



<http://militaryreview.army.mil>  
PB -100 -16- 09/10  
Headquarters, Department of the Army  
PIN: 200118-000  
Approved for public release; distribution is unlimited



# **Military Review**

THE PROFESSIONAL JOURNAL OF THE U.S. ARMY

SEPTEMBER-OCTOBER 2016

## **North Korean Collapse**

Port, p8

## **How America Will Be Attacked**

Gorka, p30

## **Bolivia's Defense Policy**

Faundes, p51

## **The New Retirement System**

White, p110





## Greetings!

Chief of Staff of the Army Gen. Mark Milley has repeatedly emphasized that readiness is the U.S. Army's number one priority. This issue

of *Military Review* strives to support the chief of staff's vision by offering several articles that relate to Army readiness, especially its understanding of future conflicts.

In Bryan Port's "North Korean Collapse or Korean Reunification," the author examines how the U.S. Army can think about and prepare for the possible failure of the North Korean state. Sebastian Gorka's "How America Will Be Attacked: Irregular Warfare, the Islamic State, Russia, and China" shifts the focus to more immediate adversaries and the ways in which they present irregular and unconventional threats to the United States. In "Training for Decisive Action," Maj. Will Shoemate and Maj. Benjamin Jensen relate personal experiences along

with historical examples to highlight ways the Army can provide training that ensures units are ready to conduct unified land operations through decisive action.

We appreciate the support of all the contributors to this edition of *Military Review*, and also encourage prospective writers to consider writing not only for *Military Review*, but also for the other divisions of the Army Press: the Army Press Online offers a venue for relatively quick publication of short, timely articles; the *NCO Journal* provides an opportunity to publish stories and insights pertinent to the Army's noncommissioned officers; and, for those interested in undertaking more ambitious projects of greater scope and depth, the Combat Studies Institute publishes full-length books and monographs on military history and other topics of professional interest.

Finally, thanks to all our loyal readers. Please continue to follow us at <http://usacac.army.mil/cac2/militaryreview/index.asp> or <http://armypress.dodlive.mil/>. ■

A U.S. Army CH-47 Chinook helicopter assigned to the 82nd Combat Aviation Brigade lands at Latham Drop Zone during the Little Group of Paratroopers portion of All American Week at Fort Bragg, North Carolina, on 23 May 2016. (Photo by Staff Sgt. Christopher Freeman, U.S. Army)





# NCO JOURNAL

The official magazine of Noncommissioned Officer professional development



**News.** [www.ncojournal.dodlive.mil](http://www.ncojournal.dodlive.mil) is the main source of information for stories pertinent to NCO professional development and related current events. Follow us on Facebook and Twitter to receive notifications of new stories.



**Video.** The *NCO Journal* releases a video news broadcast every month that touches on subjects significant to NCO professional development. Subscribe to our YouTube channel to receive notifications of our newest releases.



NCO JOURNAL  
PODCAST

**Podcast.** Two NCO special guests are invited to discuss and debate recently published *NCO Journal* stories and explore leadership challenges and solutions. You can listen to our podcasts direct from [www.ncojournal.dodlive.mil](http://www.ncojournal.dodlive.mil), and our Facebook page.



# Themes and Suggested Topics for Future Editions



A U.S. Army soldier assigned to 1st Brigade Combat Team, 2nd Infantry Division, provides security during Decisive Action Rotation 16-06 at the National Training Center in Fort Irwin, California, on 16 May 2016. (Photo by Sgt. Christopher Blanton, U.S. Army)



## **“Sacred Cows”: What Should Go Away But Won't**

- **Barnacles:** Army institutions, processes, customs, or doctrine that are anachronistic and impede needed change and progress
- **Relevance of the Uniform Code of Military Justice:** What is the state of military justice and military policing, including corrections? What crimes do soldiers commit, not just against detainees but also against other soldiers, their families, civilians, or unified action partners? How well do people accused of crimes receive due process? Is military justice applied fairly and equitably across all ranks?
- **Is racism or excessive force an issue of concern for military police?** How well trained are military police as compared to civilian counterparts?

## **Mission Command Revisited**

- Has the philosophy of mission command taken hold inside the Army?
- Case studies on the use of the Army design methodology during specific operations
- Modularity ten years after: an evaluation
- Noncommissioned officers (NCO) and mission command: Are we blurring too much the lines between officer/NCO duties and responsibilities? Are we training soldiers or quasi-commissioned officers? What is the impact of new NCO evaluation reports, schooling, and the Army University on the enlisted force?

## **Dealing with a Changing World**

- Adjusting to changing societal norms: how they impact the Army
- Military role in dealing with revival of global slavery
- Security implications of the new Syrian, Iranian, and Russian triad in the Middle East
- Security implications of growing Chinese hegemony over the South China Sea
- Security implications of the new Islamic Europe
- Filling the ranks: how to deal with the long-term challenge of finding people who want to serve in the military and who are qualified
- Is the U.S. military still the world's most powerful?
- Clash of civilizations as the new paradigm for global conflict: Was Samuel Huntington right?
- Analysis of the nation-state: is it the cause of war? Will open borders be the solution to ending global conflict?

## **War by Other Means**

- Are there nations that consider themselves to be at war with the United States? If so, how are they conducting war and what are the probabilities of their success?
- Insurgent warfare: case studies of winning by outgoverning
- Clash of cultures: Is winning the struggle for cultural hegemony a prerequisite for final victory?
- Case studies: immigration as a strategic weapon of war
- What must the United States do to defend itself against economic, political, or informational warfare?
- Economic war with the West: China's presence in Latin America and Africa
- The relationship of Russia and Turkey as related to the Syrian conflict
- Syria and beyond: Russian intentions in the Middle East
- Nicaragua and the “New Panama Canal” through it: history and implications for the West
- Kleptocracies: Why they matter to the United States. The military's role in dealing with them



## **8 North Korean Collapse or Korean Reunification**

### **The Importance of Preparation over Prediction**

**Bryan Port**

*Preparing for the collapse of North Korea or its reunification with South Korea is more important than predicting the manner or timing of those events. How the United States responds to such occurrences will have a tremendous impact on its future position in the region and elsewhere.*

## **20 Strategic Acquisition for Effective Innovation**

**Lt. Col. Rafael Rodriguez, U.S. Army**  
**Maj. William Shoemate, U.S. Army**  
**Maj. Justin Barnes, U.S. Army**  
**Karen Burke**

*A team from the Chief of Staff of the Army Strategic Studies Group recommends ways to make the Army's cumbersome acquisition process more conducive to effective innovation.*

## **30 How America Will Be Attacked**

### **Irregular Warfare, the Islamic State, Russia, and China**

**Dr. Sebastian Gorka**

*A noted counterinsurgency scholar provides a primer on the roots of unconventional war theories behind the current Islamic insurgency being conducted by the Islamic State, Russia's current approach to warfare, and the progress of Chinese unrestricted warfare.*

## **42 The Global Spread of Arms**

### **The Link between State Collapse, Small Arms Proliferation, and Global Conflict**

**2nd Lt. Josef Danczuk, U.S. Army**

*The United States and its partners need a strategy to prevent small arms and light weapons proliferation from collapsed states in order to protect global national security interests. The author demonstrates this need by highlighting events during the collapses of the Soviet Union in 1991 and Libya in 2011.*

## **51 Strategic Assessment of Bolivia's Defense Policy**

**Cristián Faundes**

*Bolivia is interested in expanding its territory by reclaiming portions of the Pacific coast it ceded to Chile as a result of a past war. The author assesses Bolivia's defense policy as it relates to its geographical neighbors and its strategic objective of reasserting this territorial claim.*

## **60 Commanding the Right**

### **Islamic Morality and Why It Matters**

**Chaplain (Maj.) Seth H. George, U.S. Army**

*The author introduces the Islamic moral and legal obligation for "commanding the right and forbidding the wrong," describes how Islamic extremists appeal to this duty to establish their moral legitimacy, and offers recommendations for Army leaders to succeed in dealings with our Muslim partners.*

## 68 **The Chemical, Biological, Radiological, and Nuclear Terrorism Threat from the Islamic State**

**Carole N. House**

*The demonstrated ruthlessness and extensive resources of the Islamic State warrant an examination of the viability and probability of a chemical, biological, radiological, or nuclear attack by that nonstate actor.*

## 76 **Growing Army Professionals**

**Closing the Values Gap**

**Lt. Col. Thomas R. Matelski, U.S. Army**

*The author contends that new soldiers have difficulty identifying with the seven Army Values that are the foundation of the Army profession, and he describes a values-based training concept his unit implemented to bridge this gap.*

## 84 **How the Army's Multi-Source Assessment and Feedback Program Could Become a Catalyst for Leader Development**

**Col. Kevin McAninch, U.S. Army**

*With certain changes, the Multi-Source Assessment and Feedback program could be a powerful means for enhancing leader development. The author describes the current unpopularity, misuse, and ineffectiveness of this program, then describes ways to improve its efficacy.*

## 94 **Ten Lessons Learned about Host-Nation Construction in Afghanistan**

**Vikram Mittal, PhD**

*Working with Afghan construction companies means overcoming unique challenges for U.S. personnel in charge of designing or overseeing construction on U.S. military bases. A former brigade engineer shares lessons he learned while overseeing construction operations in the Kabul Base Cluster in Afghanistan.*

## 102 **Training for Decisive Action**

**Maj. Will Shoemate, U.S. Army**

**Maj. Benjamin Jensen, U.S. Army**

*The Army can provide training that ensures units are ready to conduct unified land operations through decisive action. Army leaders start by describing operations in terms of time, space, purpose, and resources.*

## 110 **A Financial Comparison of the Blended (New) Retirement System and the Current (Soon to Be Old) Defined Benefit System**

**John B. White, PhD, professor of finance, U.S. Coast Guard Academy**

*Service members need to be informed of the advantages of the new Army retirement system versus the old system before making career decisions. A financial expert lays out the benefits of each to help military readers understand their retirement options.*



# Military Review

THE PROFESSIONAL JOURNAL OF THE U.S. ARMY

September-October 2016, Vol. 96, No. 5

Professional Bulletin 100-16-09/10

Authentication no.1619314

Commander, USACAC; Commandant, CGSC: Lt. Gen. Michael D. Lundy

Provost, Army University, CGSC: Brig. Gen. John Kem

Acting Director and Editor in Chief: Dr. Donald Wright

Administrative Assistant: Linda Darnell

Managing Director: William M. Darley, Col., USA (Ret.)

Operations Officer: Maj. Steven Miller

Writing and Editing: Jeffrey Buczkowski, Lt. Col., USA (Ret.);

Desirae Gieseeman; Beth Warrington

Graphic Design: Arin Burgess

Webmaster: Michael Serravo

Editorial Board Members: Command Sgt. Maj. David O. Turnbull—Army

University; Clinton J. Ancker III—Director, Combined Arms Doctrine

Directorate; Robert Baumann—Director, CGSC Graduate Program; Lester W.

Grau—Foreign Military Studies Office; John Pennington—Chief, Publishing

Division, Center for Army Lessons Learned; Col. Christopher Croft—Director,

Center for Army Leadership; Thomas Jordan—Deputy Director, MCCoE; Mike

Johnson—Combined Arms Center-Training; Col. John Vermeesch—Deputy

Director, Center for the Army Profession and Ethic; Mr. Richard J. Dixon—

acting Director, School of Advanced Military Studies

Consulting Editors: Col. Danilo Mota Alencar—Brazilian Army, Brazilian

Edition; Lt. Col. Mauricio Alejandro Rojo Fuentes—Chilean Army, His-

pano-American Edition

Submit manuscripts and queries by email to [usarmyleavenworth.tradoc.mbx.military-review-public-em@mail.mil](mailto:usarmyleavenworth.tradoc.mbx.military-review-public-em@mail.mil) or by mail to *Military Review*, CAC, 290 Stimson Ave., Unit 1, Fort Leavenworth, KS 66027-1254.

*Military Review* presents professional information, but the views expressed herein are those of the authors, not the Department of Defense or its elements. The content does not necessarily reflect the official U.S. Army position and does not change or supersede any information in other official U.S. Army publications. Authors are responsible for the accuracy and source documentation of material they provide. *Military Review* reserves the right to edit material. Basis of official distribution is one per ten officers for major commands, corps, divisions, major staff agencies, garrison commands, Army schools, Reserve commands, and Cadet Command organizations; one per 25 officers for medical commands, hospitals, and units; and one per five officers for Active and Reserve brigades and battalions, based on assigned field grade officer strength. *Military Review* is available online at <http://militaryreview.army.mil>.

*Military Review* (US ISSN 0026-4148) (USPS 123-830) is published bimonthly by the U.S. Army, CAC, Fort Leavenworth, KS 66027-1293. Paid subscriptions are available through the Superintendent of Documents for \$42 US/APO/FPO and \$58.80 foreign addresses per year. Please call GPO sales at 1-866-512-1800. Periodical postage paid at Leavenworth, KS, and additional mailing offices.

POSTMASTER: Send address changes to *Military Review*, CAC, 290 Stimson Ave., Unit 1, Fort Leavenworth, KS 66027-1254.

The Secretary of the Army has determined that the publication of this periodical is necessary in the transaction of the public business as required by law of the department. Funds for printing this publication were approved by the Secretary of the Army in accordance with the provisions of Army Regulation 25-30.

Mark A. Milley—General, United States Army Chief of Staff

Official: 

Gerald B. O'Keefe—Administrative Assistant to the Secretary of the Army

## 119 Constructive Effects

### Focus on Capabilities

Lt. Col. Kevin McCaskey, PhD,  
U.S. Air Force

*Developing doctrine based on the destructive effects that yielded positive results during Desert Storm is the wrong course of action for military planners. Instead, the military should focus on developing its constructive capabilities to yield predictable, value-added results in future wars.*

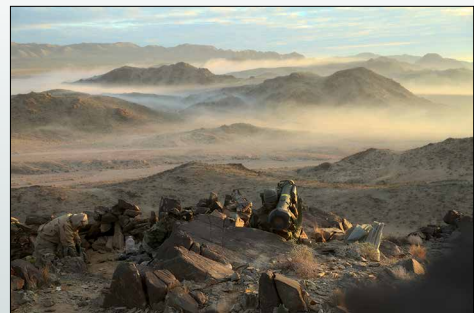
## REVIEW ESSAY

## 128 Rebuttal

### The CIA Responds to the Senate Intelligence Committee's Study of Its Detention and Interrogation Program

John G. Breen, PhD

*The reviewer critiques a book that describes the Central Intelligence Agency's highly detailed and introspective response to a Senate Select Committee on Intelligence report on the CIA's Detention and Interrogation Program, along with essays written by senior CIA officials involved with the program.*



**About the Cover:** Soldiers from 1st Battalion, 14th Cavalry Regiment, 3rd Stryker Brigade, 2nd Infantry Division stationed at Joint Base Lewis-McChord, Washington, wait to engage enemy vehicles during Decisive Action Training Rotation 14-03 at the National Training Center in Fort Irwin, California, on 28 January 2014. (Photo by Sgt. Paul Sale, U.S. Army)

## LETTERS TO THE EDITOR

**130** *Readers comments.*

## BOOK REVIEWS

**133** *Readers provide analyses of contemporary readings for the military professional.*



Soldiers jump from an Air Force C-130 Hercules during a performance at the Sioux Falls Air Show, Sioux Falls, South Dakota on 23 July 2016. The soldiers are assigned to the Black Daggers, the Army's Special Operations Command parachute demonstration team. The event marks the seventieth anniversary of the South Dakota Air National Guard. (Photo by Master Sgt. Christopher Stewart, Air National Guard)



# North Korean Collapse or Korean Reunification

## The Importance of Preparation over Prediction

Bryan Port

**K**orea is of tremendous importance to U.S. national security and economic prosperity. Unfortunately, most Americans do not closely follow developments in Korea despite the high stakes involved—stakes that include the safety of over one hundred thousand Americans in South Korea (the Republic of Korea, or ROK), hundreds of thousands of American jobs tied to exports to the ROK, and tens of billions of dollars invested there. Americans likely would lose their lives, jobs, or property in the earliest hours of a conflict in Korea. Further, a conflict would alter the regional balance of power and have strategic implications for the United States. The manner in which the United States participated in a potential conflict, particularly related to Korean reunification, would affect whether the United States was able to sustain the leading role it plays in northeast Asia and to continue reaping the many associated economic and security benefits. The effects of a collapse of the North Korean government or of reunification of the two Koreas would be so profound that they demand strategies, policies, plans, decisions, and actions to prepare the United States and the ROK to

secure their interests and shape the strategic environment that would follow.<sup>1</sup>

North Korea (the Democratic People's Republic of Korea, or DPRK) presents a severe and growing threat to American interests. It directly threatens the lives of Americans and the citizens of our allies, develops and proliferates weapons of mass destruction (WMD), and commits extensive human rights abuses. Most Americans are aware of the DPRK's efforts to develop nuclear weapons and long-range missiles, and they often hear of its "strange" leaders. However, few understand the DPRK's enduring conventional military threat and the destruction it could inflict on the ROK and, to a growing extent, the WMD threat it presents to the United States. It is even more difficult to grasp the consequences of the collapse of the DPRK's government. While the prospect of a large loss of American lives is less in a collapse scenario, a collapse would nonetheless





North Korean leader Kim Jong-un visits the construction site of an orphanage 11 February 2015 in Wonsan, Kangwon Province, North Korea. The quality of the construction shown in the photo is indicative of the problems faced in North Korea. (Photo courtesy of Rodong Sinmun)

alter the strategic landscape of northeast Asia and significantly affect U.S. interests.

Preparing for collapse or reunification is more important than predicting it. However, to be clear, I am not advocating a deliberate effort to overthrow the North Korean regime; rather, my focus is on preparing for a collapse or reunification, assuming that at some point we will face this situation without any direct effort to bring it about. Preparation is critical due to the strategic importance of these potential developments. Without predicting the timing or circumstances of a collapse or reunification, there are many dimensions of these situations that we can identify, enabling efforts now to prepare to resolve an instability crisis.

Although the U.S. and ROK forces maintain a high state of readiness, produce detailed operational plans, and conduct rigorous training, they can do more to plan for and prepare to handle collapse or reunification. With millions of lives, trillions of dollars, and vital national interests at stake, it is imperative that the United States and the ROK continue to develop a common understanding that enables the design and implementation of strategies, policies, and plans for handling collapse that places active preparation at their core. The objectives are clear: enable stabilization of North Korea, enable the Korean people to decide when and how to reunify, and position the United States and a unified Korea to sustain one of history's most successful alliances and, by extension, enable



the United States to continue to contribute to regional stability as well as sustain its influence and interests in northeast Asia.

It is unlikely that, in terms of personnel and quantity of materiel, the ROK and U.S. militaries will have sufficient capabilities on hand and pre-positioned to deal with a North Korean collapse or reunification.<sup>2</sup> However, based on experience, doctrine, and extant capabilities, the U.S. military can make a potent contribution to a ROK-led preparation-centric strategy. As the *Army Operating Concept* explains, as a member of the joint force, the Army has well-developed capabilities for establishing stable environments in postconflict or failed-state environments, consolidating gains, and achieving sustainable outcomes.<sup>3</sup> The U.S. Army's efforts to enhance the performance of its soldiers and civilians in confronting complexity position it well to succeed in preparing for or executing operations in a North Korean collapse. From the foundation of a ROK-led preparation-centric strategy, the U.S. military can play a powerful, albeit supporting, role in stabilizing North Korea.

## Contextualizing and Bounding the Problems

The DPRK's problems are many and varied, but most are knowable and will have to be dealt with eventually, whether because of war, regime collapse, or peaceful reunification. Analysts focusing on North Korea can produce a catalog of challenges and opportunities associated with North Korean collapse or reunification.<sup>4</sup> That catalog, in turn, can provide government agencies with a framework from which to create solutions to challenges and methods to take advantage of opportunities in the pursuit of objectives, including establishing a durable peace on the peninsula, denuclearization, and regional stability.

There is a growing body of work useful for assessing issues associated with the DPRK's instability and potential collapse, as well as references that provide structured approaches to active preparation and, if necessary, a positive response to those events.<sup>5</sup> U.S. Army doctrine, drawing on extensive stability operations experience, offers a framework against which to apply analysis and preparation, and upon which we can layer area-specific expertise.<sup>6</sup> U.S. scholarship and unclassified government analysis of the subject matter are a relatively recent development and provide critical country-specific context

to layer onto U.S. Army doctrine and experience.<sup>7</sup>

Collectively, the work referenced above is invaluable in understanding the context of potential regime collapse in the DPRK or reunification of the two Koreas, and correspondingly, for designing and executing a strategy to prepare for these potentialities.

## "7P" Strategy

A "7P" strategy—*politics, public (support), prediction (assessment), policy, plans, preparation, and prompting (shaping)*—best positions the U.S.-ROK alliance to stabilize North Korea and set conditions to enable reunification and reintegration.<sup>8</sup> All seven Ps are critical, but this article focuses on policy and preparation. Collectively, the other Ps can be used to prompt positive, and hopefully stable, change in North Korea.<sup>9</sup>

The 7P strategy does not advocate or require efforts to bring down the Kim family regime. Rather, this strategy is designed primarily to enable rapid, effective, and efficient stabilization, and potentially reunification, in the event of a collapse crisis that originates internally in North Korea. However, perhaps the 7P strategy could encourage, or enable, the Kim family regime to implement changes that reduce the threat they present to their neighbors and enhance the well-being of their own people.

## Politics and Public Support

Concerted efforts are required in both the United States and the ROK to build understanding and support for a campaign to stabilize North Korea in the event of collapse. In the ROK, support for reunification is eroding. Other than with Koreans in their fifties and older, there is not significant support in any strata of ROK society to pay the costs required to achieve reunification, let alone to make advance investments through taxes or other material measures to offset reunification costs.<sup>10</sup> Responding to changing perspectives in ROK society, President Park Geun-hye is working to build a consensus on reunification.<sup>11</sup> Indications from focus groups are that her administration's efforts have arrested the decline in support for reunification and sparked a broader dialogue on the issue.<sup>12</sup> However, national consensus remains elusive; it is trending toward acceptance of continued division or perhaps a future federation. More is required to sustain, enhance, and ultimately transition a societal dialogue into tangible support for active preparation for collapse or reunification, which, depending on North



Young people from a collective farm in North Korea harvest crops 30 October 2012. Autumn rains had soaked the crops, which may have made them difficult to store. Citizens of North Korea continually face famine, exacerbated by the country's "military first" policy. (Photo by Devrig Velly, European Union)

Korea, may not come about in a manner that offers a choice to the ROK other than direct involvement.<sup>13</sup>

The U.S. public presents a tougher challenge in terms of its willingness to support stabilization of North Korea in the event of regime collapse or to support reunification. Americans would likely be reluctant to support a fight against remnants of the DPRK's military to bring about stability or reunification. In order to draw support, the U.S. government would be well served to provide the American people with a compelling explanation about the U.S. interests at stake in the event of regime collapse or reunification, to include the need to gain control over the DPRK's WMD.

### From Prediction to Assessment

We must transcend the tendency to predict the fate of the Kim regime, to assess, instead, the requirements for stabilizing North Korea should its regime collapse, and for setting the conditions for reunification. For more than two decades, since the death of Kim Il-sung, Korea watchers focused on predicting the DPRK's collapse at the expense of a disciplined

consideration of the preparation necessary to respond to North Korean instability, let alone reunification and reintegration. Beginning with the death of Kim Il-sung, the focus on collapse intensified at key inflection points, including the first North Korean nuclear crisis and famine. The result has been a twenty-year analytic wandering; analysts tend to admire the problem and mystery that is North Korea rather than considering how to make progress in pursuing national interests, or, more nobly, how to bring relief to the long-suffering North Korean people.

With Kim Jong-un effectively wielding power, the cottage industry of predicting North Korea's collapse adjusted its business model. Analysis now centers on new areas such as power consolidation and relationships among North Korean elites.<sup>14</sup> Rather than predicting the precise timing and circumstances of the Kim regime's demise, most are content to assess that the Kim regime cannot last forever.<sup>15</sup> This shift has facilitated thought on responding to instability, not just predicting it. This shift in turn is rendering analytically robust frameworks useful for actual preparation.<sup>16</sup>





Farmers bring in the maize crop 24 October 2012 in North Hwanghae Province, North Korea. Because of a lack of proper storage facilities, the crop is lying out in the open, which could result in significant losses and contribute to North Korea's continual famine conditions. (Photo by Devrig Velly, European Union)

Fortunately, we do not need to know the exact timing or nature of a North Korean collapse to understand and prepare for the challenges associated with it. We do not need to define every challenge in detail. We have enough knowable objectives, tasks, and problems to facilitate deliberate planning, as well as active preparation. Setting policy against and preparing for the *knowns* will leave us better postured to succeed when *unknowns* inevitably arise. Thus, we must ensure that prediction gives way to assessment, and that planning does not substitute for actual preparation for instability or reunification. We should move to set conditions for whatever may come, as well as to enhance deterrence and shape positive, stable change in North Korea.

## Using Policy and Doctrine to Design Frameworks

U.S. policy and military doctrine provide a framework for preparation. Applying Korea subject-matter expertise to that policy and doctrine will enable the United States and the ROK to sharpen and transcend planning in order to begin preparations. Specific policy and doctrinal references include

Department of Defense Instruction (DODI) 3000.05, *Stability Operations*; Joint Publication (JP) 5-0, *Joint Operational Planning*; and Army Doctrine Publication (ADP) 3-07, *Stability*.

