In regard to the orbital maneuvering technology, the Chinese point out that this capability was developed in the 1970s. The concern about surveillance, reconnaissance, and navigation capabilities also seems misplaced. American observers have pointed out that the instruments in orbital modules of the Shenzhou spacecraft could be converted for use in military reconnaissance. The Chinese argue that it is illogical to assume that China would spend its limited resources on military functions that can be achieved through unmanned satellites.52

Technology, Doctrine, Organization. As impressive as the Chinese accomplishments have been, the technology used for China's manned flights remains decades behind that of other modern nations. The Chinese are simply using a modified version of the 1960s Soviet *Soyuz* technology for their manned missions.⁵³ To put their accomplishments in perspective, the United States and the Soviet Union conducted their spacewalks in 1965. Granted, the Chinese are making headway. The development of space hardware and software will increase Chinese know-how in everything from materials to

the American military's propensity to view China as the "enemy" may lead to a self-fulfilling prophecy

computing powers to systems engineering, as the *Apollo* program did for the United States.⁵⁴ Much of the technology will have dual-use applications in areas such as surveillance, navigation, and positioning, increasing the efficiency and effectiveness of China's weapons systems.⁵⁵ But these advances do not constitute scientific breakthroughs.

Like the antisatellite program, there is little observable change in doctrine or organization resulting from the manned space program. The official Chinese plans for their manned space program are phased, incremental, cautious, and ambitious.⁵⁶ But these plans have not been translated into warfighting doctrine. Instead, most of the discussion and writings about the manned space program remains in the realm of Chinese grand strategy. Chinese leaders view the space program as a tool for technological modernization.⁵⁷

Organizationally, the Chinese seem content with the increasing diversification of responsibility, not centralization. The China National Space Administration, China's equivalent of the National Aeronautics and Space Administration, was established in 1993 and is responsible directly to the Premier. In addition, multiple government-owned "corporations" have been set up to handle different aspects of the space program.58 This structure seems to be aimed at reducing the corruption within the government and military as well as increasing linkages to private enterprises to benefit Chinese industry. The aim does not seem to be for increasing military effectiveness. The trend of diffusion of power away from the People's Liberation Army has not changed.

Much like the antisatellite program, the capabilities that the Chinese are seeking in their technological, doctrinal, and organizational developments lag behind those of the United States. The technological advances that the Chinese have made are not noticeably reducing the gap, much less leapfrogging American capabilities. These technological developments have not been accompanied by any doctrinal or organizational changes that signal the intent to transform the manned space program into a military project to challenge American hegemony. There seems to be no intention of matching or exceeding American capabilities.

China's manned space program, however, has awed its regional neighbors. Except for Russia, no regional country has been able to follow through on the development of a manned space program.⁵⁹ Other nations may possess greater technological capabilities, but only China has been able to apply its technology to plan and execute manned space flights. This organizational development at a national policy level has allowed China to become the only Asian country that has been able to focus its resources to build this capability. Like the antisatellite program, China's capabilities indicate a globally defensive posture vis-à-vis the United States, but possibly a locally offensive posture vis-à-vis its regional neighbors. This again indicates the influence of the Local War school.

In both of these case studies, the school with the most dominant influence seems to be the Local War school of thought. The Chinese are pursuing developments in technology, doctrine, and organization that give them capabilities that lag behind those of the United States, but match or exceed those of its regional neighbors. China's posture is globally defensive vis-à-vis the United States but locally offensive vis-à-vis its regional neighbors, indicating the dominance of the Local War school of thought.

The pervasive view of American analysts seems to be that China is a monolithic actor that has little constraint on its military spending and will use its newfound wealth to challenge American hegemony. This article challenges that proposition on two counts. First, China is not a monolithic actor; under its opaque façade, China has many competing views that vie for influence in the pursuit of military space policy. Second, China's challenge to American hegemony may one day come, but has not arisen yet. The present capabilities demonstrated in the developments in technology, doctrine, and organization do not support the notion that China is challenging the United States. Instead, the intent behind China's space policy seems to be pursuing and strengthening its regional hegemony. Understanding this intent has several ramifications for the American military.

First, understanding that the Local War school of thought has the dominant influence provides clues to how the People's Liberation Army views its threat. In space, the purpose has not been to challenge American hegemony, but to reinforce its growing regional hegemony. In tracking Chinese space capabilities, American analysts should be cognizant of strengths and weaknesses compared not only to the United States, but also to countries like Japan and India with whom China has had traditional disagreements.60 As Chinese power grows, China may be inclined to act more aggressively in the region and use space to help it pursue resources or protect territorial claims. The American military should be prepared and plan for conflict not only between itself and the People's Liberation Army, but between China and a regional adversary.

Second, the United States should be aware that its actions or strategic communications may increase or decrease the influence of a certain school of thought. The American military's propensity to view China as the "enemy" may lead to a self-fulfilling prophecy. American strategic communications that contain poorly veiled portraits of China as its enemy may empower those in China who see space conflict with the United States as inevitable. A time may come when the dominant school in China is one that sees no other choice but to challenge America in space. But thoughtful actions and words may delay this day and strengthen the hand of more moderate governmental and military elites.

Lastly, the Chinese have identified one of the American military's critical vulnerabilities. The overreliance on space systems and the relative ease with which low Earth orbit satellites can be attacked warrant study on how to mitigate these risks. With the proliferation of missile technology, other nations may learn from Chinese efforts to attack America's Achilles' heel. Protecting the relatively vulnerable space platforms and increasing American ability to operate with degraded space support

FEATURES | Assessing Chinese Intentions

may be essential to future warfare. Research should continue to minimize American vulnerabilities, as well as to increase the capacity to ensure American predominance in space.

Assessing China's intentions for space will remain a difficult endeavor. But planning with the assumption that China's streamlined decisionmaking process will soon challenge American hegemony in space may bring about conflict sooner rather than defusing misunderstandings. The competition and tensions inside China's opaque policymaking apparatus will continue as different schools vie for influence. For the time being, the dominance of the Local War school of thought has meant that China's military use of space has been focused on reinforcing its regional hegemony. America should continue to strive for better understanding of China's inner working to produce prudent policies to minimize the conflicts in the region as well as conflicts between the United States and China. JFQ

NOTES

¹ Ashley J. Tellis, "China's Military Space Strategy," *Survival* 49, no. 3 (Autumn 2007), 41–72.

² "China's Military Space Strategy: An Exchange," *Survival* 50, no.1 (February–March 2008), 157–198.

³ Alison A. Kaufman and Peter W. Mackenzie, *Field Guide: The Culture of the Chinese People's Liberation Army* (CNA China Studies, February 2009), 3–4.

⁴ Dennis J. Blasko, *The Chinese Army Today: Tradition and Transformation for the 21st Century* (New York: Routledge, 2006), 96.

⁵ Ibid., 11.

⁶ Ibid., 12.

⁷ Sun Dangen, "Shenzhou and Dreams of Space," *China Security* 2 (2006), 62.

⁸ Anatoly Zak, "China considers big rocket power," *BBC News*, July 26, 2010.

⁹ Blasko, 12.

¹⁰ See Andrew Scobell, "Discourse in 3-D: The PLA's Evolving Doctrine, Circa 2009," in *The PLA at Home and Abroad*, ed. Roy Kamphausen, David Lai, and Andrew Scobell (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2010), 99–134.

¹¹ Michael Pillsbury, "PLA Capabilities in the 21st Century," in *The Chinese Armed Forces in the* 21st Century, ed. Larry M. Wortzel (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 1999), 113.

¹² See Office of the Secretary of Defense, Annual Report to Congress: Military Power of the People's Republic of China 2009 (2009), 52. ¹³ Deng Cheng, "Prospects for China's Military Space Efforts," in *Beyond the Strait: PLA Missions Other Than Taiwan*, ed. Roy Kamphausen, David Lai, and Andrew Scobell (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2008), 215.

¹⁴ Ibid., 217.

¹⁵ Pillsbury, "PLA Capabilities in the 21st Century," 125.

¹⁶ Michael Pillsbury, *China's Military Strategy Toward the U.S.: A View from Open Sources* (November 2, 2001), 4.

¹⁷ The "Assassin's Mace" is a reference to any exotic and advanced secret military weaponry that allows the inferior to defeat the superior. See Office of the Secretary of Defense, *Military Power of the People's Republic of China* 2009, 20.

¹⁸ Joan Johnson-Freese, "Strategic Communication," *China Security* 2 (2006), 41.

¹⁹ Richard D. Fisher, *China's Military Modernization* (Westport, CT: Praeger, 2008), 79.

²⁰ See Mary C. FitzGerald, "China's Military Strategy for Space," testimony presented before the U.S.-China Economic and Security Review Commission, March 30, 2007.

²¹ See Bruce Blair and Chen Yali, "Editors' Notes," *China Security* 2 (2006), 2–15.

²² Chin Chien-li, "PRC is Preparing for Form[ing] a Space Force," *Chien Shao*, July 1 2005, 52–55, quoted in Fisher, *China's Military Modernization*, 79.

²³ Pillsbury, "PLA Capabilities in the 21st Century," 112.

²⁴ Ibid., 125.

²⁵ Tellis, 41.

²⁶ See David Isenberg, *The Newest Anti-Satellite Contender: China's ASAT Test*, Occasional Paper on International Security Policy (London: British American Security Information Council, March 16, 2007).

²⁷ Ian Easton, The Great Game in Space: China's Evolving ASAT Weapons Programs and Their Implications for Future U.S. Strategy (Arlington, VA: Project 2049 Institute, 2009), 3, accessed at http://project2049.net/documents/ china_asat_weapons_the_great_game_in_space. pdf>.

²⁸ David R. Sands, "China, India hasten arms race in space; U.S. dominance challenged," *Washington Times*, June 25, 2008, A1.

²⁹ Pillsbury, "PLA Capabilities in the 21st Century," 113.

³⁰ Hui Zhang, *China's ASAT Capabilities*, draft report submitted to Federation of American Scientists (July 1, 2003), 120.

³¹ Bruce W. MacDonald, *China, Space Weapons, and U.S. Security* (Washington, DC: Council on Foreign Relations, September 2008), 27.

³² Bates Gill and Martin Kleiber, "China's Space Odyssey," *Foreign Affairs* 86, no. 3 (May– June 2007), 2. ³³ If such was the intent, the Chinese ultimately failed. The Americans responded in February 2008 with an antisatellite test of their own. See Joseph Kahn, "China Confirms Space Test; Denies Intent to Intimidate," *The New York Times*, January 24, 2007, A8; and Bruce W. Mac-Donald and Charles D. Ferguson, "New Heights for Friendly Fire," *Virginian Pilot*, February 23, 2008, B9.

³⁴ "Anything you can do; Chinese missile defense," *The Economist*, January 16, 2010, 42.
 ³⁵ MacDonald, 13.

³⁶ Eric Hagt, "China's ASAT Test: Strategic Response," *China Security* (Winter 2007), 39.

³⁷ Deng Cheng, 214.

³⁸ MacDonald, 3.

³⁹ "Chinese EVA Keyed to Future Development," *Aviation Week & Space Technology* 169, no.
13 (October 4, 2008), 27.

⁴⁰ Joan Johnson-Freese, Space as a Strategic Asset (New York: Columbia University Press, 2007), 214.

⁴¹ See James A. Lewis, *China as a Military Space Competitor* (Washington, DC: Center for Strategic and International Studies, August 2004).

⁴² Johnson-Freese, *Space as a Strategic Asset*, 204.

⁴³ Jeffrey Logan, CRS Report to Congress: China's Space Program: Options for U.S.-China Cooperation (Congressional Research Service, 2008), 3.

⁴⁴ Xin Xin, "China's Space Exploration, *China Today* (August 2007), 25.

⁴⁵ Sun Dangen, 59.

⁴⁷ Johnson-Freese, Space as a Strategic Asset, 211.
 ⁴⁸ Ibid.

⁵⁰ Office of the Secretary of Defense, *Military Power of the People's Republic of China 2008*, 26.

⁵¹ Sun Dangen, 61–62.

⁵² Wu Chunsi, "Development Goals of China's Space Program," *China Security* 2 (2006), 111.

⁵³ James Clay Moltz, *The Politics of Space Security* (Stanford: Stanford University Press, 2008), 276.

⁵⁴ Joan Johnson-Freese, "China's Manned Space Program: Sun Tzu or Apollo Redux," *Naval War College Review* 61, no. 1 (Summer 2003), 56.

⁵⁵ Chang Xianqi and Sui Jungin, "Active Exploration and Peaceful Use of Outer Space," *China Security* 2 (2006), 19.

⁵⁶ Johnson-Freese, Space as a Strategic Asset, 219.
 ⁵⁷ Lewis.

⁵⁸ Stacey Solomone, "China's Space Program: The Great Leap Upward," *Journal of Contemporary China* (May 2006), 314.

⁵⁹ Johnson-Freese, Space as a Strategic Asset, 211.
⁶⁰ See "Brushwood and gall," *The Economist*,

December 4–10, 2010, 3–5.

⁴⁶ Zak.

⁴⁹ Ibid., 214.

"GOING OUT"

IS CHINA'S SKILLFUL USE OF SOFT POWER IN SUB-SAHARAN AFRICA A THREAT TO U.S. INTERESTS?

By JOANNE WAGNER

n iron ore-rich Gabon, the Chinese will build not only a railway from the mining territory 500 miles inland to the country's main port, but also a deep-water export terminal and a hydropower dam.¹ In copper-and cobalt-rich Uganda, China is building a \$350-million road from Entebbe to Kampala.² In gold-and cocoa-blessed Ghana, Vice President John Dramani Mahama recently dedicated the Chinese-constructed Teshie General Hospital—while Chinese soap operas played on television and students studied Mandarin at the local campus of a Chinese university.³



FEATURES | China's Skillful Use of Soft Power

Now the world's second largest economy,⁴ China is on the move in Africa, employing a wide range of soft power initiatives to secure influence, trade, and-most critically-the energy and mineral resources the Communist Party needs to continue the astonishing economic growth that undergirds its legitimacy.5 Awash with cash, the Chinese are investing in extensive infrastructure projects; spending billions on oil-, copper-, and cocoa-secured loans to African nations; contributing to peacekeeping operations6 in Burundi, Côte d'Ivoire, and Liberia; and spreading Chinese culture across the continent. Although Beijing's African courtship is not new, the intensity of its recent drive is, which raises the question: are China's soft power offensive and its scramble for natural resources in sub-Saharan Africa a threat to U.S. interests?

China's new "going out" policy and the soft tools Beijing is employing to implement it will certainly intensify economic-, energy-, and

this foray into Africa is a natural outgrowth of China's ideological, technical, and military support for African nations during their Cold War liberation struggles

influence-based competition with the United States. However, the potential for bolstering stability on the troubled African continent, the openings China's expansive activity provides for partnership and deepened engagement with the United States, and the possibility, through cooperative action in Africa, of exposing China to international labor and human rights standards in action mean that on balance, "going out" presents more opportunity than threat to the United States.

This article explores the current state of and reasons behind China's soft power offensive, particularly its scramble for Africa's natural resources; analyzes its impacts on several African states; demonstrates why the potential for generating stability and

JoAnne Wagner, J.D., is the Department of State Deputy Director for Pakistan, a career Foreign Service Officer, and a 2011 graduate of the National War College. A version of this article won second place in the 2011 Secretary of Defense National Security Essay Competition.



expanding and deepening our relationship with Beijing through African ventures outweighs the competitive dangers posed to U.S. interests; and recommends U.S. policy approaches—including cooperative partnerships—to capitalize on the Chinese model.

Soft Power and the "Going Out" Policy

The Chinese Communist Party has an urgent and accelerating need to secure the raw materials and natural resources China needs to feed its booming economy. With an export- and manufacturing-driven economy, and without sufficient raw materials or energy to sustain this economic expansion, China's rulers will be unable to keep the implicit bargain they made with the Chinese public: in exchange for social stability and, above all, the survival of the party, the government will ensure continuing economic growth. By all accounts, this bargain has been successful; since 1981, China has lifted 600 million citizens out of poverty.7 Failure to keep this bargain, however, could bring about the fall of the party, and the intensity of Beijing's focus on feeding the industrial beast reflects that existential threat.

The strategy China has chosen to stave off that threat is the "going out" policy-a determination to accelerate investment of China's impressive foreign reserves overseas to secure the raw resources necessary to fuel Chinese building, manufacturing, employment, and other economic programs. Consequently, more than 100 state-owned enterprises "have been given the legal and administrative means, preferential access to finance, and diplomatic support necessary to break into markets outside of China."8 The spending aspects of this policy have the added virtue of helping China avoid inflationary pressures (deadly in an economy where restless hundreds of millions still live

below the poverty line) and the concomitant reduction in the value of its dollar assets.⁹

To make a virtue of its economic necessity, and to avoid alarming the world about its economic rise,¹⁰ China has embarked on a charm offensive¹¹ that is at once attractive and eminently practical; Africa is a particular target of this very effective campaign. In fact, Sino-African trade has burgeoned—from \$10 billion in 2000 to more than \$108 billion by 2008¹² and, with it, China's influence on the continent.

This foray into Africa, however, is not new, but is a natural outgrowth of China's ideological, technical, and military support for African nations during their Cold War liberation struggles.13 This early support established China's bona fides on the continent and led to African appreciation of and backing for China as, for example, it vied for a permanent Security Council seat at the United Nations (UN) and faced political isolation in the wake of the 1989 Tiananmen Square massacre.14 This in turn helped build an Africa receptive to Chinese overtures, particularly when, as now, China pursues major infrastructure projects designed and advertised as based on the principles of noninterference in the internal affairs of the recipient country, equal treatment, and mutual benefit.15 These three principles, in contrast to those pursued by most Western donors, have won fans among African leaders, who often recoil at the good governance, transparency, and accountability stipulations and hectoring tone they find inherent in traditional U.S. and European aid packages.

China, however, has good reason to promote this particular triad. With separatist unrest in Tibet and the western Uighur territory, with Taiwan still outside China's full embrace, and with China's narrow definition of human rights focused more on employment than free speech, China follows an interference "golden rule"—we'll stay out of your internal affairs, and you stay out of ours. Mutual benefit, in turn, is a critical and pragmatic element of China's strategy, even while it works to expand its soft power influence in the diplomatic, cultural, military cooperation, and economic/financial arenas.

For example, in the diplomatic realm, Beijing established the multilateral Forum on China-Africa Cooperation in 2000 to chart the way ahead for mutual collaboration. Hosted by President Jiang Zemin, 44 nations and 17 international and regional organizations sent representatives to the inaugural event. By 2009's fourth ministerial meeting in Sharm el-Sheikh, Egypt, Premier Wen Jiabao announced a \$1-billion entrepreneurs' fund for Africa in addition to a \$10-billion loan fund; promised to write off the debt of some of Africa's poorest states; noted that China will implement 100 new clean-energy projects in Africa, including solar and hydropower projects; and pledged to train 2,000 agricultural technologists to help address food security issues.¹⁶ All projects are aimed, he said, at increasing Africa's self-reliance.17 Additionally, China conducts regular security talks with South Africa, establishing trust and deepening the habits of cooperation; has built and paid for several African embassies in Beijing;18 regularly sends senior physicians to train African counterparts and treat patients; and provides thousands of scholarships for African students to study in Chinese institutions.19

China's leaders have also made a particular point of cultivating personal relations with their African peers. In 2006–2007, President Hu Jintao visited 17 African nations,²⁰ deftly conveying respect while consolidating China's position as the leader of the developing world. China, in turn, benefits from the resulting relationships and positive predispositions toward Beijing that such soft power efforts help create. In contrast, the United States has been accused by Africans of calling on their leaders only to criticize them or to ask for something (a UN vote, troop contributions, or the like) from their continental counterparts.

To strengthen its appeal, China has also entered into cultural cooperation agreements with 44 African states, through which hundreds of artistic and educational exchanges have taken place.²¹ Further, Beijing has established 282 Confucius Centers around the world, 21 of them in Africa. These centers (16 of which will open in North Carolina classrooms by 2013) serve as hubs for teaching Mandarin, hosting performance troupes, and cultivating youth groups, all aimed at creating a positive view of Chinese traditions and drawing Africans into China's cultural ambit.22 These methods are similar to those employed by the United States through its public diplomacy initiatives, including its American Corners and International Visitors Programs; however, the scope of China's program far outstrips U.S. efforts, particularly since the post-Cold War "peace dividend" of the 1990s was used to justify permanently closing highly effective American libraries and research centers throughout the globe.

it is in the areas of economics and development that China has most vigorously exercised its soft power muscles

Furthermore, China has sought to intensify its attraction, "project an image of China as a responsible power," and alleviate fears about a rising China through cooperative military interaction.23 Among other activities, it has contributed a 175-manstrong engineering unit to UN peacekeeping operations in the Democratic Republic of the Congo,24 and a 315-member unit to Darfur.25 Additionally, China has posted at least 14 defense attachés in its embassies across the continent to enhance relationships between respective militaries.²⁶ Although arguably more of the hard power mode, China also provides training and capacity-building for African militaries (as does the United States), building practical skills, instilling trust, and stretching tight continental military budgets.²⁷ Further, China has reportedly stationed up to 4,500 military personnel in Nigeria to protect that nation's multi-billiondollar oil infrastructure (and its own interests in the same).28 These activities burnish China's image as a rising power, help foster close relations in African power centers, and showcase Beijing's internationalist credentials as it acts under UN auspices.

However, it is in the areas of economics and development that China has most vigorously exercised its soft power muscles, where the "mutual benefit" is most apparent, and where the United States should be most wary of losing influence.

Economic Soft Power

As an overarching theme, the fact that China continued to grow while the rest of the world struggled (and continues to struggle) through the most recent economic crisis has encouraged African leaders to consider emulating Beijing's increasingly attractive combination of strong-even repressivecentral authority and a more open market economy; for any leaders of a dictatorial bent, the Beijing model justifies-for a time, at least-oppressive policy choices in the name of growth. The "Beijing Consensus," where markets have been substituted for taut communist ideology, has thus gained some rather influential currency and has led politicians to question the rival-and often painful-Washington Consensus free trade model.

Against this background, China's practice of bundling infrastructure projects with concessional, resource-backed loans has proven particularly appealing to impoverished African nations. Through this model, African nations receive enormous, so-called no-strings loans at below world market rates for major infrastructure projects. In return, these resource-rich countries pay back the Chinese with oil, copper, cobalt, and other minerals, often over a long-term period. These are welcome bargains, particularly for countries where Western debt forgiveness terms preclude their acquiring additional debt of a size necessary to finance dams, bridges, and the like. In any case, many Africans perceive that, when freed from troublesome, Western-style requirements for good governance and transparency clauses, projects are delivered quickly and with an eye toward hard-nosed practicality. The Africans get the infrastructure they require, minus the lecture. In return, the Chinese secure access to much-needed resources. lock in long-term supplies, spend their



FEATURES | China's Skillful Use of Soft Power

excess cash, and enhance their influence with the partner nation's elite. Simply put, these arrangements are seen as pragmatic, mutually beneficial, and unembellished with the trappings of Western human rights and forced democracy.

while development projects may purportedly come without strings (save the requirement that each nation with which China interacts accept the "One China" policy with respect to Taiwan), these arrangements can nevertheless trigger destabilizing social, economic, and environmental reactions

Such arrangements have had a particularly striking effect in Angola, where bilateral trade increased from \$150 million in the early 1990s to \$12 billion by 2006.29 Angola is now China's largest trading partner in Africa and its third largest supplier of oil.³⁰ In return, China has embarked on a series of infrastructure projects financed by oil-backed concessional loans that, thanks to China's foreign reserves, Beijing provides on far more generous terms than are (or can be) offered by Western entities. The World Bank reports that the average interest rate on such Chinese loans is 3.6 percent with a 4-year grace period and a 12-year repayment schedule.³¹ One tranche of Chinese activities conducted in Angola pursuant to those loans covers more than 150 projects worth up to \$5 billiondwarfing Western contracts and including

rehabbing roads, hospitals, district health centers, irrigation systems, and secondary schools; building a fiber optic network; and supporting fisheries projects.³²

On the softer side of soft, Angolans have also reacted favorably to diplomatic initiatives, particularly reciprocal visits by Angola's and China's presidents to the other's capital.³³ The respect such visits indicate contrasts sharply with perceived U.S. neglect of most African nations. In addition to the concrete impact infrastructure projects have on the daily lives of average citizens, the size and the scope of the projects create positive views of Chinese commitment to African development.

In central Africa, China signed a \$5-billion long-term infrastructure development deal in 2008 with the Democratic Republic of the Congo to build 2,400 miles of roads, 200 miles of railway, 32 hospitals, 145 health clinics, and 2 universities. At the same time, the national mining company agreed to ease two major Congolese firms out of key copper mining areas and gave the concessions instead to state-owned Chinese companies,³⁴ even though the mines are not expected to produce copper until 2020. This Chinese approach signals a long-term commitment to working with Kinshasa (or at least with its governing body) and to meeting its own long-term development needs.

More broadly, the Chinese have established five Special Economic Zones in Africa: two in Zambia focused on copper mining, in which China will invest \$450 million; one in Mauritius focused on developing a manufacturing hub and financial and tourism service centers, with a \$750-million investment; and two in Nigeria centered on mineral extraction and manufacturing, powered by a \$500-million investment.³⁵ Accompanying



these investments are infrastructure projects clustered around the economic zones, including dams, roads, and rail lines. These investments have the potential to help integrate African economic activity, create hundreds of thousands of jobs,³⁶ and, in concert with China's other large infrastructure programs, transform Africa's economic landscape.

However, while development projects may purportedly come without strings (save the requirement that each nation with which China interacts accept the "One China" policy with respect to Taiwan; on this core issue there is no leeway), these arrangements can nevertheless trigger destabilizing social, economic, and environmental reactions.

Criticism of China's Approach

First, contracts for resource-backed infrastructure projects are awarded primarily to state-owned or provincially backed Chinese firms operating in Africa, which generally supply the bulk of the labor; certain contracts, in fact, stipulate that 70 percent of the labor will be supplied by the Chinese.37 Partially as a result of such requirements, there are currently more Chinese in Nigeria than there were British at the height of colonial rule.³⁸ While such clauses provide considerable outlets for China's surplus labor supply, they are perceived as meaning that Chinese interlopers steal jobs from locals, provoking resentment and, occasionally, violent responses. For example, during the immigrant-focused demonstrations in South Africa in 2008, protesters accused Chinese workers of taking local jobs much to the same extent as the Zimbabweans who had fled ruinous inflation in their home country.39

Similarly, in Zambia, opposition leader and failed presidential candidate Michael Sata echoed fairly extensive Zambian sentiment when he claimed that "the Chinese are not here as investors, they are here as invaders."⁴⁰ While China-bashing was a significant part of Sata's electoral platform and his rhetoric may well have been part of playing to the crowds, he complained that Chinese workers—even manual laborers such as bricklayers and those pushing wheelbarrows—were displacing unemployed Zambians.⁴¹

Second, Chinese-owned firms, factories, and cheap imported goods crowd out local entrepreneurs while also failing to promote technology transfer, creating fears that Chinese colonization may be permanent and harmful to indigenous developmentparticularly when Chinese workers remain in-country, opening shops and restaurants after their development contracts expire. In Zambia, a 65-year lease to a Chinese management company for Lusaka's Kamwala market has displaced local merchants while creating opportunities for Chinese who used to work on mining projects.⁴² In 2008, an angry President Thabo Mbeki cautioned China against dumping cheap textiles and plastics in South Africa, and then imposed a quota on the Chinese textiles that were supplanting local products and enterprises.⁴³ Again, these types of responses can be destabilizing.