DODI 3000.05 establishes stability operations as a core U.S. military mission.<sup>17</sup> It holds that civilians are best suited to perform stability tasks, but when not prepared to do so, the Department of Defense (DOD) leads operations to establish civil security and civil control, restore essential services, repair and protect critical infrastructure, and deliver humanitarian assistance. The DOD leads until it can transition tasks to other U.S. agencies, foreign governments, or international organizations. However, the United States must ensure its policy and doctrine allow for the unique circumstances of a North Korean collapse, particularly the leadership role of the ROK.

U.S. military planning doctrine found in JP 5-0 provides a comprehensive approach to planning for any operations, including intervention in instability crises, ranging from those with limited objectives (resolving a humanitarian crisis) to those with maximal end states (conditions for reunification).<sup>18</sup>

ADP 3-07 defines stability tasks as “tasks conducted as part of operations outside the United States in coordination with other instruments of national power to maintain or reestablish a safe and secure environment, and provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief.”<sup>19</sup> The primary stability tasks are to establish civil security, establish civil control, restore essential services, support to governance, and support to economic and infrastructure development.<sup>20</sup> These tasks are important elements in a framework that guides preparation for a North Korean collapse or Korean reunification.

## Crucial Policy Decisions

U.S. and ROK policy on North Korea is fundamentally sound, but profoundly incomplete. The ROK and the United States have clear positions on North Korean denuclearization, responding to North Korean military aggression, and the need for the DPRK to respect human rights. Unfortunately, more detailed policy decisions are required to enable active preparation to handle collapse or reunification situations.

Policy is also required to set conditions to proactively reduce or eliminate sources of instability in advance of a crisis that would prompt the ROK and United States to intervene, as well as to influence the DPRK to adopt a responsible approach. We must establish policies that allow us to provide a vision for a positive future to the majority of North Koreans. This is not to say, for example, that the ROK needs exhaustively detailed civil and criminal codes for a reunified Korea or analogous bodies of policy in other realms such as education. Rather, we need guidelines that will provide North Koreans, individually and collectively, a sense of their prospects in a changed or reunified Korea, and what they must and must not do to realize those opportunities. Correspondingly, guidelines will provide a sound planning-and-preparation platform to guide the military in how it is to relate to North Koreans in the event of an intervention.

The policy decisions in play are at levels above the military’s purview, but the issues at hand have a crucial impact on the planning and conduct of military operations. Some of the issues include transitional justice, salaries and pensions for former government officials and military personnel, property rights, macroeconomic issues (e.g., disposition of the North Korean currency, the *won*), educational policy (to include curriculum

development and professional credentialing), and more. Decisions in areas such as these will enable the military to plan, train, and allocate resources well in advance of a crisis. The military is responsible for providing its best military advice to civilian leaders, and for gaining a clearer sense of how the political leadership intends to proceed. Collectively clear communication between military and civil authorities on matters of policy will enable the military to optimize operations to facilitate a smooth transition from a military- to a civilian-led operation.

Policies on these types of issues can be used to decrease the scope, intensity, and duration of violence and resistance during stability operations. Better still, they can increase the prospects for gaining popular support—in North Korea, as well as in the ROK, the United States, and the international community. Policy guidelines in each of these areas will enable the military to co-opt, or at least nonmilitarily neutralize, significant elements of the DPRK’s military and security services. This, in turn, can lower the resource requirements and the strategic risk associated with stabilizing North Korea.

These types of decisions will need to be made at some point regardless of how change comes about in North Korea. If made sooner, these decisions can prove useful in deterrence, response to aggression, strategic shaping, and international consensus building. The key is to avoid losing opportunities to prepare for and handle sudden change for want of policy decisions and guidance.

## From Policy to Planning

With policy guidance in hand, the military can better conduct deliberate planning for responding to North Korean collapse. Deliberate planning will bring into relief issues that are currently obscured, but that if handled poorly could fuel sustained resistance in North Korea or exacerbate an already severe humanitarian crisis. For example, some of the earliest areas likely to come under control of the ROK or a U.S.-ROK alliance include North Korea’s Hwanghae Province—its breadbasket. Failure to rapidly rehabilitate agriculture in the event of a North Korean collapse could cost the ROK and U.S.-ROK alliance legitimacy and place an already vulnerable population at further risk of malnutrition or starvation. Successful economic and infrastructure development efforts at the outset of a crisis in the areas earliest under the control of the ROK or the U.S.-ROK alliance would encourage North Koreans in other areas of the country



to be more pliant, if not cooperative.

With greater fidelity on challenges and opportunities, and knowing most boots on the ground will be ROK troops, the United States can better identify and prepare to contribute unique combat multipliers, or stability multipliers. Specific areas for consideration include, but are not limited to, command, control, communications, and computers; imagery intelligence; mobility; logistics; military medicine; military law enforcement and justice; and military engineering. We train our forces to meet the requirements of our plans. Therefore, shifts in planning will have significant implications on training and readiness, as well as on resources. As training begets readiness, shifts in our plans will lead to greater preparedness.

## From Planning to Preparation

The U.S. military can do much to prepare for the challenges of stability operations in North Korea. However, doing so requires vision, leadership, resources, and the acceptance of risk. It is no easy task to convince either the American or the South Korean people to invest resources now for an event that some believe may never come and that cannot be predicted with precision. This is acutely so when factoring in the other priorities and challenges each nation currently faces. Complicating matters, active preparation initiatives could prompt a North Korean backlash,

Astronauts on the International Space Station took this night image of the Korean Peninsula on 30 January 2014. Unlike daylight images, city lights at night illustrate dramatically the relative economic importance of cities, as gauged by relative size. In this north-looking view, it is immediately obvious that greater Seoul is a major city and that the port of Gunsan (south of Seoul) is minor by comparison. There are 25.6 million people in the Seoul metropolitan area—more than half of South Korea's citizens—while Gunsan's population is 280,000. North Korea is almost completely dark compared to neighboring South Korea and China. The darkened land appears as if it were a patch of water joining the Yellow Sea to the Sea of Japan. Its capital city, Pyongyang, appears like a small island, despite a population of 3.26 million (as of 2008). The light emission from Pyongyang is equivalent to the smaller towns in South Korea. Coastlines are often very apparent in night imagery, as shown by South Korea's eastern shoreline. But the coast of North Korea is difficult to detect. These differences are illustrated in per capita power consumption in the two countries, with South Korea at 10,162 kilowatt hours and North Korea at 739 kilowatt hours. (Photo courtesy of NASA)



even when explicitly communicated and executed as being done without the intent of bringing about the end of the Kim regime. Further, much of what can be done now is not within the military's purview.<sup>21</sup> Still, despite the limitations and constraints, there are preparations the U.S. military can make.

The military could use a preparedness platform to enhance interagency collaboration. Drawing on the previous example regarding North Korea's Hwanghae Province, the ROK and U.S. militaries could engage with



agriculture experts to gain insight into the initial actions required to rehabilitate North Korea's agricultural sector, to include identifying a cadre of agriculture experts that would be willing to move forward early in a stability operation. This cadre would assess, organize, and manage resources and operations to ensure that North Korea does not lose a growing season due to conflict, and that it has a productive yield within one year.

The United States and the ROK could also better leverage defectors. Much is made of the number of

North Korean defectors now in the ROK, with an inclination on the part of some to dismiss their intelligence value, let alone consider their value in an effort to bring stability to the north. While unable to pinpoint North Korean nuclear weapons or give us insight into the inner thoughts and monologue of Kim Jong-un, defectors from areas and professions in question can be an invaluable resource for understanding the needs that the ROK, the United States, and the international community will face in the wake of a North Korean collapse.





The U.S. military can advise on, and advocate for, military and nonmilitary preparations that involve the international community, particularly the United Nations Command (UNC) sending states. Even if advice and advocacy only result in a shared understanding and more fidelity in planning, we will be better prepared to respond to an instability crisis. Many of the UNC sending states are likely to contribute to efforts to bring stability and an enduring peace to the Korean peninsula. The United States can assist

in outreach and organizing these efforts in a manner that is agreeable to the ROK.

Also, the United States has underutilized our professional military education and civilian education systems. Within our defense educational institutions, we can program instruction generally and directly applicable to North Korean contingencies to enhance the ability of our military professionals to thrive in the complex and uncertain conditions sure to characterize a North Korean instability crisis.<sup>22</sup>





Republic of Korea soldiers stand guard 24 June 2008 in the Joint Security Area (JSA) between North and South Korea. Located in the now unoccupied village of Panmunjom, North Hwanghae Province, North Korea, in the Korean Demilitarized Zone (DMZ), the JSA is used by both countries for diplomatic engagements. The JSA is the only portion of the DMZ where North and South Korean forces stand face-to-face. (Photo courtesy of Wikimedia Commons)

The U.S. Army is well suited in this regard, with deep and recent experience in stability challenges codified in doctrine and applied in training.<sup>23</sup> It has the capacity to do the conceptual work required to succeed in

handling a North Korean instability crisis. As one key component of the military education system, the Army University represents a powerful step in ensuring that the U.S. Army not only retains but also enhances its competitive advantage in creativity and innovation, as operationalized through mission command.<sup>24</sup>

Building and engaging networks, partnerships, and coalitions are another strength of the U.S. military. The Army should place more focus on developing professionals in key areas related to Korean issues, particularly North Korean instability. This includes foreign area officers, international relations officers, civil affairs soldiers, and military information support operations soldiers. The development of our human capital and efforts to foster networks using our talented professionals will pay dividends on adapting to the complex and shifting conditions that we will encounter in a North Korean collapse.

### Prompting Positive, Stable Change

There is a fine line between preparing for and prompting change. While our intent may be to bring about positive, stable change, those on the receiving end may not see it as such. The accumulation of preparatory actions over time could be perceived not as efforts to position for a possible future, but as a deliberate attempt to bring about regime change. Strategic communication and robust international partnerships are required to increase the chances that preparatory efforts do not lead to a situation in which North Korea lashes out.

There is also the potential to transcend preparation to use preparation actions in a deterrent-and-shaping mode. Many of the measures discussed above can be used in this manner, to include policy decisions that provide clear and positive alternative futures for the majority of North Koreans while refraining from concerted efforts to apply those decisions prior to crisis. We also can engage the North Korean people with practical information they can use to improve their daily lives and be better prepared to weather sudden change. For example, we can provide information on preventive medicine or civil engineering. Doing so would also enhance the credibility of the channels that we use to communicate information. Investments made in shaping have the potential to lead North Korea to make changes



internally in a stable manner, lessen the burdens encountered should collapse occur, and solidify the prospects for an alliance between the United States and a unified Korea.

## Winning the Peace: A U.S.-Unified Korea Alliance

As noted, our efforts to prepare for instability in North Korea are insufficient, placing at risk millions of lives, trillions of dollars, and vital interests. Further, how the United States responds to a crisis will have a tremendous impact on its future position in the region and elsewhere. Should Koreans see the United States as having failed to live up to

commitments, or should the manner in which it acts cause others to question its will or capacity for action elsewhere, America's ability to influence and shape the strategic environment would take huge hit. A 7P strategy that places preparation at its core and sets the stage for more deliberate shaping efforts holds the best prospects for ensuring we acquit ourselves well in an instability crisis and, by extension, preserve the U.S.-ROK alliance and American options and leadership in the region. ■

*The views expressed in this article are the author's and do not represent the official position or views of the Department of Defense or any other department or agency of the U.S. government.*

### Biography

Bryan Port is the director of strategy at U.S. Forces Korea, Combined Forces Command, and United Nations Command, in Seoul, Korea. He has served in leadership and staff positions as a soldier and as an Army civilian in South Korea, Iraq, Afghanistan, and the United States. He holds an MA in national security studies from Georgetown University. His professional training includes Korean language studies at the Defense Language Institute in Monterey, California, and Yonsei University in Seoul, Korea.

## Notes

1. Many have spent considerable time discussing these issues with the author. For their advice and counsel, I express my gratitude to Bruce Bennett of the RAND Corporation and many currently serving military officers and government officials from the United States and Republic of Korea (ROK), including Ken Gause, Lt. Gen. Chun In-bum, Dan Pinkston, and Peter Beck.

2. I credit this idea—not having seen a major war on the territory of an advanced industrialized nation since World War II—to Kwon Go-Hoon of Goldman Sachs, who made this point to me during a conversation in Seoul in 2013. Despite the capabilities of the ROK military, the severity and scope of a collapse make it likely the ROK would want and need assistance. Although stability tasks are labor intensive, the ROK would be able to devote few resources to stability tasks should its forces be depleted, or otherwise tied down, against large-scale North Korean resistance. Moreover, force reductions are planned in the ROK military.

3. U.S. Army Training and Doctrine Command (TRADOC) Pamphlet (TP) 525-3-1, *The U.S. Army Operating Concept: Win in a Complex World* (Fort Eustis, VA: TRADOC, 31 October 2014).

4. Bruce W. Bennett, *Preparing for the Possibility of a North Korean Collapse* (Santa Monica, CA: RAND Corporation, 2013), accessed 4 April 2016, [http://www.rand.org/pubs/research\\_reports/RR331.html](http://www.rand.org/pubs/research_reports/RR331.html); materials associated with the University of Southern California (USC)–Center for Strategic and International Studies (CSIS), Korean Unification Project 2010 Working Paper Series, principal investigators Victor Cha (CSIS) and David

Kang (USC), accessed 4 April 2016, <http://csis.org/program/korean-unification>.

5. ROK open source literature, governmental and nongovernmental, often comes under criticism on one or more bases, including overly optimistic assessments of the challenges or ROK capabilities to handle them. Another significant criticism is a lack of fidelity or detail.

6. U.S. Army Field Manual (FM) 3-07, *Stability* (Washington, DC: U.S. Government Printing Office [GPO], June 2014); Army Doctrine Publication (ADP) 3-07, *Stability* (Washington, DC: U.S. GPO, 31 August 2012); Army Doctrine Reference Publication (ADRP) 3-07, *Stability* (Washington, DC: U.S. GPO, August 2012). U.S. doctrine regarding stability operations is based heavily on lessons learned in Iraq and Afghanistan. However, many Koreans react negatively when Americans, or others, draw on experiences in Iraq or Afghanistan, asserting that Korea is not Iraq or Afghanistan. Those with responsibilities for preparing for crisis on the peninsula would do well to honor the differences, and critics would do well to draw from lessons learned due to the many similarities, even if only using Iraq- or Afghanistan-based lessons as common points of departure.

7. Bennett, *North Korean Collapse*; USC-CSIS, Korean Unification.

8. I draw a clear distinction between shaping and changing the regime. Shaping aims to alter the way the regime thinks, decides, and acts, as opposed to changing the regime, which

centers on replacing all the key leaders and fundamentally altering the political structure of North Korea.

9. I credit colleagues at U.S. Pacific Command for work they have done on a concept for “stable change.”

10. In 2010, then President Lee Myung-bak called for a tax to raise funds to pay for reunification. See Brett Cole, “South Korea President Calls for Reunification Tax,” Reuters online, 15 August 2010, accessed 14 July 2016, <http://www.reuters.com/article/us-korea-north-tax-idUSTRE67E08K20100815>.

11. The Park administration has codified key concepts regarding North Korea in the ROK’s *A New Era of Hope: National Security Strategy*, in late 2014. See Park Geun-Hye, “A New Kind of Korea: Building Trust between Seoul and Pyongyang,” *Foreign Affairs* (September/October 2011); Blue House, *A New Era of Hope: National Security Strategy* (Republic of Korea: Blue House, October 2014).

12. The statement that support for reunification is no longer declining is based in part on the results from more than three-dozen confidential youth focus groups conducted from 2010 through 2015. The groups normally included six-to-ten South Korean university students in their late teens and early twenties. The vast majority of participating students acknowledged that the president’s initiatives had increased discussion of unification on a broad basis, even if discussion had not led to increased support. However, President Park’s initiatives seemed to have stopped the decline in support for reunification, and possibly to have set a basis for renewed support in the future. The rationale for support is shifting from historical imperative and ethnic-nationalistic bonds with the north to one of strategic considerations.

13. Han Wool Jeong, *The Public’s Appraisal of the Park Geun-hye Administration’s Unification Policy: The Deterioration of Support for the Unification as a “Bonanza” Idea and a Way to Reignite Momentum*, trans. Benjamin A. Engel (Seoul: East Asia Institute, August 2015), accessed 21 June 2016, [http://www.eai.or.kr/data/bbs/eng\\_report/201509071627572.pdf](http://www.eai.or.kr/data/bbs/eng_report/201509071627572.pdf).

14. Ken E. Gause, *North Korean House of Cards: Leadership Dynamics Under Kim Jong-un* (Washington, DC: Committee for Human Rights in North Korea, 2015), accessed 21 July 2016, [https://www.hrnk.org/uploads/pdfs/HRNK\\_Gause\\_NKHOC\\_FINAL.pdf](https://www.hrnk.org/uploads/pdfs/HRNK_Gause_NKHOC_FINAL.pdf).

15. A Google search on 22 May 2016 of “Preparing for North Korean Collapse” yielded six discrete articles on the first page by reputable sources (e.g., RAND Corporation, Council on Foreign Relations Asian Institute, and the National Interest website) on preparing for North Korean collapse. Other sources show the trend away from specific predictions on the timing of North Korean collapse to general assessments that the regime will not be able to sustain itself, including Julian Ryall, “Is North Korea Finally Close to Collapse?” Deutsche Welle website, 13 April 2016,

accessed 21 June 2016, <http://www.dw.com/en/is-north-korea-finally-close-to-collapse/a-19183141>; Armin Rosen, “The Long History of (Wrongly) Predicting North Korea’s Collapse,” *The Atlantic* website, 6 August 2012, accessed 21 June 2016, <http://www.theatlantic.com/international/archive/2012/08/the-long-history-of-wrongly-predicting-north-koreas-collapse/260769/>; Andrei Lankov, “When May North Korea Collapse?” *Fortuna’s Corner* website, 4 March 2014, accessed 21 June 2016, <http://fortunascorner.com/2014/03/04/when-may-north-korea-collapse-by-andrei-lankov/> (Lankov is one of the most-renowned experts on North Korea. He was consulted frequently by the author, and he is frequently consulted by the most senior officials of the U.S. government); Kim Sung-han, “The Future of North Korea,” Center for Strategic and International Studies website, 4 November 2014, accessed 21 June 2016, [https://csis-prod.s3.amazonaws.com/s3fs-public/legacy\\_files/files/publication/141031\\_The\\_Future\\_of\\_north\\_korea.pdf](https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/publication/141031_The_Future_of_north_korea.pdf) (Kim served as the ROK’s vice minister of foreign affairs from 2012 to 2013).

16. Bennett, *North Korean Collapse*; USC-CSIS, Korean Unification.

17. Department of Defense Instruction 3000.05, *Stability Operations* (Washington, DC: U.S. GPO, 16 September 2009), accessed 14 July 2016, login required, <http://www.dtic.mil/whs/directives/corres/pdf/300005p.pdf>.

18. Joint Publication 5-0, *Joint Operational Planning* (Washington, DC: U.S. GPO, 11 August 2011). In addition, I would like to highlight an important turn of phrase expressed here—the distinction between actual reunification and the conditions for it. Actual reunification involves political decisions that are not for the military to make. Rather, the military is intended to set conditions so political decisions can be made in the most secure environment possible.

19. ADP 3-07, *Stability*, GL-2.

20. *Ibid.*, 11.

21. The military is not well positioned to stockpile humanitarian assistance materials for use in stability operations. Nor is the military best suited to lead in the design and execution of broad informational initiatives to change North Korean perspectives and prepare the populace to be better able to weather sudden change.

22. ADRP 1, *The Army Profession* (Washington, DC: U.S. GPO, 14 June 2015); TP 525-3-1, *The U.S. Army Operating Concept*.

23. FM 3.07, *Stability*; ADP 3.07, *Stability*; ADRP 3.07, *Stability*; TP 525-3-1, *The U.S. Army Operating Concept*.

24. Robert B. Brown, “The Army University: Educating Leaders to Win in a Complex World,” *Military Review* 95, no. 4 (July-August 2015): 18.





The U.S. Army Natick Soldier Systems Center's new virtual reality dome, demonstrated 7 October 2015 at the U.S. Army Natick Soldier Research, Development and Engineering Center, Natick, Massachusetts, will enable researchers to assess the impact of the environment on soldier cognition, including decision making, spatial memory, and wayfinding. (Photo by David Kamm, U.S. Army Natick Soldier RD&E Center)

# Strategic Acquisition for Effective Innovation

Lt. Col. Rafael Rodriguez, U.S. Army

Maj. William Shoemate, U.S. Army

Maj. Justin Barnes, U.S. Army

Karen Burke

This article reflects recommendations developed by a team from the Chief of Staff of the Army Strategic Studies Group (CSA SSG). The CSA SSG is a think tank that conducts independent research on topics selected by the CSA.<sup>1</sup> The team studied an essential strategic question: How can the Army make its acquisition process lead to effective innovation?

That the Army acquisition process is cumbersome is widely accepted, as several case studies and task forces established to improve it have clearly demonstrated. For example, in 2009, the Task Force on Defense Acquisition Law and Oversight recommended significant acquisition reform to increase unity of effort across all acquisition stakeholders, recruit personnel with business skills and experience, and focus on outcomes that would meet the needs of warfighters.<sup>2</sup> However, attempts such as this at improving the acquisition process have largely failed, and innovation has suffered for that reason.

The Future Combat System (FCS) exemplifies the task force's findings. The FCS originally was envisioned as a major Army innovation effort. However, FCS program managers failed across all acquisition functions to plan effectively, generate realistic requirements, and manage the complex program. Their failure largely was due to an unreformed acquisition process that did not include adequate analysis nor achieve technology readiness before the program was under way.<sup>3</sup>

A critical roadblock to innovative solutions reaching warfighters is the difficulty of introducing new ideas, technologies, and concepts from the scientific and research community into acquisition programs.<sup>4</sup> Acquisition programs offer minimal flexibility—with fixed requirements, schedules, testing protocols, and budgets that deter integration of innovative solutions. Furthermore, a key metric of success in research and development (R&D) efforts is the number of transitions from the R&D community to acquisition programs. This metric drives R&D investments toward existing acquisition programs, requirements, and funding lines, and away from effective innovation.

The team conducted extensive research before reaching its conclusions on how the Army can encourage the kind of acquisition process it needs to be ready for future conflict. However, the final recommendations are adapted primarily from a 2014 paper by Joseph P. Lawrence III, titled "A Strategic Vision and a New Management Approach for the Department of the

Navy's Research, Development, Test and Evaluation (RDT&E) Portfolio."<sup>5</sup> Lawrence's proposals, while aimed at improving Navy acquisition, apply strategic principles relevant across the Department of Defense. Therefore, for the purposes of ensuring acquisition supports effective innovation for the force, the Army should adopt the following recommendations:

1. Separate research (technology development) from product development.
2. Establish an Army R&D corporate board to set Army acquisition priorities consistent with projected future conflict.
3. Realign acquisition management under Headquarters, Department of the Army (HQDA).
4. Increase competitive prototyping and experimentation.

These changes are necessary because the Army suffers from a kind of acquisition paralysis—a limited ability to get good ideas and effective new technology applications into the field rapidly, as evidenced by the number of ad hoc organizations that are created during times of conflict.<sup>6</sup> For example, during the conflicts of the past decade, the Army needed intelligence, surveillance, and reconnaissance (ISR) technologies for squad-level command-and-control systems, but attempts to integrate ISR programs into Army acquisition failed because of R&D stakeholder ownership issues and federal regulations on the use of frequencies.<sup>7</sup> The Army acquisition process, however, is not in need of broad-based acquisition reforms—these have been tried before. Nor is acquisition paralysis the result of underinvestment.

The problem stems from how the Army traditionally views and executes R&D, and from how it defines the word *innovation*. For example, the Army tends to focus on the near term. In addition, Army leaders sometimes pursue exciting new technology solutions rather than effective innovation. Some leaders use the word *innovation* narrowly, to mean inventing new technologies. However, *innovation* also can include exploiting an existing capability or resource in a new and clever way to solve a problem. Objective, data-driven analysis for understanding problems can inform creative thinking that leads to inexpensive or nonmateriel solutions.

The Army is no stranger to innovation. Jeffrey J. Clarke, former director of the Center for Military History, frames the Army's rich innovation history

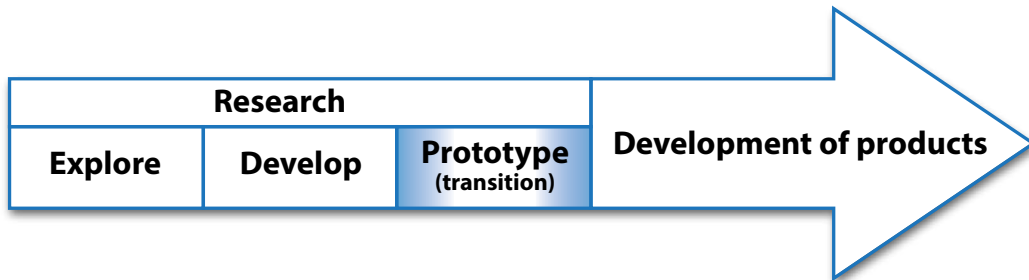


in the foreword to *A History of Innovation: U.S. Army Adaptation in War and Peace*:

From the exploits of the Lewis and Clark Expedition at the beginning of the nineteenth century to the medical and engineering advances associated with the construction of the Panama Canal begun at its end, ... [Army innovation also includes] military initiatives in weapons, tactics, organization, training, and other areas.<sup>8</sup>

requirements. Their objective is to transition developmental systems to production and then into fielding.