Third, critics accused China of flouting local labor laws, refusing to offer competitive wages or respect work hour limitations, and, in some cases, refusing to pay at all.44 In Zambia, one Chinese copper mining company reportedly pays higher wages to its Chinese employees than to locals in the same jobs.45 Things came to a head at a second mine in March 2008 as Zambian workers rioted over low wages and unsafe working conditions (an explosion in a Chinese-run copper mine killed 50 Zambians in 2005). When Chinese workers fought back with more aggressive weapons than the stones used by the Zambians, relations deteriorated, and bitterness now remains.46

Critics also blame what they consider China's resource rapaciousness and selfinterested trade practices for serious environmental degradation. Environmentalists claim that the majority of wood imported from Cameroon, Gabon, and Republic of the Congo meant to fuel China's extraordinary building boom, for example, is illegally harvested, thus contributing to deforestation (and corruption) in those countries.⁴⁷

Additionally, uneven distribution of the wealth garnered by elites that fails to trickle down to local citizens has caused deep resentment against Chinese corporations in some areas. In Nigeria, for example, a 2006 bomb targeting an oil refinery was accompanied by a warning from the Movement for the Emancipation of the Niger Delta: "We wish to warn the Chinese government and its oil companies to steer well clear of the Niger Delta. The Chinese government[,] by investing in stolen crude places[,] [is putting] its citizens in our line of fire."48

Perhaps most troubling for Western liberals is China's consistent approach to business as strictly business, both in divorcing its interactions from judgments regarding the unsavory character of its counterpart regimes and in remaining resistant to international criticism for doing so. For years, China-Sudan's biggest foreign investor-supported the corrupt, murderous government of Omar Hassan al-Bashir (now an indicted war criminal), importing 40 percent of Sudan's oil49 while building a presidential palace. China also built Sudan's Merowe dam, "one of the world's most destructive hydropower projects ... displacing 50,000 residents from the fertile Nile Valley to arid desert locations,"50 and circumventing a regional Nile Basin Initiative to address water issues. More sinister power than soft, China also built weapons and ammunition factories in Sudan before finally sending peacekeepers to Darfur.51 Despite that peaceful overture, "Beijing's support for the Khartoum government is widely regarded as instrumental in prolonging conflict" in Darfur's troubled region.52

Furthermore, although the accusation should be viewed in light of the bitter political rivalries extant there, opposition figures in Zimbabwe accuse China of cooperating in President Robert Mugabe's violent 2007 crackdown on street traders who were competing with Chinese merchants. Whether or not the accusations are true, both the Sudanese and Zimbabwean regimes have likely been emboldened by Chinese support.⁵³

One Sierra Leonean ambassador summed up China's approach to Africa, good and bad, this way: "The Chinese just come and do it. They don't hold meetings about environmental impact assessments or human rights, bad governance and good governance. I'm not saying its right, just that Chinese investment is succeeding because they don't set very high benchmarks."⁵⁴

Threat or Not?

It is easy to conclude, in light of these criticisms, that China poses a genuine threat to U.S. interests in Africa. Business displacement, worker abuse, environmental degradation, and attempts to secure Africa's resource wealth while the benefits related to those resources fail to reach local populations are potentially destabilizing and a cause for concern. China's penchant for dealing with often-corrupt governmental elites while ensuring preferential resources-for-infrastructure exchanges can undermine Western attempts to leverage aid to promote governmental reform, democratic principles, and human rights. Such contracts can also increase competition for the oil and minerals the United States needs by taking these resources out of the transparent bidding process and tying them to China for the duration of the long-term contracts Beijing typically employs. Political agreements that supersede the market-including accusations that China is not above substantial bribery to secure favorable contracts or taking deliberate losses on resource investments in order to ensure access-make U.S. firms less competitive and diminish U.S. influence. Further, the fact that the head of China's influential Shanghai Institute for Strategic Studies has recommended that China work with African nations to lead a new world order to counter "some powerful nations [that] continue to dominate the world" sounds alarm bells in Western ears.55 Even more sobering is

perhaps most troubling for Western liberals is China's consistent approach to business as strictly business, both in divorcing its interactions from judgments regarding the unsavory character of its counterpart regimes and in remaining resistant to international criticism for doing so

China's pragmatic and tone-deaf proclivity for bedding down with the world's most deeply distasteful regimes.

Some may argue that while in hardnosed pursuit of the resources it needs to address its strategic vulnerabilities, China is merely mimicking the pattern of exploitation set by Western colonial powers centuries ago; many Africans agree and fear a Chinese brand of neocolonialism. While an "imitation excuse" does not justify a conscious decision to perpetuate such an approach, the argument could be made that China's willingnessalbeit at the cost to Africans of their natural resources, environment, jobs, and so forth-to provide such things as medical training for African doctors; to engage in mutually beneficial security talks; to forgive substantial debt; and to fund special economic zones and enormous infrastructure projects such as dams, roads, and railways that Africa needs to pull itself out of poverty but that the West cannot afford has the potential, if properly managed,

FEATURES | China's Skillful Use of Soft Power

to profoundly and positively change the economic equation in Africa. Roads, for example, provide a means for farmers to bring crops to market, making increased cultivation feasible and profitable; railways open up export possibilities; and hydroelectric plants provide engines for growth. Growth, in turn, while not a panacea (indeed, in Nigeria the single resource "curse" has contributed to instability as factions and regions scramble for their share of oil wealth), can help anchor stability on the continent, a clear U.S. strategic priority.56

a U.S. partnership would involve greater emphasis on transparency, anticorruption efforts, and sustainable development, which the Chinese would likely consider unwanted adjuncts with their resource contracts

There are additional advantages for the United States in a partnership approach. Although China is jealous of the United States' status as the champion of the developing world, its growing confidence as a rising world power gives Washington an opportunity to urge China to play a role in Africa commensurate with that status. This is, in fact, explicit U.S. policy. In a January 14, 2011, speech, Secretary of State Hillary Clinton urged that "on international development, [the United States and China] could make a significant impact by aligning our investments and coordinating projects."57

This strategy, however, is not without considerable risks. Since China sees itself as Africa's primary defender, Beijing may resist sharing that title with what it views as an already-overinvolved superpower; traditionally China has shunned having too close of an identity with the Americans. Beijing may not relish the increased competition for copper and oil that might result from greater U.S. involvement in Africa. To this point, the infrastructure programs have been considered generally successful; China may question why it should share this success with a cash-strapped United States. Further, a U.S. partnership would involve greater emphasis on transparency, anticorruption efforts, and sustainable development, which the Chinese would likely consider unwanted adjuncts-even interferences-with their resource contracts. African leaders themselves may prefer China's no-strings, quick-action approach to major projects to American approaches and may favor keeping the two powers separate so as to play them against each other as a means of gaining some leverage over the development heavyweights.

On balance, however, the genuine possibility for jointly increasing African stability, while pursuing a more muscular engagement with China (and thus laying further groundwork for addressing more intractable problems such as climate change), argues for overcoming probable Chinese, African, and domestic reluctance and attempting a partnership approach. Additionally, the reasons for pursuing cooperation are deeply pragmatic. While some may fear that a partnership-focused adaptation to Chinese factson-the-ground may make the United States appear weak, realistically speaking, China will-in fact, must-continue to pursue what are genuine domestic imperatives through its African ventures. Better, then, to try to help steer the Sino train than to attempt to derail it.

We also have propartnership arguments that should appeal to the practical nature of the Chinese. Through the sheer extent of its investment and its long-term contracts, China is betting a great deal of its own national interests, and party survival, on its African success. This leaves the United States an opening and gives certain leverage for demonstrating that two major powers, working with African partners to the same ends, have a better shot at assuring a successful gamble.

Consequently, while not abdicating our own interests in promoting fair competition, democratic values, and human rights, a practical, clear-eyed U.S. approach that, consistent with our National Security Strategy, seeks to co-opt China as a development partner and thus help shape Chinese approaches in Africa could provide opportunities for all partiesincluding the Africans-and diminish the more threatening aspects of the Chinese policy. Some areas are particularly ripe for U.S. overtures. At the same time, we should renew our efforts to bolster our own soft power and influence in Africa.

Recommendations

The United States can help change the zero-sum threat narrative regarding U.S.-Chinese competition by focusing first on stabilityenhancing projects that yield relatively simple

wins. For example, China is deeply involved in promoting African health, as is the United States through the multi-billion-dollar President's Emergency Plan for AIDS Relief and Global Fund to Fight Aids, Tuberculosis, and Malaria programs.58 Cooperative programs to address health issues are desperately needed in much of Africa, should involve little controversy with respect to competition, are already considered U.S. priorities and thus are (to some extent) funded, and would give an acceptable, truly humanitarian flavor to a joint project. Cooperative ventures to help assure supplies of clean water could follow a similar trajectory.

Promoting agriculture and education are also promising partnership areas; cooperative efforts are already in train. In 2010, the U.S. Agency for International Development and the Chinese government held a workshop on food security meant to "act as a vehicle for future collaboration in Africa and around the world ... [to] boost agricultural productivity and distribution."59 Similarly, in Liberia, the United States and China have already collaborated on rehabbing a university engineering school, demonstrating that joint efforts (albeit small) are possible,60 while offering an opportunity to promote international labor standards. The United States and China can expand these

Forum on China-Africa Seal



programs and build on these successes to deepen Sino-U.S. partnership to the benefit of our African counterparts.

In a more complex arena, because China is an African and a global trading power, it is likely that the Americans and Chinese can find common ground on certain macroeconomic policies, such as tariffs and protection for investments.61 The volume of China's investments and contracts on the continent may also make jointly promoting the rule of law in African states more attractive (at least with respect to commerce), providing recourse to remedies should contract disputes arise. Similarly, as Beijing is already beginning to discover, as China becomes more involved in African and global commerce, its noninterference policy will become more difficult to sustain; the intersection and impact of nations' actions on each other make strict sovereignty notions more problematic. Consequently, Beijing's economic interests may help Washington to nudge China away from its strict noninterference policy toward responsible intervention in global matters, perhaps even (eventually) in favor of "responsibility to protect" missions, by showing such actions to be in Beijing's financial interests.

Peacekeeping cooperation is more problematic due to congressional restrictions on U.S. cooperation with the People's Liberation Army for other than humanitarian purposes. However, when the United States and China are both engaged in UN-sponsored peacekeeping operations, we have the ability to press for respect for international human rights norms vis-à-vis the military. Further, greater antipiracy cooperation in African waters can both help protect African, Chinese, and American shipping and strengthen U.S.-China ties.

Beijing is already beginning to discover, as China becomes more involved in African and global commerce, its noninterference policy will become more difficult to sustain

As we look for Sino-U.S. partnership opportunities in Africa, we should also take certain unilateral and bilateral actions to enhance our own economic and soft power base. First and foremost, the United States must develop alternative energy modes and sources. While the United States receives only about 15 percent of its oil from sub-Saharan Africa, the long-term nature of China's resource-backed loans, Beijing's desire to lock in supplies, and the certainty of increased competition for oil as rising nations clamor for more energy make rapid development of alternatives a national security imperative. China has already moved in that direction, designating alternative energy development as one of seven strategic industrial targets and hosting the world's largest wind farms.⁶² It is high time the United States got serious about this goal.

In addition to enhancing existing U.S. public diplomacy programs (including highly effective military ship visits to African ports-in fact, coordinated U.S. Africa Command engagement with African militaries and civilian groups is one of our more effective soft power tools and should be continued), the United States should spend more high-level time on Africa. If other world crises leave President Barack Obama and his top advisors unable to travel as extensively in Africa as Hu Jintao, U.S. leaders should make more time for pull-asides at major international meetings such as the UN General Assembly and for placing periodic phone calls to those counterparts it is in the U.S. interest to cultivate. Adding more scholarships for African students to study in the United States is a low-cost investment in future leaders, and more public-private partnerships with universities on these and similar projects should help spread the financial burden.

Joshua Eisenman notes that "today, Mao's Red Book has been replaced by a balance sheet. Africa is now a component in China's larger strategy to cultivate political support, bolster its claims to Taiwan, acquire energy and natural resources, and secure its commercial interests."⁶³ China will certainly continue to pursue these aims, but with prudent, pragmatic, and strategic actions, the United States may be able to nevertheless promote African stability, deepen Sino-American relations, and press for good governance, democracy, and human rights values. And that just may help tip that balance sheet our way. **JFQ**

N O T E S

¹ Hany Besada et al., "China's Growing Economic Presence in Africa," The Centre for International Governance Innovation Policy Brief no. 6, October 2008.

² "China to Construct \$350m Entebbe Road," NewVision.org, January 12, 2011.

³ Samuel Dowuona, "The Other Side of the Chinese Coin," January 18, 2011, available at <www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php>.

⁴ BBC News, "China Overtakes Japan as World's Second-Largest Economy," February 14, 2011, available at <www.bbc.co.uk/news/business-12427321>. ⁵ For purposes of this article, soft power includes not only Joseph Nye's sense of attractive, behavior-shaping power, encompassing "culture, political values and national foreign policies," but also the more exhaustive range of "economic and diplomatic levers like aid and investment and participation in multilateral organizations" described by Harvard's Joshua Kurlantzick. See Parama Sinha Palit, "China's Soft Power in South Asia," RSIS Working Paper no. 200, June 8, 2010, 4.

⁶ Bonny Ling, "China's Peacekeeping Diplomacy," *China Rights Forum* no. 1, 2007, available at <www.hrichina.org>.

⁷ Anup Shah, "World Bank's Poverty Estimates Revised," 2010, available at <www.globalissues.org/poverty/4-around-the-world#WorldBank sPovertyRevised>.

⁸ Chris Alden and Ana Cristina Alves, "China and Africa's Natural Resources: The Challenges and Implications for Development and Governance," South African Institute of International Affairs Occasional Paper no. 41, September 2009.

⁹ Al Jazeera, "China's 'Going Out' Buying Spree," August 14, 2009, available at <http://english. aljazeera.net/focus/.../08/20098109731244921. html>.

¹⁰ Ian Taylor, *China's New Role in Africa* (Boulder: Lynne Rienner Publishers, Inc., 2009), 4.

¹¹ China's greatest soft power success is arguably its triumphant execution of the 2008 Olympics. The beautifully orchestrated event (and the fact that China topped the medal board) showcased a confident, world-class China; the fact that thousands of citizens were summarily displaced to build Olympic venues and to hide less savory neighborhoods was given little press coverage.

¹² Kerry Brown and Chun Zhang, "China in Africa—Preparing for the Next Forum for China-Africa Cooperation," Chatham House, June 2009, 3.

¹³ Alden and Alves, 7. See also Ian Taylor, "Unpacking China's Resource Diplomacy in Africa," Center on China's Transnational Relations Working Paper no. 19, 2007, 2.

¹⁴ Phillip C. Saunders, *China's Global Activism: Strategy, Drivers, and Tools*, Institute for National Strategic Studies Occasional Paper 4 (Washington, DC: National Defense University Press, October 2006), 17.

¹⁵ Alden and Alves, 8.

¹⁶ Forum on China-Africa Cooperation, available at <www.focac.org/eng>.

17 Ibid.

¹⁸ Ibid.

¹⁹ Stephanie Hanson, "China, Africa, and Oil," Council on Foreign Relations, June 6, 2008, available at <www.cfr.org/china/china-africa-oil>, 4.

²⁰ Greg Mills, "Partners or Predators? China in Africa," *The Jamestown Foundation China Brief* 8, issue 2 (February 4, 2008).

²¹ Brown and Chun, 6.


for the Institute for National Strategic Studies



INSS China Strategic Perspectives 4 *Buy, Build, or Steal: China's Quest for Advanced Military Aviation Technologies*

by Phillip C. Saunders and Joshua K. Wiseman

Although China lags 15-20 years behind world leaders in developing and producing fighter aircraft and other complex aerospace systems, it has progressed from reliance on other countries to the ability to pursue an array of strategies. It remains unclear, however, what obstacles must still be overcome for China to join those nations with sophisticated air forces and aviation industries. This study devises a general model consisting of three procurement strategies (buy, build, or steal) and three subavenues (reverse engineer, coproduce, or codevelop). It then applies the model to Chinese efforts over five time periods in the last 60 years. The authors show that China's history in this area reflects an ongoing tension between the desire for self-reliance in defense and the need for access to foreign technologies. They note two important conclusions: the Chinese military aviation industry will have to rely on indigenous development of "single-use" technologies in the future; and China will likely rely more heavily on espionage to acquire critical aviation technologies it cannot acquire legitimately from foreign suppliers or on its own.



Visit the NDU Press Web site for more information on publications at ndupress.ndu.edu

FEATURES | China's Skillful Use of Soft Power

²² Bram Posthumus, "China's Cultural Diplomacy in Africa," Radio Netherlands Worldwide, July 16, 2010, available at <www.rnw.nl/africa/ artcle/china's-cultural-diplomacy-africa>.

²³ Ling.

²⁴ "China Sends Peacekeeping Troops to DRC," December 19, 2005, available at <www.gov.cn/ misc/2005-12/19/_131502.html>.

²⁵ "Follow-up Troops from Engineering Unit Leave for Darfur," *China Daily*, July 17, 2008, available at <www.chinadaily.com.cn/ china/2008-07/17/content>.

²⁶ Susan Puska, "Resources, Security and Influence: The Role of the Military in China's Africa Strategy," *The Jamestown Foundation China Brief* 7, issue 11 (May 30, 2007).

²⁷ Mauro De Lorenzo, "African Perspectives on China," China Brief, American Enterprise Institute for Public Policy Research, October 3, 2007.

²⁸ Jackson Ogbonna Ude, "FG Hires Chinese Soldiers to Police Niger Delta," January 20, 2007, available at <http:nigeriavillagesquare.com/forum/ archive/index.php/t-7157.html>.

²⁹ Alex Vines et al., "Thirst for African Oil: Asian National Oil Companies in Nigeria and Angola," Chatham House Report, August 10, 2009, 40.

³⁰ Ibid.

³¹ Ibid., 47.

³² Ibid., 46–48.

³³ Confidential source.

³⁴ "China Steps Up Investment in Congo as War in East Continues," available at <www. cibexchange.com/.../3-china-steps-up-investmentin-congo-as-war-in-east-continues>. See also Howard W. French, "The Chinese and Congo Take a Giant Leap of Faith," *The New York Times*, September 21, 2007.

³⁵ Loro Horta, "China Building Africa's Economic Infrastructure: SEZs and Railroads," *The Jamestown Foundation China Brief* 10, issue 15 (July 22, 2010).

³⁶ Ibid.

³⁷ While the Angolan government has insisted that more recent contracts stipulate that 30 percent of the labor will be local, it has proven difficult to find workers with the requisite skills and willingness to work the long hours and on the intense timetables the Chinese employ.

³⁸ Arno Maierbrugger, "The Rush for Africa's Resources," August 15, 2010, available at <www.gulfnews.com/business/.../ the-rush-for-africa-s-resources-1.668242>.

³⁹ "Nowhere Left to Go: Xenophobic Violence Rocks South Africa's Largest City," *The Economist*, May 20, 2008.

⁴⁰ Cited in Ofeibea Quist-Arcton, "Chinese-Built Zambian Smelter Stirs Controversy," July 31, 2008, available at <www.npr.org/series/90408961/ china-in-the-spotlight>.

⁴¹ Ibid.

⁴² Li Pentao, "The Myth and Reality of Chinese Investors: A Case Study of Chinese Investment in Zambia's Copper Industry," South African Institute of International Affairs, Occasional Paper no. 62 (May 2010), 13. See also Brown and Chun, 22–25, and Yoon Yung Park, "Chinese Migration in Africa," South African Institute of International Affairs, Occasional Paper no. 24, January 2009. Both argue that perceptions that thousands of Chinese are colonizing Africa are exaggerated.

⁴³ Kent Hughes Butts and Brent Bankus, "China's Pursuit of Africa's Natural Resources," Collins Center Study 1–09, U.S. Army War College, Center for Strategic Leadership, June 2009, 9.

⁴⁴ Dowuona, 2; Deborah Brautigam and Ryan Briggs, "Wikileaks—China, the U.S. and Africa: What Do the Cables Really Tell Us?" January 16, 2011, available at <www.royalafricansociety.org/index. php?option=com_comment&task>.

⁴⁵ Li Pentao, 9.

⁴⁶ Ibid.

⁴⁷ Ian Taylor, "China's Environmental Footprint in Africa," February 2, 2007, available at <www.chinadialogue.net>.

⁴⁸ Ibid.

⁴⁹ Moira Herbst, "Oil for China, Guns for Darfur," *Business Week*, March 14, 2008, available at <www.businessweek.com/globalbiz>.

⁵⁰ International Rivers, available at <www. internationalrivers.org/africa/nile-basin>.

⁵¹ Herbst.

⁵² Tom Holland, "China's 'Go Out' Policy Means Trouble," South China Morning Post, April 26, 2007.
⁵³ Ibid.

⁵⁴ Taylor, "China's Environmental Footprint," 3.

⁵⁵ Kizito Sikuka, Comment, Southern African News Features 11, no. 1, January 18, 2011, available at <http://allafrica.com/stories/201101180770. html>.

⁵⁶ The White House, *National Security Policy* (Washington, DC: The White House, 2010,) available at <www.whitehouse.gov/sites/default/files/ rss.../national_security_strategy.pdf>, 37.

⁵⁷ Hillary Rodham Clinton, inaugural Richard C. Holbrooke Lecture on a Broad Vision of U.S.-China Relations in the 21st Century, January 14, 2011, available at <www.state.gov/secretary/ rm/2011/01/154653.htm>.

⁵⁸ See, generally, the President's Emergency Plan for AIDS Relief, available at <www.pepfar.gov>, and the Global Fund to Fight Aids, Tuberculosis and Malaria, available at <www.globalfund.org>.

⁵⁹ Embassy of the United States–Beijing, available at <www.beijing.usembassy-china.org>.
⁶⁰ Ibid.

⁶¹ Saunders, 29.

⁶² "Wind Energy Takes Off in China," *Business Week*, June 13, 2008, available at <www. businessweek.com/globalbiz/content/jun2008/ gb20080613_533754.htm>.

⁶³ Serge Michel and Michel Beuret, *China Safari: On the Trail of Beijing's Expansion in Africa* (Philadelphia: Nation Books, 2009), 206.

SLICING THE ONION DIFFERENTLY

SEAPOWER AND THE LEVELS OF WAR

By ROBERT C. RUBEL

Significantly, this strategy requires new ways of thinking—about both empowering individual commanders and understanding the net effects of dispersed operations. —A Cooperative Strategy for 21st-century Seapower¹

<image>



or most of history, generals and admirals have talked about the process of war in terms of strategy and tactics. However, in its 1982 Field Manual 100-5, Operations, the U.S. Army inserted an intermediate level between strategy and tactics that it called the "operational level." Subsequently, military officers and scholars have devoted considerable effort to defining and developing the different levels of war, especially the operational level. Although first institutionalized by the Army, the levels of war were eventually embedded in joint doctrine. However, the notion of an operational level of war and its attendant set of terms, principles, and concepts has not gained purchase within the U.S. Navy until recently, despite being taught and touted by its own war college. Even now, most naval officers, including many admirals, are either unfamiliar or uncomfortable with the idea, despite giving it considerable lip service. Although this could be dismissed as parochialism, there are deeper and more pragmatic reasons for the Navy's institutional discomfort with the operational

Captain Robert C. Rubel, USN (Ret.), is Dean of Naval Warfare Studies in the Center for Naval Warfare Studies at the U.S. Naval War College. level of war that will be addressed in this article. Understanding these reasons will lead to the articulation of a new way to look at the relationship between levels of war—a different way to slice the onion.

The Problem of Command

Napoleon, it is said, was unbeatable when he could see the whole battlefield and personally direct the action. However, he did not do so well when he had to rely on his subordinate generals to exercise independent command.² Either they were incompetent, or Napoleon lacked understanding of what we now call the operational art. The growth in size of armies in the 19th century and the industrialization of warfare, including railroads, meant that no general could exercise personal command of a whole army. This was clearly illustrated in the U.S. Civil War when General Ulysses S. Grant coordinated the movements of several widely separated armies toward a common goal. By World War II, millions of men comprised the Red Army that drove back the vaunted German Wehrmacht in 1944 and 1945. The Soviets, in order to keep coherence across this massive force, developed the notion of operational art, which referred to the principles and concepts needed to link a set of tactical actions to a goal that was itself part of a larger scheme. Armed with this doctrine, subordinate commanders and their staffs could plan and execute even large and progressive operations in a way that was congruent with overall strategy. The commander in chief did not have to be there in person.

Until World War II, navies did not have the problem of trying to closely coordinate the actions of widely separated fleets. It was not that there were no scattered fleets; it was just that the nature of the problem at sea was different than on land. If one navy concentrated its power into a main fleet, the contending navy had to follow suit or risk defeat in detail. The mobility of ships made this a central issue. Therefore, large naval battles, when they occurred, were concentrated in space and time such that the admiral in charge was there in person. The key command problem was tactical: how to find the enemy and then how to coordinate the movements of individual ships or squadrons such that maximum firepower could be brought to bear. The big battles were over in a few hours, and they generally had significant strategic effects. Thus, naval officers thought in terms of strategy and tactics.

World War II forced a change in practice, if not in terminology. The adoption of a progressive island-hopping strategy through the Mandated Islands with concurrent support to General Douglas MacArthur's converging drive along the north coast of New Guinea meant that the actions of separate, powerful fleets had to be coordinated. Upon arrival in Pearl Harbor in December 1941, Admiral Chester Nimitz, Commander in Chief, Pacific Ocean Areas, elected to command from ashore in Hawaii, allowing subordinate admirals such as Raymond Spruance and William Halsey to plan and execute the individual operations that constituted the Central Pacific campaign, each of which might involve multiple tactical engagements or battles. Although not articulated as such, the Navy had to develop its own version of the Soviet operational art. However, after the war-and notwithstanding several dramatic operational-level actions in the Korean War such as the Inchon invasion and the rescue of Army and Marine forces in North Koreawith no enemy fleet in sight but pressured by the advent of nuclear weapons, the Navy promptly reverted to the traditional strategy and tactics framework. Individual battlegroups each centered on an aircraft carrier became the strategic chess pieces that the fleet commanders moved around.