Frequently, product managers fund engineers from RDECOM's research, development, and engineering centers (RDECs)—usually the same RDECs that oversee the supporting technology. Figure 1 (adapted from Lawrence) illustrates the transition point of research and product development, where prototyping leads to innovations.<sup>9</sup> However, at this transition point, prototypes tend to be influenced by end users *before* product



(Graphic adapted from Joseph P. Lawrence III)

**Figure 1. Traditional Process Flow of Research and Development (with Transition Point Highlighted)**

requirements are generated and locked in.

While the process sometimes works, there are some unanticipated consequences. For example, the Army tends to be focused on incrementally improv-

With the right changes to the acquisition process, the Army can make sure the force remains adaptable through effective innovation. The CSA SSG team's recommendations are designed to ensure Army innovation thrives within budgetary limits. They could help ensure R&D investments address both near-term and future needs.

## Recommendation 1: Separate Research from Product Development

The Army needs to separate research (where technologies are discovered or created) from product development (where technologies are refined for use). A separation between research and product development would increase the discovery of innovative solutions. It would facilitate determining a technology's viability before significant resources were expended in product development.

Army researchers and scientists explore and develop technologies to solve the Army's capability gaps and maintain military superiority. They do this mainly as part of the Research, Development and Engineering Command (RDECOM). In contrast, program executive officers, and their subordinate project and product managers, undertake product development as part of formal programs of record guided by fixed capability

ing existing equipment and systems without adequate consideration of return on investment. This approach leads to a stove-piped, product-based culture instead of a solid strategy and a balanced investment portfolio that could address the most pressing Army problems. Alternately, by focusing on early prototyping of new capabilities and concepts rather than product-based programs for improving trucks, aircraft, and rifles, the acquisition community could become responsive to bigger-picture Army needs for accomplishing missions.

The intentional separation of research and product development would also prevent immature technologies from entering into formal programs where they are exposed to rigid processes and fixed requirements that can lead to high risk of failure, delays, and cost overruns. A 2010 review of Army acquisition, known as the Decker-Wagner report states, "even with this laborious [acquisition] process, new weapon systems continue to enter engineering and manufacturing development prematurely with technological risk, leaving a legacy of program cost overruns, reduced quantities fielded, and terminations."<sup>10</sup>

This same point is made in a report published by Business Executives for National Security (BENS). The report notes the Department of Defense effectively



Deryck James, Army Research Laboratory (ARL), operates the Stream Line PRO Light Detection and Ranging (LiDAR) at the Parachute Operations Mishap Prevention Orientation Course 2016, Fort Stewart, Georgia, to demonstrate enhanced capabilities not available with current precision airdrop operations systems. In response to a request from United States Army Africa, ARL undertook a program to reduce the size, weight, and power of current commercial off-the-shelf Doppler LiDAR systems. The new system weighs less than forty-five pounds, is under two cubic feet, and operates on standard twenty-four-volt batteries with required power of less than one hundred watts. (Photo courtesy of U.S. Army)

encourages unnecessary risk in acquisition product-development programs with unproven technologies and uncertain requirements.<sup>11</sup> Demanding a high science and technology (S&T) transition success rate places the greatest S&T program risk where it does not belong—in product development.

According to Lawrence, the risk of failure should be mainly in the research phase of R&D.<sup>12</sup> The cost of failure during research is less than the cost of failure during product development. New ideas and theories can be expounded and tested, prototypes built, and experiments conducted apart from product development. Allowing researchers to explore ideas without having to perfect a specific product would provide the Army with tremendous value because it would allow the freedom to explore creative solutions to the Army's challenges prior to facing

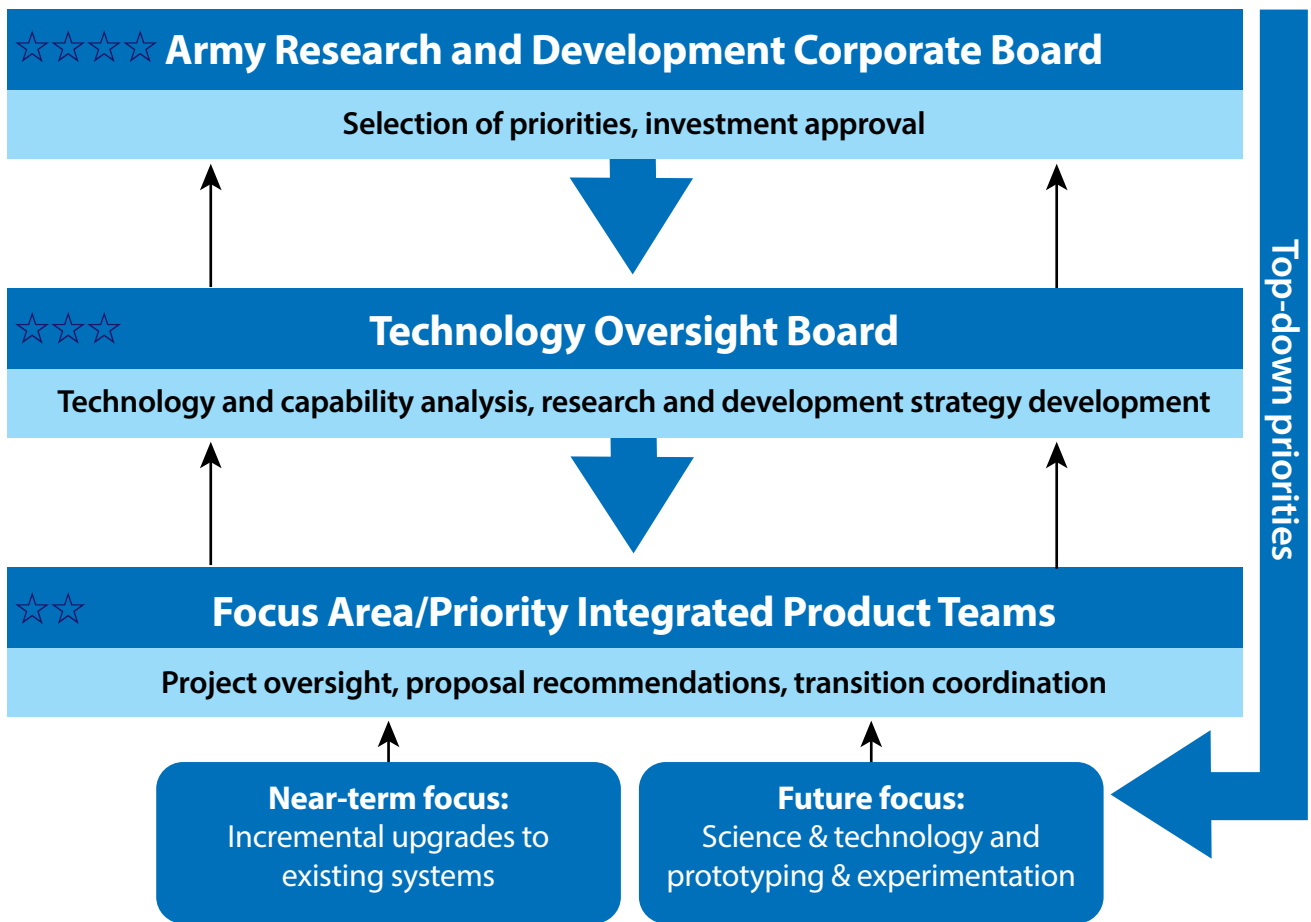
fixed requirements and acquisition processes. In contrast, to fail during product development leads to very different outcomes, with far greater costs, as noted in the Decker-Wagner report.<sup>13</sup> How, then, does the Army realign risk to the technology development phase and increase the rate of innovation in Army culture?

Lawrence, an acquisition expert at the National Defense University, is a strenuous advocate of early prototyping and experimentation during technology development. He promotes “use of early experiments and/or demonstrations by SYSCOMs [systems commands] to resolve technology risks, prior to initiation of product development, reducing cost and schedule overruns;

and use of early-fielded prototypes as a mechanism for achieving speed to the fleet/force.”<sup>14</sup> Lawrence further notes that prototyping should be a mechanism for refining requirements, gaining customer expertise and buy-in on the value of the product, and reducing the risk otherwise inherent to introducing new technologies. Adopting an approach similar to what Lawrence describes would allow the Army to place and resolve risk early in the R&D process, where failures contribute valuable insights that inform the Army's future decisions—and where failures cost far less.

Furthermore, the separation of research from product development prevents the Army from over influencing S&T investments to support existing near-term technology and programs. Capability gaps, operational requirements, strategic direction, and space for innovative ideas





(Graphic by Innovation and Improved Acquisition Team, Cohort IV, Chief of Staff of the Army Strategic Studies Group, 2015-2016)

**Figure 2. Recommended Research and Development Governance Structure**

should direct focus areas, not existing programs of record. Essentially, the current investment strategy, which emphasizes continual incremental improvement of existing systems for today’s threats and operating environments, closes an effective entry point into Army R&D that would keep pace with the Army’s accelerating needs.

Before creating a program of record, there should be an iterative refinement of requirements for new capabilities by warfighters, technologists, sponsors, and the acquisition community. Scientists and engineers should be free to explore new ideas and move toward a larger strategic vision that would guide their work.

### **Recommendation 2: Establish an Army Research and Development Corporate Board**

An Army senior leader R&D corporate board would bridge the gap between technology development and product development. It would ensure the CSA and

Army secretariat could identify the Army’s problems and set priorities to guide the acquisition community to align its R&D investments. It could increase the direct participation of uniformed military personnel in setting acquisition priorities and guiding R&D investments. Without that participation, the CSA’s ability to influence acquisition to meet future threats and operational needs will be stymied by a lack of synchronization across military, civilian, and congressional stakeholders.

The board would not be a new governance body. It would be a repurposing of existing four-star general-officer-level and senior civilian-level boards such as the Army Science & Technology Assessment Group or the Army Requirements Oversight Council (AROC). It would achieve unity of purpose across the Army’s senior leadership by reinvigorating corporate R&D governance and development of an Army R&D strategy.

In early 2016, CSA Gen. Mark A. Milley took charge of the requirements process by convening four-star



Spc. Logan Fishburn, 2nd Battalion, 27th Infantry Regiment, 3rd Brigade Combat Team, 25th Infantry Division, tests a PD-100 unmanned aerial vehicle 22 July 2016 during the Pacific Manned-Unmanned Initiative at Marine Corps Training Area Bellows, Hawaii. (Photo by Staff Sgt. Christopher Hubenthal, U.S. Army)

commanders to participate in frequent AROC forums.<sup>15</sup> By reinvigorating other senior-leader groups in a similar manner, senior leaders could set priorities for the current and the future force, balance the R&D portfolio, and establish an Army R&D strategy built on an analytical foundation. An Army corporate board (illustrated in figure 2) would operate as a governance team, directing R&D resources toward the Army's most pressing near- and far-term needs, and promote unity across Army labs, combatant commands, and networks of industry and academia. A four-star corporate R&D board could establish a single Army R&D strategy and exercise substantial influence to cut through bureaucratic processes and organizational stovepipes.<sup>16</sup> To be effective, the corporate board would require access to valid analysis to enable thoughtful decision making.

### **Recommendation 3: Realign Acquisition Management**

The third recommendation is focused on aligning R&D, program executive officer programs of record,

and systems engineering functions under a single chain of command. A misalignment between S&T (far term) and product development (near term) has created counterproductive incentives that lead to integrating immature technologies into Army systems and investments in nonprioritized efforts.

Figure 3 (next page) depicts a realignment of acquisition stakeholders that would enhance their ability to respond to guidance from the corporate board, as refined from the CSA's guidance and priorities. Existing Army labs, RDECs, program executive officers, and program managers would provide formal analysis and S&T, R&D, and systems integration within a proposed technology oversight board. Most important, an execution command (i.e., a proposed modernization command) could unify and integrate R&D organizations to execute well-founded programs that are in line with the needs of the Army.

This realignment would calibrate the technology development and product development efforts to help solve tough Army problems and inform the corporate board on potential courses of action. This would be

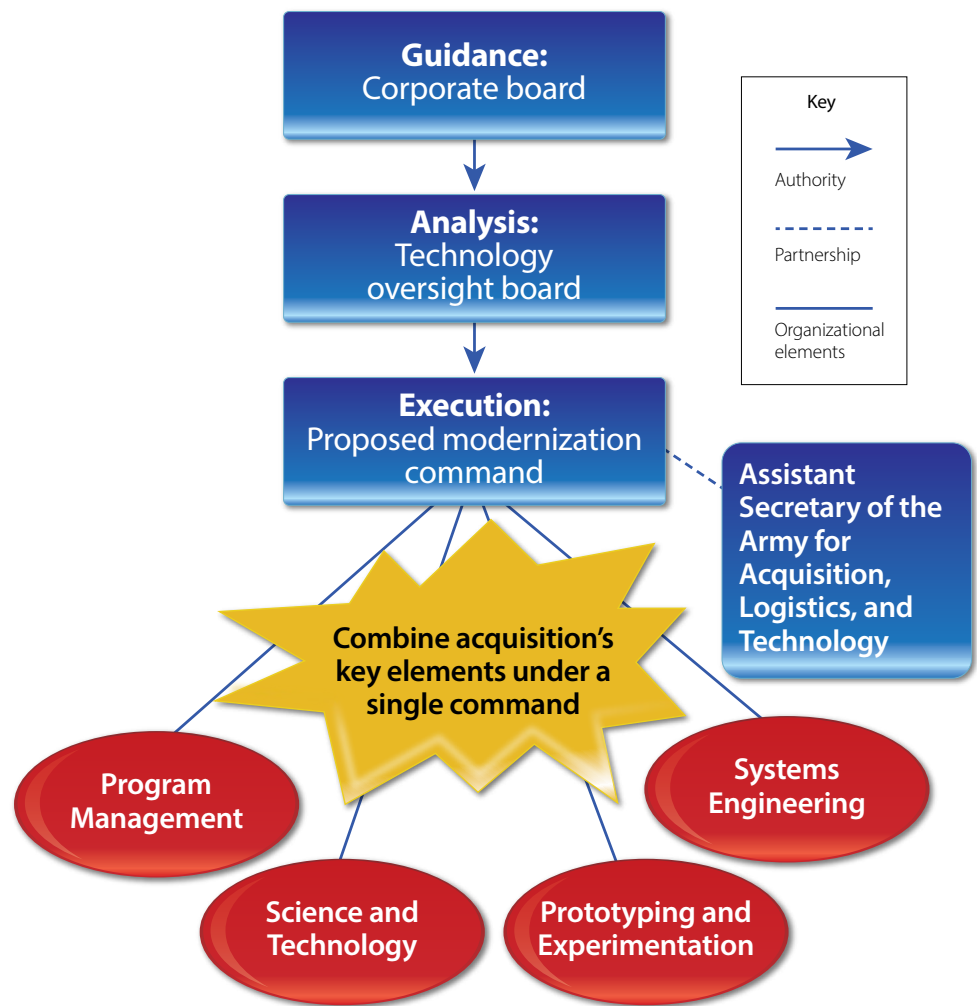


especially important when the corporate board and the CSA needed to make tough decisions such as redirecting program efforts and funds.

The proposed HQDA organizational structure would develop strategic approaches around Army problems by balancing investments through cost-benefit and trade-off analyses. An analysis-based R&D strategy—grounded in shared views of future operational environments and supported by data from operational prototyping and experimentation—would coalesce around shared Army goals and objectives.

Combined with a technology- and capability-vetting process led by RDECOM, the R&D strategy would be integrated with operational test venues to inform the corporate board and the executing acquisition organizations on how to accelerate innovation and reduce program-of-record risk. Test venues integrated with that R&D strategy would include the Rapid Equipping Force, the Asymmetric Warfare Group, combat training centers, and U.S. Army Training and Doctrine Command battle labs.

By placing R&D, prototyping, program executive officers and product managers, and systems engineering funding under a single HQDA priority schema, in partnership with the assistant secretary of the Army for acquisition, logistics, and technology, the CSA can better execute a streamlined, need-driven R&D program. This realignment also would provide the added benefit of



(Graphic by Innovation and Improved Acquisition Team, Cohort IV, Chief of Staff of the Army Strategic Studies Group, 2015-2016)

### Figure 3. Recommended Organizational Alignment of Army Acquisition

creating a more flexible, focused, and responsive culture among the Army RDECs, program executive officers and product managers, and centers of excellence.

Once this alignment was achieved, the work of identifying and analytically vetting technologies and capabilities could begin. Prototyping and early experimentation would be key to this process.

### Recommendation 4: Increase Competitive Prototyping and Experimentation

How can the Army senior leaders influence the acquisition process to maximize the benefit it has on R&D? The final recommendation is to strategically manage prototyping and experimentation as a distinct

portfolio that progresses toward the Army's strategic vision. This is akin to seizing key terrain in battle.

The CSA has limited influence over the current force, as the budget investments are set through 2025. However, with these recommendations, Milley could align Army R&D to meet the needs of the future force as he realigned Army capability requirements when he reenergized the AROC. The CSA has significant influence on the future. Milley has indicated he welcomes opportunities to guide R&D for the success of the future force. In his view, the future must be informed by analysis derived from prototyping and experimentation, and inspired by networks of expertise.<sup>17</sup>

As of 2016, most prototyping funds are executed by program executive officers, in a process that does not allow for early, unconstrained prototyping and experimentation that could positively influence multiple capability solutions. The CSA, as the uniformed leader of the R&D corporate board, should strategically oversee prototyping efforts and strategies. This would assure Army priorities were met, and it would provide the capabilities needed for the current and future force.

Through prototyping efforts, the CSA receives user needs from two primary sources: first, from the current force (through FORSCOM) and the combatant commands, and, second, from the projected future force, as influenced by the S&T technology communities and future operating concept data. The outputs from these data are strategic requirements, priorities, and funding for both forces.<sup>18</sup> For the current force, the corporate board and the CSA can identify the equipment needed for incremental capability enhancements. For the future force, they can identify critical technologies for the S&T portfolio. The CSA would have the means to manage R&D strategically so that Army innovation could thrive even during downsizing.



The Boeing-Sikorsky RAH-66 Comanche prototype made its maiden flight 4 January 1996 at West Palm Beach, Florida. The program was canceled in 2004 just before mass production. (Photo courtesy of Wikimedia Commons)

### Sunk Costs on Terminated Acquisition Programs

The Army spends more unrecoverable money—sunk costs—on more terminated acquisition programs than any other entity in the Department of Defense (DOD): “The Army has both the largest number of canceled programs and the largest percentage of sunk RDT&E [research, development, test, and evaluation] costs [compared to DOD and other services]. The amount of funding lost was relatively constant for the Army from 2004 through 2010, coming down sharply thereafter. The majority of the Army's sunk funding problem through this period was due to the cancellation of the Future Combat System (FCS); however, every year from 1996 to 2010, the Army spent more than \$1 billion annually on programs that ultimately were canceled.”<sup>1</sup>

According to Patrick Clowney, Jason Dever, and Steven Stuban, the Army's sunk cost for the failed FCS is estimated at \$20 billion.<sup>2</sup> Another example of a sunk cost for a failed acquisition program is the estimated \$6 billion spent on the RAH-66 Comanche helicopter.<sup>3</sup> Helicopters exceed their budgets more frequently than most other major defense acquisition programs.<sup>4</sup> A third example is the sunk cost of the failed Joint Tactical Radio System, estimated at \$11 billion.<sup>5</sup>

#### Notes

1. Under Secretary of Defense, Acquisition, Technology, and Logistics (USD[AT&L]), *Performance of the Defense Acquisition System, 2013 Annual Report*, (Washington, DC: USD[AT&L], 28 June 2013), 13. The annual reports on the performance of the defense acquisition system are available at <http://www.acq.osd.mil/news.html>.

2. Patrick Clowney, Jason Dever, and Steven Stuban, “Department of Defense Acquisition Program Terminations: Analysis of 11 Program Management Factors,” *Defense Acquisition Research Journal* 78, July 2016, table 1.

3. *Ibid.*

4. USD(AT&L), *Performance of the Defense Acquisition System, 2015 Annual Report*, (Washington, DC: USD[AT&L], 16 September 2015), 28.

5. Clowney, Dever, and Stuban, “Department of Defense Acquisition Program Terminations: Analysis of 11 Program Management Factors,” table 1.



## Conclusion

The Army can create space for innovation to thrive within the acquisition process. It can do this by (1) separating research (technology development) from product development, (2) establishing an Army corporate board to direct R&D for unity of effort, (3) realigning acquisition management under HQDA, and (4) strategically managing prototyping and experimentation to nest within the strategic vision for the Army's current and future force.

The Army can apply analytical rigor to determining how it will invest in discovering technologies that can ensure the Army is successful in future conflicts. The Army can begin to overcome acquisition inflexibility and provide interdisciplinary solutions to complex issues; this does not require overhauling of the system through reform. The goal should be to identify long-lasting and impactful improvements to the acquisition system that will survive the frequent change of leaders in senior positions. ■

### Biographies

*Lt. Col. Rafael Rodriguez, U.S. Army, formerly served as a Chief of Staff of the Army fellow in the Strategic Studies Group. He holds a BS from the U.S. Military Academy, West Point, New York, and a master's degree in defense analysis from the Naval Postgraduate School. He has served in multiple airborne and Special Forces command and staff assignments, where he deployed routinely on overseas contingency operations.*

*Maj. William H. Shoemate is a U.S. Army engineer and formerly served as a Chief of Staff of the Army fellow in the Strategic Studies Group. He holds a BA from the University of the Ozarks and an MMAS from the U.S. Army Command and General Staff College. He has served in a variety of command and staff assignments and was an observer/controller/trainer at the National Training Center, Fort Irwin, California.*

*Maj. Justin Barnes is a U.S. Army judge advocate and formerly served as a Chief of Staff of the Army fellow in the Strategic Studies Group. He is a summa cum laude graduate of the University of St. Thomas School of Law and a graduate of Indiana University. He was an assistant professor in the administrative and civil law department and editor of the Military Law Review at the Judge Advocate General's Legal Center and School. He has served in a variety of Army staff judge advocate assignments.*

*Karen Burke is an acquisition professional in the U.S. Army Research, Development and Engineering Command (RDECOM). A Chief of Staff of the Army fellow in the Strategic Studies Group, she has over twenty years' experience in defense acquisition in positions across Army science and technology and joint program management. She holds an MS in engineering management from Western New England College and a BA from Framingham State College. She holds Level III certification in program management and systems engineering and is a member of the Army Acquisition Corps.*

## Notes

1. Chief of Staff of the Army Strategic Studies Group (CSA SSG) website, accessed 21 June 2016, [http://csa-strategic-studies-group.hqda.pentagon.mil/SSG\\_Index.html](http://csa-strategic-studies-group.hqda.pentagon.mil/SSG_Index.html). The authors were members of the Innovation and Improved Acquisition Team, Cohort IV, 5 July 2015 through 10 June 2016.

2. Task Force on Defense Acquisition Law and Oversight, *Getting to Best: Reforming the Defense Acquisition Enterprise* (Washington, DC: Business Executives for National Security, July 2009), accessed 30 June 2016, <http://www.bens.org/document.doc?id=12>. Other acquisition studies include Office of the Under Secretary of Defense, Acquisition, Technology and Logistics,

*Performance of the Defense Acquisition System* (Washington, DC: Office of the Under Secretary of Defense, Acquisition, Technology and Logistics, 2013), accessed 30 June 2016, <http://www.defense.gov/Portals/1/Documents/pubs/PerformanceoftheDefenseAcquisitionSystem-2013AnnualReport.pdf>; Government Accountability Office (GAO), *Defense Acquisitions: DOD's Research and Development Budget Requests to Congress Do Not Provide Consistent, Complete, and Clear Information*, GAO-07-1058 (Washington, DC: GAO, 5 September 2007).

3. Christopher G. Pernin et al., *Lessons from the Army's Future Combat Systems Program* (Santa Monica, CA: RAND

Corporation, September 2012), accessed 30 June 2016, [http://www.rand.org/content/dam/rand/pubs/monographs/2012/RAND\\_MG1206.pdf](http://www.rand.org/content/dam/rand/pubs/monographs/2012/RAND_MG1206.pdf).

4. Thomas Russell, technical director of the Army Research Lab, interview by Karen Burke, Rafael Rodriguez, and William Shoemate on Army Research Lab initiatives, 21 January 2016, Adelphi, Maryland.

5. Joseph P. Lawrence III, *A Strategic Vision and a New Management Approach for the Department of the Navy's Research, Development, Test and Evaluation (RDT&E) Portfolio* (Washington, DC: National Defense University, August 2014).

6. Army Science Board, FY 2009, *Institutionalization of Innovation in the Army* (Washington, DC: Army Science Board, December 2009), 11–14.