The strategy/tactics framework sufficed for the Navy until the 1991 Gulf War. In that conflict, the Service discovered that the lack of any theory or doctrine connected with a progressive and sustained air campaign, a form of operational art, put it in a subordinate position to the Air Force, which did have such doctrine. After the war, the Navy embarked upon an effort to achieve its own operational-level command and control capability by trying to mirror the Air Force's Joint Force Air Component Commander (JFACC) command structure-at sea. This effort ultimately failed in part because the Navy attempted to shoehorn a highly complex operations center into a space-limited ship and superimpose it on existing tactical staffs. However, a key reason it did not work out was that the Navy did not have any existing operational-level theory or doctrine that would have established the need for such a command element.

The command problem for the Navy in the 1990s became one of protecting its warfighting equities in an increasingly developed joint command environment that was based substantially on Army structure, process, and doctrine. In the wake of the Soviet Union's demise, the Navy again found itself without a seagoing rival. In order to establish its continuing relevance in new terms, it issued a white paper entitled . . . *From the Sea* in which it acknowledged the absence of a threat to its command of the seas and committed itself to supporting joint

until World War II, navies did not have the problem of trying to closely coordinate the actions of widely separated fleets

warfighting in the littorals. Over the next few years, several successor documents were issued to refine the Navy's utility argument, but each retained the fundamental argument that its mission was power projection.³ This argument ended up presenting the Navy with a new command problem in the first decade of the 21st century. Prior to . . . From the Sea, the world ocean was divided into two massive areas of responsibility (AORs), U.S. Pacific Command and U.S. Atlantic Command. The two "fleet commanders in chief" owned virtually all naval forces, which moved fluidly (as it were) around the world operating "in support" of the land-oriented joint commanders (although substantial forces were transferred on a rotating basis to the Mediterranean under U.S. European Command). After the Navy issued . . . From the Sea, each successive Unified Command Plan (UCP), the document that spells out the joint command structure, expanded the AOR boundaries of the land commanders into the oceans. Now, U.S. Southern Command, a traditionally Army-centric command, owns the Caribbean and large swaths of the Atlantic and Pacific. U.S. Central Command owns the Indian Ocean north and west of Diego



FEATURES | Seapower and the Levels of War

Garcia, and U.S. Africa Command owns the seas around much of Africa.

In the new joint command arrangements, each unified commander has his own naval component, a numbered fleet that exercises command in the AOR in a way very similar to the ground and air components. In joint theory, these components represent the lower echelon of the operational level, with the joint task force commander being in the heart of it and the unified combatant commander (COCOM) being at the "theaterstrategic level"—the levels-of-war onion being sliced rather thin by now.

For the world of the 1990s, this set of command arrangements worked adequately despite being occasionally awkward for mobile naval forces and despite various spats between the Air Force and Navy over where the maritime commander's airspace ended and that of the JFACC began. Naval forces were essentially a "sea base" that contributed air sorties, gunfire, and other support to forces ashore. Moreover, even in the peacetime naval diplomacy role, the pattern of naval operations was a function of the COCOM's security cooperation plan. The world as seen from the perspective of the UCP is simply a collection of individual and autonomous AORs.

In the wake of the 9/11 attacks, the whole architecture of the UCP started to

become obsolete, especially for the Navy. The possibility of terrorists smuggling nuclear weapons or other dangerous things into the homeland by sea posed a new kind of security threat, one that neither the Navy nor the Coast Guard was prepared to deal with. As the nature of the problem and its potential solution began to emerge, it started to dawn on admirals that a new approach to command and control was necessary. Maritime security and its component function, maritime domain awareness (MDA), require the utmost in fleet dispersal in order to catalyze a global maritime security partnership. MDA-the collaborative sharing of information about who is doing what on the seas and where-requires centralized fusion of information to see tips and patterns from terrorist organizations that are not constrained by American AOR boundaries. The need is for information to flow freely among naval forces and headquarters around the world, unfettered or distorted by the existing structure of joint command authorities and UCP dividing lines. The Navy's answer to this problem has been the establishment of a network of interconnected maritime operations centers (MOCs), one in each of the numbered fleet headquarters. While not exactly violating the existing provisions of U.S. statute or the UCP, the networking of the MOCs to rapidly share information is the leading edge of an emerging process of globalizing naval command and control that eventually will yield a structure that does not conform to the Armydefined levels of war.

The MOCs are one response to the global terrorist problem, but they are not the only one. As mentioned previously, achieving global maritime security requires the utmost in dispersion of naval forces. However, the Navy is not structured to do this effectively. Its fleet of around 280 ships consists primarily of high-end combat units centered on nuclear aircraft carriers and large amphibious ships. It currently has few ships that are suitable for constabulary work or supporting engagement with the many small navies of African, Caribbean, Middle Eastern, and Southeast Asian countries. With such limited assets, the Navy cannot afford to respond fully to the demands levied by each regional numbered fleet or the COCOMs. The Navy

maritime security and its component function, maritime domain awareness, require the utmost in fleet dispersal in order to catalyze a global maritime security partnership



has decided it needs some way of figuring out, from a global perspective, where to place its limited resources for the most effect. It therefore created the Global Engagement Strategy Division within the Navy Headquarters staff in the Pentagon. Having no direct command authority, it is charged nonetheless with advising the Chief of Naval Operations (CNO) on how to make the case for depriving some AORs of forces and attention while loading up others—in other words, devising a strategy for placing the Navy's limited chips where they count the most from a global perspective. Here again, there are no violations of existing law or joint regulations, but the CNO is now getting more involved in how Navy forces are distributed.

A third Navy command and control response to the changed strategic environment is the standup of U.S. Tenth Fleet, the Navy component of U.S. Cyber Command (which itself is a subunified command of U.S. Strategic Command). U.S. Strategic Command has global functional responsibilities, so Tenth Fleet is global within the context of the existing UCP. However, much remains to be worked out as to how Tenth Fleet relates to the rest of the numbered fleets and their MOCs. Tenth Fleet has recently assumed authority over the Navy Information Operations Command, allowing it to coordinate information operations that will be needed to cover the movement of forces during crisis or war. In an age of satellites, the Internet, cell phones, and significant ocean instrumentation, naval operational deception will no longer be a local tactical matter. It will require a globegirdling effort of exquisite timing and comprehensiveness to allow ships and fleets to show up somewhere by surprise. This can only be achieved through a tightly coordinated effort among all the MOCs and the Navy Staff in the Pentagon. Tenth Fleet's MOC will be the logical coordination point.

Perspective

The Navy's responses to the command and control problems it faces point toward a different way of looking at the relationships among forces and commanders. In each case, the Navy is attempting to match planning and execution authority with the perspective needed to ensure those plans and orders are coherent at the proper level; and in each case, the Navy has found that the existing joint command structure is either inappropriate or incomplete. That command structure, and the attendant levels-of-war framework upon which it is based, is inherently regional and land-oriented. What is missing is an effective global and maritime perspective.

For the Navy, and perhaps also for the Air Force, a framework that makes more sense in terms of matching command arrangements with environment and mission can be described simply as global, regional, and local. Unlike the existing levels of war (tactical, operational, and strategic), in this framework the military skill sets of strategy and tactics-and, yes, the operational art-could inhabit each level of command, depending on the nature of the specific missions and functions that are needed. By divorcing the separate intellectual skill sets of tactics, operational art, and strategy from command level, we would empower Sailors, to use a trite phrase, to think globally and act locally. Moreover, if the military skill sets were refined within this framework, there would be less likelihood of destructive micromanagement from above, of the operational tail wagging the strategic dog, and of "loose cannon" activities at the tactical level.

The proposed framework is anchored at the global level. The Navy has good reasons for needing a global perspective embedded in its planning and decisionmaking process, operational as well as administrative. The first and perhaps most fundamental reason is that seapower can be neither understood properly nor applied properly except from a global perspective. Most naval theorists have missed this point. A true maritime strategy is based on the ocean and is oriented on movement. Leveraging the geographic fact that the seas are all connected, it seeks to gain and maintain the global exterior position in order to provide sanctuary for the Nation's trading economy, maintain credible contact with allies and create strategic options, and hem in opponents. The pursuance of such a strategy might result in regional or local operations (such as invasions) but must be coordinated from a global perspective. One reason for having a maritime headquarters with a global perspective is that because the global system is so tightly coupled, perturbations propagate rapidly and globally and can emanate from disruptions that are of natural or human origin. Planning for and reacting to such disruptions must be based on a global perspective and can best be

coordinated from Washington, where, not coincidentally, most of the personnel from other executive branch departments, headquarters of nongovernmental organizations, and embassies of other countries are located.

because the global system is so tightly coupled, perturbations propagate rapidly and globally and can emanate from disruptions that are of natural or human origin

In 2003, the Navy and U.S. Joint Forces Command ran a wargame entitled Unified Course 04 in which conflicts erupted in several different regions of the world nearly simultaneously. Each region's game cell was led by an admiral. By the end of the game, a strong consensus emerged that since events in widely separated theaters seemed to be coupled in various ways, some sort of "global operational art" was needed for a number of reasons, including making sure the logistics of one theater did not disrupt the logistics in another. Moreover, in the Internet age, ad hoc allies scattered around the globe can form up and coordinate their efforts if their common foe is the United States. Without commensurate operational coordination among theaters, the U.S. military risks being outmaneuvered. In lieu of the Joint Staff acting as a general staff, such a military skill is orphaned, with no staff having the perspective or incentive to develop it. In World War II, Admiral Ernest King and his staff, with King functioning as Commander in Chief, U.S. Fleet, as well as CNO, provided the Navy with the global operational perspective needed to rationalize Atlantic, Pacific, Mediterranean, and Indian Ocean projects. Currently, the UCP offers no such mechanism. The issue here is that the global level is not necessarily strategic; an operational art perspective is needed at times, mostly for naval, air, cyber, and space operations.

There are clearly times and places where the local perspective is the key to effective military decisionmaking. The sea Services have a long tradition of decentralized command and control, and this corporate culture will continue to serve them well. However, naval weapons, both offensive and defensive, and sensors have attained such range and capability that in many cases,

FEATURES | Seapower and the Levels of War

local perspective is no longer competent to control them. It has been a long time since a naval officer in tactical command has had targeting authority over his land attack missiles or aircraft, and as the Standard Missile achieves over-the-horizon aircraft intercept capability, it is likely that the JFACC will have the call on some defensive shots. Because our arsenal of missiles is limited, including those for ballistic missile defense. a headquarters with regional perspective will have to make decisions on the positioning of forces and establishing doctrine for making actual use of these weapons. The necessity for regional perspective is a way of establishing who should have what authorities over what weapons and sensors. Given the culture of delegation in the Navy, allowing the matter to be defined as centralization versus decentralization will unnecessarily abet conservatism and generate tensions. As the Navy establishes the MOC as its key regional command center, using the needed geographic perspective as the litmus test for whether it should have certain command authorities will help ensure its ultimate success.

New Principles

As with the introduction of the operational level of war in 1982, adoption of this framework will necessarily be attended by a gestation period in which the war and staff colleges and perhaps academia in general digest the concept, test it in games, and generate doctrine. However, it seems possible at this point to identify some principles a priori that fall out logically from the inherent nature of the new framework.

The first principle is the most basic: define the security problem from all perspectives. Defining the problem is a preliminary step in the military decisionmaking process that has found currency in the U.S. Army in the past few years.⁴ Performed prior to the mission analysis step, it makes the whole process more intellectual and less mechanical. In terms of the new framework proposed here, defining a problem separately from the global, regional, and local perspectives helps to illuminate what measures of coordination will be necessary and where various command authorities ought to reside.

A second principle is that strategy is not a level of war or even a command echelon, but a thought process that links specific actions, military or otherwise, to political and economic goals. This makes strategy an intellectual skill set that, combined with defined command authorities, might be applied at each of the levels of command. For years, the military literature has been full of assertions that the levels of

defining a problem separately from the global, regional, and local perspectives helps to illuminate what measures of coordination will be necessary and where various command authorities ought to reside

war have been fusing into each other and of observations about "strategic corporals."⁵ However, the traditional levels-of-war framework does not accommodate such an evolution comfortably. Establishing a framework based on command perspective, and regarding strategy, operations, and tactics as skill sets to be applied as needed at each level, would accommodate these phenomena quite naturally.

Regarding strategy as a skill set versus command echelon or level of war might also improve the oversight of military operations. Two Army authors argue that the elaboration of the original Soviet concept of operational art into a level of war and echelon of command has driven a wedge between civilian political authorities and commanders in the field. Politicians, they say, have become detached strategic sponsors rather than effective strategic overseers of operations.6 If perspective rather than levels of war became our organizing principle, and there existed a military staff in Washington with operational authority, the coordination of politics and operations would be much more effective. Moreover, since strategy would be a skill set that inhabited each level, based on perspective, the appropriate influence of political and economic guidance from the capital would be clearer, with issues of micromanagement or neglect becoming moot.7

The issue of strategy as a skill set leads to a third principle. Command authority should not be a comprehensive or blanket tool; it is multifaceted and should be delegated in specific segments to the command with the appropriate perspective for exercising it. This kind of thing has already happened. Navy battlegroup commanders no longer have targeting authority over the land attack missiles their ships carry; that resides with higher authority-commanders with the requisite perspective on the effects those weapons are to produce or on the coordination of their employment with other means from other Services. Instead of echeloning command as is currently done, it would be distributed. Moreover, specific command authorities would not be static; they would migrate among the command levels as the situation unfolds. Whereas the local commander might initially have the authority to strike certain types of targets, emerging intelligence may indicate that such authority should be moved to either the regional or global level, at least for a time. Authorities could as easily migrate downward. For those used to the rigid command structure that has been in place since Napoleon's day, this may seem a recipe for chaos. However, what we have observed at the tactical level in wars from Vietnam through Afghanistan is that an echeloned command structure is not capable of rapidly integrating strategy and operations, thus allowing events to spin out of control. At the end of the "100-hour war" in 1991, the George H.W. Bush administration failed to exert sufficient oversight of General Norman Schwarzkopf (who, despite having four stars, was a local commander in that fight), and the Iraqis were allowed to fly their helicopters, thus keeping Saddam Hussein in power. In 2003, Army ground commanders removed key command elements from Baghdad at precisely the moment their presence could have been most helpful in averting

under the current levels-ofwar structure, the military is isolated and its imperatives and reasoning are opaque to other organizations

an insurgency. While echeloning of command is necessary for the effective functioning of ground forces at the corps level and below, the presence of a global/regional/local framework might have distributed command authorities in these cases such that the strategic errors could have been avoided.

A fourth principle prescribes that speed of coordination trumps speed of command. Since Air Force Colonel John Boyd articulated his theory of the "observe-orient-decide-act loop,"⁸ military



theorists have almost universally extolled the virtues of what some call "speed of command," that is, the ability of a commander and staff to make and implement decisions faster than the enemy. This is clearly a benefit when the issue is solely kinetic combat, but in an age in which fewer military actions are purely or even mostly kinetic and the need for interagency and international coordination is also universally cited, it is more likely that kinetic speed of command will produce harmful strategic side effects that outweigh the tactical or operational benefits. If coordination is indeed key, then the faster it can be done, the less it will adversely affect speed of command. A command framework that has at its core a global operations center that is collocated with the headquarters of the other government agencies as well as foreign embassies, and has as its intellectual fabric the integration of strategy, operations,

and tactics at each command level, is far better positioned to achieve speed of coordination.

A final preliminary principle is that the U.S. Government should act in a unified manner. Given the size of the executive branch and its multiplicity of organizations that could have both a stake in and influence on any modern military operation, the government as a whole must be convinced to lend support and to coordinate with the military. This idea was manifested in a speech by Admiral Mike Mullen, then Chairman of the Joint Chiefs of Staff, when he said that no military operation ought to be undertaken unless and until the whole government is ready.9 The framework advocated in this article would make it easier and faster for a proposed operation to be articulated in a way that would be more intelligible and persuasive to organizations not imbued with a military culture or educated in military matters. The need for military action must be sold, but under the

current levels-of-war structure, the military is isolated and its imperatives and reasoning are opaque to other organizations. Defining problems from the different command perspectives and integrating strategy at each level could greatly enhance communication and thus aid the vetting process.

There are undoubtedly more principles that can be defined, but these five serve to provide a better view of what the proposed framework really is and how it would work. However, these principles, if pragmatic, are still abstract. If the framework is to be adopted in practice, a specific new command structure would have to be created.

Fixing the Problem

There are several ways the problem might be solved or ameliorated. The most radical solution is to do away with the geographic combatant commanders (GCCs). Over the past few years, a number of people, including Admiral Mullen, have expressed concern that American diplomacy has become too militarized.10 One way of counteracting this perception, if not fact, is to disestablish the GCC position. Much of the staff structure would remain in place, but instead of a four-star military officer, the person heading the staff would be a senior State Department officer. There would be a number of three-star officers on the staff who would maintain the necessary regional military infrastructure. The mission of this newly reorganized "regional engagement staff" would focus on diplomacy. There would not be AOR boundaries in the current sense, but rather perhaps delineations that correspond to current State Department assignments. There would also be a standing joint task force headquarters in each region to handle any contingencies that might arise. These joint task force headquarters, as well as the regional Service component headquarters, would report to a central military coordinating staff in Washington, thus establishing a joint staff with a global perspective and global authority, located in a place where close coordination with the National Security Council as well as a host of other agencies is most feasible. If current operational-level doctrine has produced a disconnect between strategy and operations, then such an arrangement would facilitate appropriate strategic oversight of military operations.

On the other hand, major surgery on the UCP may be politically infeasible. How could all of this be squared with the existing joint command and control system? One way would be to focus on the status of naval forces. Resurrecting the doctrine of operating "in support" and having the Pacific Fleet and Fleet Forces staffs function as the principal maritime operations centers for each hemisphere would be one way to reestablish fleet mobility in peacetime execution of the Cooperative Strategy for 21st-century Seapower. If a fight did break out in Korea or the Persian Gulf, a joint task force could be established and, per existing joint doctrine, the local numbered fleet would take over Joint Force Maritime Component Commander duties for the joint operations area.

Although the Navy, in its attempt to generate a global command perspective, is applying the various band-aid fixes that have been described in this article, a more comprehensive solution is needed in order to ensure a global command perspective is available when needed. Assuming that the reestablishment of Admiral Ernest King-like authorities for the CNO is no more politically feasible than eradicating current AOR boundaries, a new approach is called for. One possibility is to create a naval deputy to the Secretary of Defense who has defined authorities to direct intertheater movements and certain operations of naval forces. The advantage of such an arrangement is that this officer would be located in Washington, close to the other cabinet departments and the Pentagon's communications capabilities. An alternate solution might be to invest such authorities in the existing Navy component to U.S. Strategic Command, although the range of responsibilities and authorities would not be exactly compatible with those of the unified commander. Moreover, it adds a layer of command between the global naval commander and the national command authorities. In any case, the emerging global strategic environment cries out for an updated U.S. military command structure that can provide a global perspective to local operations and can conceive of and execute strategic maritime maneuver.

For armies, the three levels of war are not abstract constructions, but a command echeloning framework that emerged quite naturally as a function of the scale of operations enabled by industrialized warfare. However, this framework does not apply equally naturally to naval operations. In an era when naval operations were almost entirely auxiliary to land operations, the inconveniences were tolerable. In an era of global transnational threats, the Internet, and an emerging global competitor, the inconveniences are turning into operational and strategic vulnerabilities. The world has entered an era in which the seas are more than just extended communications zones between a land operation in Eurasia and the continental United States; they have attained strategic significance in and of themselves. Among other things, they are now a vast strategic and operational maneuver space, not only for us, but also increasingly for nations and groups hostile to the United States and to the global system of commerce and security that perpetuates our economic well-being and political values. If we are to avoid being outmaneuvered, we must overcome the maritime seams our former strategic success has created. Slicing the onion differently in terms of maritime command arrangements will help. JFQ

NOTES

¹U.S. Navy, A Cooperative Strategy for 21st-century Seapower, October 2007, available at <www.navy.mil/maritime/Maritimestrategy. pdf>.

² John Prados, "Napoleon Bonaparte," in *The Reader's Companion to Military History*, ed. Robert Cowley and Geoffrey Parker (New York: Houghton Mifflin & Co., 1996), 322.

³ There are three principal documents that were progressively issued during the 1990s: From the Sea (September 1992), available at <http://www.globalsecurity.org/military/library/ policy/navy/fts.htm>; Forward ... From the Sea (1994), available at <www.dtic.mil/jv2010/navy/ b014.pdf>; and Forward ... From the Sea, the Navy Operational Concept, March 1997, available at <www.navy.mil/navydata/policy/fromsea/ ffseanoc.html>.

⁴ U.S. Army, TRADOC Pamphlet 525–5–500, "Commander's Appreciation and Campaign Design," January 28, 2008, page 5, paragraph e, concisely states the logic of the issue. Section 1–3 goes into detail on defining problems.

⁵ See for example, Douglas Macgregor, "Future Battle: Merging the Levels of War," *Parameters* (Winter 1992/1993), 33–47; Elaine M. Grossman, "Developing Adaptive Army Leaders: 10 Questions for Don Vandergriff," *Inside the Pentagon*, March 15, 2007; Charles C. Krulak, "The Strategic Corporal: Leadership in the Three Block War," *Marines Magazine* (January 1999).

⁶ Justin Kelly and Mike Brennan, *Alien: How the Operational Art Devoured Strategy* (Carlisle, PA: Strategic Studies Institute, 2010), 93.

⁷ Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976), 177. Clausewitz has some pithy remarks concerning the coordination of strategy and operations that are apropos of the difficulties cited by Kelly and Brennan.

⁸ Boyd never wrote a book on his theories. For a detailed analysis of his ideas, see Frans Osinga, *Science, Strategy and War: The Strategic Theory of John Boyd* (London: Routledge, Taylor and Francis Group, 2007).

⁹ "In fact, I would argue that in the future struggles of the asymmetric counterinsurgent variety, we ought to make it a precondition of committing our troops, that we will do so only if and when the other instruments of national power are ready to engage as well." Admiral Michael G. Mullen, speech at Kansas State University, March 3, 2011, available at <www.cfr. org/defense-strategy/admiral-mullens-speech-military-strategy-kansas-state-university-march-2010/ p21590>.

¹⁰ Max Hastings, "Heroism Is No Substitute for an Afghan Strategy," *Financial Times*, December 20, 2010.

THE HIGH-ENERGY LASER

TOMORROW'S WEAPON TO IMPROVE FORCE PROTECTION

By AARON ANGELL

hink about the current laser designation capability used to direct precision-guided munitions (PGMs) to destroy an enemy target. Now, imagine replacing that laser designator with a high-energy laser (HEL) weapon that emits enough thermal energy to directly render a target ineffective without using a conventional munition. That HEL weapon will affect targets faster and with more precision and stealth than a conventional munition or weapons system. Additionally, that HEL weapon could affect targets across the domains of air, ground, sea, and space. Defensive HEL weapons could be used to counter indirect fire munitions (rockets, artillery, and mortars), aircraft, water vessels, vehicles, and even ballistic missiles. Offensive HEL weapons could be used for offensive air support and even strategic airstrike missions. In future

Major Aaron Angell, USMC, a recent graduate of the School of Advanced Warfighting at the Marine Corps University, is assigned to Future Operations, G–3, 2^d Marine Logistics Group, II Marine Expeditionary Force.



FEATURES | The High-energy Laser

conflict, HEL weapons will be utilized across the joint force to dramatically improve force protection of military and civilian infrastructure and populations.

This article links ongoing research and development of laser technology to show that HEL weapons will be a reality, develops some

with a zero time of flight, a HEL ostensibly can engage and affect many more targets in a given period than a conventional gun

concepts of employment for HEL defensive and offensive weapons as they apply to the tactical and strategic levels of warfare, and presents several vignettes to illustrate possible HEL weapons applications accounting for the joint nature of tomorrow's fight.

High-energy Laser Weapons

First, it is important to understand what a HEL is. Current military HELs are generally defined as having laser power greater than 1 kilowatt (kW). However, most HELs being developed and tested for military application have laser powers ranging from tens of kilowatts to 100 kilowatts for tactical-level employment and up to multi-megawatts for strategic-class application.1 A powerful laser pointer that emits less than 1 watt can cause permanent eye damage in less than 1 second, while average power outputs of 300 watts to 1 kilowatt are commonly used for industrial laser cutting.² In comparison, these examples are far below the laser power output measurements of military HELs currently being tested.

This illustrates the remarkable potential impact for damage and harm by a HEL. Another common measurement to classify a HEL is the emission of a single pulse of energy exceeding 30 kilojoules. To qualify this measurement, just 0.2-0.4 joules per square centimeter (cm²) over 10 nanoseconds can burn skin, and just 10 kilojoules/ cm² in 0.2 seconds could result in damage to the structure of an aircraft or missile without armor.3 Other qualifiers can be used to classify different types of HELs, but the aforementioned power and energy parameters are two key measurements used to distinguish HELs from low-energy lasers.

With these high-power emissions and pulse energies, HELs will achieve extraordinary thermal effects on a target within seconds of initial engagement. Most likely, the optimal engagement time for achieved effects will be between 2 and 4 seconds. In



some cases, HELs may only need to engage targets for less than a second to achieve desired effects. Even with these short engagement times, HELs can:

■ induce an "explosive reaction of the high explosive" contained within.⁴ Targets containing high explosives heated beyond the auto-ignition point, or fuel heated greater than the flash point, will be swiftly destroyed.

■ perforate a critical surface (a fragile aircraft wing, hull of a watercraft, or even the tire of a vehicle), resulting in disruption or prevention of critical capabilities of a targeted threat

■ ignite a critical surface or component (resulting in temporary distraction, at a minimum)

■ disrupt the optics or control systems of a threat by temporarily or permanently blocking a sensor from operating or even blinding an operator.⁵

Whether the thermal effects of a HEL on a target induce explosion, perforation, burning, or blinding, the effects will be measurable and swift.

since HEL weapons encapsulate into one system the enhancements of speed, precision, and stealth, their use for future military application is inevitable

Additionally, the speed of a HEL makes it superior to most conventional weapons systems and munitions. Lasers operate at the speed of light,6 resulting in an almost immediate impact from laser initiation to the target. With a "zero time of flight," a HEL may immediately affect the target following positive identification. This will reduce the time to engage a target by seconds or even minutes compared to most conventional subsonic and supersonic weapons systems and munitions.7 This nearly instantaneous ability to affect a target practically eliminates the time for an enemy to react. Furthermore, with a zero time of flight, a HEL ostensibly can engage and affect many more targets in a given period than a conventional gun.8

Another remarkable advantage of a HEL is long-range precision. Lasers are intrinsically accurate, as has been proven by their use for medical surgery. Now magnify the energy output of that surgical laser in an operating room and place it on the battlefield-giving a new meaning to the phrase surgical strike. However, conducting surgically accurate fires against targets that may be moving (or perhaps maneuvering) on a vast battlefield demands precision aiming. To overcome these challenges, advanced systems such as the high-resolution laser radar and high-power phased array transceiver are also being developed to improve accuracy in acquiring, identifying, and tracking targets at distant ranges.9 Furthermore, another new development, the precision aimpoint maintenance using continually updated templates, can be used to translate from the identification of an adversary system to aim points that will direct a HEL weapon onto specific system vulnerabilities (such as fuel tanks, wings, optics, areas with less armor, and so forth).¹⁰ Marrying a surgically accurate HEL to ancillary advanced acquisition, identification, tracking, and aiming systems will create a promising and effective HEL weapons system.