7. National Telecommunications and Information Administration (NTIA), *Manual of Regulations and Procedures for Federal Radio Frequency Management (Redbook)* (Arlington, VA: NTIA, September 2015), accessed 30 June 2016, <https://www.ntia.doc.gov/page/2011/manual-regulations-and-procedures-federal-radio-frequency-management-redbook>.

8. Jeffrey J. Clarke, "Foreword," in ed. Jon T. Hoffman, *A History of Innovation: U.S. Army Adaptation in War and Peace* (Washington, DC: U.S. Army Center for Military History, 2009), v.

9. *Ibid.*, 5, 3.

10. Gilbert F. Decker and Louis C. Wagner Jr., "Army Strong: Equipped, Trained and Ready," final report of the 2010 Army Acquisition Review (Aberdeen Proving Ground, Maryland: U.S. Army Research, Development and Engineering Command, 2011), iv.

11. Task Force on Defense Acquisition Law and Oversight, *Getting to Best*, 28.

12. Lawrence, "A Strategic Vision," 10.

13. Decker and Wagner, "Army Strong," 92.

14. Lawrence, "A Strategic Vision," 6.

15. Brant Dayley, CSA SSG fellow July 2014 through June 2015, interview by Karen Burke and Rafael Rodriguez about insights on Army innovation, 11 February 2016, Arlington, Virginia.

16. Joseph Lawrence, "Prototyping and Experimentation for Improved Acquisition: Setting the Stage" (lecture, National Defense University, Washington, DC, 14 September 2015).

17. *Report to Congress on Chief of Staff of the Army Acquisition Authorities, In Response to Section 801 of the National Defense Authorization Act for Fiscal Year 2016 Pub. L. 114-92* (March 2016) (statement of 39th Chief of Staff for the U.S. Army Gen. Mark A. Milley). See also Jen Judson, "US Army Chief Moves to Center of Acquisition Universe," Defense News online, accessed 30 June 2016, <http://www.defensenews.com/story/defense/land/army/2016/03/10/us-army-chief-moves-center-acquisition-universe/81588944/>.

18. *Ibid.*, 16.

From theories of international relations, to incorporating cultural considerations into training and education efforts with internationals, to a look at the ethics of espionage and covert action, the Summer 2016 edition of the Simons Center's *InterAgency Journal* offers a variety of topics for interagency practitioners and others.

Is the United States ready for a deadly airborne disease outbreak? Is West Africa a ticking time bomb or an opportunity to advance U.S. national interests? Read about these issues and more!

The CGSC Foundation's **Simons Center for Interagency Cooperation** publishes the *InterAgency Journal* four times per year.



Get your free online copy of all editions of the *InterAgency Journal* from the Simons Center at [www.thesimonscenter.org/publications/interagency-journal](http://www.thesimonscenter.org/publications/interagency-journal)



# How America Will Be Attacked

## Irregular Warfare, the Islamic State, Russia, and China

Dr. Sebastian Gorka

*[The Future Operating Environment] “will feature the erosion of sovereignty, weakened developing states, the empowerment of small groups or individuals, and an increasingly contested narrative environment favoring agile nonstate actors and state actors demonstrating persistent proficiency in the irregular domain.”*

—ARSOE Operating Concept: Future Operating Environment, U.S. Army Special Operations Command

*You may not be interested in War but War is interested in you.*

—Apocryphally attributed to Leon Trotsky

As this paper is being written, the U.S. national security establishment is under significant internal and external pressures: internally from the consequences of prosecuting the longest war in the Republic’s history, which has seen unprecedented post-Cold War operational tempos, matched by constant downsizing of our forces and sustainment budgets; externally from the events occurring in the Middle East, North Africa, Asia, and Africa, which has included the rise the Islamic State (IS), the most powerful jihadist organization of the modern age, and the concurrent displacement of more than sixty-five million refugees, a historic world record surpassing even World War II.

These pressures are not going to abate, which will most probably lead to the reality of our armed forces having to accomplish more missions with less resources. At the same time, both nonstate and nation-state adversaries of the United States who have become supremely

adept at exploiting irregular warfare (IW) and unconventional modes of attack will exploit these forces. This article is an introduction to three of the most important enemies we face today and who we will also face in the future, and how these actors use IW and unconventional warfare (UW) against our interests: the Islamic State, China, and Russia.

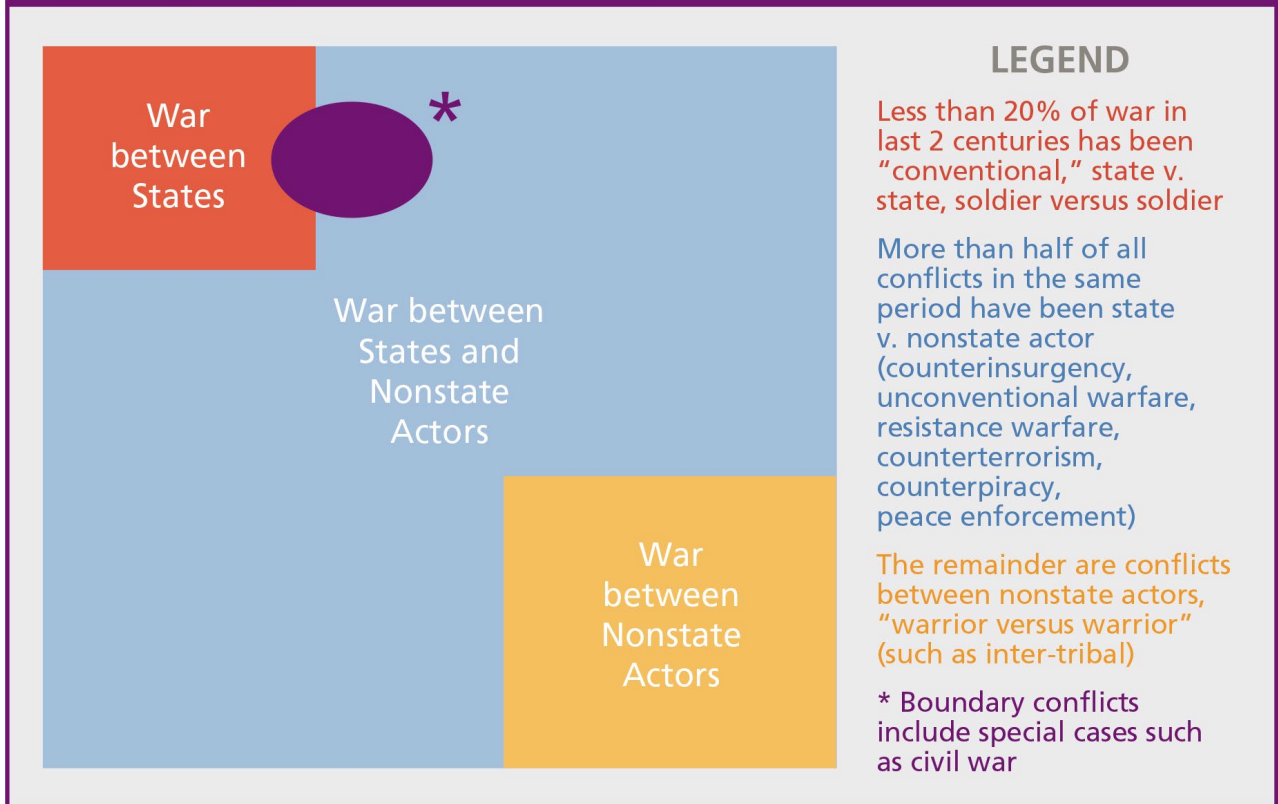
### The Operating Context

*There are many kinds of manoeuvre [sic] in war, some only of which take place upon the battlefield.<sup>1</sup>*

—Winston Churchill

The United States is still engaged in the longest formal military campaign since the founding of the Republic. Launched in October 2001, the war against the global jihadi movement—including al-Qaida and IS—persists and will continue into the next administration. We may have weakened the original al-Qaida’s operational capacity, but the threat has transformed and moved elsewhere in the last fifteen years to areas as diverse as Yemen, Mali, and Nigeria, and more recently to Libya and Syria, with IS becoming a fully-fledged insurgency mobilizing eighty thousand-plus fighters. Additionally, the jihadist threat to the continental United States has not subsided but increased as the bloodshed and mass violence of San Bernardino and Orlando attest. In fact, according the terrorist monitoring organization SITE, between 2 June 2016 and 1 August 2016, outside of Iraq and Syria, a jihadist attack is perpetrated every eighty-four hours.

Figure. Typology of Conflict: The Reality of War



(Graphic courtesy of *Joint Force Quarterly*)

At the same time we have seen America’s erstwhile enemy, Moscow, act in newly belligerent and destabilizing ways. Its invasion of Ukraine breaking the sixty-plus year European taboo on territorial aggrandizement through force together with military jet fly-bys of U.S. naval vessels and along the American seaboard harken back to the Cold War days of military intimidation and brinkmanship.

And there is the Communist People’s Republic of China. Although it has yet to use direct force against its neighbors or the United States, it has used a broad array of unconventional means to increase its military presence and strategic footprint—from very aggressive cyberattacks against U.S. interests, both governmental and commercial, to the manufacture of artificial islands in disputed waters as platforms for military installations.

Though none of these adversaries or enemies unilaterally could feasibly win a conventional war with the United States that still maintains a “hyperpower” position amongst the nations of the world, they have deployed old IW techniques as well as developed new

ones with which to progressively both undermine our interests now, and weaken our allies and partners.

The sooner we as a nation, and our armed forces understand that the age of conventional warfare is a bygone and grasp how nations like Russia and China, and “super-insurgencies” like IS, are waging IW against us today, the sooner we will be able to defeat them or lessen their impact upon our own national security.

### **Irregular Warfare Is Dead; Long Live Irregular Warfare**

*Although history may not in fact repeat, as Twain is reputed to have said, it surely does rhyme.*

The United States remains a true superpower, but mostly in one dimension: conventional warfare and kinetic direct action (DA). As our nation’s response to the war in Vietnam, and the last fifteen years in Afghanistan and Iraq would seem to attest, we as a nation do not much care for fighting “irregular enemies.” Nor does it seem that we are that often successful in such endeavors. This is a very serious problem given that IW is historically the most prevalent mode of warfare.



The *Correlates of War Project* at the University of Pennsylvania has collected all the most relevant data on every conflict since the age of Napoleon in one place. According to this data set, in the last two hundred years, there have been four hundred-sixty wars of various types. These can be broken down into conventional wars—state forces versus state forces, and unconventional or irregular conflicts—states fighting nonstate actors, or nonstate actors fighting other nonstate actors. The breakdown is expressed visually in the figure (see page 31).<sup>2</sup>

Therefore, among all the other information the database contains, one can draw a very significant conclusion: of all the wars since Napoleon (460), more than 80 percent (380) were irregular in nature, conflicts in which at least one of the fighting forces was not a representative of a recognized government. In other words, in modern history we see four times as many conflicts resembling our war in Vietnam, or the war with IS and the Taliban, than wars that look like World War I or World War II, or even the first Gulf War.

Subsequently, if the frequency of IW has been so high in the last two hundred years, we can, with a high degree of certainty, predict that in the coming decades American forces will frequently be called upon to fight and assist others in future conflicts that fall under this category.<sup>3</sup>

Eleven years after the 2001 attacks, the Joint and Coalition Operational Analysis (JCAO) division of the Joint Staff J7 published a set of reports titled *Decade of War: Enduring Lessons from the Past Decade of Operations*.<sup>4</sup> Several of the J7's observations and conclusions concerning Operations Enduring Freedom and Iraqi Freedom (OEF and OIF) bear directly upon current and future missions. They include—

- a failure to recognize, acknowledge, and accurately define the operational environment, leading to a mismatch between forces, capabilities, missions, and goals,
- a slowness to recognize the importance of information and the “battle for narrative” in achieving objectives at all levels,
- difficulties in integration of general purpose and special operations forces (SOF),
- individuals and small groups exploiting globalized technology and information systems to shape the battlespace and near state-like disruptive capacity, and

- the increased state use of surrogates and proxies to generate asymmetric threats.<sup>5</sup>

There is widespread agreement among those who have been responsible for planning and running our more kinetic operations after 9/11 that on the whole the armed forces have performed without peer in the application of direct force. America's ability to execute strike- and maneuver-type missions has developed to such a degree that no other nation can come close to matching our capabilities in the conventional and surgical strike (SOF) domains.

But when we step beyond the application of “steel on target,” and move into the indirect and unconventional domains, our peer position is rapidly lost to others who have devoted more time to these less obvious modes of attack. IS has a force that represents less than 10 percent of the forces the United States has at its disposal yet persists and is now bringing the jihadi way of war to our shores more frequently than ever before. China escalates its military adventurism daily without our doctrine providing an obvious response mechanism or our policy providing a lucid strategic end-state. And the Russian Federation has not only used established modes of UW in Europe in ways that would impress surviving members of the Office of Special Services (OSS) of World War II, but it also has deployed a full suite of psychological operations (PSYOP) and information operations in the Middle East, Europe, and even the United States that matches anything from the heyday of the Union of Soviet Socialist Republics (USSR).

What follows is a brief primer on how these actors use their IW and UW techniques against our interests. It should be taken as the most basic of introductions on how America is being challenged today and will be undermined by these adversarial actors in the future.

## The Islamic State and the Modern Way of Jihad

The modern movement for global jihad was born with the Muslim Brotherhood in Egypt after World War I, refined by the fatwas of jihadi strategist Abdullah Azzam, and made a spectacular international phenomenon by Osama bin Laden and the attacks of 11 September 2001.<sup>6</sup> But in recent years, the global jihadi movement has transformed. With the death of bin Laden and the separation of al-Qaida in Iraq from the original parent organization, IS has become the new standard-bearer for Holy War

against the infidel and has done so in a way that makes it far more dangerous than al-Qaida ever was.

Today, after the collapse of Syria, the fall of Mosul in Iraq, and the multiple IS-connected attacks around the world, including the San Bernardino and Orlando massacres, very few people talk any more about al-Qaida or about its current leader Ayman al-Zawahiri.<sup>7</sup> And for good reason, for on at least four counts, IS is now far more powerful than al-Qaida ever was:

1. Unlike al-Qaida, IS is a true transregional and global insurgency.
2. IS is the richest nonstate threat group of its kind ever.
3. IS has demonstrated stupendous recruitment capabilities, pioneering such recruitment through the global Internet.
4. Most important, IS has achieved that which all other modern jihadi groups have failed to achieve: the re-establishment of a theocratic caliphate, or actual Islamic state.

## The Islamic State Is a True Transregional and Global Insurgency

Elaborating further while comparing the two, al-Qaida, wherever it functioned after 9/11, never did so as a true insurgency. Instead, it maintained its identity as a globally ambitious and globally operational terrorist organization. Even when it was associated with a local insurgency, such as in Somalia and in Afghanistan, it was always in a parasitic fashion. Specifically, true insurgencies like Al Shabaab (al-Qaida's affiliate in Somalia) and the Taliban are defined by having a mass base of support and so many actual fighters that they can operate in daylight and capture territory with the intention of holding and governing it. In contrast, exclusively terrorist groups are by nature much smaller, without a mass base of support such that they must therefore operate covertly, and they do not attempt to govern the people they

terrorize. Instead, they hide in safe houses when inactive or plotting, then rapidly execute an attack only to return immediately back to their covert locations.

Thus, by comparison, an insurgency functions as a quasi-military force that is able to muster recruits and

**... an insurgency functions as a quasi-military force that is able to muster recruits and deploy in formation not just to attack but to exercise lasting control over the territory it captures.**

deploy in formation not just to attack but to exercise lasting control over the territory it captures. For the insurgent, terrorist violence is but one tool with which to challenge government writ and not his or her reason for being. For the terrorist organization—which has no true military

capacity—coercion and intimidation through violence is the reason the organization exists. Thus, al-Qaida was never a true insurgency, but an organization that was founded only to terrorize in campaigns the purpose of which was to seek revenge and inflict punishment. Even in those theaters such as Afghanistan and Somalia where it is linked to an insurgency, it never recruited its own mass base of support, instead leveraging pre-existing insurgencies such as the Taliban and Al Shabaab and piggybacking on top of them.

On the other hand, IS is all the more impressive because it took no short-cuts to quasi-statehood. It is not a terrorist group perched upon another pre-existing insurgency and does not have to borrow its fighters from another older threat group. IS has recruited its own mass base of fighters, at least eighty-thousand, in just a couple of years. And not only is IS more powerful than al-Qaida because it is an insurgency, it is additionally unique amongst all modern insurgencies.

By way of context to see just how unique, if one looks at the whole range of modern twentieth-century insurgent groups, there is one characteristic common to them all. Whether it be Mao Tse-tung in China after World War II, or FARC (Fuerzas Armadas Revolucionarias de Colombia) in Colombia, irrespective of ideology, they shared the same proximate goal: the defeat and displacement of the government they were fighting. Mao wanted to defeat and replace the nationalists and create a Marxist



China. The FARC wanted to defeat and replace the Hispanic elite of Bogota and create a Bolivarian people's republic. Similarly, whether in Asia, Latin America, Africa, or Europe, insurgents are set on replacing just one regime, the regime they were at war with.

In contrast, though IS shares the immediate goal of usurping Syrian and Iraqi governance in a wide geographic area overlapping both nations, it is far more ambitious and has global objectives. To that end, not only has ISIS built its own insurgent base with tens of thousands of fighters, it has managed to capture city after city in multiple countries. IS now holds territory in both Iraq and Syria as well as Libya, making it the first historic insurgency to control land in multiple countries in one region. On top of that success, it has spread into West Africa as well. Two years ago, Boko Haram, the black African jihadi group of Nigeria swore *bayat*—made the Arabic pledge of allegiance—to al-Baghdadi, the self-appointed caliph of IS. It had done so several times before, but this time its pledge was accepted by IS, and Boko Haram was accepted into the new “caliphate” under al-Baghdadi's leadership.

Not long after, the leaders of Boko Haram officially changed its name to the West Africa Province of the Islamic State, meaning that any of the territory under its control was de facto part of the new sovereign Islamic State. Never before has an insurgency successfully captured and held land in multiple nations of multiple regions.

## The Islamic State Is the Richest Nonstate Threat Group in History

Secondly, IS is the richest threat group of its type ever. Unclassified U.S. government estimates put its income at U.S.\$2–4 million per day, which comports with the *Financial Times'* own estimate of IS having a gross domestic product of \$500 million. Considering that, according to the official 9/11 Commission Report, the 2001 attacks on New York and Washington only cost al-Qaida \$500,000, this means that IS is in a completely different league than its progenitor and is in no way a “JV [junior varsity] team.”

## The Islamic State Has Demonstrated Stupendous Recruitment Capabilities

Thirdly, IS has been incredibly impressive when it comes to mobilizing jihadist fighters. According to the United Nations, in the first nine months of renewed

IS operations in Iraq, it managed to recruit nine thousand fighters, and in the last few years, of the eighty-five thousand recruited, at least thirty-five thousand have been foreign fighters from outside of Iraq and Syria. The IS recruitment effort is all the more impressive given that when al-Qaida operated as the MAK (Arab Services Bureau) for *mujahideen* during the Afghan war of 1979–1989, its recruited only fifty-five thousand over a decade. This has been done through the use of truly pioneering Internet-based propaganda, which has enabled recruitment globally in ways that were previously unheard of when recruitment had to be done mainly face to face.

## Establishment of a Theocratic Caliphate

*When a country is being subverted it is not being outfought; it is being outadministered.*<sup>8</sup>

—Bernard B. Fall

But the last facet of IS that makes it truly stand out from other groups with similar motivation and objectives is what its leader al-Baghdadi managed to achieve on 29 June 2014 from the Grand Mosque in Mosul. When he declared reestablishment of the caliphate—the theocratic Islamic empire—and proceeded to exercise true control over a population of more than six million people in a territory larger than Great Britain, he achieved that which no other jihadist group has in the last ninety years. Here it is crucial to remember that the caliphate is historically not just the fabulist whim of extremists but was a true political and religious entity for over a thousand years, established in Mecca and then headquartered respectively over the centuries in Damascus, Baghdad, and lastly, Istanbul. Moreover, the caliphate in fact existed just one hundred years ago in the form of the Ottoman Empire. Yet it dissolved because of the Ottomans being on the losing side in World War I and the decision of Mustafa Kemal Ataturk, the head of state of the new Republic of Turkey, to do away with it in order to clear the way for modernizing his nation. In doing so, he officially dissolved the caliphate by decree in 1924. Ever since then, jihadist organizations have been trying to bring the caliphate back, starting with the Muslim Brotherhood, which was created just four years after Ataturk disbanded the empire.

Subsequently, literally hundreds of extremist organizations were created over the next nine decades with the

express purpose of reversing what Ataturk had decreed. Yet every single one of them failed, including al-Qaida. Even after winning the elections in Egypt, the descendant group rooted in the original Brotherhood failed when it tried to Islamize too rapidly and was dethroned by Egyptian Gen. Fattah el-Sisi and the military.

This invokes the question, “How, exactly, has the

Islamic State succeeded where all other jihadist groups failed?” The answer is a twofold one. The first answer has to do with how effectively IS has leveraged a religious narrative, specifically an eschatological one that portrays their “holy war” as the final jihad prior to end times. (For de-

tailed background and discussion beyond the scope of this article, see my article in the May-June 2016 edition of *Military Review*.<sup>9</sup>) And the second answer has to do with an Egyptian jihadi theorist of IW.

Prior to the success of IS, the key strategists of the global jihadist movement were less than pragmatic. The majority saw violence as a sacred act with the fate of their movement wholly contingent on the will of Allah. If the holy warriors of Allah were faithful in the execution of violence against the infidel in an escalation of operations, the caliphate would be miraculously established.

That idealist attitude was challenged when the Egyptian writer Abu Bakr Naji published his e-book, *The Management of Savagery*.<sup>10</sup> Although Naji was killed not long after the book was made public, the work remains extremely influential, and thus very dangerous, as it has injected a level of IW understanding into the jihadist movement that we had not seen previously. The

importance of *The Management of Savagery* as it relates to fomenting global Islamic insurgency is illustrated by the fact that it informs most of how IS operates today.

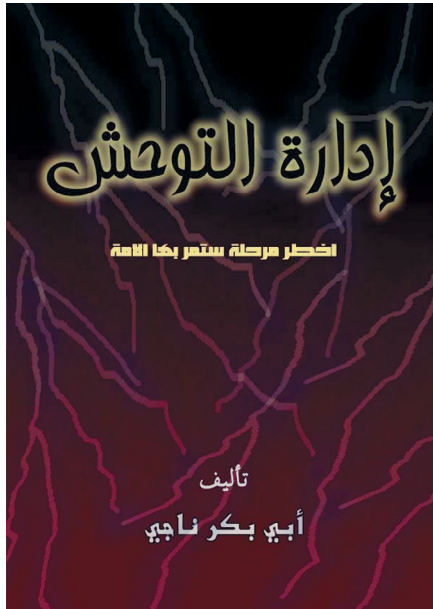
All national security professionals should read the full translation of the book, but the summary is as follows. Like all jihadis, Naji believed that a Muslim must live under a caliphate, and that war must be waged un-

til the Empire of Islam covers the world. However, he is explicit that violence alone will not magically result in the appearance of a functioning caliphate. Instead the jihadi movement must follow a comprehensive phased plan of operations that systematically builds layer upon layer until the final

theocratic reality is achieved. The phases Naji describes in his book are:

**Phase One: The Vexation Phase (IS four years ago).** In the initial stage the jihadist organization will apply IW to execute dramatic terror attacks against the infidel and his regional partners. The goal here is to attrit and weaken the infidel and apostate governments and prepare the battlespace for Phase Two.

**Phase Two: Spread Savagery (IS two years ago).** Under this stage, the IW attacks are drastically increased in size and frequency. According to open source reports, when Ramadi fell, two hundred vehicle-borne improvised explosive devices were employed in a twenty-four hour period; this is exactly what Naji prescribed. The objective of Phase Two is to dislocate the local government from its own territory, making it functionally impossible for it to govern. This illuminates IS strategy for focusing on operations to sever the Syrian government or the administration



*The Management of Savagery* by Egyptian jihadist Abu Bakr Naji closely parallels Chinese communist leader Mao Tse-tung's theory of revolutionary war as it outlines the process of waging insurgent jihad in stages. A link to the complete English-language translation, by scholar William McCants, can be found within endnote 10.

### The Management of Savagery:

The Most Critical Stage  
Through Which the  
Umma Will Pass

Abu Bakr Naji

Translated by William McCants

Funding for this translation was provided by  
the John M. Olin Institute for Strategic Studies at  
Harvard University, and any  
use of this material  
must include a reference to the Institute.

23 May 2006



in Baghdad from the people to prevent the respective governments from exercising sovereignty. The jihadist organization thus aims to engender such a level of chaos that the resultant doubt of the population in the viability of legacy state structures positions the threat group as the only viable governance alternative.

**Phase Three: Administer Savagery—Consolidate Expand (IS now).** In an echo of our own manual, FM 3-24, *Counterinsurgency*, this is the stage when the enemy consolidates its hold on captured territory, members of the local population are integrated into new fighting units, and a new governance structure is put in place that weds provision of services to the population with imposition of a draconian judicial system based upon sharia law.

The territory thus captured is gradually converted into a new “base state,” or giant forward operating base, to be used as a launching platform for new Phase One and Phase Two type operations in new territories such as Libya, Yemen, Jordan, or Saudi Arabia.

The significance of Naji’s work is that it injects a dose of pragmatism and an understanding of IW into the global jihadi movement that had been lacking for ideological and theological reasons. Additionally, Phase Three is really a transitional stage after which the final global caliphate will be achieved. As such it represents a period under which the jihadist enterprise is functioning as a quasi-nation-state with a fixed territory, borders, administration, and a monopoly of force.

In contrast, prior jihadi strategists had rejected the Westphalian nation-state as a heretical construct of the infidel West. Naji’s great contribution—and a very dangerous one at that—was to argue in *The Management of Savagery* that even if one does not like the nation-state conceptually, it is an evolutionary

stage the movement must pass through if it is to finally succeed in its global mission. And, unfortunately, his pragmatic approach has been effectively implemented by Abu Bakr and his IS.<sup>11</sup>

Only when we understand that IS understands IW as an instrument to obtain specific pragmatic objectives far better than al-Qaida ever did will we be intellectually focused on understanding the true scope of their

aspirations and then better positioned to formulate effective ways and means to defeat them both on the battlefield and, more importantly, in the war of ideas.

## The Russia Federation: War by Other Means

Turning to consideration of Russia as a growing IW foe, it is well to observe that today’s Russia is not the Soviet Union: it is not an existential threat to the United States.

However, it is an anti-status quo actor that intends to antagonize, undermine, and frustrate accomplishment of U.S. goals, a spoiler controlled by a thuggish former KGB officer who called the dissolution of the USSR the “greatest geostrategic calamity of the twentieth century.”

Consequently, it needs to be acknowledged that Moscow is committed to re-establishing a sphere of unchallenged dominance in Central and Eastern Europe, and beyond that, to achieving an approximate level of influence globally that the Soviet Union had during the Cold War.

Unfortunately, its invasion of the sovereign nation of Ukraine resulting in the annexation of Crimea is a masterful example of how to do UW in a post-Cold War and post-9/11 world. Similarly, its exploitation of the vacuum caused by the withdrawal of U.S. combat forces from Iraq in 2011 that enabled it to become a key player in Syria proves just how ambitious the Kremlin is to reshape the geopolitics of the Middle East also.



*Russia's New Generation Warfare in Ukraine: Implications for Latvian Defense Policy* is a detailed analysis of Russia's current approach to conducting warfare in the twenty-first century by Latvian military scholar Janis Berzins.

How has Russia done this? Some have argued that it has developed a new mode of “hybrid war.” This is not in fact true. Moscow has simply further developed and recalibrated old Cold War tools in a new combination that emphasizes a less direct and more subversive approach to war that Sun Tsu would have instantly recognized. As those nations under greatest threat after the invasion of Ukraine, the Baltic nations of Estonia, Latvia, and Lithuania are doing some of the most important work in showing the world just how it is that Russia is winning its wars without recourse to conventional means.

The best English-language summary of the revamped Russian approach to war is in the 2014 report of the National Defence Academy of Latvia’s Center for Security and Strategic Research. Titled *Russia’s New Generation Warfare in Ukraine: Implications for Latvian Defense Policy*, Janis Berzins summarizes Russia’s approach as emphasizing the following guidelines for war in the twenty-first century:

1. from direct destruction to direct influence, and from direct conflict to “contactless war”;
2. from direct annihilation of the enemy to subverting them internally;
3. from war with kinetic weapons and an emphasis on technology and platforms, to a culture war attacking the will of the enemy;
4. from war built around conventional general-purpose forces to subconventional war using specially prepared UW forces and irregular groupings and militias;
5. from the traditional three-dimensional perspective of the battlespace to an emphasis on information operations, PSYOP, and the “war of perceptions”;
6. from compartmentalized war to a total war, including the targeting of the enemy’s “psychological rear” and population base;
7. from war focused on the physical environment to war targeting human consciousness, cyberspace, and the will of the enemy to fight; and
8. from war in a defined period of time to a state of permanent war—war as the natural state for the nation to be in.<sup>12</sup>

These guidelines, each of which can be illustrated in the campaign to subvert Ukraine, were used to politically, psychologically, and economically undermine it as a nation prior to any hostilities breaking out. They were further employed in concert with

unmarked SOF units covertly deployed as UW force multipliers to conduct operations to assist fifth-column local militia assets.

The guidelines are, according to Berzins, implemented in a set of clear phases.

**First Phase: Nonmilitary Asymmetric Warfare.** Synchronized informational, moral, psychological, ideological, diplomatic, and economic measures supporting the overall Russian plan to establish a political, economic, and military environment favorable to the interests of Moscow.

**Second Phase: Special UW Operations.** Actions designed to mislead the adversary’s political and military leaders through coordinated measures on diplomatic channels, through the media, and via key government and military agencies, utilizing the “leaking” of false data, and counterfeit orders and directives.

**Third Phase: Subversion.** Intimidating, deceiving, and bribing adversarial government and military officers with the objective of making them abandon their service duties.

**Fourth Phase: Propaganda.** Information operations targeting the civilian population to increase discontent amplified by the arrival of Russian-sponsored and trained bands of militants, escalating subversion.

**Fifth Phase: Military Measures below Open War.** Establishment of no-fly zones over the country to be attacked, imposition of blockades, extensive use of UW units and direct action in close cooperation with armed “opposition” units.

**Sixth Phase: Open Use of Force.** Commencement of military action, immediately preceded by large-scale reconnaissance and sabotage missions. Employment of all means of attack and types of assets, kinetic and nonkinetic, including SOF, space capabilities, electronic warfare (EW), aggressive and subversive diplomacy, and intelligence assets, industrial espionage, allied force-multipliers, and embedded fifth-column actors.

**Seventh Phase: Force Escalation.** Intensification of targeted information operations, increased EW, air operations, and harassment, combined with the use of high-precision weapons launched from multiple platforms, including long-range artillery, and the use of weapons platforms based on new physical principles, including microwaves, radiation, and nonlethal biological weapons targeting the will to resist.



**Eighth Phase: Assert Control.** Roll over and neutralization of all the remaining points of resistance, use of SOF and stand-off platforms to destroy remaining combat-effective enemy units, deployment of airborne assets to surround last points of resistance, execution of “mop up” and territorial control operations with ground forces.

As can be seen, none of the above together constitute a new type of war. However, the focus and combination of modes of attack have changed. Instead of the Cold War scenario of all-out war under which all means of attack are to be used initially, including chemical, biological, and nuclear, and during which *maskirovka* (deception) was an integral part of the plan to defeat the enemy, the Kremlin’s new priorities put indirect and nonkinetic measures first.

Sun Tsu wrote that the ultimate skill in war was to achieve victory without fighting, and the Kremlin has taken Sun Tsu to heart and modified its approach. As has been demonstrated in its actions relative to Ukraine and elsewhere, for Russia, the approach is now to win without fighting too much. The Russian Federation has even established a pseudoscientific theory upon which its new approach is based. This repurposed Soviet-era theory is called Reflexive Control and is the science of how to shape the information environment in such a way as to make your enemy take decisions that are preferable to your victory and detrimental to his success. This more aggressive version of “perception management” is well worth studying by the U.S. military and intelligence community. An excellent primer is Timothy Thomas’s “Russia’s Reflexive Control Theory and the Military” from the *Journal of Slavic Military Studies*.<sup>13</sup>

## The New Sun Tsus: “Making Trouble for the Troublemakers”

In 1999 two senior colonels of the Communist Chinese People’s Liberation Army, with experience in political warfare, published the work *Unrestricted Warfare*.<sup>14</sup> Qiao Liang and Wang Xiangsui proposed with their work that the context of conflict had drastically changed and that this change required a “new” type of war without limits.

In their work, the colonels focused first on the geostrategic and geopolitical changes that necessitate “unrestricted warfare.” This discussion included excursions on the topic of globalization, the waning power of the classic nation-state, the rise of

“super-empowered” actors such as hackers and cyber warriors, and a lengthy discourse of the significance of the First Gulf War in demonstrating the new “omnidirectionality” of combat, wherein integration is at a premium and the instruments of war are deployed in all dimensions and directions at the same time. This then led to the authors enumerating the eight principles of UW:<sup>15</sup>

- **Omnidirectionality.** A 360-degree perspective guaranteeing all-around consideration of all the factors related to war and when observing the battlefield, designing plans, employing measures, and combining the use of all war resources to have a field of vision with no blind spots. Warfare can be military, quasi-military, or nonmilitary with the “battlefield” existing everywhere with no distinction made between combatants and noncombatants.
- **Synchrony.** Conducting actions in different locations within the same period. Synchrony accomplishes objectives rapidly and simultaneously.
- **Limited Objectives.** Limit objectives in relation to measures employed. Objectives must always be smaller than measures used to obtain them.
- **Unlimited Measures.** Once objectives are limited there should be no restrictions placed on the measures used to achieve them. Hence UW.
- **Asymmetry.** Understanding and employing the principle of asymmetry correctly so as to find and exploit an enemy’s weaknesses.
- **Minimal Consumption.** Use the least amount of combat resources sufficient to accomplish the objective. (Analogous to the U.S. principle of economy of force.)
- **Multidimensional Coordination.** Coordinating and allocating all forces, which can be mobilized in the military and nonmilitary spheres covering an objective (this includes nonmilitary assets, such as cultural warfare).
- **Holistic Adjustment and Control of the Entire War Process.** Continual acquisition of information through the campaign to allow for iterative adjustment and comprehensive control.

As even a cursory glance will demonstrate, none of these principles is at all new. In fact, several are as old as Sun Tsu’s *The Art of War* itself. And others are simply good common sense. Likewise, the contextual factors that lead to these principles being evinced are not new

either, with scores of Western authors, such as Phillip Bobbitt and Ed Luttwak, having discussed them after the end of the Cold War.

Nevertheless, we should not disregard this work, or rather, we should not conclude that there is nothing new about how China has been thinking about and exercising its power in the post-9/11 world. Every nation—and even individual nonstate actors—has its own unique strategic culture. China

is shaped by two specific historical experiences the most. The one is the original period of the warring states which brought us the wisdom of Sun Tsu, and the other is the nineteenth and early twentieth-century experiences of modern China.

The former imbued the strategic personality of China's generals and leaders with an obsession for maintaining internal cohesion to a degree that far exceeds any reasonable attitude other nations have toward maintaining internal peace and harmony. And, the second created a suppurating psychological wound in the mind of the political elite that China must never again be exploited and humiliated by foreign powers as it was for so long in the modern age.

What has this resulted in today when it comes to China's strategic goals and actions? Liang and Xiangsui may not have expounded a revolutionary new way of war for their nation, but Beijing is most definitely practicing a very shrewd form of IW that seems to reflect its prescription for war. Less aggressive than Russia's in that its primary purpose is not subversion, this approach is focused less on remote political control than on intimidation and economic control.

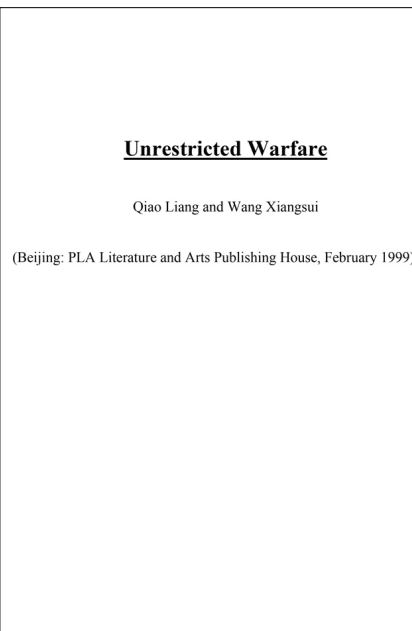


Original cover of *Unrestricted Warfare* by Chinese People's Liberation Army Cols. Qiao Liang and Wang Xiangsui, published in 1999. Several commercial translations are available. See endnote 13 for a partial translation originally made by the CIA's Foreign Broadcast Information Service.

Simply looking at China's actions in Latin America and South Asia, with billions "invested" in countries like Venezuela and Afghanistan for access to natural resources such as oil and copper, we see how China uses the nonkinetic to realize its national goals. Add to that the privatization and co-optation of the state China has perpetrated in Africa in places such as Angola and Nigeria, and we can agree with

the label Rafael Marques has used to describe China's foreign policy: new imperialism.

While Russia subverts and buys individual actors, China buys the good will of whole governments in ways that are very reminiscent of the mercantilist ways of the West just a couple of centuries ago. In



short, Beijing's approach is to exploit weak nations and corrupt regimes, while exploiting the weaknesses of strong nations. And when it comes to the strongest of its competitors, such as the United States, to quote Liang, from a CCTV interview in 2012 when he was already a general, the goal is "to make trouble for the troublemaker."

## Irregular Warfare: Back to the Future

As the empirical data shows, war is most often "irregular" and "unconventional." With America's capacity to maintain an overwhelming competitive advantage in the conventional military arena, our adversaries and enemies will continue to develop and employ established unconventional and irregular modes of attack. Although not all of these are



revolutionary, or even novel, there are proving very effective already. The sooner our strategists and policymakers recognize and acknowledge this, the better able they will be to develop relevant counters and

hone our own indirect and nonkinetic modes of attack to better secure our republic and all Americans in what has become a decidedly unstable and ever more dangerous world. ■

## Biography

Sebastian Gorka, PhD, is a professor of irregular warfare and strategy and vice president for national security support at the Institute of World Politics, Washington, D.C. He is the author of the New York Times bestseller *Defeating Jihad: The Winnable War*. Gorka can be found online at <http://www.TheGorkaBriefing.com> or followed on Twitter @SebGorka.

## Notes

**Epigraph.** U.S. Special Operations Command, *ARSOFF Operating Concept: Future Operating Environment/ARSOFF Operating Concept Phase 1* (28 June 2013), 17.

**Epigraph.** This quote has been apocryphally attributed to Leon Trotsky though no original source has been found.

1. Winston S. Churchill, *The World Crisis*, vol. 2 (New York: Charles Scribner's Sons, 1923), 5.

2. Sebastian Gorka and David Kilcullen, "An Actor-Centric Theory of War," *Joint Force Quarterly* 60(2011): 14–18, <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA535254>.

3. Based upon the empirical data described and the frequency of unconventional wars in contrast to state-on-state conflicts, it would seem obvious that we should, in fact, doctrinally label irregular warfare as conventional, and see conventional warfare as the anomaly, not the standard. Even though these are the facts of the matter, I do not expect to see the Pentagon make such a switch in the near future.

4. The Joint and Coalition Operational Analysis findings were drawn from forty-six separate studies that looked at operations ranging from *Strategic Communications Best Practices to Counter-IED Efforts* and *Provincial Reconstruction Teams in Afghanistan*.

5. Joint Staff J7, "Decade of War, Volume I: Enduring Lessons from the Past Decade of Operations," Joint and Coalition Operational Analysis (2012), 20 March 2012, accessed 4 August 2016, [http://www.dtic.mil/doctrine/training/conferences/wjts12\\_1/wjts12\\_1JLL\\_decadeOfWar.pdf](http://www.dtic.mil/doctrine/training/conferences/wjts12_1/wjts12_1JLL_decadeOfWar.pdf).

6. For a summary exposition of the key strategists of modern Jihad, including Azzam, see Sebastian Gorka, "Understanding Today's Enemy: The Grand Strategists of Modern Jihad," *Military Review* 96, no. 3 (May-June 2016): 32–39, accessed 10 August 2016, [http://usacac.army.mil/CAC2/MilitaryReview/Archives/English/MilitaryReview\\_20160630\\_art009.pdf](http://usacac.army.mil/CAC2/MilitaryReview/Archives/English/MilitaryReview_20160630_art009.pdf).

7. This is dangerous. Although the Islamic State (IS) is currently more impressive and capable than al-Qaida, that does not mean that al-Qaida is finished or dormant. On the contrary, Al-Qaida has, in fact, expanded its reach in many parts of the world outside

of IS influence, including Africa. The war for the "crown of the Caliphate" is far from over.

8. Bernard B. Fall, "The Theory and Practice of Insurgency and Counterinsurgency," *Naval War College Review*, 8 no. 34 (April 1965): 34.

9. Gorka, "Understanding Today's Enemy."

10. Abu Bakr Naji, *The Management of Savagery: The Most Critical State Through Which the Umma Will Pass*, trans. William McCants (Cambridge, MA: John M. Olin Institute for Strategic Studies, 23 May 2006), PDF e-book, accessed 8 August 2016, <http://azelin.files.wordpress.com/2010/08/abu-bakr-naji-the-management-of-savagery-the-most-critical-stage-through-which-the-umma-will-pass.pdf>.

11. Note also that it is clear the IS has studied their Mao. The original al-Qaida had a more Guevarist approach to insurgency, believing that spectacular attacks would trigger a mass movement and mass mobilization of fighters. Abu Bakr al-Baghdadi has demonstrated an understanding of what Mao taught: the insurgent will be successful if he can establish the "counter state" and provide services to the local population in competition to a failing legacy government. Appreciation of what the hackneyed phrase "hearts and minds" truly means illuminates what makes IS much more dangerous than al-Qaida ever was.

12. Janis Berzins, *Russia's New Generation Warfare in Ukraine: Implications for Latvian Defense Policy*, Policy Paper No. 2, (Riga, Latvia: National Defence Academy of Latvia, Center for Security and Strategic Research, April 2014), accessed 5 August 2016, <http://www.naa.mil.lv/~media/NAA/AZPC/Publikacijas/PP%2002-2014.ashx>.

13. Timothy Thomas, "Russia's Reflexive Control Theory and the Military," *Journal of Slavic Military Studies* 17 (2004): 237–56, [https://www.rit.edu/~w-cmmc/literature/Thomas\\_2004.pdf](https://www.rit.edu/~w-cmmc/literature/Thomas_2004.pdf).

14. Qiao Liang and Wang Xiangsui, *Unrestricted Warfare* (Beijing: PLA Literature and Arts Publishing House, February 1999), accessed 4 August 2016, <http://www.c4i.org/unrestricted.pdf>. Some Sinologists prefer the translation "Warfare Beyond Limits."

15. Adapted from Maj. John A. Van Messel, "Unrestricted Warfare: A Chinese doctrine for future warfare?" (master's thesis, Marine Corps University, 2005), accessed 4 August 2016, <http://www.dtic.mil/dtic/tr/fulltext/u2/a509132.pdf>.

The Army Press  
wants to hear  
from you!



# THE ARMY PRESS

Encouraging Writing Across the Force

The Army Press now has an online platform for writers to publish their work. The Army Press Online exists to support the Army University and adds to existing publishing opportunities already available through the Combat Studies Institute (CSI) and *Military Review*.

For more information about publishing with the Army Press, visit <http://armypress.dodlive.mil/publishing-iniative/>.







An ex-combatant holds ammunition 8 February 2012 in Attécoubé, Abidjan, Côte d'Ivoire. He is one of several to have participated in a disarmament, demobilization, and reintegration operation conducted in the area by the United Nations operation in Côte d'Ivoire. (Photo courtesy of the United Nations)

# The Global Spread of Arms

## The Link between State Collapse, Small Arms Proliferation, and Global Conflict

2nd Lt. Josef Danczuk, U.S. Army

**M**any established states around the world have collapsed in recent decades. The collapse of a state poses new, sometimes unanticipated, strategic concerns for other nations. One such concern is the proliferation of small arms and light weapons (SALW) that find their way into the hands of nongovernment actors due to either abandonment or loss of control over government weapons depots. Such weapons are favored by militias, rebels, terrorist organizations, and crime groups. They are inexpensive, easy to produce, adapted to be especially lethal in combat, and require minimal training to operate and maintain.

According to a United Nations (UN) report on disarmament, small arms are a category of weapons that includes handheld, small-caliber firearms such as pistols, shotguns, rifles, assault rifles, and small-caliber machine guns. On the other hand, light weapons include medium-caliber firearms such as crew-served medium and heavy machine guns, as well as hand grenades, rifle grenades, rocket-propelled grenades, small-caliber mortars, small-caliber rockets, and portable air-defense systems.<sup>1</sup>

When a state with a large supply of SALW collapses, the incentives for the failed state's incumbent leaders, the new government's leaders, or whoever may seize regional power to contain proliferation are lowered. For example, sometimes the people who take power after a collapse may actually promote instead of discourage proliferation for economic or political gain. Additionally, increasing volatility in a state due to the collapse of domestic law enforcement makes containing SALW proliferation more difficult, especially if the state moves from instability and civil unrest to open civil war. With any such collapse, borders become less protected and more porous as state regulation and border patrolling decrease. This makes it easier to conduct unregulated weapon transfers. Arms can spread to areas with a high demand, potentially inciting new conflicts or worsening existing ones.

Studying the mechanisms of state collapse, and how they lead to SALW proliferation, can enhance the overall understanding of conflicts worldwide. This article seeks to shed light on the link between state collapse and SALW proliferation through the lens of the collapses of the Soviet Union in 1991 and Libya in 2011. It will highlight the need for a U.S. strategy to prevent SALW proliferation in order to protect global national security interests.

## A Process That Leads to SALW Proliferation

A state collapse occurs when the government of a state can no longer effectively govern its territory. For the purposes of this paper, complete state collapse is defined as a polity's failure to maintain the ability to provide its citizens internal and external security as well as basic goods and services, while losing the capability to conduct foreign policy.

By way of comparison, stable states do not typically proliferate large quantities of SALW illegally because they have institutional controls in place to regulate their transfer and use, including constraints placed by international law. For example, although many weapons are bought and sold on international markets, the UN and other international organizations provide a check on the community of viable states so weapons do not flow in large quantities to nonstate actors or certain designated, usually embargoed, states. Consequently, if a legitimate state were to proliferate in a manner that the international community deemed illegal, it could face international sanctions or even a military response. This creates incentives for legitimate states to prevent or tightly limit SALW distribution. In contrast, failed states characteristically are no longer governed by internally recognized legal authority and are therefore often disconnected from systems of international law. Weapons dealers operating in the absence of constraints imposed by domestic law may proliferate SALW without some of the same potential consequences. Notwithstanding, the UN remains a key international buffer against proliferation coming from failed states, though indirectly.

When states are failing, the institutions that monitor legal, and illegal, SALW transfers break down. Under such circumstances, these institutions lose the capability to account for and prevent SALW proliferation. The result is a lack of centralized national oversight over SALW stockpiles and manufacturing. Moreover, in failed states, emerging regional leaders sometimes take over local administrative functions, including the control of local weapons stockpiles. In many cases, these local leaders acquire real regional power because they have seized control over some of the SALW inventories. Without centrally recognized law and centralized control, the new, local controllers have little incentive not to proliferate SALW. Thus, international sanctions are less likely to



influence them. Instead, such leaders are more likely to funnel SALW to other groups for their own economic or political gain.

Centralized oversight by a recognized governing body that is also accountable to international law is necessary to prevent international proliferation of weapons. However, a legitimate authority may not become available until the establishment of a new central government. And, even then, any new government—which likely will be operating with limited resources while struggling to establish legitimacy in the eyes of its populace and the international community—may not be able to establish sufficient centralized control and rule of law to prevent the uncontrolled transfer of arms.

The theoretical framework in figure 1 depicts the process that leads to SALW proliferation following a state collapse. This framework predicts increases in SALW among certain militias, rebels, terrorist organizations, and crime groups. Given a state with large SALW supplies or manufacturing capabilities, when the state collapses and its institutions become weak or absent, new leaders seizing power are likely to export SALW to groups inside or outside the state's former borders. Analyses of the collapses of the Soviet Union in 1991 and Libya in 2011 highlight the application of this model framework.

## The 1991 Soviet Union Collapse

During the Cold War, the Soviet Union dedicated vast resources to military spending, including the manufacture and stockpiling of SALW. For example, estimates of Soviet military spending in 1988 range from \$384 million to \$200 billion per year.<sup>2</sup> As a result, when the Soviet Union collapsed in 1991, it left fifteen newly independent states, many of which held large surpluses of SALW in addition to massive SALW manufacturing capabilities. As just one example, Ukraine inherited eighteen thousand artillery pieces, eleven thousand armored vehicles, millions of SALW, and millions of tons of ammunition.<sup>3</sup>

In the aftermath of the Soviet collapse, a number of circumstances led to SALW proliferation. First, the implosion of the Soviet Union created economic turmoil and extreme hardship as well as policy and power vacuums that the new states needed time to fill. Second, the new states did not need the stockpiles they inherited. Since they could no longer afford to maintain the former massive standing armies of the Soviet era, there were millions of unneeded weapons available for distribution.