Lastly, the stealth of a HEL weapon will add a psychological impact when used on the battlefield. "Mysterious weapons have a psychological effect," wrote Montgomery Miegs in reference to the evolution of military innovation.11 A HEL weapon certainly could fall into this category of mysterious weapons, as an adversary may not know if a HEL weapon is being used or is even on the battlefield until it is too late. Most lasers operate in a spectrum that is not visible to the naked eye, and therefore lasers may not be immediately detected by an enemy receiving effects. In fact, there may be no recognition of laser effects on a target until there is no time left for the target to react for survival. Currently, only a limited number of existing systems have the frequency and bandwidth detection capabilities to identify a HEL while in use. To lessen the effects of a laser weapon, possible reaction maneuvers by an intended target could include a change in speed, attitude, or altitude; a counterattack; or a movement to a concealed position. However, even when an enemy discerns the effects of a laser, he may not know the direction or distance of the source of the effects, as there is no smoking gun or combustion flash from the laser "shot." Therefore, an adversary may

not be capable of effectively conducting reactionary maneuvers. At least initially, even the sound and appearance of a HEL weapon, let alone a HEL shot, will not be recognizable by the enemy, making a standalone laser weapons system difficult to target. The current limited ability to detect a HEL weapons system or the effects of a HEL weapon will result in tactical asymmetry on tomorrow's battlefield.

Laser Weapon Employment

Since HEL weapons encapsulate into one system the enhancements of speed, precision, and stealth, their use for future military application is inevitable. HEL weapons will provide a marked advantage over existing conventional weapons, to include indirect fire munitions, aircraft, water vessels, vehicles, and even ballistic missiles. In 2008, the U.S. Army formally recognized the potential of HEL technology for future weapons by awarding a contract to Boeing for the HEL Technology Demonstrator. The justification identified the following capability gaps that HEL weapons could fill: "1) Defeat In-Flight Projectiles such as rockets, artillery, mortars, anti-tank guided missiles, and man-portable surface-to-air missiles, 2) Ultra-Precision Strike with little to no collateral damage, 3) Disruption of Electro-Optical (EO) and Infra-Red (IR) sensors, and 4) Neutralizing mines and other ordnance from a stand-off distance."12

Scenarios

In 2009, Lieutenant General George Flynn, who was then the U.S. Marine Corps Deputy Commandant for Combat Development and Integration, formally recognized the recent advances in solidstate laser technology, citing the "near zero time of flight, low shot cost, and ostensibly 'deep-magazine' capability to counter the primary low altitude unmanned aerial system (UAS) threat."13 There is a vast list of employment scenarios for HEL weapons across the domains of land, sea, air, and space. The following vignettes and analysis of current research and development tests illustrate the potential for HEL weapons on the battlefield.

Background. It is December 2020. North Korea has taken military action to threaten South Korea. International disputes have escalated regarding island territories and the maritime border between North

FEATURES | The High-energy Laser



Korea and South Korea. North Korea has increased the size of navy fleets at bases on the east and west coasts. From these bases, the North Korean navy has deployed numerous torpedo craft, missile craft (PTG), and patrol craft to guard the southeastern and southwestern coasts. Reports from merchant ships have shown these craft are frequenting waters between 10 and 30 miles off the coast. The North Korean air force has increased air patrols over coastal airspace to the south. The North Korean army also appears to be mobilizing toward the south. Pyongyang seems to be posturing to conduct limited military operations under centralized control in order to provoke military action against them first, intending to deliver a strong and immediate counterattack.

Scenario 1. On December 1, 2020, North Korea conducts an artillery attack on Yeonpyeong Island with a mixture of 170-millimeter (mm) and 152mm artillery rounds launched from mainland North Korea. While approximately 100 rounds were destined to impact on the island, only 50 actually impacted with no loss of life and no destruction to critical infrastructure due to networked land and maritime laser defense systems. The U.S. Army had previously deployed land laser defense systems (LLDS) to protect the population center and

HEL weapons can provide point defense against surface and air threats both ashore and in a maritime environment

economic port of Yeonpyeong from rocket and artillery attack. Additionally, U.S. Navy ships from the George Washington battlegroup had recently been upgraded with the maritime laser defense system (MLDS) for ship and area defense against rockets, missiles, and unmanned aerial vehicles (UAVs). On December 1, the networked LLDS and MLDS engaged and forced detonation of all artillery rounds with trajectories destined for the port and city at Yeonpyeong.

Ground forces are already looking to apply HEL weapons to target rocket, artillery, and mortar (RAM) threats. Northrop Grumman's Skyguard laser defense system has proven effective against RAM threats at a range of 5 kilometers (km).14 Skyguard, more recently known as the Tactical High Energy Laser (THEL), has the interest of the U.S. and Israeli armies. Further advancement in laser technology has resulted in the Mobile THEL (MTHEL) as a point defense weapon that can be displaced to a base, key operational node, or population center to engage and destroy RAM threats for force protection. During testing, the MTHEL engaged and destroyed 28 122mm and 160mm Katyusha rockets, multiple artillery shells and mortar rounds, and a salvo attack by mortars. The MTHEL, which is the size of a single container-sized semi trailer, can be deployed today to an expeditionary environment to protect military or civilian infrastructure or personnel.15 Additionally, Raytheon has developed a HEL weapon for short-range air defense against RAM threats and aircraft. In June 2006, Raytheon mounted a HEL on the turret of its Phalanx close-in weapon system, which is already in use for ship-and land-based short-range air defense. Known originally

as the Laser Area Defense System (LADS), the short-range point defense HEL weapon included a 20-kW fiber laser and a benchmounted beam director attached to the top of a Phalanx mount. During testing, the LADS detonated a 60mm mortar at a range of 550 meters.¹⁶ The MTHEL and LADS are potential tactical HEL weapons capable of terminal defense of a local area against RAM threats.

HEL weapons will also be used for defense against enemy offensive aircraft. In December 2008, Boeing successfully tested a kilowatt-class laser weapon on its Avenger air defense system that shot down a UAV. The acquisition, tracking, and aiming systems acquired and tracked three small UAVs; then the HEL was used to shoot down one of them "from an operationally relevant range" by burning a hole through the vehicle.17 Although this could be considered a minor success against a UAV, it is indicative of an expeditionary mobile tactical HEL antiaircraft capability for protection of key infrastructure or even a halted tactical convoy.

Scenario 2. On December 2, 2015, North Korea launched two surface-to-surface missiles (SSMs) at USS Normandy from a PTG approximately 20 miles west of Namp'O naval base. USS Vicksburg initiated its two MLDS for 6 seconds each to detonate both SSMs before they reached the Normandy. Simultaneously, the Normandy utilized its MLDS in manual mode to engage the North Korean PTG. The PTG was neutralized when the MLDS ignited its engine after laser weapon engagement for 20 seconds.

There is great potential for using HEL weapons for maritime defense. In June 2010, Raytheon's maritime variant of the HEL with a Phalanx mount, dubbed the Laser Weapon System by the U.S. Navy, detected, engaged, and downed a "threat representative" UAV in a simulated combat encounter at sea.18 More recently, on April 10, 2011, the Navy demonstrated the ability to use a HEL against watercraft by setting an outboard engine of a small boat on fire from a distance of a few miles.¹⁹ An additional advantage of a maritime HEL is the logistically friendly "deep magazine" effect as compared to the traditional Phalanx that expends 3,000-4,500 20mm rounds per minute. Furthermore, the high electrical power required for the Laser Weapon System is readily available aboard the ship.

HEL weapons can provide point defense against surface and air threats both ashore and in a maritime environment.

Scenario 3. While conducting a Combat Air Patrol (CAP) mission in the vicinity of the George Washington battlegroup in the Yellow Sea, a U.S. Navy F/A–18 Super Hornet was illuminated by a land-based Fan Song radar, presumably associated with an SA–2 launcher. In response, the F/A–18's onboard airborne laser defense system (ALDS) immediately engaged the radar operating system, rendering it inoperable before the SA–2 was launched.

Offensive air support against ground targets will also be enhanced by HEL

weapons. Unlike ground forces, a pilot's "bird's eye" view of the battlefield is often less obstructed by terrain, although it can be severely diminished by vegetation. Nonetheless, pilots will make frequent use of directfire HEL weapons for offensive air support. This is the concept for the U.S. Air Force Advanced Tactical Laser (ATL). Currently mounted on a C–130, although envisioned for other aircraft to include the V–22 Osprey, the ATL is designed as a close air support weapon using a Mega-Watt class HEL.²⁰ In September 2009, the ATL penetrated an unoccupied stationary vehicle in 8 seconds from an undisclosed altitude and distance.²¹ While



FEATURES | The High-energy Laser

this may seem negligible in effect, the high heat generated with precision accuracy from a moving aircraft reveals the reality of close air support with a HEL for limited high-value target engagement.

even the cost of a few million dollars for each HEL weapon is minimal compared to the loss of a Navy ship, an aircraft, a key facility, or a grouping of military or civilian personnel

Scenario 4. On December 3, 2015, a section of U.S. Air Force F–16 Fighting Falcons was conducting a CAP north of Seoul, South Korea, when they were engaged by four MiG–19 Farmers. The result was an immediate and short air-to-air engagement. All four MiG–19 Farmers were destroyed: one by 20mm cannon fire, another by an AIM–7 Sparrow, and two by the ALDS. While the two F–16s each engaged a MiG–19 using conventional munitions, their respective onboard ALDS targeted and detonated the drop tanks of the remaining two enemy aircraft.

The ability of aircraft to conduct counterair warfare will be greatly enhanced by a HEL weapon. It could provide a counterair capability that operates distinctly from the primary mission of the aircraft and pilot. In other words, while a pilot is conducting his assigned aviation mission (for instance, offensive air support or aerial reconnaissance), a HEL weapon could automatically identify, acquire, target, and engage an enemy missile or aircraft. The counterair capability of HEL weapons will enhance the survivability of pilots, especially aboard aircraft not designed specifically for that purpose.

Onboard airborne HEL defense weapons could be used to protect more than just tactical fighter and attack aircraft. The Defense Advanced Research Projects Agency High-Energy Liquid Laser Area Defense System competition has the goal of creating a 150 kW laser weapon within a 3-cubic-meter space and weighing no more than 5 kilograms/kW. The intent is to create an airborne HEL that is small enough to fit in a bomber, transport, or tanker aircraft without interrupting the main function of the aircraft. The milestones for the project include a ground test in 2011 to shoot down two SA–10 class surface-to-air missiles simultaneously and then an airborne test in 2012–2013.²² These tests are encouraging the evolution of tactical defense HEL weapons beyond military application.

Scenario 5. On December 4, 2015, North Korea launches a Scud-ER from a northern province. The Scud appeared to be on a trajectory to impact in the vicinity of Pusan, South Korea, where coalition forces were conducting reception, staging, onward movement, and integration for potential follow-on land operations against North Korea. A U.S. Air Force strategic airborne laser defense system detected, engaged, and detonated the Scud-ER while it was still in North Korean airspace. What remained of the detonated Scud-ER fell to the ground within North Korea.

The strategic impact of a HEL against a ballistic missile still provides promise. The U.S. Air Force has continued research and development evolving from the Strategic Defense Initiative concept to use a laser weapon against ballistic missiles. Specifically, the AL-1A Airborne Laser (ABL) has been designed to attack ballistic missiles in the boost phase. The intent is to cause slight damage to the booster skin that will result in catastrophic failure and ultimate detonation. The concept of employment is to deploy the ABL to borders of a nation threatening ballistic missile attack and to detect, track, and attack the missiles once they clear the cloud base. The debris would then fall back to the nation that launched the weapon or some other safe environment. Once the system is more mature, it could be used against short, intermediate, and intercontinental ballistic missiles, as well as high-flying aircraft and cruise missiles.23 In February 2010, the Missile Defense Agency announced that the ABL shot down a liquid-filled Scud-like target.24 However, in the most recent test in October 2010, "preliminary indications are that the system acquired and tracked the plume (rocket exhaust) of the target, but never transitioned to active tracking. Therefore, the HEL [shot] did not occur."25 Even with these recent setbacks, this initiative is likely to result in a strategic HEL weapon that will provide a defense against a ballistic missile.

Challenges

Obstacles that will have to be overcome before HEL weapons are commonplace are costs, counter-laser defense, and collateral damage. None of these obstacles is insurmountable. Additionally, these obstacles will likely remain even when HELs are operational.

A cost-benefit analysis is necessary to determine the right time to integrate HEL weapons into the Department of Defense (DOD) arsenal. In 2006, Northrop Grumman stated that its first Skyguard/ THEL systems would cost \$150 million-\$200 million due to nonrecurring developmental costs, but that the cost would drop to \$25 million-\$30 million per system.26 That price is very likely to be reduced even more through further research and development of the three components of laser action: laser medium, pumping stations, and resonant optical cavities.²⁷ In contrast to the high price, even the cost of a few million dollars for each HEL weapon is minimal compared to the loss of a Navy ship, an aircraft, a key facility, or a grouping of military or civilian personnel. The monetary cost of HEL is high, although at some point the cost will be deemed worthwhile for force protection.

Time is also a cost when considering that global competitors are likely also developing HEL weapons. Russia is developing the Almaz-Antey HEL directed energy weapon (HEL DEW) air defense system, which has already engaged a target drone. The expected concept of employment of this weapon is like the U.S. and Israeli THEL, although with enhanced capability to engage surface-to-air missiles and PGMs for point defense. Russia has also developed an airborne Almaz/Beriev A-60 HEL DEW "Testbed" capability.28 Additionally, in 2007, DOD presented evidence that the Chinese People's Liberation Army funded a well-developed and advanced HEL program intending to attack low orbit satellites, cruise missiles, and PGMs, while also providing point defense.29 Most recently, India released information regarding its testing of a laser ballistic missile defense system with capability of producing 25kW pulses that can reportedly destroy a ballistic missile at a range of 7km, as well as an air defense laser capable of engaging aircraft at a range of 10km. India's laser research has even resulted in a hand-held laser sensor capable

of identifying an impending laser threat.³⁰ While the Russian, Chinese, and Indian HEL weapon capabilities do not appear to be as robust as the U.S. initiatives, there is potential for a future HEL arms race. Therefore, even time is a cost when it comes to developing HEL weapons for military employment.

while the precision of a HEL weapon will likely reduce collateral damage, more research must be done to predict and regulate that damage

The cost to effectively counter a HEL will also be high. It is just a matter of time for every innovation to be countered. A seemingly obvious counter to a laser weapon is to use a material with reflectivity that either dissipates or fully reflects the transfer of energy from a laser. In many cases, these surface material innovations will just delay the thermal effects of a HEL by a matter of seconds. For the adversary, this counter will be costly financially and temporally, as producers will have to redesign and field modified materials on current equipment or design completely new equipment.

Lastly, forethought is necessary to understand the possible collateral damage of a HEL weapon. At the strategic level, DOD is developing "decentralized predictive avoidance" measures to prevent unintended collateral damage of satellites on the trajectory of a stray laser. At the tactical level, HEL weapons could cause unintentional permanent and temporary personnel blinding. As reflectivity of material is further advanced, it is even possible that a "thermal ricochet" could result in collateral damage. While the precision of a HEL weapon will likely reduce collateral damage, more research must be done to predict and regulate that damage.

HEL weapons are on the cusp of becoming a reality for use across the joint force. They will provide a precise and nearly undetectable direct-fire capability with "zero time of flight" against conventional weapons systems and munitions. HEL weapons will significantly improve force protection of civilian and military infrastructure and populations against rockets, artillery, mortars, aircraft (manned and unmanned), watercraft, vehicles, and missiles in the domains of land, sea, air, and space. Furthermore, offensive HEL weapons will improve speed and precision of fire support, counterair, and strike capability, while also providing capacity for fires from nontraditional aircraft platforms. Since HEL weapons provide such significant advancement in defensive and offensive capability and capacity, they will be included in the arsenal of military assets to operate in tomorrow's conflicts. **JFQ**

NOTES

¹ Major Billy Short, Office of Naval Research, email correspondence to author, December 9, 2011.

² Industrial Laser Systems, LLC, Laser Cutting Services and Systems, "Important Laser Information," available at <www.laser-industrial.com/ pweld3.htm>.

³ Bengt Anderberg, *Laser Weapons: The Dawn* of a New Military Age (New York: Plenum Publishing, 1992), 93.

⁴ J. Thomas Schriempf and Brian Hankla, "Navy HEL Lethality Program," lecture given at the High Energy Laser Joint Technology Office Directed Energy Professional Society Annual Review, Albuquerque, NM, May 5, 2010.

⁵ United Nations, Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, Protocol IV on Blinding Laser Weapons, Article 1, negotiated and adopted in Vienna, October 13, 1995, says, "It is prohibited to employ laser weapons specifically designed, as their sole combat function or as one of their combat functions, to cause permanent blindness to unenhanced vision, that is to the naked eye or to the eye with corrective eyesight devices. The High Contracting Parties shall not transfer such weapons to any State or non-State entity."

⁶ For the physics, see R.P. Feynman, R.B. Leighton, and M.L. Sands, *The Feynman Lectures on Physics* (Reading, MA: Addison-Wesley Publishing Company, 1963).

⁷ Carlo Kopp, "High Energy Laser Directed Weapons," Technical Report APA–TR–2008–0501, May 2008, 3.

⁸ Anderberg, 96.

⁹ Dan Marker, "Hi-power Phased Array Transceiver (HiPAT)," lecture given at the High Energy Laser Joint Technology Office Directed Energy Professional Society Annual Review, Albuquerque, NM, May 5, 2010.

¹⁰ Andrew Scott, "Precision Aimpoint Maintenance using Continuously Updated Templates (PAMCUT)," lecture given at the High Energy Laser Joint Technology Office Directed Energy Professional Society Annual Review, Albuquerque, NM, May 5, 2010.

¹¹ Montgomery C. Meigs, *Slide Rules and Submarines: American Scientists and Subsurface Warfare in World War II* (Washington, DC: National Defense University Press, 1989), 214.

¹² Kopp, 46.

¹³ Ashley G. Johnson, Office of Naval Research brief, "POM13–07: Ground Based Air Defense Onthe-Move," July 9, 2010.

¹⁴ Jefferson Morris, "Northrop Unveils Skyguard Laser Air Defense System," *Aviation Week*, July 13, 2006.

¹⁵ Kopp, 37–47.

¹⁷ Graham Warwick, "Boeing Claims First Laser UAV Shootdown," *Aviation Week*, January 27, 2009. In 2007, Boeing used an earlier variant of the Avenger laser to neutralize improvised explosive devices and other unexploded ordnance.

¹⁸ David Wichner, "Laser Ship-defense Test a Win for Raytheon, Navy," *Arizona Daily Star*, June 4, 2010.

¹⁹ "Laser Gun Fired from U.S. Navy Ship," BBC News, April 11, 2011.

²⁰ Kopp, 48.

²¹ "Boeing Advanced Tactical Laser Defeats Ground Target in Flight Test," media release, September 1, 2009.

²² Graham Warwick, "Solid-state Laser Programs Advance," Aviation Week, January 11, 2009. ²³ Kopp, 14–36.

-- Kopp, 14-36

²⁴ Robert Wall, "Airborne Laser Shoots Down Scud-like Target," *Aviation Week*, Defense Technology blog, February 12, 2010.

²⁵ "Airborne Laser Test Bed Exercise Conducted," Military Defense Agency news release 10–NEWS–0014, October 21, 2010.

³⁰ Jay Menon, "India Looks at Laser Weapons for Air and Missile Defense," *Aviation Week*, April 28, 2011.

¹⁶ Ibid., 53.

²⁶ Morris.

²⁷ Anderberg, 18.

²⁸ Kopp, 54-60.

²⁹ Ibid., 65.

MQ–1C Grey Eagle UAV armed with Hellfire missiles

10

TARGETED KILLING, THE LAW, AND TERRORISTS FEELING SAFE?

By MARK DAVID MAXWELL

n a 2004 *New Yorker* article, Malcolm Gladwell explored the unprecedented spike in the number of sport utility vehicles (SUVs) on American roadways.¹ The popularity of SUVs is based, in part, on the perception that they are safer for the consumer than traditional sedan automobiles. Gladwell skillfully dissected this perception and demonstrated, with the help of some compelling safety statistics, that SUVs are much more dangerous

for both their drivers and passengers than traditional sedans. He maintained that in the automotive world, a strange and contorted phenomenon has taken place: "*feeling* safe has become more important than actually *being* safe."² This automotive phenomenon, although seemingly illogical given the safety statistics, is grounded on a false premise: automobile consumers believe that a bigger vehicle will mitigate their risk of injury. This seductive premise, however, ignores the reality of what causes injury: driving on the roadways. Gladwell concluded that "[the] feeling of safety isn't the solution; it's the problem."³ In the wake of the attacks by al Qaeda on September 11, 2001, an analogous phenomenon of feeling safe has occurred in a recent U.S. national security policy: America's explicit use of targeted killings to eliminate terrorists, under the legal doctrines of selfdefense and the law of war. Legal scholars define *targeted killing* as the use of lethal force by a state⁴ or its agents with the intent, premeditation, and deliberation to kill

Colonel Mark David Maxwell, USA, is a Judge Advocate with the U.S. Army.

FEATURES | Targeted Killing, the Law, and Terrorists

individually selected persons who are not in the physical custody of those targeting them.⁵ In layman's terms, targeted killing is used by the United States to eliminate individuals it views as a threat.⁶ Targeted killings, for

President Ford did not want legislation that would impinge upon his unilateral ability as Commander in Chief to decide on the measures that were necessary for national security

better or for worse, have become "a defining doctrine of American strategic policy."⁷ Although many U.S. Presidents have reserved the right to use targeted killings in unique circumstances, making this option a formal part of American foreign policy incurs risks that, unless adroitly controlled and defined in concert with Congress, could drive our practices in the use of force in a direction that is not wise for the long-term health of the rule of law.

This article traces the history of targeted killing from a U.S. perspective. It next explains how terrorism has traditionally been handled as a domestic law enforcement action within the United States and why this departure in policy to handle terrorists like al Qaeda under the law of war-that is, declaring war against a terrorist organization-is novel. While this policy is not an ill-conceived course of action given the global nature of al Qaeda, there are practical limitations on how this war against terrorism can be conducted under the orders of the President. Within the authority to target individuals who are terrorists, there are two facets of Presidential power that the United States must grapple with: first, how narrow and tailored the President's authority should be when ordering a targeted killing under the rubric of self-defense; and second, whether the President must adhere to concepts within the law of war, specifically the targeting of individuals who do not don a uniform. The gatekeeper of these Presidential powers and the prevention of their overreach is Congress. The Constitution demands nothing less, but thus far, Congress's silence is deafening.

History of Targeted Killing

During the Cold War, the United States used covert operations to target certain political leaders with deadly force.8 These covert operations, such as assassination plots against Fidel Castro of Cuba and Ngo Dinh Diem of South Vietnam, came to light in the waning days of the Richard Nixon administration in 1974. In response to the public outrage at this tactic, the Senate created a select committee in 1975, chaired by Senator Frank Church of Idaho, to "Study Government Operations with Respect to Intelligence Activities."9 This committee, which took the name of its chairman, harshly condemned such targeting, which is referred to in the report as assassination: "We condemn assassination and reject it as an instrument of American policy."10

In response to the Church Committee's findings, President Gerald R. Ford issued an Executive order in 1976 prohibiting assassinations: "No employee of the United States Government shall engage in, or conspire to engage in political assassination."¹¹ The order, which is still in force today as Executive Order 12333, "was issued primarily to preempt pending congressional legislation banning political



assassination.³¹² President Ford did not want legislation that would impinge upon his unilateral ability as Commander in Chief to decide on the measures that were necessary for national security. ¹³ In the end, no legislation on assassinations was passed; national security remained under the President's purview. Congress did mandate, however, that the President submit findings to select Members of Congress before a covert operation commences or in a timely fashion afterward.¹⁴ This requirement remains to this day.

Targeted killings have again come to center stage with the Barack Obama administration's extraordinary step of acknowledging the targeting of the radical Muslim cleric

like the soldier who acts under the authority of self-defense, if one acts reasonably based on the nature of the threat, the action is justified and legal

Anwar al-Awlaki, a U.S. citizen who lived in Yemen and was a member of an Islamic terrorist organization, al Qaeda in the Arabian Peninsula.15 Al-Awlaki played a significant role in an attack conducted by Umar Farouk Abdulmutallab, the Nigerian Muslim who attempted to blow up a Northwest Airlines flight bound for Detroit on Christmas Day 2009.16 According to U.S. officials, al-Awlaki was no longer merely encouraging terrorist activities against the United States; he was "acting for or on behalf of al-Qaeda in the Arabian Peninsula . . . and providing financial, material or technological support for ... acts of terrorism."17 Al-Awlaki's involvement in these activities, according to the United States, made him a belligerent and therefore a legitimate target.

The context of the fierce debates in the 1970s is different from the al-Awlaki debate. The targeted killing of an individual for a political purpose, as investigated by the Church Committee, was the use of lethal force during *peacetime*, not during an armed conflict. During armed conflict, the use of targeted killing is quite expansive.¹⁸ But in peacetime, the use of *any* lethal force is highly governed and limited by both domestic law and international legal norms. The presumption is that, in peacetime, all use of force by the state, especially lethal force, must be necessary.



The Law Enforcement Paradigm

Before 9/11, the United States treated terrorists under the law enforcement paradigm-that is, as suspected criminals.19 This meant that a terrorist was protected from lethal force so long as his or her conduct did not require the state to respond to a threat or the indication of one. The law enforcement paradigm assumes that the preference is not to use lethal force but rather to arrest the terrorist and then to investigate and try him before a court of law.²⁰ The presumption during peacetime is that the use of lethal force by a state is not justified unless necessary. Necessity assumes that "only the amount of force required to meet the threat and restore the status quo ante may be employed against [the] source of the threat, thereby limiting the force that may be lawfully applied by the state actor."²¹ The taking of life in peacetime is only justified "when lesser means for reducing the threat were ineffective."22

Under both domestic and international law, the civilian population has the right to be free from arbitrary deprivation of life. Geoff Corn makes this point by highlighting that a law enforcement officer could *not* use deadly force "against suspected criminals based solely on a determination an individual was a member of a criminal group."²³ Under the law enforcement paradigm, "a country cannot target any individual in its own territory unless there is no other way to avert a great danger.²⁴ It is the individual's *conduct* at the time of the threat that gives the state the right to respond with lethal force.

The state's responding force must be *reasonable* given the situation known at the time. This reasonableness standard is a "commonsense evaluation of what an objectively reasonable officer might have done in the same circumstances."²⁵ The U.S. Supreme Court has opined that this reasonableness is subjective: "[t]he calculus of reasonableness must embody allowances for the fact that police officers often are forced to make split-second judgments . . . about the amount of force that is necessary in a particular situation."²⁶

The law enforcement paradigm attempts to "minimize the use of lethal force to the extent feasible in the circumstances."27 This approach is the starting point for many commentators when discussing targeted killing: "It may be legal for law enforcement personnel to shoot to kill based on the imminence of the threat, but the goal of the operation, from its inception, should not be to kill."28 The presumption is that intentional killing by the state is unlawful unless it is necessary for self-defense or defense of others.²⁹ Like the soldier who acts under the authority of self-defense, if one acts reasonably based on the nature of the threat, the action is justified and legal.

What the law enforcement paradigm never contemplates is a terrorist who works outside the state and cannot be arrested.

FEATURES | Targeted Killing, the Law, and Terrorists

These terrorists hide in areas of the world where law enforcement is weak or nonexistent. The terrorists behind 9/11 were lethal and lived in ungovernable areas; these factors compelled the United States to rethink its law enforcement paradigm.

The Law of War Paradigm

The damage wrought by the 9/11 terrorists gave President George W. Bush the political capital to ask Congress for authorization to go to war with these architects of terror, namely al Qaeda. Seven days later, Congress

under the law of war, a soldier who kills an enemy has immunity for these precapture or warlike acts

gave the President the Authorization for the Use of Military Force (AUMF) against those "nations, organizations, or persons [the President] determines planned, authorized, committed, or aided the terrorist attacks that occurred on September 11, 2001, or harbored such organizations or persons, in order to prevent any future acts of international terrorism against the United States by such nations, organizations, or persons."³⁰

For the first time in modern U.S. history, the country was engaged in an armed conflict with members of an organization, al Qaeda, versus a state. The legal justification to use force, which includes targeted killings, against al Qaeda, the Taliban, and associated forces is twofold: self-defense and the law of war.³¹

In armed conflict, the rules governing when an individual can be killed are starkly different than in peacetime. The law enforcement paradigm does not apply in armed

Communist-related literature, including photograph of Cuban president Fidel Castro, seized by U.S. military during Operation *Urgent Fury*, Grenada, 1983



conflict. Rather, designated terrorists may be targeted and killed because of their status as enemy belligerents. That status is determined solely by the President under the AUMF. Unlike the law enforcement paradigm, the law of war requires neither a certain conduct nor an analysis of the reasonable amount of force to engage belligerents. In armed conflict, it is wholly permissible to inflict "death on enemy personnel irrespective of the actual risk they present."32 Killing enemy belligerents is legal unless specifically prohibited-for example, enemy personnel out of combat like the wounded, the sick, or the shipwrecked.33 Armed conflict also negates the law enforcement presumption that lethal force against an individual is justified only when necessary. If an individual is an enemy, then "soldiers are not constrained by the law of war from applying the full range of lawful weapons."34 Now the soldier is told by the state that an enemy is hostile and he may engage that individual without any consideration of the threat currently posed. The enemy is declared hostile; the enemy is now targetable.

Anticipatory Self-defense

This paradigm shift is novel for the United States. The President's authority to order targeted killings is clear under domestic law; it stems from the AUMF. Legal ambiguity of the U.S. authority to order targeted killings emerges, however, when it is required to interpret international legal norms like self-defense and the law of war. The United States has been a historic champion of these international norms, but now they are hampering its desires to target and kill terrorists.

Skeptics of targeted killing admit that "[t]he decision to target specific individuals with lethal force after September 11 was neither unprecedented nor surprising."35 Mary Ellen O'Connell has conceded, for example, that targeted killing against enemy combatants in Afghanistan is not an issue because "[t]he United States is currently engaged in an armed conflict" there.³⁶ But when the United States targets individuals outside a zone of conflict, as it did with al-Awlaki in Yemen,³⁷ it runs into turbulence because a state of war does not exist between the United States and Yemen.38 A formidable fault line that is emerging between the Obama administration's position and many academics, international organizations,39 and even some foreign governments⁴⁰ is *where* these targeted killings can be conducted.⁴¹

According to the U.S. critics, if armed conflict between the states is not present at a location, then the law of war is never triggered, and the state reverts to a peacetime paradigm. In other words, the targeted individual cannot be killed merely because of his or her *status* as an enemy, since there is no armed conflict. Instead, the United States, as in peacetime, must look to the threat the individual possesses at the time of the targeting. There is a profound shift of the burden upon the state: the presumption now is that the targeted killing must be necessary. When, for example, the United States targeted and killed six al Qaeda members in Yemen in 2002, the international reaction was extremely negative: the strike constituted "a clear case of extrajudicial killing."42

The Obama administration, like its predecessor, disagrees. Its legal justification for targeted killings outside a current zone of armed conflict is anticipatory self-defense. The administration cites the inherent and unilateral right every nation has to engage in anticipatory self-defense. This right is codified in the United Nations charter⁴³ and is also part of the U.S. interpretation of customary international law stemming from the Caroline case in 1837. A British warship entered U.S. territory and destroyed an American steamboat, the Caroline. In response, U.S. Secretary of State Daniel Webster articulated the lasting acid test for anticipatory self-defense: "[N]ecessity of self defense [must be] instant, overwhelming, leaving no choice of means and no moment for deliberation . . . [and] the necessity of self defense, must be limited by that necessity and kept clearly within it."44

A state can act under the guise of anticipatory self-defense. This truism, however, leaves domestic policymakers to struggle with two critical quandaries: first, the factual predicate required by the state to invoke anticipatory self-defense, on the one hand; and second, the protections the state's soldiers possess when they act under this authority, on the other. As to the first issue, there is simply no guidance from Congress to the President; the threshold for triggering anticipatory self-defense is ad hoc. As to the second issue, under the law of war, a soldier who kills an enemy has immunity for these precapture or warlike acts.⁴⁵ This "combatant immunity" attaches only when the law of war has been triggered. Does combatant immunity attach when the stated legal authority is self-defense? There is no clear answer.

The administration is blurring the contours of the right of the *state* to act in Yemen under self-defense and the law of war protections afforded its *soldiers* when so acting. Therefore, what protections do U.S. Airmen enjoy when operating the drone that killed an individual in Yemen, Somalia, or Libya? If they are indicted by a Spanish court for murder, what is the defense? Under the law of war, it is combatant immunity. But if the law of war is not triggered because the killing occurred outside the zone of armed conflict, the policy could expose Airmen to prosecution for murder.

In order to alleviate both of these quandaries, Congress must step in with legislative guidance. Congress has the constitutional obligation to fund and oversee military operations.⁴⁶ The goal of congressional action must not be to thwart the President from protecting the United States from the dangers of a very hostile world. As the debates of the Church Committee demonstrated, however, the President's unfettered authority in the realm of national security is a cause for concern. Clarification is required because the AUMF gave the President a blank check to use targeted killing under domestic law, but it never set parameters on the President's authority when international legal norms intersect and potentially conflict with measures stemming from domestic law.

although the United States has moved away from the terminology unlawful combatant, the net effect remains the same: it is a third status that is targetable and given fewer protections than the law enforcement paradigm would provide

Targeting Terrorists

The tension created by this intersection—international norms on one side and domestic law on the other—is framed not only by the self-defense debate, but also by the law of war. The blank-check nature of AUMF has created a profound legal issue for



security in Zabul Province as Afghan-led force detains persons of interest for questioning on insurgent activity

the United States: since the war is against nonstate actors, when can an individual not in uniform be lawfully targeted under the law of war? In response to this issue and the modern-day impossibility of combating terrorism under a law enforcement paradigm, the Bush administration attempted to create a third law of war status beyond civilians (those the state must not target under the law of war) and combatants (those the state can lawfully target under the law of war): unlawful combatants. This status melds two concepts together: first, unlawful combatants, like traditional combatants, can be targeted with lethal force as an enemy with no proportionality requirement to resort to lesser means; and second, unlawful combatants, unlike traditional combatants, are not given combatant immunity if captured for their warlike acts before being apprehended.⁴⁷ Terrorists are combatants that are "unlawful" because "they do not differentiate themselves from the civilian population, and they do not obey the laws of war."48 Yet when targeting the "unlawful combatant" like a traditional combatant, the state must still adhere to the bedrock principles embedded in the law of war, which are distinction, military necessity,49 and preventing unnecessary suffering.50

The term *unlawful combatant* first gained currency in the 1942 Supreme Court case of *Ex parte Quirin*.⁵¹ During World War II, President Roosevelt created a military commission to try eight German soldier saboteurs who illegally entered the United States by submarine, shed their military uniforms, and conspired to commit acts of sabotage and espionage and to use explosives on targets within the United States.⁵² The U.S. Supreme Court upheld President Roosevelt's actions and a majority of the saboteurs were put to death.⁵³ In the Court's Opinion, the delineation between lawful and unlawful combatants is made clear:

By universal agreement and practice the law of war draws a distinction between the armed forces and the peaceful populations of belligerent nations and also between those who are lawful and unlawful combatants. Lawful combatants are subject to capture and detention as prisoners of war by opposing military force. Unlawful combatants are subject to capture and detention, but in addition they are subject to trial and punishment by military tribunals for acts which render their belligerency unlawful.⁵⁴

In the aftermath of 9/11, the Bush administration categorized al Qaeda, Taliban, and associated terrorist members as unlawful combatants.⁵⁵ This categorization received much criticism, regardless of the Supreme Court's pronouncements, because a "third" status under international law had not yet developed.⁵⁶ Although the United States has moved away from the terminology *unlawful combatant*, in favor of *unprivileged belligerent*, the net effect remains the same: it is a third status that is targetable and given fewer protections than the law enforcement paradigm would provide.⁵⁷

The status of unlawful combatant was also advanced by the government of Israel in arguments before its supreme court. The Israeli court, however, did not add this status to the other two—combatant and civilian. Unlawful combatancy has not gained international currency: "[i]t does not appear to us that we were presented with data sufficient to allow us to say, at the present time, that such a third category has been recognized in customary international law."⁵⁸ Israel did not foreclose the prospect that this status would gain acceptance in the international community, but ultimate recognition of a third status was deferred.

The Obama administration, like its predecessor, does not agree. Instead, certain terrorists are treated as unlawful combatants or unprivileged belligerents who can be

FEATURES | Targeted Killing, the Law, and Terrorists

targeted based on their status. This approach, however, has been robustly criticized for transforming all terrorists into combatants with little or no protections. Does another status exist?

Third Category for Status and Geographical Locations

After 9/11, the complexion of warfare changed in two profound ways: the belligerents who are nonstate actors look like civilians, and they are located worldwide. A gap developed between what the law is and what the law should be. One international law court acknowledged that their fight against terrorism required a "new reality," and therefore the law "must take on a dynamic interpretation."59 For the first time, the United States, the leading military power in the world, was involved in this novel type of warfare.⁶⁰ It was not an armed conflict involving another state, nor was it an armed conflict involving only belligerents within the affected state's borders. The belligerent actors in this armed conflict were nonstate actors outside a zone of armed conflict. And the reality is that this unique type of armed conflict is growing.61

This reality of conflict with nonstate actors was the leading catalyst for the International Committee of the Red Cross (ICRC) to convene. The result was the Interpretive Guidance on the Direct Participation in Hostilities, adopted by the ICRC in 2009. The guidance attempted to tackle the legal contours of whether individuals who do not don a uniform, but take a direct part in hostilities, can be targeted.

The guidance provides a roadmap for advancing the position that a status of individuals exists in armed conflict that is separate and distinct from both combatants and civilians. The trend to treat everyone in this special type of armed conflict as civilians—some of whom are uninvolved with the conflict and others who are taking a direct part—is simply rejected by the guidance.⁶²

By treating everyone in these types of armed conflict as civilians, the principle of distinction between warriors and civilians becomes weakened, if not irrelevant. This led the ICRC to posit that "organized armed groups constitute the armed forces of a non-State party to the conflict and consist only of individuals whose continuous function is to take a direct part in hostilities."⁶³ The ICRC guidance acknowledges the historic ambiguity of how to treat nonstate actors who are an organized armed group: "While it is generally recognized that members of State armed forces in non-international armed conflict do not qualify as civilians, treaty law, State practice, and international jurisprudence have not unequivocally settled whether the same applies to members of organized armed groups (i.e. the armed forces of non-State parties to an armed conflict)."⁶⁴

Given this ambiguity, the guidance does not lump all actors in an armed conflict within the category of civilians even though "it might be tempting to conclude that membership in such groups is simply a continuous form of civilian direct participation in hostilities."65 This would "create parties to noninternational armed conflicts whose entire armed forces remain part of the civilian population."66 Instead, the guidance boldly concludes that "[a]s the wording and logic of Article 3 G[eneva] C[onventions] I-IV and Additional Protocol II reveals, civilians, armed forces, and organized armed groups of the parties to the conflict are mutually exclusive categories also in non-international armed conflict." A status-members of an organized armed group-is crystallized.

The guidance narrowly defines what constitutes a member of any organized armed group: the term "refers exclusively to the armed or military wing of a non-State party: its armed forces in a functional sense."⁶⁷ This armed wing can be targeted like the armed forces of a state in an armed conflict because the armed wing's purpose is to conduct hostilities.⁶⁸ The crux of distinguishing whether an individual is a member of an organized armed group or a civilian is whether the person performs a continuous combat function.⁶⁹

Therefore, two requirements-membership in a group and the conduct of that group-must be met before an individual can be considered a member of an organized armed group and thereby be targeted because of his or her status. First, the individual must be a member of an organized group because the "[c]ontinuous combat function requires lasting integration into an organized armed group."70 Second, the organized group must be conducting hostilities. If these two requirements are met, a belligerent nonstate actor can be targeted without regard to current or future conduct. Therefore, under this two-part analysis: "[a]n individual recruited, trained, and equipped by such a group to continuously and directly participate in hostilities on its behalf can be considered to assume a continuous combat function even before he or she first carries out a hostile act."71

Like a member of an armed force (a soldier), the member of the armed group is part of a structure whose aim is to inflict violence upon the state. A soldier might never take a direct part in hostilities, but he holds the status of someone who can be targeted because of his membership in an organization whose function is to perform hostilities. The test for status must be the *threat* posed by the group and the member's course of conduct that allows that threat to persist. This



danger-centric approach is echoed by the Commentary to the Second Protocol: "Those who belong to armed forces or armed groups may be attacked at any time. If a civilian participates directly in hostilities, it is clear that he will not enjoy any protection against attacks for as long as his participation lasts. Thereafter, *as he no longer presents any danger for the adversary*, he may not be attacked; moreover, in case of doubt regarding the status of an individual, he is presumed to be a civilian."⁷²

two requirements—membership in a group and the conduct of that group—must be met before an individual can be considered a member of an organized armed group and thereby targeted because of his or her status

Nonstate actors can be targeted only if membership in the organized armed group can be positively established by the state through a pattern of conduct demonstrating a military function.⁷³ This logic would make it analogous to the soldier: the soldier is a danger and presents a threat continuously because of his status.

Once a state demonstrates membership in an organized armed group, the members can be presumed to be a continuous danger. Because this danger is worldwide, the state can now act in areas outside the traditional zones of conflict. It is the individual's conduct over time—regardless of location that gives him the status. Once the status attaches, the member of the organized armed group can be targeted.

Enter Congress

The weakness of this theory is that it is not codified in U.S. law; it is merely the extrapolation of international theorists and organizations. The only entity under the Constitution that can frame and settle Presidential power regarding the enforcement of international norms is Congress. As the check on executive power, Congress must amend the AUMF to give the executive a statutory roadmap that articulates when force is appropriate and under what circumstances the President can use targeted killing. This would be the needed endorsement from Congress, the other political branch of government, to clarify the U.S. position on its use of force regarding targeted killing. For example, it would spell out the limits of American lethality once an individual takes the status of being a member of an organized group. Additionally, statutory clarification will give other states a roadmap for the contours of what constitutes anticipatory self-defense and the proper conduct of the military under the law of war.

Congress should also require that the President brief it on the decision matrix of articulated guidelines before a targeted killing mission is ordered. As Kenneth Anderson notes, "[t]he point about briefings to Congress is partly to allow it to exercise its democratic role as the people's representative."⁷⁴

The desire to feel safe is understandable. The consumers who buy SUVs are not buying them to be less safe. Likewise, the champions of targeted killings want the feeling of safety achieved by the elimination of those who would do the United States harm. But allowing the President to order targeted killing without congressional limits means the President can manipulate force in the name of national security without tethering it to the law advanced by international norms. The potential consequence of such unilateral executive action is that it gives other states, such as North Korea and Iran, the customary precedent to do the same. Targeted killing might be required in certain circumstances, but if the guidelines are debated and understood, the decision can be executed with the full faith of the people's representative, Congress. When the decision is made without Congress, the result might make the United States feel safer, but the process eschews what gives a state its greatest safety: the rule of law. JFQ

NOTES

¹ Malcolm Gladwell, "Big and Bad: How the S.U.V. Ran Over Automotive Safety," *The New Yorker*, January 12, 2004, 28–32.

² Ibid., 30 (emphasis added).

³ Ibid., 32.

⁴ *State* is a technical and legal term meaning a land mass recognized by the United Nations Charter as a member state.

⁵ Philip Alston, "Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions," Report for the Human Rights Council (A/ HRC/14/24/Add. 6), May 28, 2010, 3. See Mils Melzer, *Targeted Killing in International Law* (Oxford, UK: Oxford University Press, 2009), 5: "the use of lethal force attributable to a subject of international law with the intent, premeditation and deliberation to kill individually selected persons who are not in the physical custody of those targeting them."

⁶ Eben Kaplan, "Targeted Killings," Background Paper for the Council on Foreign Relations, March 2, 2006, 1.

⁷ Samuel R. Berger, "The Bush Administration's National Security Strategy: A Limited View of Leadership," testimony before the House Armed Services Committee, Washington, DC, November 19, 2003, 2.

⁸ Tyler Harder, "Time to Repeal the Assassination Ban of Executive Order 12333: A Small Step in Clarifying Current Law," *Military Law Review* 172 (Summer 2002), 12.

⁹ U.S. Senate, Report No. 94–465, "Alleged Assassination Plots Involving Foreign Leaders" (Washington, DC: U.S. Government Printing Office, November 1975), 282.

¹⁰ Matthew J. Machon, "Targeted Killing as an Element of U.S. Foreign Policy in the War on Terror," School of Advanced Military Studies, Fort Leavenworth, KS, 18.

¹¹ Executive Order 11905 (February 18, 1976). ¹² Machon, 20. The word "political" has been removed from the Executive order and now there is simply a ban on assassinations.

¹³ Nathan Canastaro, "American Law and Policy on Assassinations of Foreign Leaders: The Practicality of Maintaining the Status Quo," *Boston College International and Comparative Review* 26 (Winter 2003), 11–13.

¹⁴ The Hughes-Ryan Amendment of 1974, Pub. L. No. 93–559, Sec. 32, 88 Stat. 1804 (1974).

¹⁵ Scott Shane, "U.S. Approves Targeted Killing of American Cleric," *The New York Times*, April 6, 2010, 6A; Shaykh Anwar al-Awlaki, "The New Mardin Declaration: An Attempt at Justifying the New World," *Inspire*, issue 2 (Fall 2010), 3; Declaration of Professor Bernard Haykel, *Nasser Al-Aulaqi v. Obama*, No. 10-cv-01469 (JDB), U.S. District Court for the District of Columbia (October 7, 2010), 3.

¹⁶ Opposition to Plaintiff's Motion for Preliminary Injunction and Memorandum in Support of Defendants' Motion to Dismiss, *Nasser Al-Aulaqi v. Obama*, Civ. A. No. 10-cv-01469, U.S. District Court for the District of Columbia, filed September 24, 2010, 8 (quoting the director of the National Counterterrorism Center, Michael Leiter, before the Senate Homeland Security and Government Affairs Committee on September 22, 2010).

¹⁷ Designation of Anwar Al-Aulaqi as a Specially Designated Global Terrorist, pursuant to Executive Order 13224 and the Global Terrorism Sanctions Regulations, 31 C.F.R. Part 594, 75 Federal Register 43233, 43234 (July 23, 2010).

¹⁸ W. Hays Parks, "Memorandum on Executive Order 12333 and Assassination," 8 (on file with author).

¹⁹ Greg Travalio and John Altenburg, "Terrorism, State Responsibility, and the Use of Military

FEATURES | Targeted Killing, the Law, and Terrorists

Force," *Chicago Journal of International Law* 4 (Spring 2003), 109.

²⁰ Judgment, Public Committee Against Torture in *Israel v. Israel*, HCJ 769/02 (December 11, 2005), ISrSC, at para. 22.

²¹ Geoffrey S. Corn, "Mixing Apples and Hand Grenades: The Logical Limit of Applying Human Rights Norms to Armed Conflict," *Journal of International Humanitarian Legal Studies* 1 (2010), 85.

²² Ibid., 78.

²³ Ibid., 77.

²⁴ Gabriella Blum and Philip Heymann, *Law* and Policy of Targeted Killing, *Laws*, Outlaws, and Terrorists: Lesson from the War on Terrorism (Boston: MIT Press, 2010), 10.

²⁵ Thomas D. Petrowski, "Use-of-Force Policies and Training: A Reasoned Approach," *F.B.I. Law Enforcement Bulletin* 71, no. 10 (October 2002), 26.

²⁶ Graham v. Conner, 490 U.S. 386, 396–397 (1989).

²⁷ Alston, 23.

²⁸ Ibid., 5.

²⁹ Ibid., 11. Alston states that a "State killing is legal only if it is required to protect life (making lethal force *proportionate*) and there is no other means, such as capture or non-lethal incapacitation, of preventing that threat to life (making lethal force *necessary*)."

³⁰ Authorization for the Use of Military Force, Pub. L. 107–40, 115 Stat. 224 (2001), sec. 2(a).

³¹ The Obama administration has addressed this justification in two forums: filings in Federal court in the case of *Al-Aulaqi v. Obama*, Civ. A. No. 10-cv-01469 (December 7, 2010) and the statements of administration officials (Harold Koh, Legal Advisor to the Department of State, "The Obama Administration and International Law," keynote speech at the annual meeting of the American Society of International Law, March 24, 2010).

³² Corn, "Mixing Apples and Hand Grenades,"73.

³³ Convention for the Amelioration of the Condition of Wounded, Sick, and Shipwrecked Members of the Armed Forces at Sea, August 12, 1949, 6 U.S.T. 3217, 75 U.N.T.S. 85.

³⁴ W. Hays Parks, "Direct Participation in Hostilities Study: No Mandate, No Expertise, and Legally Incorrect," *New York University Journal of International Law and Politics* 45 (Spring 2010), 780.

³⁵ William C. Banks, testimony before the Subcommittee on National Security and Foreign Affairs, Committee on Oversight and Government Reform, U.S. House of Representatives, April 28, 2010.

³⁶ Mary Ellen O'Connell, testimony before the Subcommittee on National Security and Foreign Affairs, Committee on Oversight and Government Reform, U.S. House of Representatives, April 28, 2010.

³⁷ Shane, 6A.

³⁸ According to O'Connell, "Armed Conflict depends on the satisfaction of two essential

minimum criteria, namely: i. the existence of organized armed groups; ii. engaged in fighting of some intensity." Declaration of Prof. Mary Ellen O'Connell for the case of *Al-Aulaqi v. Obama*, No. 10-cv-01469 (JDB), U.S. District Court for the District of Columbia (October 8, 2010), 6.

³⁹ International Committee of the Red Cross, Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law, June 2009 (prepared by Nils Melzer).

⁴⁰ European Convention for the Protection of Human Rights and Fundamental Freedoms, Protocol No. 2, 9ETS No. 44, enacted on May 6, 1963. Also, the Israel Supreme Court has been critical of targeted killing.

⁴¹ Other skeptics of targeted killings, like Nils Melzer, fear that "an extremely permissive targeting regime [is] prone to an unacceptable degree of error and arbitrariness." Nils Melzer, "Military Necessity and Humanity: A Response to Four Critiques of the ICRC's Interpretive Guidance on the Notion of Direct Participation in Hostilities," *New York University Journal of International Law and Policy* 42 (Spring 2010), 913.

⁴² United Nations Commission on Human Rights, UN Doc. E/CN.4/003/3, paras. 37–39 (2003).
⁴³ UN Charter, Art. 51.

⁴⁴ Webster's test ingeniously balances necessity (the need for security: "the necessity of self defense") with proportionality (the appropriate amount of responsive force: "must be limited by that necessity and kept clearly within it"). Dale Stephens, "Rules of Engagement and the Concept of Unit Self Defense," *Naval Law Review* 45 (1998), 137. In 1837, the British Government claimed that the steamboat was being used by Canadian rebels to expel the British from Canada. The U.S. Government protested Britain's action, and an exchange of diplomatic letters between the two governments resulted.

⁴⁵ Geoffrey S. Corn and Michael L. Smidt, "To Be or Not to Be, That is the Question: Contemporary Military Operations and the Status of Captured Personnel," *The Army Lawyer* (June 1999), 9–15.

⁴⁶ U.S. Constitution, Art. I, Sec. 8, Clauses 12–15. See Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge, MA: Belknap Press, 1957), 400–427.

⁴⁷ U.S. Department of Defense, Manual for Military Commissions Sec. 6(a)(13)(d)(2009).

⁴⁸ Targeted Killing Case, para. 27.

⁴⁹ U.S. Department of the Army Field Manual, 27–10, *The Law of Land Warfare* 4 (June 18, 1956) (C6, July 15, 1976): "those measures not prohibited by international law which are indispensable for securing the complete submission of the enemy as soon as possible."

⁵⁰ Protocol I, art. 51(b)(6) ("an attack which may be expected to cause incidental loss of civilian life, injury to civilians . . . which would be excessive in relation to the concrete and direct military advantage anticipated"). This is referred to as proportionality as well, but the author does not use the term in this paper because it might confuse the reader. The author instead uses the term *unnecessary suffering* because it is the proportionality of force that must be considered vis-à-vis civilians.

⁵¹ Ex parte Quirin, 317 U.S. 1 (1942).

⁵² Glenn Sulmasy, *The National Security Court System: A Natural Evolution of Justice in an Age of Terror* (Oxford, UK: Oxford University Press 2009), 56–58.

⁵³ Ex parte Quirin, 45-46.

```
<sup>54</sup> Ibid., 30–31.
```

⁵⁵ Norman G. Printer, Jr., "The Use of Force Against Non-State Actors under International Law: An Analysis of the U.S. Predator Strike in Yemen," UCLA Journal of International Law and Foreign Affairs 8 (Fall 2003), 363–369.

⁵⁶ Antonio Cassese, *International Law* (Oxford, UK: Oxford University Press, 2005), 409; Derek Jinks, "The Declining Significance of POW Status," *Harvard International Law Journal* 45 (2004), 438.

⁵⁷ U.S. Department of Defense, Manual for Military Commissions Sec. 6(a)(13)(d)(2009).

⁵⁸ Targeted Killing Case, para. 28.

⁶⁰ Laura M. Olson, "Guantanamo Habeas Review: Are the D.C. District Court's Decisions Consistent with IHL Internment Standards?" *Case Western Reserve Journal of International Law* 22 (2010), 212.