**Independent variable:  
state collapse**

**Mechanism:  
weak institutions**



**Lack of centralized structure  
for oversight of SALW**

**Mechanism:  
lower incentive to not  
proliferate**



**Dependent variable:  
SALW proliferation**

(Graphic by 2nd Lt. Josef Danczuk, U.S. Army)

## Figure 1. Framework for Small Arms and Light Weapons (SALW) Proliferation

Third, there was a personal economic or political incentive for leaders of those new states to sell the excess weapons. Fourth, demand at that time was constantly high, especially in the developing world. There were potential buyers in states and rebel groups, even some within the former Soviet republics. The consequence was that the states' newly independent and fragile central governing institutions, which inherited control over the SALW stockpiles, largely could not curtail the incentive to sell them for economic gain or political purposes. For example, former Soviet SALW are believed to have fueled many civil wars throughout Africa, including the First Liberian Civil War, later prompting a UN arms embargo that was ineffective at preventing former Soviet republics from selling arms.<sup>4</sup>

**Ukraine.** One example of SALW proliferation was the post-Soviet state of Ukraine. According to a report published in 2012 by the Geneva Centre for the Democratic Control of Armed Forces, following Ukraine's independence, more than 114 Ukrainian companies and organizations sold arms internationally with few

legal restrictions or export controls from 1994 through 1997.<sup>5</sup> It was in 1996 that concern for lax control over such exports resulted in Ukraine creating a state-owned company named Ukrspецexport to handle its arms deals with other countries. However, Ukrspецexport enjoyed high autonomy within the Ukrainian government in its decisions regarding arms sales so legitimate constraints on sales remained suspect.<sup>6</sup>

According to the same report, Ukraine had been managing “military-technical cooperation and export trade in sensitive products more as a specific process rather than as a component of international state activity,” since independence, thereby limiting public information and stifling reform attempts.<sup>7</sup> Specifically regarding the period immediately following the collapse of the Soviet Union, the report claims, “the Ukrainian arms export control system was performing poorly in its early period” since the exports were easily approved and conducted among over one hundred businesses and organizations.<sup>8</sup>

Five years after the collapse of the Soviet Union, the Ukrainian Cabinet of Ministers established the State Service of Ukraine for Export Control (SSUEC) to oversee all state export services, including general arms exports and SALW. However, it was not until 2006 that the SSUEC certified compliance with internal export control programs in the majority of arms export companies and organizations.<sup>9</sup> This period between the Soviet collapse in 1991 and Ukraine’s establishment of export control in 2006 represented a substantial time during which the export oversight agency of Ukraine was considerably weak, allowing Ukrspецexport to permit dubious arms sales with minimal state restrictions.



A stockpile of AK-47 rifles from the Sudan People’s Liberation Army burns at the launch of the disarmament, demobilization, and reintegration program conducted by the United Nations Mission 10 June 2009 in Juba, southern Sudan. (Photo courtesy of the United Nations)

Overall, Ukraine had been a major arms exporter since its independence. The report from the Geneva Centre for the Democratic Control of Armed Forces provides data suggesting that Ukrainian companies and organizations sold \$32.4 billion worth of arms internationally from 1989 to 2004. If correct, this high value of arms sales, including SALW, helps demonstrate how decentralized control after the collapse of the Soviet Union allowed for SALW proliferation from Ukraine.<sup>10</sup>

**Georgia.** The situation in the newly independent Georgia also led to SALW proliferation. Before its independence, the Soviet Union designated the Georgian region of Abkhazia, home to the minority ethnic group Abkhaz, as an Autonomous Soviet Socialist Republic. Additionally, the Soviet Union designated Ossetia as an autonomous oblast within the greater Georgian Soviet Socialist Republic. Under the Soviet system, the designated ethnic minorities enjoyed, in principle, a degree of autonomy in conducting political affairs, although the Georgian Communist Party abused them during the rule of Joseph Stalin.

Not long after Georgia’s independence in 1991, its

new president was violently overthrown. Independent Georgia then found itself in a complex civil war that included violent efforts by Abkhazian and South Ossetian separatists to secede.<sup>11</sup>

In a 2002 analysis, Spyros Demetriou, writing for the Smalls Arms Survey research project of the Graduate Institute of International and Development Studies, Geneva, Switzerland, compared the quantity and quality of SALW possessed by armed groups in Georgia before and after the collapse of the Soviet Union. The analysis clearly demonstrates how the Soviet collapse led to SALW proliferation in Georgia. For example, from 1989 to 1991, two paramilitary groups, the National Guard



and another called the White Eagle, were only able to equip themselves with enough SALW to arm about 60 percent of their members.<sup>12</sup> Furthermore, some of those arms were merely hunting rifles, training rifles, or bolt-action rifles preserved since World War II—severely limiting the groups' combat capabilities.<sup>13</sup>

However, as control of the military and the state fell into disarray pursuant to the collapse, the arsenals of the Soviet military in Georgia fell into the hands of various combatant groups. The SALW proliferation from Soviet arsenals resulted from the activities of opportunistic Russian military officers from the Transcaucasian Military District who, according to Demetriou, distributed or sold weapons. Additionally, other proliferation resulted due to theft from, or outright seizure of, loosely controlled weapons stockpiles. The former Soviet forces did not reorganize into the Group of Russian Armed Forces in the Transcaucasus (GRVZ) until late August 1992. However, the military personnel and their equipment remained in Georgia as it took time for Russian and Georgian officials to negotiate a treaty regarding withdrawal of forces and equipment.<sup>14</sup>

According to Demetriou, flawed policies and gaps in the command-and-control of the residual post-Soviet military structure, together with widespread impoverishment of the Russian troops due to the disestablishment of the Soviet troop pay and sustainment system, led individual commanders to independently seek alternate sources of support for their units. As a result, local military officers were left to their own devices and followed their own agendas as they sought to augment their ability to sustain troop formations and their own income during this tumultuous period.<sup>15</sup>

Demetriou concludes that armed groups within Georgia acquired SALW in four main ways. First, they seized arms directly from the former Soviet stockpiles and convoys. In late 1991 into 1992, there were six hundred recorded incidents of seizures of stockpiles. Second, Georgian groups received SALW through free distribution from Soviet and Russian forces. Local officers exercised their own discretion in supplying arms to Georgian groups, not only the National Guard but also to groups such as the Abkhazia separatists. Those local officers were able to get away with simply gifting SALW by writing them up as forcibly stolen. Third, Russian military forces sold SALW to combatant groups within Georgia. In such cases, the Russian commanders were exploiting the



availability of excess weapons to turn a profit. Fourth, Georgian groups imported arms from regional suppliers such as Armenia and Azerbaijan.<sup>16</sup>

Therefore, post-collapse groups on all sides became extremely well armed in terms of quantity and quality of SALW. By 1992 to 1993, all armed groups in Georgia had plentiful access to stockpiles of modern AK-74 assault rifles, rocket-propelled grenades, mortars, Kalashnikov RPK light machine guns, and others. For example, before the collapse, President Zviad Gamsakhurdia's National Guard paramilitary force had fewer than four hundred combatants, and only 60 percent had firearms; by 1993, the force numbered approximately twelve thousand combatants and had acquired enough SALW to equip 150 percent of that number, largely due to acquisitions from former Soviet arsenals.<sup>17</sup>



Fighters for Libya's interim government rejoice 17 October 2011 after winning control of the Gaddafi stronghold of Bani Walid in northern Libya. (Photo courtesy of Wikimedia Commons)

## The 2011 Libyan Collapse

The Soviet Union's collapse is not the only example of the intrinsic link between state collapse and SALW proliferation. Following the 2011 Libyan uprising and subsequent air strikes led by the North Atlantic Treaty Organization (NATO), Mu'ammarr Gaddhafi's regime fell. In an attempt to fill the governmental void, Libya's provisional government, the National Transitional Council, attempted to set up a new government in Tripoli as NATO reduced its military role. However, in the absence of a unitary military after the former Gaddhafi forces were defeated, the council had no way to enforce its decisions and struggled to establish security

and order. Additionally, many of the numerous militia leaders who had united to overthrow the regime chose to remain armed and mobilized in defiance of the new government, declaring themselves "guardians of the revolution," ostensibly to prevent a counterrevolution or new government abuses.<sup>18</sup> One result was that some of the regime's large weapon stockpiles were looted since the former military had disintegrated, and the government had no one to guard and secure them.<sup>19</sup>

Although the transitional council wrote a constitution aimed at creating a new, permanent government, the elected parliament—the General National Congress (GNC)—was unpopular with the majority of Libyans and militias. The militias' refusal to turn over their weapons to the GNC displayed just how weak the new government really was. Though fragmented and lacking unity, the locally commanded militias became the de facto Libyan military forces.

To highlight the impact of state collapse on control of weapons in Libya, it is important to emphasize that Libyan institutions formerly responsible for overseeing SALW stockpiles simply vanished. According to a RAND Corporation research report by Christopher S. Chivvis and Jeffrey Martini, during the civil war, rebel militia groups had moved to seize the weapons caches throughout Libya's military posts. Furthermore, outside governments, such as France and Qatar, supplied arms directly to the rebels.<sup>20</sup> Without an accountable central government, and with a financial incentive to seize and sell weapons on the black market, independent militias proliferated SALW for their own economic gain and for maintaining their power independent of the provisional government. The local leaders heading such militias did not fear international or regional retaliation and acted with impunity, for good reason. Although many international groups and powers decried the SALW proliferation in post-Gaddhafi Libya, they were unwilling to take action. For example the UN and NATO were unable to pass sanctions against the perpetrators as there was no political will to intervene further to enforce them.<sup>21</sup>

The UN or NATO could have placed peacekeeping troops on the ground to enforce restrictions on SALW proliferation, but the 2011 UN Security Council (UNSC) Resolution 1973, authorizing a no-fly zone and airstrikes, prohibited any permanent ground troops.<sup>22</sup> Any international forces in Libya would have required additional UNSC approval, as well as the domestic support of





More than seventeen thousand illegal weapons, seized or voluntarily handed over, are turned into scrap metal 20 December 2012 at a recycling center in Belgrade, Serbia. (Photo by Vesna Andjic, Radio Free Europe/Radio Liberty)

participating nations. Ultimately, there was no political appetite to do anything further.

However, in response to concerns over SALW proliferation, the UNSC appointed a panel of experts to investigate SALW flows out of Libya. The panel published its report in February 2014, saying that post-Gaddhafi Libya's procurement office, responsible for overseeing external arms transfers, not only took an extended time to be established but also was ineffective at regulating arms transfers.<sup>23</sup>

The panel's report provides photographic evidence showing various types of Libyan SALW in fourteen nations outside Libya. The panel traced serial numbers and case markings on shipping containers back to Libya, and even back to the original manifests of Gaddhafi's imports of the 1970s and 1980s. The map in figure 2 illustrates the African countries where SALW were found that had originated in Libya, between 2011 and February 2014. (Some of the arms were routed through Turkey, Lebanon, or Qatar.) During a succession of failed governments, Libyan weapons continued to fall into the hands of militias, including Islamist groups that now are trying to take over the country.<sup>24</sup>

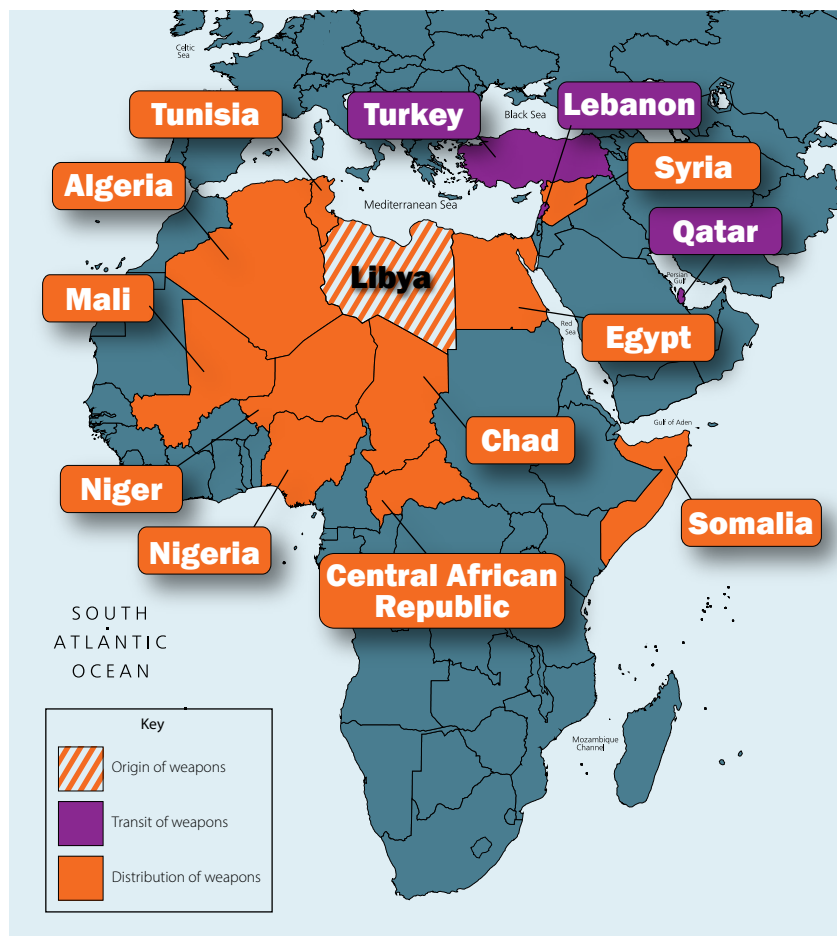
## Recommendations

As figure 1 (page 44) illustrates, four conditions appear to link state collapse and SALW proliferation. First, a state with the capability to become a supplier

state, one with stockpiles of SALW, collapses. The collapse can be due to political unrest or armed conflict. Second, the state institutions responsible for oversight of SALW weaken as a result of the collapse. Third, the incentives enforced by antiproliferation entities fail to influence the new or weakened institutions overseeing SALW. Fourth, with the absence of incentives to prevent proliferation, local actors who have taken over the SALW in a collapsed state proliferate SALW to exploit economic and political opportunities.

Thus, if a state with large SALW surpluses or manufacturing capabilities was about to undergo a collapse, a significant amount of SALW proliferation could be predicted to follow, particularly if its borders were already porous. However, the theoretical framework that links state collapse to SALW proliferation could represent multiple opportunities for potential U.S. intervention to prevent proliferation. Possible actions to reduce the likelihood and severity of proliferation may include—

- helping new leaders establish powerful, centralized SALW oversight organizations to prevent SALW from falling outside of a central, accountable institution;
- preventing SALW from flowing further by transferring arms intercepted back to a centralized authority or reclaiming them from local groups; and
- if necessary, preventing the external flow of SALW.



(Graphic by 2nd Lt. Josef Danczuk, U.S. Army)

## Figure 2. States with Confirmed Libyan Small Arms and Light Weapons Proliferation

In the first case, if a state appears to be sliding toward failure, intervention should immediately address the issue of weakening institutions. With assistance of outside states such as the United States, institutions responsible for containing SALW should be adequately strengthened to effectively survive a state collapse and combat SALW proliferation. Alternatively, even if state institutions disintegrate, outside states should emphasize, among key first steps, helping new leaders establish powerful, centralized SALW oversight organizations to prevent SALW control from shifting to local leaders who are more likely to proliferate them for their own advantage. An additional benefit of undertaking these initiatives is that they present an opportunity for outside states to establish a meaningful connection with the new government.

Second, should the SALW move from a centralized system to local militias or political leaders, outside states can prevent SALW from flowing further by seeking to

transfer arms intercepted back to a centralized authority. This may be either the new government or a special mission set up by an organization such as the UN or NATO to receive them.

To counter the economic incentive for selling SALW, such outside missions could initiate a SALW buyback program that would return them to centralized control. Buyback programs have met with some, albeit limited, success in various parts of the world. Notwithstanding, and regrettably, historical events suggest that countering the political or economic incentives for groups to proliferate or retain SALW would prove difficult. To compel cooperation, one strategy might be for the new government to threaten to withhold participation in the new political process or elections from groups who fail to relinquish their SALW, although this approach may simply further strain tensions in a collapsed state.

Third, if SALW proliferation appears imminent, surrounding states need to take proactive measures to prevent the external flow of SALW rather than react after arms begin flowing into their sovereign territories.

Outside states, especially the collapsed states' neighbors, need to create stronger border security and firmly prosecute any agents transporting or receiving SALW. The United States, in a possible alternative to direct military or even political involvement in a volatile situation of a collapsed state, could train and assist neighboring states to prevent SALW proliferation, particularly as the United States has access to high-tech solutions such as unmanned aerial vehicles to monitor borders.

## Conclusion

One area of future focus by the international community should be SALW proliferation resulting from state collapse. Outside states need to determine new economic, political, and if necessary, military means during peacekeeping or stability operations to prevent SALW proliferation from a collapsed state. Scholars



and policymakers should be able to study the issues and devise ways to stop the proliferation of SALW throughout the world. This would in turn help reduce the number and severity of conflicts. Finally, reducing

access to and use of SALW throughout the world, particularly in the developing world, should help ensure more consistent economic growth and political stability worldwide. ■

## Biography

2nd Lt. Josef J. Danczuk, U.S. Army, is assigned to Alpha Battery, 5th Battalion, 7th Air Defense Artillery, at Baumholder, Germany. He is a graduate of the Air Defense Artillery Basic Officer Leaders Course. He holds BA degrees in history and in government and politics from the University of Maryland, focusing on military history and international relations. This article is based on his undergraduate honors thesis.

## Notes

1. United Nations Security Council (UNSC), *Report of the Panel of Governmental Experts on Small Arms*, UNSC, 27 August 1997, accessed 27 June 2016, <http://www.un.org/Depts/ddar/Firstcom/SGreport52/a52298.html>.
2. Patterson Clark, "Spending on the Military, 1988–2012," *Washington Post* online, 26 March 2014, accessed 20 July 2016, <https://www.washingtonpost.com/apps/g/page/world/military-spending-1988-2012/892/>; Special to the *New York Times*, "Soviet Military Budget: \$128 Billion Bombshell," *International New York Times* online, 31 May 1989, accessed 20 July 2016, <http://www.nytimes.com/1989/05/31/world/soviet-military-budget-128-billion-bombshell.html>. The *Times* article reports that in 1989 the U.S. Central Intelligence Agency estimated Soviet military annual spending around \$200 billion.
3. Paul Holtom, *Ukrainian Arms Supplies to Sub-Saharan Africa* (Solna, Sweden: Stockholm International Peace Research Institute, 2011), 5.
4. Paul Holtom, *United Nations Arms Embargoes: Their Impact on Arms Flows and Target Behaviour, Case Study: Liberia, 1992-2006* (Solna, Sweden: Stockholm International Peace Research Institute, 2007), 4–6, 10–12.
5. Center for Army, Conversion, and Disarmament Studies, *Challenges Facing Arms Export Control in Ukraine and the Russian Federation* (Geneva, Switzerland: The Geneva Centre for the Democratic Control of Armed Forces, 2012), 5–6, accessed 27 June 2016, [http://www.dcaf.ch/content/download/102557/1580727/file/RPS\\_14\\_Arms\\_Export\\_Control.pdf](http://www.dcaf.ch/content/download/102557/1580727/file/RPS_14_Arms_Export_Control.pdf).
6. *Ibid.*, 6–7.
7. *Ibid.*, 23.
8. *Ibid.*, 5.
9. *Ibid.*, 6–7.
10. Ukrainian Parliamentary Verkhovna Rada Ad Hoc Investigative Committee, cited in Center for Army, Conversion, and Disarmament Studies, *Challenges Facing Arms Export Control*, 5–6. The Center estimates that the calculations, based on figures from the Institute for Strategic Studies, London, are questionable.
11. Spyros Demetriou, "Politics from the Barrel of a Gun: Small Arms Proliferation and Conflict in the Republic of Georgia (1989-2001)," *Small Arms Survey Occasional Paper* no. 6, (Geneva, Switzerland: Small Arms Survey, 2002), 3–6.
12. *Ibid.*, 9.
13. *Ibid.*, 8–9.
14. *Ibid.*, 10–14.
15. *Ibid.*, 10–11.
16. *Ibid.*, 11–14.
17. *Ibid.*, 21.
18. David D. Kirkpatrick, "In Libya, Fighting May Outlast the Revolution," *New York Times*, 1 November 2011, accessed 27 June 2016, [http://www.nytimes.com/2011/11/02/world/africa/in-libya-the-fighting-may-outlast-the-revolution.html?\\_r=0](http://www.nytimes.com/2011/11/02/world/africa/in-libya-the-fighting-may-outlast-the-revolution.html?_r=0).
19. Bates Gill, "Libya at the Crossroads—the Challenge of Consolidating Peace," commentary in the Stockholm International Peace Research Institute's Global Security and Arms Control online newsletter, 26 May 2011, accessed 27 June 2016, <http://www.sipri.org/media/newsletter/essay/september11>.
20. Christopher S. Chivvis and Jeffrey Martini, *Libya After Qaddafi: Lessons and Implications for the Future* (Santa Monica, CA: RAND Corporation, 2014), 8–9, accessed 27 June 2016, [http://www.rand.org/content/dam/rand/pubs/research\\_reports/RR500/RR577/RAND\\_RR577.pdf](http://www.rand.org/content/dam/rand/pubs/research_reports/RR500/RR577/RAND_RR577.pdf).
21. *Ibid.*, 5–6, 16–17.
22. UNSC, "Security Council Approves 'No-Fly Zone' over Libya, Authorizing 'All Necessary Measures' to Protect Civilians, by Vote of 10 in Favour with 5 Abstentions," United Nations website, 17 March 2011, accessed 27 June 2016, <http://www.un.org/press/en/2011/sc10200.doc.htm#Resolution>.
23. Panel of Experts on Libya, UNSC, "Final Report by the Panel of Experts [on Libya] Established Pursuant to Resolution 1973 (2011) Concerning Libya," United Nations website, 15 February 2014, accessed 27 June 2016, <http://hdl.handle.net/11176/32371>.
24. Giorgio Cafiero and Daniel Wagner, "Four Years After Gaddafi, Libya is a Failed State," *Foreign Policy* in Focus online, 6 April 2015, accessed 27 June 2016, <http://fpif.org/four-years-after-gaddafi-libya-is-a-failed-state/>; "Dozens of Pro-Government Fighters Killed in Libya Clash," 22 June 2016, *Al Jazeera* online, accessed 27 June 2016, <http://www.aljazeera.com/news/2016/06/dozens-pro-government-fighters-killed-libya-clash-160622130408024.html>.



Bolivians, protesting for access to the ocean on 3 August 2015 in La Paz, Bolivia, hold signs reading “The ocean will return to Bolivia.” Bolivia lost its coastal territory after being defeated by Chile in the War of the Pacific (1879–1883). It has argued for decades that it should be allowed sovereign access to the ocean, through which it could export its natural gas. Bolivia currently has nearly free ocean access, paying transport costs but no tariffs to export some 1.6 million tons of cargo through Chile’s ports each year, including nickel, lead, silver, and tin from Bolivia’s mines. (Photo by David Mercado, Reuters)

# Strategic Assessment of Bolivia’s Defense Policy

Cristián Faundes

Considering Bolivia’s dramatic economic growth over the past decade, as well as the increasing sophistication of its defense policymaking process, it seems appropriate to make an assessment from a strategic point of view of its available military resources and current doctrine as they may pertain to achieving its future national policy objectives. This analysis is timely, considering Bolivia’s increasingly strident claim to a sovereign outlet to the Pacific Ocean as a permanent national objective. One such policy of concern reflects

Bolivia’s interest in expanding its territory by reclaiming portions of the Pacific coast it ceded to Chile in a past war that is currently part of sovereign Chilean territory. To conduct this analysis, the *ends, ways, and means* formula will be used to synthesize the concept of strategy that predominates in the hemisphere.

Bolivia, under President Evo Morales, has recently achieved an unparalleled level of political stability and economic growth in its history. This progress has gone hand in hand with the emergence of a new elite that took



political power in 2006 with a firm will and determination to transform the country by consolidating for the first time thirty-six ethnicities in an attempt to establish a genuine plurinational state.<sup>1</sup> To achieve this, new policy foundations are being established, which in turn are generating a new institutional framework of governance. With Morales's reelection at the end of 2014 and his assumption of a third term in office in January 2015, these types of policies that aim at consolidating a plurinational state are projected to continue for another five years.<sup>2</sup>

Given these developments, it seems prudent to make an assessment of Bolivia's defense policy as it relates to its geographical neighbors from a strategic point of view following the model developed by Arthur Lykke, which is based on the ends, ways, and means formula.<sup>3</sup> Such an assessment is especially germane because of the recent resurgent Bolivian claim that it is morally and legally entitled to restoration of territory ceded by Bolivia to Chile after a war fought more than a century ago. The area is currently part of Chile, but Bolivia demands sovereign access to the Pacific Ocean and requires that the outlet be useful to harbor a port.

Reasserting this territorial claim has been institutionalized as a major Bolivian strategic objective as is evident in essential Bolivian strategic-level documents such as: *Plan Nacional de Desarrollo* [National Development Plan] (2007); *Constitución Política del Estado Plurinacional de Bolivia* [Political Constitution of the Plurinational State of Bolivia] (2009); and *Bases para la Discusión de la Doctrina de Seguridad y Defensa del Estado Plurinacional de Bolivia* [Framework for the Discussion of Bolivian Security and Defense Doctrine] (2010). A clear articulation of this policy is found in the National Development Plan, as follows:

Bolivia has declared its maritime integration to the Pacific coast a permanent objective of its

foreign policy, based on historical and judicial rights. This reintegration is justified due to commercial, economic, and political impera-

tives as well as access to the exploitation of marine resources.<sup>4</sup>

The national strategic objective of regaining previously ceded territory and gaining a sovereign corridor to the Pacific Ocean is also evident in the restructuring of the government's administrative bureaucracy that established, under the guidance of the Ministry of Foreign Affairs, the Maritime Restitution Board as well as the Strategic Office for Maritime Restitution (both created in April 2011), and the publication of *El Libro del Mar* [The Book of the Sea] (2014).<sup>5</sup>

Other contributing elements that suggest a need for monitoring Bolivian steps to achieve this object are internal changes occurring in Bolivia noted below:

- The rapid growth of Bolivia's gross domestic product (GDP), in fifteen years has increased 360 percent, reaching US\$30.601 billion in 2013, which enables more aggressive policy initiatives.<sup>6</sup>
- Bolivia's rapidly increased defense budget over a six-year span from 2008 to 2014, almost doubling with a 93 percent increase.<sup>7</sup>
- Bolivia emergence as China's fifth-largest weapon-systems buyer, reaching US\$289 million, just behind Pakistan and Bangladesh.<sup>8</sup>
- Changes in published national defense policy that emerged from the 2004 *White Paper on National Defense*.<sup>9</sup>

According to what has been shown so far, and following Lykke's formula and definitions, an assessment of the main guidelines of Bolivian defense policy will be conducted as follows: the *ends* make up the objectives, the *ways* become concepts that are established in order to obtain those objectives, and the *means* become



A 2012 postage stamp issued by the Bolivian government with a map showing Bolivia's former coastal access to the sea. At the top of the stamp, a text line reads, "Bolivian coastline seized by Chile in 1879." At the bottom of the stamp, the text line reads, "Bolivia reclaims its pathway to the sea." (Photo courtesy of Cristián Faundes)



Bolivian Navy military police march 7 August 2008 during a military parade in Cochabamba, Bolivia. (Photo courtesy of Wikimedia Commons)

resources on which the concepts are based. In this sense, we also incorporate salient perspective from H. Richard Yarger, another notable military scholar, who observes that a valid strategy should incorporate a balanced assessment of ends, ways, and means; otherwise, the success of the strategy would be at risk.<sup>10</sup>

## Ends

The Bolivian constitution extends the traditional primary mission of the Bolivian armed forces to encompass internal aspects related to social and economic development as well as political stability. It establishes as its fundamental mission “to defend and preserve the country’s independence, security, and stability, as well as its honor and sovereignty; ensure the Constitution as the supreme rule of law, guarantee the stability of a legally established government, and participate in the comprehensive national development of the country.”<sup>11</sup> Though the Plan for National Development reaffirms the previous armed forces missions, it goes even further by assigning to the defense sector the task of supporting socioeconomic inclusion as well as fighting against poverty.<sup>12</sup> Consequently, the framework for the *Discussion of Bolivian Security and Defense Doctrine* determines four security and defense objectives:

- ◆ *Integral security and defense.* Ensuring the sovereignty and independence of the Nation, protecting

the territory and its population, and defending its strategic natural resources against domestic and foreign threats.

- ◆ *Participation in the Nation’s comprehensive development.* Increasing defense sector involvement in the country’s overall development to improve the quality of life of Bolivians.
- ◆ *Integration and peace.* Promoting regional and global integration and peace in the defense sector.
- ◆ *Civil defense.* Developing an optimal and diverse infrastructure in this sector.<sup>13</sup>

In this regard, it is noteworthy that Bolivia’s *White Paper on National Defense* promotes the claim for sovereign access to the Pacific by designating it as a permanent national objective.<sup>14</sup> Consequently, it incorporates “defeating any resistance that opposes the attainment of the national objectives” among the goals of the defense sector.<sup>15</sup> The document overtly shows that Bolivian defense policy rests upon such aspirations, notably asserting a commitment “to stand firm in our unwavering desire to return to the Pacific with sovereignty.”<sup>16</sup>

All of the aforementioned points frame a policy geared toward the expansion of the country’s borders using whatever means possible. What has been recently highlighted is reinforced in the *Framework for the Discussion of Bolivian Security and Defense Doctrine*, in which the state’s objectives include “promoting





maritime restitution with sovereignty,<sup>17</sup> as a vital objective for the development of the country.<sup>17</sup> President Evo Morales referred to this objective in a direct and explicit way during a speech given to the Legislative Assembly on 22 January 2011: “Atacama belonged to Bolivia before. It is true. We hope to recover it soon.”<sup>18</sup> It must be pointed out that Atacama, the name of the territory in question, is one of Chile’s fifteen political-administrative regions (specifically, the third), and it has a surface area of 75,176 km<sup>2</sup> (equivalent to Panama’s territory).

## Ways

Bolivian defense policy incorporates the armed forces in internal and external security tasks, which in practice takes the form of an emphasis by the armed forces on support of internal development, public safety, and the fight against drugs and contraband. In this context, the Morales presidency has expressed its desire to formulate a defense policy “with the aim of reestablishing and strengthening its institutional capacities.”<sup>19</sup> Therefore, it is developing a series of plans and programs geared to equip and modernize the armed forces; establish





control of the territory; support economic and social development, including socioeconomic inclusion as well as the fight against poverty; carry out health and educational campaigns with military participation; provide support to the civilian population in emergencies and catastrophes; support the development of borders; and support environmental protection and preserve cultural heritage in protected areas.<sup>20</sup> Added to this, in 2010, a series of initiatives were created to optimize the armed forces' joint operative structure and their strategic deployment; encourage a culture

The Bolivian Armed Forces formally receive thirty-one armored vehicles from the People's Republic of China as part of a military support agreement in a ceremony held 29 July 2016 in La Paz, Bolivia. (Photo by Daniel Espinoza, Bolivian Information Agency)

of respect toward human rights; establish the armed forces as the protector of democracy and the state's institutional framework; strengthen the state's civil defense system; strengthen the defense sector's projects in support of the state's productive undertakings; and strengthen regional military integration for security and defense purposes, among others.<sup>21</sup>



From a military point of view, Bolivia does not at present appear to contemplate a near-term scenario involving initiating military aggression outside its borders, even though it identifies a potential situation of conventional aggression against it, to which it has adopted an uncommon military defense model of joint responsibility, both military and civilian.<sup>22</sup> This two-dimensional concept consists of the following:

- The use of conventional military force under the joint use of flexible units; and,
- If the scenario of an aggression with superior fire-power arises, the conventional military force is to be modified and directed to avoid direct combat in order to gain more nonconventional maneuvering freedom in an irregular warfare scheme, adopting the so-called “Doctrina de Republiquetas,” which makes the citizen a soldier of the state.<sup>23</sup>

In other words, Bolivia—aware that it is a poor country that would have a difficult time supporting or sustaining a conventional fight—appears to be contemplating an insurgent scenario against potential adversaries. One result is interesting work is being done to strengthen the Bolivian Special Forces, who specialize in unconventional warfare.

The direction of such developments should be evaluated and monitored in light of the stated policy of maritime restitution that has a prominent place in the concept of defense as it is curiously expressed in relation to the national development environment: “when maritime restitution becomes a vital aspiration for the development of Bolivia, the State sees the imperious necessity to maximize the necessary diplomatic efforts that enable the use of oceans and seas worldwide, with the purpose of obtaining economic development and enjoying the benefits that these related activities generate.”<sup>24</sup>

## Means

With regard to assessment of means available to achieve strategic objectives, it is noteworthy that Bolivia’s defense budget’s accelerated growth is directly related to the rise in GDP. Therefore, at present, improvements in the defense sector can take place without noticeable effect to funding of other projects related to the country’s development. In fact, the defense budget remained between 1.5 percent and 1.7 percent of the country’s GDP between 2008 and 2014. In this sense, we can conclude that, without an unusual perceived threat in Bolivia, this rate should remain stable in the short- and mid-term.

Expanding on this, if we consider that the government’s objective is to reach a GDP of U.S.\$100 billion in 2020, then it is possible to project a defense budget of U.S.\$1.5 billion.<sup>25</sup> Taking into consideration that Bolivia’s defense budget in 2014 was U.S.\$490 million, then by analyzing GDP growth, we can estimate that Bolivia could triple its defense budget in the next five years.<sup>26</sup>

With regard to how Bolivia has targeted the rising funding available to the defense sector, the focus has thus far been on improving the conditions of the troops, quarters, and wages. The investment projects’ objective has been to improve the troops’ living conditions as well as to invest in the military units on the country’s borders.<sup>27</sup> According to what the minister of the presidency, Ramón Quintana Taborga, has highlighted, 80 percent of the armed forces budget is earmarked for paying wages.<sup>28</sup> The goal of improving wages is to reduce inequality in the ranks. For example, in 2009, there was a wage increase of 26 percent for low-ranking soldiers, and in 2012, there was an adjustment of 8 percent for sergeants.

Improvements notwithstanding, as previously alluded to, Bolivia lacks the material warfighting capability to conduct sustained conventional operations, including lacking such systems as capable radar systems and effective interceptor and air defense aircraft. The capabilities they do have remain at the low end when compared to the capabilities of its neighbors. As a result, Bolivia’s military is currently incapable of sustaining conventional offensive operations, night combat, and even maneuver against better funded and more technologically capable adversaries.<sup>29</sup> Compounding its lack of technological and material warfighting capability, due to the relative weakness of the defense sector’s industrial base, the focus of which has primarily been supporting development (except the Navy’s shipyards), Bolivia is heavily dependent on imported replacement parts, ammunition, and other war-making material in general.

This lack of conventional capability stems in part from an emphasis on material acquisition decisions that aim instead at supporting the development of dual-purpose capabilities that could be applied to both unconventional warfare as well as the requirements of domestic law enforcement, including those required to support the fight against drugs and contraband, emergency and rescue situations, operations against border crimes, and the patrolling of regions with public safety issues.<sup>30</sup> Such dual-purpose efforts are useful in

strengthening the country's Special Forces unconventional warfare capabilities, which, it should be observed, is a traditional way underdeveloped countries prefer to fight wars, and which have sometimes been very successful in achieving objectives.

## Final Considerations

Bolivia's defense policy explicitly outlines diverse purposes that broaden the traditional concept of the military by assigning tasks to the armed forces that support internal security, political stability, economic and social development, and public safety. Such tasks respond ultimately to the urgent needs of one of Latin America's poorest countries, but they also significantly extend the military's range of action, basically exercising its logistical and organizational capabilities.

Consequently, the defense policy is structured from diverse concepts that seem to blur the notion of purely military effort and expand the focus on what is ultimately one of the nation's root problems, the development of the country in general terms. In this sense, no matter how much of a correlation exists between ends and ways, an imbalance can be perceived, in Yarger's terms, by paying attention to the essence of the armed forces and the utility of military means, which depend on the military contribution's efficiency and efficacy in the

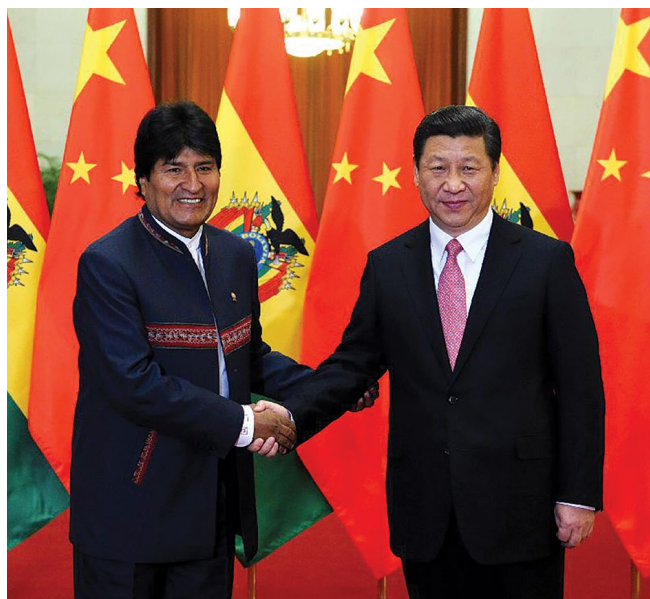
extension of such involvement into what has otherwise been regarded as the purely civilian sector of the society.

From a different perspective, one can appreciate that the country's current conditions for development prevent Bolivia from designing a force projection capability. Therefore, it employs its military resources to aid internal development; however, as long as its maritime aspiration to have a free, useful, and sovereign outlet to the Pacific Ocean through Chile remains, Bolivia's defense sector will

have to adjust its policies to generate concepts that will enable the attainment of such an objective and will be expected—as a matter of policy—to be developing the necessary means to make this happen as a policy option. The opportunity for such an adjustment stems from the fact that the country is growing like never before, which makes it possible to project a defense budget increase of 300 percent in the next five years.

Finally, as previously noted, the principal weapons supplier to Bolivia is the People's Republic

of China. Consequently, the direction of Bolivia's policy with regard to reasserting control over Atacama could plausibly invite a somewhat more ominous dimension to the issue that should be of singular possible concern to the hemisphere in general, and that is the strengthening of its relationship with its ideological and strategic ally, the People's Republic of China. ■



Chinese President Xi Jinping welcomes Bolivian President Evo Morales during a ceremony 19 December 2013 prior to their meeting at the Great Hall of the People in Beijing, China. (Photo courtesy of Ministry of Government of Bolivia)

## Biography

*Cristián Faundes is a researcher for the Strategic Studies Center and the Chilean Army War College. He received a master's degree in security and defense studies, specializing in defense policy, from the Chilean National Academy of Political and Strategic Studies, and a master's degree in military sciences in international conflict and negotiation from the Chilean Army War College. He is a graduate from the Advanced Course on Hemispheric Security and Defense at the Inter-American Defense College, Organization of American States, Washington, D.C. He also took specialization courses at the William Perry Center for Hemispheric Defense Studies and the Eisenhower School for National Security and Resource Strategy, National Defense University, Washington, D.C.*



## Notes

1. Centro de Estudios Estratégicos de la Academia de Guerra (Strategic Studies Center and the Chilean Army War College, or CEEAG), "Relaciones Chile-Bolivia Implicancias para la Defensa," cycle of conferences offered by CEEAG to the Chilean army. September–November, 2014.
2. In 2015, Bolivian President Evo Morales called for a "re-referendum" to ask the Bolivian people for a second time to allow modification of the constitution that would permit him to serve a fourth consecutive presidential term (from 2020 to 2024). The citizens voted against the modification in a February 2016 referendum.
3. Arthur F. Lykke Jr., "Toward an Understanding of Military Strategy," eds. Joseph R. Cerami and James F. Holcomb, *U.S. Army War College Guide to Strategy* (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2001), 179–85, accessed 6 July 2016, <http://www.au.af.mil/au/awc/awcgate/ssi/00354.pdf>.
4. Supreme Decree 29272, *Plan Nacional de Desarrollo: Bolivia Digna, Soberana, Productiva y Democrática para Vivir Bien: Lineamientos Estratégicos (2006–2011)*, Ministry of Development Planning, 12 September 2007, (La Paz: Gaceta Oficial del Estado Plurinacional de Bolivia, 2012) accessed 28 July 2014, [http://www.sns.gob.bo/planificacion/documentos/5\\_PND%20VERSION%20OFICIAL.pdf](http://www.sns.gob.bo/planificacion/documentos/5_PND%20VERSION%20OFICIAL.pdf).
5. Ministerio de Relaciones Exteriores de Bolivia, *El Libro del Mar*, 2nd ed. (La Paz: Ministerio de Relaciones Exteriores de Bolivia, 2014), accessed 7 July 2016, <http://embajadadebolivia.it/sites/default/files/archive/LIBRO%20DEL%20MAR-BOLIVIA-EDICION%20BILINGUE%202014.pdf>.
6. World Bank, "World DataBank," World Bank Group website, accessed 6 July 2016, <http://databank.worldbank.org/data/home.aspx>.
7. Marcela Donadio and María de la Paz Tibiletti, *Atlas Comparativo de la Defensa en América Latina y el Caribe* (Ciudad Autónoma de Buenos Aires: Red de Seguridad y Defensa de América Latina [Latin American Security and Defence Network, or RESDAL], 2014), 142.
8. "La Industria Militar China Está Atestando Golpes a Occidente," RT TV-Novosti, 25 October 2013, accessed 6 July 2016, <http://actualidad.rt.com/actualidad/view/109419-china-industria-armas-mundial>.
9. Ministerio de Defensa de la República de Bolivia, *Libro Blanco de Defensa de Bolivia* (La Paz: Instituto Geográfico Militar, 2004), accessed 6 July 2016, <http://www.oas.org/csh/spanish/documentos/Bolivia%20-%202004.pdf>.
10. H. Richard Yarger, "Towards a Theory of Strategy: Art Lykke and the Army War College Strategy Model," n.d., accessed 7 July 2016, <http://www.au.af.mil/au/awc/awcgate/army-usawc/stratpap.htm>.
11. Estado Plurinacional de Bolivia, *Constitución Política del Estado* (La Paz: Gaceta Oficial de Bolivia, 2009), 244.
12. Ministry of Development Planning, Supreme Decree 29272, 91.
13. Ministerio de Defensa del Estado Plurinacional de Bolivia, *Bases para la Discusión de la Doctrina de Seguridad y Defensa del Estado Plurinacional de Bolivia* (La Paz: Ministerio de Defensa, 2010), accessed 7 July 2016, [http://www.ceedcds.org.ar/Srd-LibBL/BOL/BASES\\_DISC\\_POL\\_DOCTRINA\\_DEF.pdf](http://www.ceedcds.org.ar/Srd-LibBL/BOL/BASES_DISC_POL_DOCTRINA_DEF.pdf).
14. Ministerio de Defensa, *Libro Blanco*, 21.
15. *Ibid.*, 36.
16. *Ibid.*, 42.
17. Ministerio de Defensa del Estado Plurinacional de Bolivia, *Discusión de la Doctrina*, 26.
18. C. Vergara and I. Toro, "Gobierno Boliviano Aclara Que Dichos de Morales Sobre Atacama Fueron 'Una Broma,'" *La Tercera*, 23 January 2011.
19. Ministry of Development Planning, Supreme Decree 29272, 86.
20. *Ibid.*, 88–92.
21. Ministerio de Defensa del Estado Plurinacional de Bolivia, *Discusión de la Doctrina*, 40–46.
22. Ministerio de Defensa de la República de Bolivia, *Libro Blanco*, 45.
23. Ministerio de Defensa del Estado Plurinacional de Bolivia, *Discusión de la Doctrina*, 34.
24. *Ibid.*, 45.
25. Statement from Bolivia's vice president, Álvaro García Linera, as quoted by Alejandro Tapia, "Los Desafíos Que Tendrá Evo Morales en Su Tercer Mandato," *La Tercera*, 19 January 2015.
26. Donadio and Tibiletti, 142.
27. *Ibid.*, 141.
28. "Sargentos y Suboficiales Bolivianos Convocaron a Una Nueva Marcha," *Télam* website, 28 April 2014, accessed 7 July 2016, <http://www.telam.com.ar/notas/201404/61052-bolivia-conflicto-fuerzas-armadas.html>.
29. Carl Marowski, "La Seguridad y la Defensa en Bolivia," Discussion Paper No. 35, Strategic Studies Center, Chilean Army War College.
30. René Quenallata, "Bolivia Expone al Mundo Vulnerabilidad de Su Defensa Militar," *Opinión* website, 28 July 2013, accessed 7 July 2016, <http://www.opinion.com.bo/opinion/articulos/2013/0728/noticias.php?id=101669>. Since 2006, the renovation of Bolivia's military vehicle fleet has been noteworthy: 148 trucks, 42 buses, 142 vans, 40 four-wheeled all-terrain vehicles and motorcycles; the acquisition of nine Diamond and six fighter aircraft, six Robinson R-44 helicopters, two AS350 and two EC145 Eurocopters; and a personnel transport aircraft fleet.

# MR

## We Recommend



**J**ames R. Locher III was the principal intellectual and administrative force behind the 1986 Goldwater-Nichols Act that resulted in revolutionary improvements in joint planning and operations among the services and within the Department of Defense overall. In the hope that a comprehensive similar reform could be made across the government among the many agencies responsible for national security, Locher went on to lead an intense research and lobbying effort by the Project on National Security Reform (PNSR) to promote broader reforms aimed at mitigating the current dysfunctional national security system. For more than five years, the PNSR staff analyzed sources of inefficiency and formulated fixes to transform the system for twenty-first century challenges. However, despite initial interest by the Obama administration (which later waned), the production of a great number of intellectual products, and support by a vast number of distinguished representatives of government, academe, and the military, the PNSR could not

rouse enough sustained support to overcome institutional parochialism and inertia to bring about transformation. In his final message at the close of PNSR operations 31 December 2011, Locher attributed failure to effect what he asserted are vitally needed reforms to “two principal obstacles ... [government] denial about the seriousness of shortcomings in the national security system and lack of political will to fix these shortcomings.” The recommended article, “National Security Reform and the 2016 Election,” was penned in part by one of the principal researchers formerly employed in the PNSR effort. It discusses why the PNSR effort failed and why the issue of failure to conduct comprehensive national security reform remains a vital and largely unaddressed issue that increasingly poses a threat to the national security of the United States by not addressing anachronistic and dysfunctional features embedded in the system. The article may be accessed at the following address: <http://ndupress.ndu.edu/Portals/68/Documents/stratforum/SF-293.pdf>



March 2016

## STRATEGIC FORUM

National Defense University

### About the Authors

Christopher J. Lamb is Director of the Center for Strategic Research (CSR), Institute for National Strategic Studies, at the National Defense University. He is also the former Study Director for the Project on National Security Reform. Joseph C. Bond was a Research Assistant in CSR and holds a Master of Arts in Government from Regent University.

### Key Points

- ◆ Over the past 20 years, there has been a sea change in senior leader views on national security reform from skepticism to support. Nine major studies argue the national security system cannot generate or integrate the capabilities needed to manage security problems well. The system is “broken.”
- ◆ Yet there are major obstacles to reform. Inexperienced U.S. Presidents discover system limitations too late, when it is politically difficult to correct them; experts who have not studied system behaviors underestimate their liabilities; and leaders in the Department of Defense are more likely to favor reform than their counterparts in other departments, which creates a bureaucratic backlash against reform.
- ◆ However, two key prerequisites for success are in place: galvanizing cases of unsustainable performance, and in-depth problem analysis that reveals the origins of the same. A third prerequisite is committed leadership. With that in mind, the authors identify several reasons why Presidential candidates should embrace national security reform during the 2016 campaign.

## National Security Reform and the 2016 Election

By Christopher J. Lamb and Joseph C. Bond

**T**here are few issues of greater intrinsic importance to the United States than national security reform—or one riper for resolution. Twenty years ago most senior leaders were skeptical of allegations that the national security system was “broken”; they believed the system functioned well enough to manage the Nation’s most pressing problems. Since then numerous prominent experts have been sounding the alarm from inside the system and from without.<sup>1</sup> No fewer than nine blue-ribbon groups have argued in favor of system reforms (see tables 1 and 2).<sup>2</sup> The overwhelming majority of scholars publishing independently on the issue favor reform.<sup>3</sup> During the 2008 Presidential election, the momentum in favor of national security reform was so strong that many thought it was inevitable. This presumption was reinforced when President Barack Obama appointed well-known proponents of reform to senior positions in the National Security Council staff, Department of State, Department of Defense (DOD), and Intelligence Community.<sup>4</sup> Yet reform did not take place during the Obama administration, and so far it has not been an issue in the 2016 Presidential race, either. This paper examines why reform was sidetracked, whether it could emerge as a campaign issue during the 2016 Presidential election, and why it is in candidates’ and the Nation’s interest that it does.

### The Case for Reform

Before identifying reform obstacles, it helps to provide context by explaining the scope and definition of the topic and summarizing the arguments in favor of reform. The term *national security system* means the group of interacting, interrelated, and interdependent U.S. national security institutions that form a complex whole to provide critical security functions, including strategic warning, strategy, resource allocation, issue management, capability-building, system management, and performance oversight from the President and Congress down to personnel

[ndupress.ndu.edu](http://ndupress.ndu.edu)

SF No. 293 1

CENTER FOR STRATEGIC RESEARCH





A bearded Egyptian police officer chants slogans and holds the Quran during a Salafi Muslim protest in support of the bearded police officers who were prevented from carrying out their work in the interior ministry, in front of Abdeen presidential palace in downtown Cairo, Egypt, on 1 March 2013. Several police officers had been suspended for growing beards in violation of anti-Muslim regulations enacted by Hosni Mubarak before his ouster in 2011. The officers argued they were being discriminated against because of their religion, while supporters of the regulations were opposed to the perceived Islamization of the police force. (Photo by Khalil Hamra, Associated Press)

# Commanding the Right Islamic Morality and Why It Matters

Chaplain (Maj.) Seth H. George, U.S. Army

Sebastian Gorka rightfully states that the Islamic State (IS) can only be defeated if we understand and undermine Abu Bakr al-Baghdadi's claim to moral legitimacy.<sup>1</sup> Baghdadi's claim to moral legitimacy is similar to other jihadist groups, enabling them to recruit, sometimes at astounding rates.<sup>2</sup> Why is this, and is there anything we can do about it? In order to help understand what the United States's role may be in defeating IS and other jihadist organizations, this article will introduce two

ideas that may be new to most readers: (1) an Islamic moral and legal duty called "commanding the right and forbidding the wrong," and (2) how jihadists have crafted a populist narrative using this duty to establish their own moral and legal legitimacy.