⁶¹ Hamdan v. Rumsfeld, 548 U.S. 557, 628–631 (2006).

⁶² Geoffrey S. Corn, "Two Sides of the Combatant COIN: Untangling DPH from Belligerent Status in Non-International Armed Conflict" (forthcoming and unpublished manuscript on file with author), 1.

63 ICRC Guidance, 1002.

⁶⁵ Ibid.

68 Corn, "Two Sides of the Combatant COIN," 8.

⁶⁹ ICRC Guidance, 1007.

⁷¹ Ibid.

⁷² Commentary to Protocol II, para. 4789.

⁷³ Kenneth Watkins, "Opportunity Lost: Organized Armed Groups and the ICRC Direct Participation in Hostilities Interpretative Guidance," *New York University Journal of International Law and Politics* 42 (Spring 2010), 692.

⁷⁴ Kenneth Anderson, "Targeted Killing in U.S. Counterterrorism Strategy and Law," A Working Paper of the Series of Counterterrorism and American Statutory Law, a joint project of the Brookings Institution, the Georgetown University Law Center, and the Hoover Institute (May 11, 2009), 35.

⁵⁹ Ibid.

⁶⁴ Ibid.

⁶⁶ Ibid., 1002–1003.

⁶⁷ Ibid.

⁷⁰ Ibid.



U.S. Air Force (Jerry Morrison)

U.S. STRATEGY IN SOUTHEAST ASIA POWER BROKER, NOT HEGEMON

By DAVID J. GREENE

he narrative of a U.S.-China rivalry for influence in Southeast Asia already dominates popular and academic commentary on the region, suggesting that efforts to enhance U.S. engagement there have been effective in signaling that the United States will continue to play a significant role in countering aggressive behavior by the People's Republic of China. However, with both China and the United States taking forceful stances on issues in recent months, the continuing media emphasis on rivalry risks both inflaming Chinese nationalism, potentially complicating

the Chinese leadership's ability to make smart choices, and alienating regional actors with whom we want to strengthen ties—for they fear anything that smacks of choosing sides between the United States and China.

China is expanding its presence in Southeast Asia through investments, development assistance, security cooperation, and diplomatic engagement, while asserting control over aspects of the Southeast Asian environment (literally, in some instances, as with its dams on the Mekong River and unilateral fishing bans in the South China Sea). However, China's rise in itself poses only one regional strategic threat to the United States: a possible challenge to freedom of navigation. With regard to other U.S. strategic interests in Southeast Asia—essentially counterterrorism, trade, and potentially (in the case of Burma) nuclear nonproliferation—the mere fact of expanding Chinese influence is not in itself a threat. Thus, it is hard to argue that power relations in Southeast Asia will be definitive in the broader question of how the United States should approach a rising China.

David J. Greene is a career Foreign Service Officer in the Department of State.

INTERAGENCY DIALOGUE | U.S. Strategy in Southeast Asia

Instead, other factors—including China's military modernization, conduct in global institutions, and role in the global economy will determine larger U.S. strategy.

Therefore, the United States must carefully calibrate its approach in Southeast Asia. In the South China Sea and other areas where the Chinese challenge freedom of navigation, the United States—as guarantor of the "global commons" of the sea lanes—will need to use a variety of means to assert said freedom, including potentially high-visibility acts such as sailing gray-hulled vessels through sensitive areas. However, the overall U.S. approach should reflect continuity with its current course:

■ strengthen bilateral ties in ways that are not threatening to China

• invest in the Association of Southeast Asian Nations (ASEAN) and related organizations that integrate the United States into the region and provide opportunities for engagement encourage critical regional (Vietnam, Indonesia, Thailand) and extraregional (Japan, India, Korea, Australia) actors to strengthen mutual ties.

Many countries in Southeast Asia are displaying hedging behavior as China's expanding sphere of influence rubs up against their vital interests. By strengthening its engagement without directly challenging China, the United States can position itself as a power broker without spooking allies who wish to avoid choosing between the United States and the rising regional power.

In addition, Washington must avoid unnecessarily strengthening Chinese paranoia about American intentions in order to minimize the chances of inadvertently contributing to a growing security dilemma. Elements within the Chinese policy community, and within its increasingly nationalistic population, believe that the United States is already pursuing "containment" and that China's only option is to arm itself and challenge the United States.

China's impact on Southeast Asia will only grow as its economy and consequent drive for energy, raw materials, and markets expand

China's Increasing Influence and Provocations

China's impact on Southeast Asia will only grow as its economy and consequent drive for energy, raw materials, and markets expand. However, it is precisely this behavior that is challenging the various countries of Southeast Asia to anxiously debate their China policies, and causing several to cast about for regional and extraregional allies in a classic example of hedging behavior.

Examples of Chinese actions that cause anxiety include:

reassertion of the "nine-dashed line" and challenges to freedom of navigation in the South China Sea

 increasingly aggressive actions regarding the resources around and under the Paracel and Spratly archipelagos

 unilateral actions in the Upper Mekong Basin that threaten the economies, food security, and sovereignty of downstream neighbors
 cheap exports that undermine local production.

The countries of Southeast Asia have a variety of often conflicting reactions. Vietnam, for example, is threatened by China's



Mekong dam cascade and smarts over Chinese proto-imperialism in the South China Sea, and thus is among the most aggressive in its hedging, seeking closer ties with the United States, Japan, and Australia. Laos, by contrast, welcomes China's help in developing its own hydropower sector, while Thailand anticipates buying power from Chinese-built Laotian dams. Indonesia's economic growth may be imperiled by cheap Chinese exports, but it welcomes Chinese investment. Burma-China ties have expanded considerably in recent years, with China seeking Burmese resources and a path to the sea for Southwest China, and Burma's reliance on China's United Nations Security Council veto to dodge any consequences for its repressive governance. Yet India's concern about Chinese encroachment to its east may well lead to increasing Indo-Chinese competition in Burma.

In addition to issue-specific anxieties, the Southeast Asian nations are well aware of the larger, looming issue: Chinese regional hegemony. The debate has been public, ranging from journal articles speculating on China's prospects for dominance, to Foreign Minister Yang Jiechi's intervention at the July 2010 ASEAN Regional Forum meeting in Hanoi, when he stated that "China is a big country and other countries are small countries and that is just a fact."

An American Safety Net?

The countries of the region are in effect playing on multiple chess boards simultaneously, with each move considered for its bearing on relationships with China, the United States, and other regional actors, both in the here-and-now and for the future. This provides the United States room for subtle and patient maneuvering. ASEAN states inclined to side with the United States are uncomfortable doing so; this could be perceived as an overt tilt away from China—



(such as the Lower Mekong Initiative) bases where there are areas of mutual interest. These approaches would be complemented by a quiet continuation of recent efforts to deepen ties with ASEAN and other regional fora (such as the East Asian Summit) so as to ensure that U.S. presence is palpable, positive, and organically integrated into the region. (The United States can even point to Chinese endorsement of such an approach, given that the final communiqué from the January 2011 Obama-Hu summit in Washington stated, "China welcomes the United States as an Asia-Pacific nation that contributes to peace, stability, and prosperity in the region.")

There are likely to be occasions when the United States must confront China over challenges to its strategic interest in freedom of navigation throughout Asia's international waters—as with the incident involving Chinese harassment of USNS *Impeccable* in 2009. The United States will be best positioned to do so if, first, such Chinese challenges are seen as acts of unilateral Chinese aggression (not a reaction to an aggressive American policy of containment), and second, the United States has diplomatic backing from other regional actors and institutions. Such backing will be more likely

there are likely to be occasions when the United States must confront China over challenges to its strategic interest in freedom of navigation throughout Asia's international waters

which, after all, is their immediate and enormous neighbor and can offer considerable benefits in terms of investment and trade. What is called for is a set of country-specific strategies to deepen U.S. ties with the states of the region on bilateral and minilateral if the United States underplays its hand and works deliberately for better ties in the region without seeming to be mounting a coordinated pushback on China.

Another virtue of a low-key strategy is that, in an era of constrained resources

and in a region where there are few vital security interests for the United States, it is largely doable with existing resources. The 2009 U.S. accession to the ASEAN Treaty of Amity and Cooperation, and the establishment of a diplomatic mission to ASEAN, laid the foundation for enhanced cooperation. Similarly, President Barack Obama's recent visit to Indonesia, rapidly expanding U.S.-Vietnam military-to-military ties, and Secretary of State Hillary Clinton's and Defense Secretary Robert Gates's reaffirmation of the Australian relationship in November 2010 exemplify the kind of diplomatic measures that strengthen the U.S. position.

Striving to stay neck-and-neck with China in Southeast Asia, or launching an attempt at containing China in that region, is likely to backfire on the United States as it expends resources while alienating potential allies who are uncomfortable at being forced to choose. Instead, Washington should foster the growing multipolarity of the region, with the United States-along with other key extraregional players such as India, Japan, and Australia-gently balancing China and offering a welcoming hedge for ASEAN nations. China's dominance may appear inevitable, but Beijing will nonetheless have to consider the concerns of rising economies such as Vietnam and Indonesia to maintain positive relations, expand markets, and allay fears of its rise (seemingly a priority, based on the Chinese Foreign Ministry's December 2010 pronouncement that "We Must Stick to the Path of Peaceful Development"). Thus, the United States can best protect its limited interests in Southeast Asia as a power broker, not a hegemon. JFQ

U.S. Army War College

STRATEGIC LANDPOWER

Essay Contest



The U.S. Army War College and U.S. Army War College Foundation are pleased to announce the annual **STRATEGIC LANDPOWER** Essay Contest.

The topic of the essay must relate to the strategic use of landpower. Specific topics of interest for this year's contest are:

The Future of Landpower

Strategic Role of Landpower

The Army's Role in National Security

Anyone is eligible to enter and win except those involved in the judging. The U.S. Army War College Foundation will award a prize of \$4,000 to the author of the best essay and a prize of \$1,000 to the second place winner.

For more information contact: **Dr. Michael R. Matheny,** U.S. Army War College, Department of Military Strategy, Planning, and Operations, 122 Forbes Avenue, Carlisle, PA 17013-5242 — (717) 245-3459, DSN 242-3459, michael.matheny@us.army.mil

STRATEGIC LANDPOWER Essay Contest Rules:

- 1. Essays must be original, not to exceed 5,000 words, and must not have been previously published. An exact word count must appear on the title page.
- 2. All entries should be directed to: Dr. Michael R. Matheny, USAWC Strategic Landpower Essay Contest, U.S. Army War College, Department of Military Strategy, Planning and Operations, 122 Forbes Avenue, Carlisle, PA 17013-5242.
- 3. Essays must be postmarked on or before February 17, 2012.
- 4. The name of the author shall not appear on the essay. Each author will assign a codename in addition to a title to the essay. This codename shall appear: (a) on the title page of the essay, with the title in lieu of the author's name, and (b) by itself on the outside of an accompanying sealed envelope. This sealed envelope should contain a type sheet giving the name, rank/title, branch of service (if applicable), biographical sketch, address, and office and home phone numbers (if available) of the essayist, along with the title of the essay and the codename. This envelope will not be opened until after the final selections are made and the identity of the essayist will not be known by the selection committee.
- 5. All essays must be typewritten, double-spaced, on paper approximately 8 ½ x 11. Submit two complete copies.
- The award winners will be notified in early Spring 2012.
 Letters notifying all other entrants will be mailed by April 1, 2012.



HOW ARE GREAT LEADERS MADE?

Lessons from the Career of General John Shalikashvili (1936-2011)

By ANDREW MARBLE

peaking at an August 6, 2011, memorial service for the recently deceased General John Shalikashvili, former Secretary of Defense William Perry described the general as a superb military leader, a Soldier's Soldier, an exemplar in civil-military relations, and a remarkable, effective diplomat.

General Shalikashvili attained the highest positions of command and influence in the U.S. military. As Assistant to Chairman of the Joint Chiefs of Staff General Colin Powell from 1991 to 1992, he was the trusted interagency representative of perhaps the most powerful Chairman in U.S. history. He also held the position of Supreme Allied Commander Europe from 1992 to 1993—a critical period of post–Cold War transition. Finally, he himself served as Chairman of the Joint Chiefs of Staff, the highest ranking

Dr. Andrew Marble is currently writing the authorized biography of General John Shalikashvili. He authored the former Chairman of the Joint Chiefs's memoriam in *JFQ* 63 (4th quarter 2011).

RECALL | How Are Great Leaders Made?

uniformed position in the world's most powerful military, from 1993 to 1997.

What catapulted General Shalikashvili to this pinnacle of leadership was his stellar command of Operation *Provide Comfort*, which represented the first time that a major international humanitarian crisis was tasked to the U.S. military.

In April 1991, more than 500,000 Kurdish refugees had been chased into the mountains on the Turkish-Iraqi border in the aftermath of the first Gulf War. Barred from crossing the border by a nervous Turkey and too afraid of Saddam Hussein's military to willingly return to the lowlands of Iraq, the Kurds were stuck. Not equipped for the inhospitable mountain conditions, Kurdish men, women, and children began dying at a rate of 1,000 per day. Called in to lead the combined rescue operation, General Shalikashvili accomplished what General Powell would later term a "miracle": leading a coalition of militaries from 13 nations and more than 50 nongovernmental organizations (NGOs) to stop the dying and return all the Kurds to their homes in Iraq in only 90 days.

If we wish to understand how great leaders are made, General Shalikashvili's command of *Provide Comfort* provides an excellent case study. How did he accomplish this miracle? Since there was no preexisting playbook for such an unprecedented crisis, the general had no option but to rely solely on the skills and experience he developed during his prior 33 years of military training. When he stepped off the plane in Turkey to take command of the operation, what skills did he bring with him?

My research on the life and career of Shalikashvili has led me to conclude that he drew on three main resources that made him an effective, unifying leader:

■ rock-solid professional competency in handling complex operational challenges, especially those that were one of a kind, heavily centered on logistics, and diplomatically sensitive

 holistic understanding of how to lead a team

■ altruistic motivations for tackling the task at hand.

Challenges

On April 17, 1991, Lieutenant General Shalikashvili, second in command at U.S. Army Europe (USAREUR), was in a mild state of shock. As an expert in the subject of defending Western Europe from a possible Soviet invasion, he had never before heard of the Kurds. But after a series of meetings that day in Heidelberg, Stuttgart, and Frankfurt, Germany, he boarded a plane to Incirlik, Turkey, on orders to evaluate and report back on this rapidly developing refugee crisis at the Iraqi border. His first thought before

what catapulted General Shalikashvili to this pinnacle of leadership was his stellar command of Operation Provide Comfort



departing was to check his footlocker to see if the Service schools had provided him with a manual titled something akin to "operations other than war." But no such manual existed; this was the first time the U.S. military had been called upon to lead the response to a major international humanitarian crisis.

By the time the general arrived in Incirlik, the situation had changed so rapidly that, while en route, he had been made commander of the entire operation. After a quick review of the situation, it became clear just how herculean the task before him was. In the days ahead, he would have to:

develop efficient ways to get food, medical expertise, and shelter to the largest concentrations of refugees in the mountains in order to stop the dying

• create a coalition protection zone in northwestern Iraq, construct temporary camps within them, and create transit stations between these camps and the main populations in the mountains

■ build an organizational structure and processes to integrate the ever-expanding number of military personnel, NGO personnel, and supplies that were arriving often willy-nilly into Iraq and Turkey

■ keep the Iraqi military from interfering with the rescue and repatriation effort

• work closely with the Turkish government to ensure their continued support of the operation as well as with the local Turkish population to help with logistics supply efforts

• convince Kurdish tribal leaders, at the appropriate stage, to encourage their disparate groups to return to Iraq.

The challenges were indeed daunting, and a trip to Turkey that he originally thought would last a few days would be extended into months. Yet Shalikashvili faced his new assignment with his characteristic calm. By this point in his career, he had a proven track record. Since being inducted as a draftee into the U.S. Army in July 1958, he had developed a broad array of leadership skills that he could rely on.

Maestro of Operational Challenges

One of General Shalikashvili's greatest strengths was his ability to manage highly complex missions, particularly those with a major logistical dimension. The basic building block of this skill was the importance he placed on "knowing one's stuff." This was a lesson



taught to him early in his career while serving as a second lieutenant leading a platoon in Alaska in the early 1960s. The general later recalled with appreciation his platoon sergeant, First Sergeant William Grice, stating:

[He] knew that if our platoon was going to be good at the countless things that would make us a finely honed war-fighting machine, then he had to teach me and practice with me so that when I walked that gun line, the soldiers would know that I knew more than them.¹

So throughout his career, Shalikashvili threw himself into becoming an expert at whatever he was tasked to do. Upon arriving at Fort Bliss in the early 1960s, First Lieutenant Shalikashvili took a 2-week crash course to learn about the Nike Hercules guided missile system. For the next 2 years, he instructed U.S. and Allied officer students ranging from second lieutenants to general officers on the topic. His superiors consistently lauded his ability to relay complex information in an accessible way and to a wide range of students.

Similarly, when Captain Shalikashvili was a nuclear weapons control officer for the 32^d Army Air Defense Command in Germany, he developed a system of easy-tounderstand instructions and booklets. A subsequent command inspection found his system so effective that it was adopted USAREUR-wide. Other large units with similar quick-reaction responsibilities and functions would visit Captain Shalikashvili's operations center for first-hand study. The general was able to convert his expertise into influence. As a senior Army staff officer at the Pentagon in 1986, Major General Shalikashvili helped develop the Army position on the reduction of mediumrange nuclear missiles in Europe. General Robert W. RisCassi, USA (Ret.), General Shalikashvili's boss at the time, later recalled the moderating influence that Shalikashvili had. "There were camps that said we can't give up one iota of anything, and those who said maybe there are some things we can give up," RisCassi recalled. "Shalikashvili just brought logic to the table. He's relaxed, non-intrusive. His forte is knowledge."²

By the time he reached flag grade, Shalikashvili's expertise in a broad array of logistical and operational areas allowed him to manage complex systems. For example, as deputy commander of the 1st Armored Division in the mid-1980s, one of the "hats" he wore was as "mayor"—making him responsible for providing service to a military community of 27,000 Soldiers with an annual budget of more than \$65 million. The community he was responsible for as the USAREUR deputy commander, his position at the time of *Provide Comfort*, had an even larger budget of \$100 million.

Shalikashvili's proven logistical and operational capabilities earned him chances to experiment. As commander of the 9th Infantry Division (ID) at Fort Lewis in 1987, Major General Shalikashvili oversaw a "high technology test bed" tasked to integrate three brigades—one heavy armor, one light infantry, and one "experimental mechanized"—into

RECALL | How Are Great Leaders Made?



a new type of fighting force. During his 2 years of command, the division came close to accomplishing what would normally take the U.S. Army Training and Doctrine Command 10 years to complete (design a division, build an organization, design and procure equipment, and create a corresponding doctrine and train Soldiers how to fight under it). Provost Marshal Larry Saunders of the 9th ID recalled that Shalikashvili made the experimental division work because of his ability to "operate in chaos without operating chaotically." Shalikashvili's huge appetite for creative solutions to both logistical problems and operational challenges was infectious. "Yes you can do it!" he would tell his team. "Don't give me five to six 'A'-level ideas, instead give me twenty or thirty 'B'-level ideas. We can improve later. Let's just keep the pace going."3

Shalikashvili's expertise in creative logistics would serve him well when called upon as the deputy commander to handle two untraditional missions of high diplomatic sensitivity. One was Operation Steel Box, a mission to retrograde 100,000 chemical munitions-including the nerve agents sarin and VX-out of Germany. A second mission was an 11th-hour operation to rush the troops and equipment-including tanks-of 7th Corps from Europe down to Saudi Arabia in time for the Gulf War ground campaign-all without interrupting Germany's Christmas holiday traffic. Shalikashvili successfully handled both, leading General Powell to remark to then SACEUR General John Galvin, "Shali is looking good, isn't he? I mean really looking good." Galvin agreed.⁴

This brief overview of General Shalikashvili's career helps us understand one of the key skills that he brought to bear on this massive rescue effort. "Knowing his stuff" and having built up a broad range of experiences in managing logistics and logisticalintensive missions gave him the confidence to tackle Operation Provide Comfort calmly and creatively and to understand and get others to understand how these complex problemssuch as airdrops, ground transportation, and building temporary camps and waystations-could be solved. One example of how he drew on past experience to tackle the problems faced at Provide Comfort involves the command structure of the units left to watch over the Kurds after the main ground units left Iraq. In a highly untraditional move, an aviation brigade commander was put in control of the remaining infantry, aviation, and support units. Shalikashvili had experimented to great success with such an unorthodox arrangement during his command of the 9th ID at Fort Lewis.5

The Ultimate Team Player

No such complex operation undertaken in a rapidly changing environment can be managed by just one man. The logistics of rescuing these 500,000 refugees could only be accomplished by a coordinated team effort. As commander, General Shalikashvili was responsible for the coordination.

Up the chain of command for this particular operation were the strategic policymakers: Shalikashvili reported to General Galvin, who in turn reported to General Powell. Laterally, USAREUR was responsible for much of the day-to-day planning and providing the bulk of the logistical support. Down the chain of command were the men and women of the operation, who would come to number more than 35,000 troops from 13 countries. The military contingent would also work in close cooperation with volunteers from more than 50 NGOs, as well as with Turkish government officials and citizens.

Shalikashvili's huge appetite for creative solutions to both logistical problems and operational challenges was infectious

What helped General Shalikashvili coordinate the efforts of this vast team was that he had a *holistic perspective*—the ability to see how the parts relate to the whole.6 This was a skill he had honed throughout his career. One such opportunity came during a 3-year stint at the Army personnel center in the early 1970s. There, he focused on both the individual and the whole as an assignments officer, guiding the careers of almost 14,500 field artillery majors and lieutenant colonels by trying to match their talents and the Army's needs in making position assignments. His superiors at the time noted how Shalikashvili demonstrated "the rare combination of confidence and humility, ambition and selflessness, which enable him to be sensitive to the problems of an individual or drive an Army-wide requirement."7

And Shalikashvili cared deeply about the individual. It is telling that he used the occasion of his retirement speech in September 1997 to drive home the point that members of the military "are not 'personnel,' but living, breathing people." He unfailingly treated every person-regardless of rank or specialization-with the same fundamental respect. Reflecting on Shalikashvili's tenure as SACEUR, USAEUR commander General David Maddox stated, "He's unassuming, straightforward, and most importantly caring. He makes people feel comfortable. He cares [about] what you say and what you think. I think that everyone-be it a private or a general-knows that he listens and cares about their views." U.S. Navy Europe commander Admiral Mike Boorda agreed: "He has this way of listening to you, and while you are talking he makes you feel you are the only person in the world."8

Shalikashvili also had the rare ability to become even more polite and considerate as the pressure mounted. Admiral Thomas Fargo experienced one example of this in 1994 when he was Director of Operations (J3) of the U.S. Atlantic Command when Shalikashvili was Chairman. While at the hospital one day with his wife who was undergoing surgery, Admiral Fargo was summoned to a secure phone to speak with General Shalikashvili. Apologizing for having to call at this inopportune time, Shalikashvili explained that Fargo was the only one available who could provide him with some needed information. "Once I relayed to the Chairman what he needed to know-information for an important briefing he had in one hour with the U.S. President on our plans to intercede in Haiti-he spent five more minutes on the phone with me asking about details of my wife's surgery," Fargo said. "I never forgot this and neither did my wife. He showed his compassion."

This basic respect that Shalikashvili had for people worked as a lubricant to smooth the dozens and even hundreds of interactions that he had during the course of any one day of Operation *Provide Comfort* regardless of whether it was with a superior, subordinate, media representative, Kurdish tribal leader, refugee, coalition member, representative of the Iraqi military, or an NGO volunteer.

This lubricant would prove crucial because every day of the operation required juggling priorities. Shalikashvili would later recall that during *Provide Comfort*, they had "the most interesting meetings that you might want to attend, because everyone knew that he had the highest priority of equipment or supplies that needed to be moved on any given day."⁹

Colonel Frank Adams, USA (Ret.), was a brigade commander at the 9th ID when Shalikashvili commanded. "Gen[eral] Shali's personable, calm, nonthreatening approach was very good in making people—even prominent people—not feel like they've come out of a discussion having lost, even if their ideas were not adopted," he said, explaining how Shalikashvili's temperament went a long way toward maintaining team unity.

As a team player Shalikashvili also respected the roles and responsibilities of other individuals on his team by refraining from stepping outside the parameters of his own position. John Lee, who was the command sergeant major in the 3^d Brigade of the 9th ID when Shalikashvili commanded, later recalled:

[General] Shalikashvili did not major in minor affairs. He focused on the higher-order role that a division commander should take on: how to resource, equip, and train a multithousand man division. He would never jump in and start making loud and public corrections. Instead he was very good at holding the leadership levels accountable for what was under their particular purview, and he used the chain of command to effect change.

what helped General Shalikashvili coordinate the efforts of this vast team was that he had a holistic perspective—the ability to see how the parts relate to the whole

Shalikashvili adopted the same approach during *Provide Comfort*. Soon after arriving, he delegated day-to-day operations to his deputy, Major General James Jamerson, USAF (Ret.), and his chief of staff, Brigadier General Anthony Zinni, USMC (Ret.). This allowed Shalikashvili to focus on supervising the field formations, maintaining good relations with the national contingent commanders, and adjudicating any disputes that could not be resolved lower down the chain of command.

Maintaining good relations with the national contingent commanders was particularly crucial to such a high-profile international coalition effort. There were tricky issues that needed to be hammered out. For example, each country had its own set of rules of engagement that dictated what its military could and could not do. Under French rules, for instance, a French infantry platoon could not come to the aid of another coalition platoon under attack. And British national rules—despite the pressing need for such support—would not allow British artillery battalions to be deployed into northern Iraq to support either coalition forces or their own troops.

The rapid pace of events on the ground often meant that national commanders could not report back to their home offices for guidance or instructions. Many times decisions needed to be made immediately via discussions among the coalition commanders on the ground. Such a decisionmaking environment allowed Shalikashvili's excellent interpersonal skills to come into full play. The relationship that he developed over the course of the operation with British commander Major General Robin J. Ross, Royal Marines, for instance, played a key role in eventually convincing the British government to change its rules of engagement to allow British artillery to be deployed into northern Iraq.¹⁰

Another facet of being a team player is understanding that the team sometimes needs wiggle room to work in. Mistakes can happen, and subordinates occasionally need the leeway to attempt creative solutions. Brigadier General Stanley Kwieciak, USA (Ret.), recalled a situation that occurred when he took over in 1979 as battalion commander in Bamberg, Germany, under Colonel Shalikashvili-the division artillery commander for the 1st Armored Division at the time. Within a few months of his arrival, division headquarters conducted an inspection. "We failed miserably," recalled Kwieciak, "but Shali didn't say 'You screwed up.' Rather he said 'go get to work and see if you can fix things." Shalikashvili gave him the nod to reorganize his unit contrary to the Army's Table of Organization and Equipment, a tweak that was a key part of Kwieciak's creative plan to make his battalion more efficient and fix maintenance and training problems. At the end of Kwieciak's command came a second inspection-which, Kwieciak recalled, the battalion passed with flying colors.

Shalikashvili exercised such leadership qualities during Provide Comfort. General John Abizaid—who commanded the 3^d Battalion, 325th Airborne Infantry, which was brought into the operation as an air combat team—would later recall that "Shalikashvili was very comfortable letting the commanders on the ground do their job. He would come to the ground only to get the information he needed to be a strategic leader." In the chaos of the operation, when a misunderstanding led Abizaid's unit to move deeper into Iraq than planned, Shalikashvili did not reprimand him for it. This professionalism earned Abizaid's deep respect. This respect was mutual; Shalikashvili would later call on Abizaid to serve as his executive officer when Shalikashvili became the Chairman of the Joint Chiefs of Staff.

RECALL | How Are Great Leaders Made?



Altruistic Motivations

In July 1995, two top nuclear scientists-Robert Peurifoy and Sidney Drellspent a full day briefing top U.S. policymakers on the results of the most in-depth study to date on whether the United States should sign the Comprehensive Nuclear Test Ban Treaty. Dr. Drell later recalled General Shalikashvili as being the most informed of all the policymakers they briefed, and Dr. Peurifoy believed that Shalikashvili was the only policymaker they met with who seemed deeply concerned with doing the right thing for the country. Shalikashvili was seemingly one of those rare individuals who had the natural ability to connect with others by expressing-through speech, intonation, body language, or other indirect signals-his empathy and concern.

Shalikashvili was able to use this skill to motivate, as demonstrated during the drawdown of the humanitarian intervention in Somalia. Because many of the coalition partners were small countries lacking robust logistical support, the United States decided to extend its own deployment in order to lend them assistance. Knowing that the U.S. troops stationed there would be dismayed that their greatly anticipated homecoming was being postponed by at least 6 months, Shalikashvili flew to Somalia to make a personal appeal. Larry Icenogle, the Chairman's Public Affairs Officer at the time, recalls Shalikashvili telling the troops, "We got these nations into this, we've got to help get them out." Through the power of his personal touch, the Chairman helped the ground troops understand how much their sacrifices would contribute to the larger good.

Shalikashvili was such an exceptional leader because he was so motivated by a desire to contribute to the common good. The roots of Shalikashvili's altruism can be traced back to formative experiences in his early years. He knew firsthand the misery that war could bring. His own father would twice become a prisoner of war, once of the Germans in 1939 and then of the Allies in 1945, and he saw the toll this took on his family. In addition, his childhood home was destroyed by German artillery when Adolf Hitler's military invaded Poland in 1939. Then, during the bloody Warsaw Uprising of 1944, he watched Polish fighters bury their war dead in the small yard of his second home, which later collapsed around the Shalikashvili family when hit by a German dive-bomber, forcing them to take refuge in cellars and sewer pipes. Fleeing to Germany after the uprising was suppressed, his family lived for 8 years with the assistance of charitable relatives. Distant nonblood relatives then brought his family to the United States in 1952. A grateful Shalikashvili would recall that these American benefactors—who provided his family with sponsorship, a safe ocean passage, housing, jobs, and

Shalikashvili respected the roles and responsibilities of other individuals on his team by refraining from stepping outside the parameters of his own position

even college scholarships—"didn't know us from beans."¹¹ Thus, Shalikashvili's own childhood experience served to reinforce the importance of both helping others in need and, as a commander who put troops in harm's way, approaching the use of violence with utmost gravity.

Shalikashvili's childhood experience served to reinforce the importance of both helping others in need and approaching the use of violence with utmost gravity

General Shalikashvili had a strong desire to serve the country that took in his family and gave them "boundless opportunities." During his tenure as Chairman, Shalikashvili stated that the honor of being nominated by President Bill Clinton to the position was but the second greatest in his life: "The first was the day back in 1958 when I became an American citizen"—the first and only citizenship he would ever hold.¹²

As one final motivation, the military community itself was Shalikashvili's everything. He was a man who had a genuine love for Soldiers and the soldiering life. He likely pledged absolute dedication to the military family as a captain stationed in Germany in 1965. Within the space of a few short months that year, he lost his first wife to cancer and their baby to complications following a premature birth. A stricken Shalikashvili felt "the sun would never shine brightly again."13 His performance reviews from the period, however, suggest a young Soldier who beat back the dark shadows by focusing all his considerable talents on improving his military community.

To reiterate, during his command of *Provide Comfort*, Shalikashvili relied on three important resources to help accomplish the mission. The first was rock-solid professional competency in dealing with complex operations, particularly one-of-a-kind, logistically challenging, and diplomatically sensitive missions. The second was his holistic understanding of how to lead a team. But it was the third source—altruistic motivations for tackling the task at hand—that was particularly important for such an unprecedented humanitarian operation. Shalikashvili would later recall:

It was an eye opener to me how much can be done by men and women who see an awesome task ahead of them and come to the task with enthusiasm and not to fight over turf, wire diagrams, and who works for whom or what I don't recall one meeting where someone started pointing at someone else and saying that is your job, why don't you start doing this.... It was just great.¹⁴

As the commander of the team, Shalikashvili was the one whose motivations would help set the tone for the operation as a whole. Reflecting on Shalikashvili's performance during *Provide Comfort*, General Powell lauded him for being "not only a gifted leader but [also] a sensitive human being," one who "understood what it was to be a refugee."¹⁵

Indeed, many times during the operation, Shalikashvili would visit the Kurdish camps. As he strolled from tent to makeshift tent, he would seek out the refugee children, particularly the orphans. They would chat and laugh together. Asked about those visits to the camps, Shalikashvili replied: "When you see youngsters who are muddy and dirty and near death, and then see them a few weeks later cleaned up and playing and feeling like kids again—if you walk away from that without your heart beating fast, then you are made out of something different than I am."¹⁶

And despite Shalikashvili's efforts to avoid the spotlight, his enthusiasm for rescuing these needy refugees would be recognized. At a September 1991 House Armed Services Committee Defense Policy Panel, Shalikashvili-who by then was General Powell's assistant-briefed Congress on the recently completed Provide Comfort. What those assembled learned from Shalikashvili was that his deputy commander for the operation, Jim Jamerson, was an "absolute professional." Brigadier General Dick Potter was a "super [S]oldier," and his 10th Special Forces Group performed an "absolutely magnificent effort through and through" in stopping the suffering and dying in the mountains. Major General Jay Garner did a "masterful job" in selecting campsites and designing and building transit centers-as did Brigadier General Donald Campbell and his "magnificent" Reserve Soldiers from Civil Affairs in working with NGOs to meet the needs of the refugees.

At the end of Shalikashvili's prepared statement, Representative Norman Sisisky (D–VA), who had earlier traveled to the region to see the operation firsthand, looked pointedly at Shalikashvili from the dais at the front of the room and said, "General, you talked about all your commanders but I can tell you that it was your enthusiasm over there that really did the job. And you really are to be commended."¹⁷

Little wonder, then, that author David Halberstam once wrote that Shalikashvili had "an immigrant's special appreciation for America and a belief that this country, not just in the eyes of its own citizens, but in the eyes of much of the world, was the place the least fortunate turned to as the court of last resort."¹⁸ The passing of an immigrant




despite Shalikashvili's efforts to avoid the spotlight, his enthusiasm for rescuing these needy refugees would be recognized

who came to the United States as a 16-yearold stateless war refugee, yet retired as the highest-ranking Soldier in the world's most powerful military on July 23, 2011, gives us all cause to reflect. General John Shalikashvili's success story is one that offers many lessons for those who wish to develop leadership skills. JFQ

NOTES

¹ Linda D. Kozaryn, "Joint Chiefs Chairman Cites Lessons Learned as New 'Louie' in U.S. Army," *Pentagram*, May 5, 1995.

² John Lancaster, "Shalikashvili: A Military Man From the Start; Soldiering Runs in Family That Fled Europe After War," *The Washington Post*, September 21, 1993, A1.

³ Unless otherwise sourced, all direct or indirect quotes from individuals stem from author interviews held between September 1, 2010, and August 22, 2011.

⁴ David Halberstam, *War in a Time of Peace: Bush, Clinton, and the Generals* (New York: Scribner, 2001), 321.

⁵ Gordon W. Rudd, *Humanitarian Intervention: Assisting the Iraqi Kurds in Operation* Provide Comfort, *1991* (Washington, DC: U.S. Army Center of Military History, 2004), 215–216.

⁶ Richard Meinhart, a professor in the Department of Command Leadership and Management at the U.S. Army War College, makes the same argument in Carol Smith, "New Orders: John Shalikashvili, once the nation's top general, works to regain command of his life after a stroke," *Seattle Post-Intelligencer*, July 7, 2005.

⁷ Shalikashvili's 201 (military personnel) file, Shalikashvili family archives.

⁸ Untitled American Forces Network news video made on the occasion of General Shalikashvili's promotion to Chairman of the Joint Chiefs of Staff (CJCS), Shalikashvili family archives. ⁹ General Shalikashvili, remarks to the House Armed Services Committee Defense Policy Panel, Hearing on Proposed Aid to the Soviet Union and Kurdish Relief Efforts, September 4, 1991.

¹⁰ Donald G. Goff, "Building Coalitions for Humanitarian Operations—Operation Provide Comfort," individual study report, U.S. Army War College, Carlisle Barracks, PA, April 15, 1992, 20. ¹¹ Smith.

¹² Veterans of Foreign Wars, Washington, DC, February 28, 1994, CJCS Selected Speeches, Special Collections, National Defense University Library.

¹³ General Shalikashvili, dinner remarks to the Military Survivors/Tragedy Assistance Program for Survivors, May 24, 1997, CJCS Collected Speeches.

¹⁴ Shalikashvili, remarks to the House Armed Services Committee Defense Policy Panel.

¹⁵ General Powell made these remarks at the Pentagon ceremony where Shalikashvili was awarded his fourth star before his assumption to the Supreme Allied Commander Europe; untitled video, Shalikashvili family archives.

¹⁶ Tad Szulc, "What we need to do," *Parade Magazine*, May 1, 1994.

¹⁷ House Armed Services Committee Defense Policy Panel.

¹⁸ Halberstam, 323.



In War's Wake: International Conflict and the Fate of Liberal Democracy Edited by Elizabeth Kier and Ronald R. Krebs Cambridge University Press, 2010 326 pp. \$29.99 ISBN: 978–0–521–15770–4

Reviewed by DAVID A. ANDERSON

n War's Wake is a collection of works by some of the most prominent academics in the fields of international relations. political science, and history. Noting that there are countless volumes addressing the transformative powers of war, the purpose of this volume is to fill a gap in the literature on the effect that war has on democratic institutions and politics. The book attempts to draw relationships between war and democratic outcomes-in other words, the consequences of war on/for democracy. As their assessment source, the authors use many of the most significant international conflicts that have taken place over the past 2 centuries, with the focus on "democratizing countries and consolidated liberal democracies." Conflicts analyzed range from conventional all-out wars, such as World Wars I and II, to irregular wars, such as the war on terror.

The book consists of 12 individually authored chapters. Editors Kier and Krebs introduce the work by providing a clear, comparative perspective of war and democracy, while at the same time framing the book's contents and introducing/linking individual author contributions. Subsequent chapters are divided into three thematic parts: "War and Democratic Transitions: New and Durable Democracies?" "War and Democratic Publics: Reshaping Political Participation?" and "War and Democratic States: Government by the People or Over the People?"

Some of the many notable findings by the authors are as follows. In part one, Edward Mansfield and Jack Snyder determine there is no evidence that war obstructs democratization; in some cases, it advances it. Their results further suggest that economic development, the political character of neighboring states, and the state's political legacy influence democratization more than war does. Like Mansfield and Snyder, Nancy Bermeo discovers no substantive evidence that wars result in the creation of democracy. However, in contrast to Mansfield, Snyder, and Bermeo, Paul Starr's research indicates that democracies have been winning modern warsleading to the spread of democracy and enhancing individual liberties. He further notes that no democracy with a per capita income greater than \$6,000 has ever reverted to an authoritarian form of government.

In part two, Rieko Kage examines the impact that citizen mobilization for war has on postconflict civil societies. He determines that war creates opportunities for individual social learning, leading to individual postconflict civil engagement far greater than what would otherwise occur during periods of prolonged peace. Jay Winter finds that the increasing role of human rights and the shrinking role of the military in European politics are shaping European democracy, and that veterans

played a fundamental role in this democratic institutional evolution following the two World Wars. Elizabeth Kier finds that wartime experiences gained by mobilized labor can lead to shifts in labor's power and preferences, resulting in labor reforms during peacetime. Mark Wilson sheds light on the misunderstanding scholars have of the role that the British and U.S. governments played in mobilizing their respective economies for World War II. He cautions about thinking that there was a direct relationship between the level of mobilization and the degree of socialdemocratic reform that followed the war (for example, by 1949, 20 percent of the British economy was publicly owned, whereas in the United States, it was a mere fraction of that percent). He believes this divergence was a result of postwar political posturing and the differences in leadership over each nation's war economies. Britain employed new civilian-led ministries, while the United States gave similar control/authority to its military, which was not to be maintained after the war.

In part three, Ronald Krebs notes that measures taken to expand executive powers in support of large-scale wars and restorative engagements tend to normalize after war, while missions identified as "transformative" tend to result in political backlashes that modify/amend constitutional balances. Scholars have generally believed that wars lead to government institutionbuilding, including policing agencies. Daniel Kryder discovers that domestic reforms driven by factors other than war determine the growth of federal institutional policing capacities. Finally, Deborah Avant posits that the U.S. desire to maintain a smaller. all-volunteer force, while the Nation is yet compelled to meet emerging global challenges, has

necessitated reliance on market mobilization to support military ventures.

Although none of the book's findings can be considered absolutely conclusive, the authors certainly accomplish their objective: to draw meaningful relationships between war and democracy. Every author does a superb job articulating and defending his/her thesis. Several of the authors draw upon the contributive works and critiques of their coauthors in solidifying their own contribution. Many of the interpretive implications of their individual findings are thought-provoking and, in many cases, provocative. Besides the noteworthy contributions that this book makes to our understanding of the complex relationship between war and democracy, it also brings to light differences in scholarly opinion, even among the contributing authors of this book, leaving plenty of room for future research.

Even though each chapter of this superbly crafted and exceptionally well-researched book can be read independently of the others, it is best read as a collective body. I must also caution the reader: the book is somewhat difficult to read and understand at times due to the academic nature of its design. Because of its subject matter focus, this book is best read by social science academics and students, as well as senior military leaders and government officials. JFQ

Lieutenant Colonel David A. Anderson, USMC (Ret.), DBA, is a Professor of Strategic Studies and the Odom Chair of Joint, Interagency, and Multinational Operations at the U.S. Army Command and General Staff College.



The Diffusion of Military Power: Causes and Consequences for International Politics By Michael C. Horowitz Princeton University Press 273 pp. \$26.95 ISBN: 978–0–691–14396–5

Reviewed by CLARK CAPSHAW

n The Diffusion of Military Power, University of Pennsylvania professor Michael C. Horowitz conducts an in-depth examination of the diffusion of four military innovations to address his assertion that "there is a big difference between the introduction of a technology on the battlefield and the full integration of that technology into national strategy . . . warfare and coercive diplomacy . . . [and that] it is the employment of technologies . . . rather than the technologies themselves, that most often makes the difference" (p. 2). He uses both qualitative case studies and quantitative analysis "to determine how states respond to new major military innovations, and how these responses affect international politics" (p. 60). Horowitz uses the innovation itself as his unit of analysis, rather than focusing on countries or regions.

In the book, which is designed as an academic study, four cases are analyzed: "early twentieth-century battlefleet warfare, mid-twentieth-century carrier warfare, nuclear weapons, and suicide terrorism" (pp. 61–62). Each case is explored in a separate chapter.

Horowitz argues that the adoption of a major military innovation by a country depends on two intervening variables: financial intensity and organizational capital. Although it may seem strange to the reader that such markedly different strategies as "battlefleet warfare" and "carrier warfare" are addressed alongside "suicide terrorism" as military innovations, the choice of cases provides a rich mix along these two intervening variable axes. Case number one, carrier warfare, is high in both financial intensity and organizational capital. By contrast, nuclear warfare-the second case-is high in financial intensity but low in organizational capital. Case three, battlefleet warfare, is medium on both axes, and the fourth case, suicide terrorism, is low in financial intensity but high in organizational capital.

Embedded within Horowitz's discussion of theory are some real gems worthy of further study on their own. For example, in the second chapter, he writes, "The more specifically a military organization defines its critical task, the harder it should be for the military to adopt an innovation. Entrenched interests within the organization will be more likely to rebel on the grounds that a proposed innovation is outside the scope of acceptable activities" (p. 36).

For the carrier warfare case, speaking of the Cold War–era Soviet Union, the author offers: "It is striking that even the second-biggest military power in the world did not have the financial resources or organizational capabilities to adopt carrier warfare" (p. 92), and "The nondiffusion of carrier warfare, the acknowledged key to naval supremacy in the post–World War II era, is an interesting puzzle of how military power spreads. The immense complexities, both financial and organizational, involved in building and operating aircraft carriers have made it . . . one of the most difficult innovations to adopt" (p. 95).

Regarding the nuclear weapons case, Horowitz posits, "The evidence shows that relative financial intensity levels powerfully predict both the ability of a state to initiate a nuclear weapons program, and whether or not it will eventually acquire nuclear weapons" (p. 133). This case is also useful in examining countries that have abandoned their efforts to develop nuclear weapons.

Battlefleet warfare, the "Fisher Revolution" in early 20thcentury British naval strategy, is examined in chapter five. The development and diffusion of this naval innovation presage many of the same issues that were later confronted in the more expensive and complex case of carrier warfare, examined earlier in the book. Because battlefleet warfare is so similar, the author might have been wiser to choose a different case to illustrate both medium financial intensity and medium organizational capital.

In the penultimate chapter, the author acknowledges that suicide terrorism is different in kind from the other military innovations studied-specifically in that it is almost exclusively employed by nonstate actors as a means to conduct irregular warfare (the one possible exception being the use of kamikaze pilots by Japan at the end of World War II)-and states that "when examining a conventional innovation, analysts tend to inquire, 'Why didn't country X adopt this military innovation?"" whereas, with suicide terrorism the question is more often posed as "Why did group X adopt suicide terrorism?" (p. 175, italics in original). Furthermore, suicide terrorism is the only case studied here in which religion plays a part as a control variable. Yet this case does provide an example of an innovation that is low in financial intensity and high in organizational capital.

The concluding chapter has a brief but illuminating discussion of precision bombs, cyber war, robotics, and unmanned aerial vehicles, perhaps presaging a second volume on this subject.

While the author develops his cases using "adoption capacity theory," he fails to address how this theory differs from the theory of "absorptive capacity," introduced in a seminal article by Wesley Cohen and Daniel Levinthal in 1990 ("Absorptive Capacity: A New Perspective on Learning and Innovation," Administrative Science Quarterly 35, 1990). He does, however, reference the work of other technology diffusion luminaries such as Clayton Christensen (Disruptive *Innovation*) and Everett Rogers (Diffusion of Innovations) in developing his thesis.

As an academic study, this book has merit in the fields of both diffusion of innovation and military science. As a more general read, it is challenging but rewarding, though the casual reader may choose to skip some of the more theoretical parts of the book. JFQ

Dr. Clark Capshaw is an Operations Research Analyst with U.S. Africa Command in Stuttgart, Germany.



A Transformation Gap? American Innovations and European Military Change Edited by Terry Terriff, Frans Osinga, and Theo Farrell Stanford University Press, 2010 258 pp. \$25.00 ISBN: 978–0–8047–6378–3

Reviewed by ALEX GRYNKEWICH

espite being the subject of copious volumes, a succinct description of military transformation is hard to come by. To some, transformation is about technology; to others, it is about doctrine; and still others see transformation as a shift toward expeditionary warfare. The genius of A Transformation Gap? is that it provides a rubric for analyzing transformation in Europe that accounts for all three perspectives. Six essays examine the transformation records of Great Britain, France, Germany, the Netherlands, Spain, and Poland relative to the United States. An excellent introductory essay also offers a theoretical construct for examining why and how each country has (or has not) embraced transformation (and to what degree), offering explanations from literature on military innovation, norm diffusion theories, and alliance theory. A short intellectual history of U.S. military transformation provides a common backdrop for subsequent essays, tracing its roots from early innovations such as AirLand Battle, through the "Revolution in Military Affairs" of the 1990s, and into Operations Enduring Freedom and Iraqi Freedom.

Throughout this period, the United States has urged its European allies to adopt the major tenets of American transformation. These efforts have met with uneven success for a variety of reasons, and the authors show how both external and internal factors have affected the pace and form of European transformation. In the case of the British, a major external factor driving transformation has been a desire for technological and doctrinal interoperability with American forces. But two internal constraints have hampered the British military's ability to transform alongside the Americans: Fiscal considerations have limited the nation's investment in transformational technologies, and the British are culturally skeptical of the promises of new technologies, particularly when they claim to obviate the need for human intuition and innovation.

The other nations show a similar interplay between external and internal factors. For example, a major external factor driving French military transformation was reintegration into the North Atlantic Treaty Organization (NATO) command structure. This drove a desire for interoperability with the Allies. The Spanish experienced a comparable external stimulus following their 1996 accession to NATO, as have the Poles more recently. While the Netherlands did not experience a sudden imperative for change as did France, Spain, and Poland, NATO has nonetheless spurred innovation within the Dutch armed forces. The Dutch always participate in military operations with others due to their small size, and this has driven a corresponding desire for technical and tactical interoperability with their NATO Allies.

Throughout continental Europe, however, internal factors including fiscal, cultural, and organizational constraints have precluded full emulation of the U.S. model. Defense budgets across the continent have always been constrained, and in the aftermath of the Cold War and absence of any clear existential threat, the pressure to reduce military spending has only increased. Culturally, each nation has a unique history that affects the path of transformation. For example, the proud military traditions of France have helped motivate transformation as a means for securing a leadership role within NATO. Conversely, in Germany, a historic aversion to extraterritorial deployments has precluded the creation of a fully expeditionary force. Organizationally, the bureaucratic structures in France, Spain, and Germany all hindered transformation to some degree. In the Netherlands, a history of service operational independence and a fierce competition for limited resources had a deleterious effect as well. Finally, the Polish military establishment has had to grapple not only with the transition to NATO but also with internal reforms of its post-communist system.

Interestingly, despite the unique external and internal factors affecting each nation's transformation experience, the European military establishments examined in this book share a common disdain for two American transformation tenets. First, the Europeans on the whole reject the American notion of network-centric warfare, favoring instead network-enabled warfare. The difference is far from semantic. In the former (American) version, the network is central to military operations, and its presence has transformed the nature of warfare. In the latter (European) understanding, the network is merely a tool that will help nations to more efficiently and effectively conduct war. Second, the Europeans generally indict the American concept of effects-based operations (EBO) for being overly scientific, failing to account for the human elements of war, and underappreciating the impact of fog and friction. The Europeans on the whole are much more comfortable with the effectsbased approach to operations, which is still concerned with gaining a

strategic effect but has more in common with the whole-of-government or comprehensive approach (where nations leverage all aspects of their power to attain their objectives) than with the U.S. military's early understanding of EBO.

These discontinuities between American and European transformation illuminate the one shortfall of this work. The authors do a superb job scoring European military transformation vis-à-vis American, and they ably identify the external and internal factors that have governed each nation's level of success in emulating the United States. Unfortunately, they never take the next critical step and ask if the European nations *should* be trying to emulate U.S. transformation. The authors collectively identify a European concept that allows for changes in the conduct of war through new technology and doctrine but reject the idea that the nature of war can change. Conversely, the U.S. conception of transformation embraced the idea of technological-driven changes in the nature of war. Indeed, transformation advocates even claimed that technology would allow one to "lift the fog of war."

The authors' failure to address this underlying question leaves the reader wondering whether the transformation gap they so eloquently describe is between the vanguard Americans and lagging Europeans, or whether it is the other way around. A discussion of the external and internal factors that drove the United States to its own unique understanding of transformation and warfare would have gone a long way toward addressing this shortfall. Nonetheless, this is an important, timely, and well-researched work, and a must-read for all who are interested in either transformation or the dynamics and future of the Atlantic Alliance. JFQ

Lieutenant Colonel Alex Grynkewich, USAF, is a Crisis Action Planner at U.S. European Command.



The Clausewitz Delusion: How the American Army Screwed Up the Wars in Iraq and Afghanistan (A Way Forward) By Stephen L. Melton Zenith Press, 2009 306 pp., \$30 ISBN: 978-0-760-33713-4

Reviewed by JOHN T. KUEHN

tephen L. Melton teaches in the Tactics Department at the U.S. Army Command and General Staff College (CGSC). His book joins a number of other recent publications on the reigning philosopher of war Carl von Clausewitz, including Jon T. Sumida's Decoding Clausewitz and Antulio J. Echevarria's *Clausewitz and Contemporary* War. Melton's purpose, though, is not to reinterpret Clausewitz but to use his masterpiece On War as the basis for criticizing the U.S. Army and American ("neoconservative") foreign policy (p. 3).

Of these three targets-Clausewitz, the Army, and foreign policy-Clausewitz gets the least amount of serious time. However, Melton's title is accurate insofar as his first criticism is directed at the "specious theories" of "a nineteenth-century German philosopher" (pp. 15, 18). Melton's rather superficial discussion and critique of Clausewitz are intrinsically linked to his criticism of what he sees as the U.S. Army's illogical and puzzling fascination with Clausewitz's ideas. Melton makes the same mistake that he in some

sense is criticizing in the institutional Army: he conflates another theorist of war, Antoine-Henri Jomini, with Clausewitz and then dresses up his criticisms of what are actually Jominian concepts (for example, decisive points) in Clausewitzian language (p. 17). He then makes a second and greater error in conflation when he confuses Clausewitz's ideas in *On War* with the entire modern Prussian-German military tradition of short, decisive wars. The two are not interchangeable.

Finally, Melton attributes conceptual influences to Clausewitz that had nothing to do with the man or his writings. For example, he identifies the Army's embrace of the concept of operational art and then incorrectly blames Clausewitz as its progenitor (p. 17). To the contrary, operational art is a Soviet theoretical construct by V.K. Triandifilov, M.N. Tukhachevsky, and A.A. Svechin. The Army focused on operational art because of its doctrinal success as practiced by the Red Army against the presumably Clausewitzian Wehrmacht in World War II. Army intellectuals were studying the doctrine of their most likely adversary and found much in it of value, not because of a misguided fixation on Clausewitz. What a muddle.

Melton's next targets, already mentioned, are the Army's intellectual and senior leaders (who are not always the same people). Here the book makes some valid points, but for precisely the reason stated earlier-Clausewitz's words and concepts were misunderstood and misapplied. A common saying at CGSC goes, "They talk Clausewitz but they walk Jomini." Melton identifies the defensive nature of the Cold War and the U.S. defeat in Vietnam as having contributed in a negative way to the inclusion of mistaken "Clausewitzian" ideas into Army and joint doctrine and into the professional military education curriculum. Some

of his evidence on this point is ludicrous. For example, he points to the 1,000 copies of On War in the CGSC library as prima facie evidence of the Army's obsession with Clausewitz. In fact, the library has as many copies as CGCS does students simply to save money on copyright costs for paper and rights to key passages; it is not a reflection of Clausewitz's domination of Army doctrine (p. 16). Affording student officers the opportunity to forgo buying On War will probably lessen the influence of Clausewitz, not increase it.

Melton recommends a different framework of analysis as a remedy for Clausewitzian/flawed thinking. It involves looking at war using very much the taxonomy described in On War. He is especially concerned with what he calls "offensive wars" and uses "governance" as a criterion for success. He then proceeds to look at America's military tradition through this lens, creating an entire taxonomy of his own for American wars and summarizing it in an extensive table (pp. 22-23). Much of this model focuses on the concept of attrition (as opposed to "neo-Clausewitzian" annihilation) (p. 68). This is all well and good, except it has already been done, and thoroughly, by another German theorist named Hans Delbruck. Other extended discussions of the U.S. Army as a strategic institution, such as Russell Weigley's American Way of War and Brian M. Linn's Echoes of Battle, are either mentioned in passing or missing from Melton's surveycontradictory evidence, perhaps?

The account is one of triumph and celebration of a successful American approach to war from colonial times to the Cold War—until the unfortunate rise of Clausewitzianism after Vietnam. Melton is trying to come to terms with how this approach could have gone so wrong in our own day, and he seems to be positing a new approach at the grand strategy level—a new exceptionalist American "way of war." However, his critiques of the Army institutionally, and of foreign policy more broadly, have already been done better—in Andrew Bacevich's several volumes, for example.

In other words, Melton has confused the cure for the disease, and the disease itself is better described elsewhere. What this equates to is a book whose main efforts are focused on military and foreign policy recommendations that the author presumes run counter to current trends. Paradoxically, these recommendations, and the methods used to achieve them, are well grounded in Clausewitzian principles. It is worth emphasizing just a couple of points of contact in the book with these principles: defense as the stronger form of war (pp. 72, 87, 211–213, 246), the utility of viewing war as the interaction and result of rational policy factors (pp. 115, 244), irrational and primordial forces such as nationalism and tribalism (pp. 72, 142), and the randomness and chaos in the sphere of combat (pp. 118, 158, 244).

Certainly, a superficial or reductionist reading of Clausewitz can cause damage; Melton is right to criticize the crazy taxonomy with respect to center of gravity that has been foisted upon the U.S. military through both Service and joint doctrine (p. 18). What is needed, however, is a more honest study of On War, not the implementation of an exceptionalist approach to war that has little utility given the commitments the United States has made and its position of global leadership. This book succeeds in igniting debate; however, it ultimately fails to convince or offer anything new or original. JFQ

Dr. John T. Kuehn is a Professor at the U.S. Army Command and General Staff College, Fort Leavenworth, KS.



Red Star Over the Pacific: China's Rise and the Challenge to U.S. Maritime Strategy By Toshi Yoshihara and James R. Holmes Naval Institute Press, 2010 304 pp. \$36.95 ISBN: 978–1–59114–390–1

Reviewed by ERIC SETZEKORN

ed Star Over the Pacific is a timely, focused, and persuasive analysis of Chinese naval strategy that stands well above other works on the topic. The patient, solid scholarship and nuanced argumentation of the work offer a comprehensive perspective of Chinese strategic thinking and naval development and their ramifications for the United States. Although cautious in its language, the book leaves readers with a firm impression that not only is the balance of naval power in the Pacific steadily shifting against the United States, but also, more importantly, public maritime interest and naval intellectual power are shifting in ways that are potentially destabilizing for the region.

The irony of the work is that the exhaustive Chinese language research Yoshihara and Holmes undertook, which included an extensive review of Chinese military journals and books, led them back to Alfred Thayer Mahan, a strategist who once taught at their own institution, the Naval War College. They found that over the past decade, Mahanian motivations for robust seapower and a strategy of sea control have become increasingly popular, although not dominant, in Chinese intellectual debates, and that Mahan's ideas are providing a crucial theoretical basis for China's naval expansion beyond its coastal waters. To simplify Mahanian ideas and illustrate China's selective adaptation of his concepts, Yoshihara and Holmes divide his thought into two conceptual "tridents." The first encompasses the larger strategic and historical "logic" and rests on three points: commercial, political, and military power. The second trident is the tactical and operational "grammar" of economic production, shipping, and overseas markets and bases all underpinned by military strength. The authors refer to the two tridents throughout the book to accentuate how various navies have used or misused Mahan's logic and grammar to highlight the strategic choices China has made.

The book's organization, on the surface, appears to have little overall cohesiveness; many of the chapters seem only tangentially related. While this makes understanding the larger argument of the work difficult at times, the embedded Mahanian framework allows each chapter to stand as an independent and compelling argument while still being directed toward a larger intellectual goal. It also seems that the authors perceived this book as an opportunity to answer the questions they have received about China's navy: Who do the Chinese read? (Mahan.) Isn't China's navy just going to end up like Wilhelmine Germany? (No, the United States is in a far weaker position than Great Britain.) Where does Taiwan fit into this? (The Chinese increasingly see Taiwan as a springboard into the Pacific, not the finish line.)

The core of the book is chapters four through six, which delve into the Mahanian grammar of Chinese fleet tactics, missile developments, and China's undersea nuclear deterrent force. Wisely eschewing the acronym-heavy and numerically focused analysis of counting ships and missiles, the concentration is on doctrine and strategic choices. Chapter four, "Fleet Tactics with Chinese Characteristics," highlights a Chinese preference for asymmetric military action involving multiple weapons systems and a lingering preference for a policy of active defense. Chapter five, "Missile and Antimissile Interactions at Sea," shows how recent advances in Chinese missile technology are destabilizing U.S. and allied strategic assumptions about carrier operations and surface warfare. Chapter six, "China's Emerging Undersea Nuclear Deterrent," details the growing interest in China of a robust sea-launched ballistic missile force that would increase the desire for overt sea control of potential launch areas.

Chapter seven is a subtle but powerful analysis of the recent attempts by the Chinese government to promote a historical narrative that emphasizes China's seagoing tradition. While the exploits of 15th-century Admiral Zheng He may look historically inaccurate to scholars, this narrative provides an essential maritime storyline for the Chinese public. Yoshihara and Holmes stress that such efforts are an attempt to fashion a "usable past" featuring a Chinese maritime identity that could be longer lasting and more destabilizing to the Pacific balance of power than any ship or missile.

So what about the U.S. response? Yoshihara and Holmes briefly but sharply apply their Mahanian logic and grammar dichotomy to compare and contrast the 1986 *Maritime Strategy* with the 2007 *Cooperative Strategy for 21st-Century Seapower*. They argue that the 1986 document was almost solely composed of tactical grammar because of the broad consensus on Cold War strategy, but the 2007 strategy is a bland compromise document that is solely focused on vague Mahanian logic. The ambiguity of the 2007 document is perhaps understandable in an era of strategic and budgetary uncertainty, but the authors highlight that this means that Congress, naval officers, and the American public are left with no clear strategic and operational framework on which to build solid domestic support or aid in military planning.

Red Star Over the Pacific fills a significant gap in military and strategic analysis between grand but often empty theories of international relations and overly detailed analysis of specific ships or weapons. The primary argument of the book-that the Chinese navy is an increasingly capable organization that has developed a sophisticated intellectual rationale for enlarging its mission and responsibilities—is presented in cautious and measured tones. The implication drawn from the analysis is subtly provocative; while the Chinese navy might seek (and be able) to control or dominate crucial portions of the global commons, they will not challenge the U.S. Navy on a global scale. If Yoshihara and Holmes are correct and China achieves uncontestable control over areas of the South China Sea and East China Sea. can freedom of the seas be credible if key portions are excluded? Casual readers, naval historians, military officers, and perhaps some Chinese readers should all benefit from this work, which is likely to become a benchmark text in a burgeoning field. JFQ

Eric Setzekorn is a Ph.D. student at The George Washington University specializing in Chinese and military history.

Joint Force Development Vision: Adapting to New and Future Realities

By GEORGE J. FLYNN

It's clear we have work to finish in the current conflicts and it should be just as clear that we have work to do in preparing for an uncertain future. Our work must result in a joint force that is responsive, decisive, versatile, interdependent, and affordable.

-General Martin E. Dempsey to the Senate Armed Services Committee, July 26, 2011

n August 31, 2011, U.S. Joint Forces Command (USJFCOM) was disestablished-the first disestablishment of a combatant command. As part of the USJFCOM disestablishment, the execution of key joint force development functions (joint training, education, doctrine, lessons learned, and concept development and experimentation) was realigned to the Joint Staff Directorate for Joint Force Development (J7). This action was designed to improve the overall effectiveness and responsiveness of joint force development functions by bringing these core responsibilities directly under the Chairman of the Joint Chiefs of Staff.

After a decade of persistent conflict, we are presented with an opportunity to reflect upon what was done well and what can be improved, and incorporate that learning into our current and future development efforts. Our success in the future requires a joint force that is more adaptable and responsive than our adversaries, as well as one that is able to respond rapidly and decisively to the broad array of irregular and conventional challenges.

To guide this effort on behalf of the Chairman, the J7 director was tasked to lead the joint force development process.

Lieutenant General George J. Flynn, USMC, is the Director for Joint Force Development, Joint Staff J7.

Joint Force Development Authorities

Each of the Services organizes, trains, and equips to bring its own unique capabilities to the fight. While these Service capabilities provide the foundation of our warfighting capability, it is the integration and interdependence of these capabilities that achieve jointness and exponentially multiply the value that each alone brings to the fight. Jointness is not automatic; it must be nurtured and continually updated through integrated joint force development activities to provide relevant capabilities that are responsive to the security environment. Joint force development comprises joint training, doctrine, education, lessons learned, and concept development and experimentation.

As mandated in Title 10, U.S. Code, the Chairman is responsible for providing planning, advice, and policy formulation for key joint force development functions, such as doctrine, training, and education.¹ The functions of lessons learned, concept development, and experimentation are key to supporting joint force development activities. With the disestablishment of USJFCOM, the Chairman now directly oversees the execution of these key functions.



Directorate for Joint Force Development

Leveraging the Chairman's statutory responsibilities, the J7 leads the effort to develop an adaptable and responsive joint force capable of confronting the wide range of future challenges—those that will arise tomorrow, and those that will arise in 2020.

In light of current fiscal constraints, balancing resources between current and future needs will be more challenging, but it is all the more important to get it right. The future joint force must be able to operate across the full spectrum of operations in both a supported and a supporting role. We will anticipate the future security environment and adapt accordingly because we know our adversaries will seek to engage us where we are weakest, exploiting any capability gaps that might exist.

Each of the joint force development functions must deliver results both independently and together in order to produce a trained, adaptable, and responsive joint force of today and the joint force of 2020. In concert with the Chairman's guidance, the following objectives provide the primary means of directing and aligning joint force development.

Training. The J7 is responsible to the Chairman for the content of joint training policies, policy guidance to improve joint force readiness, management of joint exercise and engagement funds for the combatant commands and Services, and provision and support of a continuum of integrated individ-

Understanding the Why, How, and What of Joint Force Development

Why does the J7 mission exist? Jointness is at its core. Each of the Services organizes, trains, and equips to bring its own unique capabilities to the fight. It is the integration of these Service capabilities that is the foundation of our warfighting capability. Jointness is not automatic; it is maintained and advanced through continuous joint force development efforts.

How the J7 maintains and advances jointness is through the joint force development cycle. It is iterative, constant, and inclusive. It does not rest. Our joint warfighting capability is *improved* through the exploration of concepts validated by rigorous experimentation. It is *sustained* through relevant joint doctrine, education, training, and exercises. New capability is *discovered* through the collection and exploration of lessons learned— that is, best practices from the field that are rapidly integrated into collections of joint knowledge such as doctrine and learning programs. It is discovered through active scouting—capitalizing and exploiting innovative opportunities and developments occurring inside and outside of the military community. Finally, joint warfighting capability is *created* through the codification of best practices into joint doctrine; the dissemination of tactical, operational, and strategic lessons learned; and a comprehensive education program that produces strategic joint thinkers and leaders for today and tomorrow.

What we produce is the trained, adaptable, and responsive joint force of today—and the joint force of 2020.



Joint Doctrine

JOINT DOCTRINE | Update



ual, staff, and collective training and senior leader education.² Our programs of training and exercises will continually challenge and improve an experienced force, maintaining readiness for today and tomorrow. Training will ingrain in the force the lessons learned from the last decade of warfare. We will maintain interoperability with our coalition and interagency partners. Most importantly, training will continue to adapt to prepare the force for tomorrow's challenges.

Education. The J7 is responsible for developing the policies governing officer and enlisted joint professional military education (JPME) and for National Defense University, the Chairman's University.³ Our joint education system will promote the knowledge, skills, attributes, and behaviors of the joint force that define our profession of arms, keeping leadership as the foundation. It will produce leaders at every echelon who possess the ability to think strategically, critically, and jointly.

Doctrine. The J7 is responsible for the content of joint publications and for managing the joint doctrine development process.⁴ Doctrine must be accessible to all and relevant to the challenges faced by the joint force commander today and in the future. It will reflect

proven principles and best practices but will be responsive to changes from lessons learned and validated concepts. Joint doctrine will codify the values of the profession of arms.

Lessons Learned. The J7 develops joint lessons learned policy and guidance and provides active lessons and analytical support to the Chairman, Joint Staff, combatant commanders, and joint warfighter throughout planning, preparation, and execution of operations and exercises. The J7 oversees teams that deploy worldwide to collect, analyze, aggregate, and disseminate joint lessons and best practices across the full spectrum of military operations.⁵

Our lessons learned process will achieve greater effectiveness in identifying lessons and making these collected best practices available to the entire force. Furthermore, we will ensure that we have actually learned those lessons by evaluating how they have been integrated into our joint warfighting capability through a rigorous exercise program.

Concept Development and Experimentation. The J7 leads the development, assessment, and transition of joint capabilities, filling gaps identified by the Secretary of Defense, Chairman, and combatant commanders. The purpose of the program is to develop conceptual solutions to expected challenges faced by combatant commanders or Service chiefs and then evaluate those potential solutions through joint experimentation. Validated solutions lead to the development and fielding of joint warfighter capabilities.6 Concept development will focus on how the joint force can operate more effectively and guide change by developing new joint operating methods, again validated by experimentation, leading to substantive changes in doctrine, organization, training, materiel, leadership and education, personnel, and facilities. Comprehensive concept development and experimentation enable us to consider future challenges and prepare for them before they are upon us. Nonmateriel solution development and transition will be a key part of future warfighting capabilities. Nonmateriel solutions allow us to get the most out of our ideas, people, and fielded capabilities in a fiscally constrained environment. The J7 will be the advocate for nonmateriel solutions in the Joint Capabilities Integration Development System (JCIDS).

We cannot afford to lose the jointness we have achieved. To fulfill this role, the J7 will remain organized for mission success and enabled by authorities consistent with its responsibilities. Unity of effort, both internally and with our partners in the force development community, increases our impact and effectiveness significantly.

Chairman's Guidance

The Chairman's intent is a balanced management of today's and tomorrow's requirements, highlighting opportunities rather than obstacles. Simplification of the staff organization and processes to achieve innovation is critical to providing the responsiveness needed to push jointness deeper, sooner. As the Chairman's principal steward of jointness, the J7 director is charged with executing four immediate tasks:

make concept development and experimentation relevant to building joint force 2020

develop a comprehensive plan to promote the knowledge, skills, attributes, and behaviors that define our profession of arms

make sure we learn the lessons of the last decade of war and correctly apply them to future conflicts

lead a reexamination of joint professional military education.

Joint Force Development Way Ahead

The future is fraught with complex challenges ranging from dynamic adversaries to resource constraints. To achieve the Chairman's intent and execute the functions of joint force development, we must adopt a business model founded on innovation and collaboration. We must recognize that what works today will not withstand the force of change.

The J7 is on course, having published a 90-day plan that initiates an examination of business processes, requirements, resources, and outputs for each of the J7 functional areas. The plan articulates individual and collective objectives with the ultimate goal of unifying the different functions into one iterative, deliberate, and continuous joint force development cycle.

Experience gained over the last decade of active joint combat must be captured and included in future exercises and training. The force must be prepared to operate in dynamic and complex threat environments that include a robust cyber threat. Increased use of special operations forces and the principles of mission command must also be emphasized in future training events and exercises. The high level of coalition and interagency support in rehearsal exercises and operations must be maintained and incorporated into exercises, training, and JPME. Increased collaboration with key coalition and interagency partners is ongoing to ensure that the training environment adequately replicates the interoperability challenges and complexity faced in operational deployments. Critical decisions are necessary to prioritize limited resources for these important events.

Joint doctrine, education, and lessons learned continue to evolve in a dynamic manner to ensure relevant knowledge, skills, attributes, and behaviors within the joint force. A plan that promotes our profession of arms will form the foundation of joint and Service education programs. Development of electronic collection systems is ongoing to streamline lessons learned to ease collection, storage, analysis, and dissemination. Compiling the lessons learned process under a single Web-based system will ease use and enable rapid, accurate data retrieval for incorporation into planning processes. A joint doctrine application is under development to enable rapid access and searching of joint



JOINT DOCTRINE | Update



publications. JPME programs and institutions are under constant review to improve effectiveness, measured against creation of the required capabilities in individuals and units toward joint force 2020.

As the defense budget becomes smaller, nonmateriel solutions are critical to fill warfighter capability gaps. A revision to the formal Defense Department process that defines acquisition requirements and evaluation criteria for future defense programs—JCIDS—will drive nonmaterial solution importance and increase the J7 director's role as the nonmateriel advocate. These include requiring a J7 director's nonmateriel endorsement to all documents staffed to the Joint Requirements Oversight Council and injecting the J7 director's involvement at acquisition milestones A, B, and C.

Conclusion

The J7 cannot miss this opportunity to make a difference. Across all functions, joint force development will implement practices and processes that are adaptable and responsive; eliminate stovepipes that impede change and relevance; and work together to achieve more synergy in efforts and results within the J7 itself and the Services, coalition partners, interagency partners, and other organizations that play a role in force development. It will advocate adaptability and responsiveness as the core capabilities that will enable the joint force to confront the complexity of future challenges. The J7 endstate is a joint force development process that does not rest; is integrated, leaner, and focused on results; and

produces operationally relevant solutions to meet the needs of the joint warfighter-today and in 2020. JFQ

NOTES

¹ "Chairman: Functions," Title 10 U.S. Code, § 153.

²As described in Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3500.01 Series, "Joint Training Policy and Guidance"; CJCS Memorandum (CJCSM) 3500.03 Series, "Joint Training Manual"; Department of Defense Directive 1322.18, "Military Training"; CJCSI 3511.01 Series, "Joint Exercise Transportation Program"; CJCSI 7401.01 Series, "Combatant Commander Initiatives Fund"; CJCSI 3500.XX, "Chairman's Exercise Program."

As described in CJCSI 1800.01D, "Officer PME Policy"; CJCSI 1805.01A, "Enlisted PME Policy"; CJCSI 1801.01C, "National Defense University Policy."

⁴As described in CJCSI 5120.02B, "Joint Doctrine Development System"; CJCSM 5120.01, "Joint Doctrine Development Process"; CJCSI 5705.01D, "Standardization of Military and Associated Terminology"; CJCSI 2700.01, "Rationalization, Standardization and Interoperability."

⁵In accordance with: CJCSI 3150.25, "The Joint Lessons Learned Program," October 10, 2008 (under revision); CJCSM 3150.25, "The Joint Lessons Learned Program," February 15, 2011.

6 In accordance with CJCSI 3010.02C, "Draft-Joint Operations Concept Development Process"; CJCSI 3100.01B, "The Joint Strategic Planning System."

JPs Under Revision

- JP 1, Doctrine for the Armed Forces of the United States
- JP 1–06, Financial Management Support in Joint Operations JP 2-0, Joint Intelligence
- JP 2-01, Joint and National Intelligence Support to Military Operations
- JP 2-03, Geospatial Intelligence Support to Joint Operations
- JP 3-00.1, Strategic Communication
- JP 3-01, Countering Air and Missile Threats
- JP 3–04, Joint Shipboard Helicopter Operations
- JP 3-07.3, Peace Operations
- JP 3-07.4, Counterdrug Operations
- JP 3-11, Operations in Chemical, Biological, Radiological, and Nuclear (CBRN) Environments
- JP 3-12, Cyberspace Operations
- JP 3–13, Information Operations
- JP 3-13.1, Electronic Warfare
- JP 3–13.2, Military Information Support Operations (PSYOPS)
- JP 3-13.3, Operations Security
- JP 3-13.4, Military Deception
- JP 3–15.1, Counter–Improvised Explosive Device Operations (C-IED)
- JP 3–16, Multinational Operations
- JP 3-18, Forcible Entry Operations
- JP 3-27, Homeland Defense
- JP 3-28, Civil Support
- JP 3-29, Foreign Humanitarian Assistance
- JP 3-32, Command and Control for Joint Maritime Operations
- JP 3-33, Joint Task Force Headquarters
- JP 3–35, Deployment and Redeployment Operations
- JP 3-40, Combating Weapons of Mass Destruction
- JP 3-41, Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives Consequence Management
- JP 3–50, Personnel Recovery
- JP 3-57, Civil-Military Operations
- JP 3–59, Meteorological and Oceanographic Operations
- JP 3-60, Joint Targeting
- JP 3-63, Detainee Operations
- JP 3-72, Nuclear Operations
- JP 4-0, Joint Logistics
- JP 4–01, The Defense Transportation System
- JP 4–01.2, Sealift Support to Joint Operations
- JP 4–01.5, Joint Tactics, Techniques, and Procedures for Transportation Terminal Operations
- JP 4-01.6, Joint Logistics Over-the-Shore (JLOTS)
- JP 4-02, Health Service Support
- JP 4–08, Logistics in Support of Multinational Operations
- JP 4–10, Operational Contract Support
- JP 6-01, Joint Electromagnetic Spectrum Operations (JEMSO)

JPs Revised (last 6 months)

- JP 1-0, Personnel Support to Joint Operations
- JP 1–04, Legal Support to Military Operations
- JP 3-0. Joint Operations
- JP 3-03. Joint Interdiction
- JP 3-07, Stability Operations
- JP 3-08, Interorganizational Coordination During Joint Operations
- JP 3-15, Barriers, Obstacles, and Mine Warfare for Joint Operations
- JP 3-34, Joint Engineer Operations
- JP 4-06, Mortuary Affairs
- JP 5-0, Joint Operation Planning

NEW from *NDU Press*





for the Center for the Study of Chinese Military Affairs

The Paradox of Power: Sino-American Strategic Restraint in an Age of Vulnerability

By David C. Gompert and Phillip C. Saunders

The United States and China each have or will soon have the ability to inflict grave harm upon the other by nuclear attack, attacks on satellites, or attacks on computer networks. Paradoxically, despite each country's power, its strategic vulnerability is growing. A clearer understanding of the characteristics of these three domains nuclear, space, and cyber—can provide the underpinnings of strategic stability between the United States and China in the decades ahead. David Gompert and Phillip Saunders assess the prospect of U.S.-Chinese competition in these domains and recommend that the United States propose a comprehensive approach based on mutual restraint whereby it and China can mitigate their growing strategic vulnerabilities. This mutual restraint regime may not take the form of binding treaties, but patterns of understanding and restraint may be enough to maintain stability.





NEW Series from NDU Press for the Historical Office, Office of the Secretary of Defense

Establishing the Secretary's Role: James Forrestal Special Study 1 in the Cold War Foreign Policy Series

By Jeffrey A. Larsen and Erin R. Mahan

When James Forrestal became the first Secretary of Defense in September 1947, his interest in foreign policy and in ensuring that the defense establishment had a say in that policy would set precedents for his successors for decades to come. President Harry Truman, while respecting Forrestal's abilities, wanted a Defense Secretary who would enforce discipline among the Services, operate the Pentagon as efficiently as possible, and not wander too far into foreign policy, which he considered a secondary function of the job. Authors Larsen and Mahan trace Forrestal's involvement in foreign policy decisions in the challenging postwar era, which put him increasingly at odds with Truman and eventually led to his resignation in March 1949.



Visit the NDU Press Web site for more information on publications at ndupress.ndu.edu



CALL FOR ENTRIES



2012 Secretary of Defense and 2012 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 at U.S. PME colleges, schools, and other programs, including international students and Service research fellows.

What's Required? Research and write an original, unclassified essay in one or more of the various categories. The essay may be written in conjunction with a course writing requirement. All entries must be selected by and submitted through your college.

When? Any time during the 2011–2012 academic year. Students are encouraged to begin early and avoid the spring rush. Colleges may set their own internal deadlines, but must submit their official entries to NDU Press by **April 25, 2012**, for the first round of judging. Final judging and selection of winners take place **May 15–16, 2012**, at NDU Press, Fort McNair, Washington, DC.

National Defense University Press conducts the competition with the generous support of the NDU Foundation. For further information, see your college's essay coordinator or go to: www.ndu.edu/press/SECDEF-EssayCompetition.html www.ndu.edu/press/CJCS-EssayCompetition.html





A Journal of the Center for Complex Operations

PRISM begins its third year with a solid line-up of provocative articles. David Ucko opens "Features" with a look at counterinsurgency *after* Afghanistan, noting that the concept has undergone a rapid rise and now decline. Next, Thomas Pickering examines the prospect of negotiations in Afghanistan, asking three hard questions: *when, with whom*, and *about what* should we negotiate? The remaining feature authors take rigorous approaches as well: Renanah Miles on the flawed mandate for stabilization and reconstruction; Brian Burton on perils of the indirect approach; Paul Miller on fixing failed states; Amitai Etzioni on a problematical "Marshall Plan for the Middle East"; Birame Diop on Sub-Saharan military activities; and Kenneth McKenzie and Elizabeth Packard on military-to-military partnerships in light of the Arab Spring. In the Special Feature, Frank Rusagara looks at nontraditional roles for the Armed Forces and the crisis in Rwanda. "From the Field" author John Bessler examines the difficult operations in a remote district of Afghanistan as a "tragedy of policy and action in three acts." Bradford Baylor et al. in "Lessons Learned" present a case study of the challenges faced by the United States in Iraq from 2007 to 2010. Finally, Pauline Baker reviews Stewart Patrick's *Weak Links: Fragile States, Global Threats, and International Security* (Oxford University Press, 2011).

PRISM explores, promotes, and debates emerging thought and best practices as civilian capacity increases in order to address challenges in stability, reconstruction, security, counterinsurgency, and irregular warfare. Published by NDU Press for the Center for Complex Operations, *PRISM* welcomes articles on a broad range of complex operations issues, especially civil-military integration. Manuscript submissions should be between 2,500 and 6,000 words and sent via email to prism@ndu.edu.





JOINT FORCE QUARTERLY

Published for the Chairman of the Joint Chiefs of Staff by National Defense University Press National Defense University, Washington, DC