Highlighting the influence of *commanding right and forbidding wrong*, also translated "to enjoin that which is good and to forbid that which is evil," is an effort to understand the underlying principle by which Islamic communities seek to organize civic

and personal life.<sup>3</sup> Groups such as IS claim to be exemplars of the duty and by doing so not only offer financial benefits to those who join, but also the most effective recruiting tool available, an “authentic” Islamic identity.<sup>4</sup>

The concept of commanding the right or enjoining good can easily go unnoticed because it is an assumed basis of morality just as Westerners, religious or not, assume the Golden Rule. But in times of turmoil and injustice, the duty may be invoked just as the civil rights leader Dr. Martin Luther King stood upon the moral authority of the Golden Rule to challenge the public morality of the status quo.<sup>5</sup> Likewise, Muslim visionaries have been able to challenge the public morality of their status quo with reforms they claim are rooted in the moral duty to *enjoin the good and forbid evil*.

## The Formation of Islamic Law and Its Promise for Success

Since the Quran does not comprehensively describe how to *enjoin the good*, Muhammad and his companions (approximately 610–680 AD), known as the *salafi* or the pious ones, are frequently referred to as the “best of generations” and serve as exemplars of the duty. Therefore, early Islamic scholars meticulously cataloged their practices and traditions in order to determine how they lived and made decisions. These traditions, or *hadith*, became a practical guide for life. Consequently, from the earliest stages of the Islamic *ummah* (community), the duty is woven through every aspect of life from banking to family law and is so fundamental it is nearly considered the “Sixth Pillar” of Islam.<sup>6</sup>

In time, the Quran and the hadith became the first and second sources of Islamic law by expert scholars and jurists known as the *ulema*. Leading scholars such as Imams Hanafei, Maliki, Shafei, and Hanbal, whose legal methods formed the four main Sunni schools of jurisprudence, recognized that certain matters of faith and practice found consensus, or *ijma*, across the entire Islamic community. *Ijma* became the third source of Islamic law. Complex matters required interpretive reasoning and analogical adjudication, making *qiyas* (the use of reason and analogy) the fourth source of Islamic law.<sup>7</sup>

During the golden age of the Islamic Empire (approximately the ninth to twelfth centuries), jurists developed a comprehensive understanding and interpretive method of these four sources of Islamic law

called *ijtihad*, which was applied to issues such as trade agreements, war, treaties, civil disputes, and practices of personal and public piety. This tradition, often referred to as “traditional Islam,” survived the Mongol invasion and extended through the Ottoman Empire.

Today, Islamic extremists and jihadists interpret their sacred texts by connecting the success of the salafi and the golden age with the application of passages from the Quran such as Surah 3:104, which says, “Let there arise out of you a band of people inviting to all that is good, enjoining what is right, and forbidding what is wrong.”<sup>8</sup> An early hadith from the first caliph, Abu Bakr, states, “If you follow the (right) guidance and forbid what is wrong, no hurt can come to you from those who are in error.”<sup>9</sup> These passages and others like them have prompted many Muslims to wonder, “If the duty was a means of success for the Salafi, why not us?”

## The Fall of Legal Procedure and the Rise of Moral Duty from 1880 to 1980

Although the ulema had been the interpreters of Islamic law for centuries, they lost influence due to political changes starting with the centralization of power in the Ottoman Empire and its demise, culminating with the abolishment of the caliphate in 1924. Additional challenges to their influence were the rise of socialism, the success of Israel, the disparate distribution of oil wealth that mainly benefited certain wealthy families, and the perceived domination of Western powers. These grievances are often discussed as explanations for terrorism. But under the surface, a religious reformation was taking place in which the authority of the ulema was being challenged by “prophets” of the moral duty who promised success even as they planted the seeds of jihadism.

As early as 1880, members of the ulema such as Muhammad ‘Ilish (1802–1882) and others predicted that if the populist teachings of Jamāl al-Dīn al-Afghānī (1838–1897) and Muhammad ‘Abduh (1849–1905) were accepted over the traditional jurist’s authority to interpret Islamic law, there would be “religious anarchy,” “civil war,” and “chaos in religion for common Muslims.” ‘Ilish pointed to the rise of Muhammad al-Wahhab, who had rejected the *consensus* of jurists and waged *jihad* within Arabia, as a case in point. ‘Abduh effectively argued that any educated person had the right to interpret Islamic law, and particularly the Quran, rather



than relying upon specially trained jurists.<sup>10</sup> In Egypt, this spawned advocates of everything from progressive education and gender reform to political Islamists and Salafist movements. Ironically, these movements were as pro-European in their early days as they were assaults on the traditional influence of the ulema. However, by the mid-twentieth century they were producing revolutionary groups with political potency.

The Muslim Brotherhood and Sayyid Qutb (1906–1966) argued that the administration of Gamal Abdel Nasser lacked true commitment to Islam and failed to live and govern according to the Quran and hadith. Qutb also charged that the ulema was bought and paid for by the government, was unable to hold government officials accountable, and was allowing society to slip into un-Islamic practices leading to an ignorance of Islam. Qutb argued that the state of affairs required an eternal jihad by faithful Muslims against these “near enemies” of Islam based on what the salafi had done in order to *enjoin the good*.<sup>11</sup>

Although Qutb’s populist tone stopped short of calling for violent jihad, Salam Faraj went further, arguing that jihad in its fullest sense had become a neglected duty. He reasoned that the dangers posed by Egyptian leadership in the 1970s were analogous to the dangers of the thirteenth-century Mongol rule. Faraj justified the assassination of Anwar Sadat as an act of jihad by positing that fighting the near enemy must be a priority.<sup>12</sup>

Because Qutb and Faraj were not legally trained, they were dismissed by the ulema and charged with “cherry picking” certain jurists and hadith to advance their ideas. However, the combination of Qutb’s populism and Faraj’s individualism shaped the conditions for jihadist moral legitimacy in three ways. First, their writings were laced with quotations from the Quran and hadith and were crafted with a passionate rhetoric to engage fellow Muslims regarding their future.

Second, because the narrative initiated by ‘Abduh and others had cast so much doubt on the ulema, their legal scholarship was no longer perceived as authoritative but a man-made tradition propped up by outdated and rigid methods of *ijma* and *qiyas*. This second point was partially due to a narrative that the traditional ulema had created in the nineteenth century in order to prevent ‘Abduh and his students from reinterpreting Islamic law. But the strategy failed, and rather than preserving the role of specially trained jurists, they were marginalized.<sup>13</sup>

Finally, with the ulema and their approach to Islamic law undermined, these lay reformers framed their arguments upon the moral essence of the law, the sacred duty to command the right and forbid the wrong. By conscientiously pursuing this duty, the promises of Islam would be realized and the ummah’s lost honor restored.

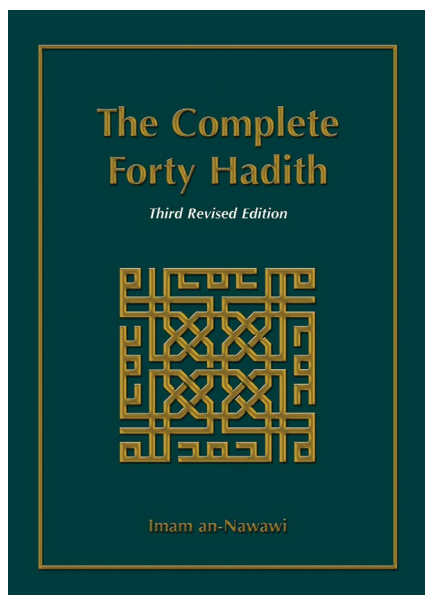
This appeal to morality combined with the political undercurrents of change boiled over in Iran with the Islamic Revolution

in 1979 and Ruhollah Khomeini (1902–1989), who fueled the Shia revolution by arguing he would be a “just jurist”:

Command over you is worth still less in my eyes, except for this: by means of ruling and commanding you I may be able to establish the “right”—i.e., the laws and institutions of Islam—“and destroy the wrong”—i.e., all impermissible and oppressive laws and institutions.<sup>14</sup>

The rise of Hamas over the more secular Palestine Liberation Organization also reflects the trend toward Islamic morality. The opening statement of Hamas’s Charter is lifted straight out of the Quran 3:110:

In the Name of Allah, the Merciful, the Compassionate ... You are the best community that has been raised up for mankind. Ye enjoin right conduct and forbid indecency; and ye believe in Allah. And if the People of



An English-language translation of a collection of the sayings and actions of Muhammad and his companions used in conjunction with the Quran to guide Islamic jurisprudence. Such collections are titled *Hadith*. Of the many different collections of hadith, the one by Imam an-Nawawi, pictured above, is among the most famous and enduring.



Islamic scholars at an Abbasid library. Maqamat of al-Hariri illustration by Yahyá al-Wasiti, Baghdad, 1237. (Photo courtesy of Wikimedia Commons)

the Scripture had believed, it had been better for them. Some of them are believers; but most of them are evil-doers.<sup>15</sup>

Sadat's assassination in 1981 by the Jihad Organization and al-Jama'a al-Islamiyya led to a violent campaign to save Muslims from the "near enemies" by means of the twin principles of jihad and *hisbah*, i.e., those who command right and forbid wrong.<sup>16</sup> Osama bin Laden complained:

The Saudi regime imposed on the people a life that does not appeal to the free believer. They wanted the people to eat and drink and celebrate the praise of God, but if the people wanted to encourage what is right and forbid what is wrong [a duty enjoined upon them by the Qur'an], they can't. Rather, the regime dismisses them from their jobs and ... they are detained in prisons. I have rejected to live this submissive life ... I found myself forced ... to carry out a small part of my duty.<sup>17</sup>

## Living by the New Moral Narrative

Jihadists today who command the right are powerful recruiters merely by living in compliance with

hadith such as this: "Whoever sees a wrong, and is able to put it right with his hand, let him do so; if he cannot then with his tongue; if he cannot then with his heart. That is the bare minimum of faith."<sup>18</sup> While this hadith is a no-nonsense approach to personal and public morality, it also gives latitude for a benevolent application of *enjoining the good* by most jurists. Yet jihadists have rejected latitude in favor of their own interpretation which turns *use of the hand* into a strict ideology of hisbah applied to all spheres of life, especially public piety.<sup>19</sup> This is the ideological basis for al-Baghdadi's moral legitimacy. Those who attempt to confine *enjoining the good* to personal piety, or jihad to an inner spiritual struggle, but fail to support their perspectives with evidence from all four sources of Islamic law, cannot sustain their arguments in the face of someone like al-Baghdadi, who is well versed in this legal and moral narrative.

The declaration of a caliphate is another expression of commanding the right and is a call to the spirit of piety that has attracted thousands of recruits to participate as lawyers, civil servants, soldiers, and most notably, hisbah—morality police who forbid the wrong. One only has to watch the "Jihadist Next Door" to see its appeal in Britain, or the ISIS VICE News documentary to see that according to their public image, IS is engaged in a comprehensive social program of *enjoining the good* in which modesty and respect for women are encouraged and activities such as price gouging and mixing water with gasoline are monitored and forbidden.<sup>20</sup> Additionally, leaders of IS submit to the decisions of the Islamic courts and have punished those whom the Syrian government would not.<sup>21</sup> This has a broad appeal because it appears as though everyone is accountable to the law. The journalist Jurgen Todenhofer has noted IS is attracting recruits who are "winners" from their respective communities, not "losers."<sup>22</sup> Furthermore, those willing to fight and die as martyrs are memorialized as hisbah, i.e., those who have died commanding the right and forbidding the wrong.<sup>23</sup>

## The Ulema's Response

After Salam Faraj assassinated Anwar Sadat and described jihad as a neglected duty, the Al-Azhar



University Mufti Jad al-Haq articulated the traditional role of jurists in an accurate but unpopular tone: “Piety is for Muslims as a whole, but the religion and decreeing its precepts and what is lawful and what is forbidden are for the people who are specialized in it.”<sup>24</sup>

The “Amman Message” written by the traditional scholars of Jordan responded to jihadists with this as part of its opening statement:

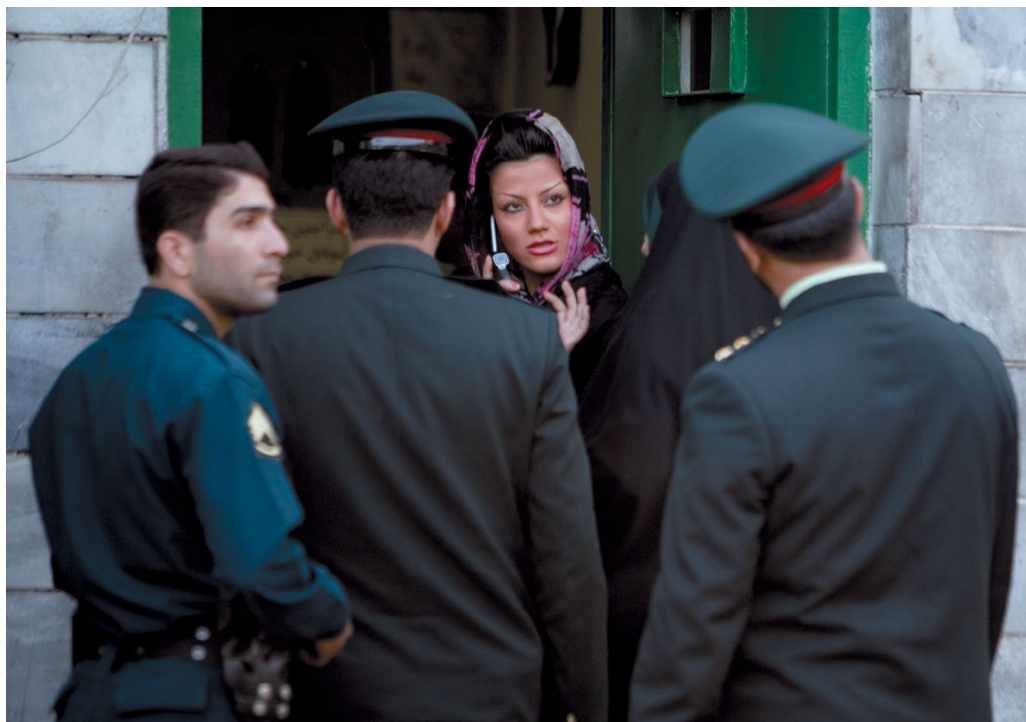
“This magnificent message that the

Originator—great is His power—revealed to the unlettered Prophet Muhammad—God’s blessings and peace upon, and that was carried by his successors and the members of his household after him, is an address of brotherhood, humanity and a religion that encompasses all human activity. It states the truth directly, commands what is right, forbids what is wrong, honors the human being and accepts others.”<sup>25</sup>

The “Open Letter to al-Baghdadi” written by a wide assortment of scholars from across the Middle East disputes the actions of IS and claims their use of hisbah is coercion and assault.

The scholars present their case point by point in saturating the Open Letter with words stating “this is forbidden,” “this is prohibited.” Under the heading “Coercion and Compulsion,” the authors write,

In Al-Raqqa, Deir el-Zor and other areas under your control, armed groups who call themselves “al-hisbah” make their rounds, taking people to task as though they were assigned by God to execute His



Iranian police interrogate a woman suspected of breaking restrictions on Islamic dress codes at a police station in eastern Tehran, Iran, on 23 April 2007. Iranian police, who are charged with enforcing Iranian morality laws pertaining to dress, typically crackdown on women’s dress before the summer season when soaring temperatures tempt many to flout the strict Islamic dress code. (Photo by Morteza Nikoubazl, Reuters)

commandments. Yet, not a single one of the Companions did this. This is not enjoining the right and honourable and forbidding the wrong; rather it is coercion, assault, and constant, random intimidation.<sup>26</sup>

These statements are not only refutations of jihadist morality but also an appeal to the same Islamic morality for legitimacy. They are also undergirded by the theological belief that it is Allah who has called Muslims to command the right as a means to transcend political rivalries, and not as an interpretive method to which one group may lay an exclusive claim. This is of critical importance to recognize. Since the rules are rooted in religion, the duty to govern is sacred. Both the jihadists and the scholars share this conviction with a key distinction being that most scholars today believe Islamic law does not require a caliphate but accommodates a variety of governing arrangements such as monarchies, autocratic leaders, or even liberal democracies (not be confused with secular democracies) such as the 2014 constitution of Tunisia. Furthermore, even though the duty to govern is sacred, government is not perceived as an instrument to enforce piety, as

with IS, but as an institution accountable to Islamic law and in submission to Allah.<sup>27</sup>

## Understanding Islamic Law Is Culturally Complicated

Because of these perspectives on government, the United States must understand how proposals for governance appear through the lens of Islamic law and morality, especially since we think and speak in terms of a *secular* democracy and tend to project the separation of church and state upon the rest of the world.<sup>28</sup> Khomeini warned his readers that westerners would attempt to strip Islam of its power by turning their mosques into churches.<sup>29</sup> In fact, our foreign policy has required U.S. military personnel to work out the details of secular governance on the ground, and as we have all learned from multiple deployments, the devil is in the details.

Consider a 2007 incident in Al Qaim, Iraq, in which a U.S. patrol found a young Iraqi male hanging from a swing set. A report was sent up that eventually reached Multi-National Corps-Iraq (MNC-I). A MNC-I staff officer called the planner for Governance and Tribal Engagements of Al Anbar Province, wanting to know what was being done about this “murder” and whether steps were being taken to investigate the matter through appropriate Iraqi officials. The planner explained that it was essentially a matter of tribal justice involving the rape of a younger girl and strongly advised against any U.S. involvement. Agitated, the officer said, “We call this the rule of law?”<sup>30</sup>

Suppose an investigation had been pursued in accordance with the rule of law, where and how would one separate the tribal justice from the *tasir* (discretionary) and *hudud* (fixed) punishments of Islamic law?<sup>31</sup> Whose moral legitimacy would be threatened or vindicated? It serves as an example of why we need to be aware of the moral principles behind Islamic law and allow our partners to adjudicate crime. In this case, despite the distasteful method of punishment, good was enjoined and wrong was forbidden.

## What Can Be Done to Undermine the Moral Legitimacy of Jihadists?

1. The legitimacy of extremists such as the Taliban can be significant when they prohibit immoral practices such as the recruitment and use of dancing boys in Afghanistan. Failing to appreciate the morality

behind certain aspects of Islamic law will result in a failure to understand who the people believe are legitimate authorities. Furthermore, if we hesitate to support our partners because of their commitment to Islamic law (i.e., sharia law), extremists and jihadists will dominate the conversation and the cycles of violence will continue. During the 1980s and 1990s, Egypt’s al-Jama’a al-Islamiyya forcefully pursued hisbah by the “use of the hand.” After much bloodshed, pressure from the Egyptian government, and being exposed to the larger tradition of Islamic law, most came to understand Islam as a practical religion and recognized more peaceful means of hisbah.<sup>32</sup>

2. Secularism has stoked the jihadist recruiting fires and cycles of violence against “collaborators” for years. We must be aware of how our description of secular democracies may undermine the efforts of traditional scholars and partner-government officials who simultaneously need our support while they engage in political conversations that discuss sharia law and its contemporary reforms.

3. Lt. Col. Brian Steed has noted that in Arab cultures we must focus on being providers. Being a provider who offers various services is a cultural method of building mutual trust and understanding.<sup>33</sup> A recent example of this at the tactical level is the training, air-lift capability, and operators we provided to assist the Pesh Merga in their mission to free Iraqi prisoners in October 2015.<sup>34</sup> A long-standing diplomatic example is our mission in the Sinai Peninsula that came from the Camp David agreements. Likewise, in 2007, while in Ramadi, the United States embarked on a policy during the Anbar Awakening which would *forgive* tribal fighters who had attacked our soldiers if Sunni leaders would *reconcile* with Shia leaders. This provided a service of negotiations couched in moral language that *enjoined the good*. The combined action and narrative produced results that undermined the legitimacy of IS operating in Iraq. Approaches such as these will keep our partners in a position of leadership projecting a vision of governance based upon a moral legitimacy that is recognized by population.

## Conclusion

We must make the effort to understand and appreciate the conversations our Islamic partners



are having in relationship to enjoining good and forbidding wrong. We must resist the temptation to establish a secular rule of law apart from a specific understanding of how Islamic law is perceived within

the region of operation. Finally, we should also help facilitate negotiations and provide services to help defeat jihadists in ways that allow our partners to enhance their moral legitimacy. ■

## Biography

Chaplain (Maj.) Seth George, U.S. Army, is serving with the 3rd Armored Brigade Combat Team, 4th Infantry Division, Fort Carson, Colorado. He holds master's degrees from Sangre de Cristo Seminary and the University of Kansas. George has served multiple deployments to Iraq and Afghanistan and served as an assistant professor at the U.S. Army Command and General Staff College, Fort Leavenworth, Kansas.

## Notes

1. Sebastian Gorka, *The Islamic State and Information Warfare: Defeating ISIS and the Broader Global Jihadist Movement*, Threat Knowledge Group website, January 2015, 3, accessed 15 July 2016, <http://threatknowledge.org/wp-content/uploads/2015/11/TKG-Report-ISIS-Info-Warfare.pdf>.

2. Michael Weiss, "How I Escaped From ISIS," The Daily Beast website, 15 November 2015, accessed 15 July 2016, <http://www.thedailybeast.com/articles/2015/11/15/confessions-of-an-isis-spy.html>.

3. In Arabic, this term is known as *amr bil ma'ruf wal-nahi 'an al-munkar*; Human Dimension Capabilities Development Task Force, "Cross-Cultural Competence: Introduction and Overview of Key Concepts," *Mission Command Center of Excellence white paper*, 8 December 2010, 10, accessed 15 July 2016, [http://usacac.army.mil/sites/default/files/publications/HDCDTF\\_WhitePaper\\_Cross-Cultural%20Competence\\_Final\\_2015\\_04\\_10\\_0.pdf](http://usacac.army.mil/sites/default/files/publications/HDCDTF_WhitePaper_Cross-Cultural%20Competence_Final_2015_04_10_0.pdf).

4. Anonymous, "The Mystery of ISIS," *New Yorker*, 13 August 2015, accessed 15 July 2016, <http://www.nybooks.com/articles/archives/2015/aug/13/mystery-isis/>. The point is well made that the rise of the Islamic State (IS) cannot be reduced to economics, morality, nationalism, territory, or any particular combination thereof. Instead, we are left with a baffling reality. The author's thesis offers a thoughtful word of caution to that of Gorka's thesis (mentioned below). IS is not the sum total of the problem, and, therefore, we need to look beyond IS and reflect upon how much we understand the moral framework and culture of our allies.

5. Muhammad Musa Al Shareef, *Shaykh al-Islam Ibn Taymiyyah*, Youtube video, 26 January 2011, accessed 15 July 2016, <https://www.youtube.com/watch?v=mPOQ1PR5liE>. In this fascinating video, a sheik of Islam, Ibn Taymiyyah, is being held as model of enjoining the good during the turmoil under Mongol domination. Within the first twenty-five minutes, the phrase is repeatedly used to show the Taymiyyah's sterling character and conviction; Martin Luther King Jr., "Early Years," in *The Autobiography of Martin Luther King, Jr.*, ed. Clayborne Carson (New York: Warner Books, January 2001), chap. 1. King said, "We cannot be truly Christian people so long as we flout the central teachings of Jesus: brotherly love and the golden rule."

6. Fazlur Rahman, *Major Themes of the Qur'an* (Chicago: University of Chicago, 2009), 43; Abou El Fadl, *The Great Theft: Wrestling Islam from the Extremists* (New York: HarperSanFrancisco, 2005), 122–23.

7. Malise Ruthven, *Islam: A Very Short Introduction* (New York: Oxford University Press, 2012), 83.

8. Abdullah Yusuf Ali, *The Meaning of the Holy Qur'an* (Beltsville, MD: Amana Publications, 2002), 3:104, "Let there arise out of you a band of people inviting to all that is good, enjoining what is right, and forbidding what is wrong. They are the ones to attain felicity"; Al Tawbah 9:111, 112 of the Quran states, "Those that turn in repentance; that serve Him, and praise Him; that walk in devotion to the Cause of Allah; that bow down and prostrate themselves in prayer; that enjoin good and forbid evil; and observe the limits set by Allah. So proclaim the glad tidings to the Believers"; see also Quran 3:110, 7:157, and 22:41.

9. Nasiruddin Al-Khattab, trans., *English Translation of Musnad Imam Ahmad bin Hanbal, Vol. 1 (Hadith 1–1380)* (Riyadh: Darussalam, 2012). Ibn Hanbal (780–855), who inspired the Hanbali school of jurisprudence, begins his famous Musnad with this hadith from the first caliph, Abu Bakr, about the importance of enjoining the good.

10. Indira Falk Gesink, "'Chaos on the Earth': Subjective Truths versus Communal Unity in Islamic Law and the Rise of Militant Islam," *The American Historical Review* 108, no. 3 (June 2003): 710–33.

11. Sayyid Qutb, *Social Justice in Islam* (New York: USA Islamic Publications International, 2000), 86–87.

12. Faraj Muhammad Abd al-Salam, *The Neglected Duty: The Creed of Sadat's Assassins and Islamic Resurgence in the Middle East*, trans. Johannes J. G. Jansen (New York: Macmillan, 1986), 55 and following, 200. "Know that when jihad is an individual duty, there is no (need to) ask permission of your parents to leave to wage jihad, as the jurists have said; it is thus similar to prayer and fasting"; "Fighting the near enemy is more important than fighting the far enemy," 193.

13. Gesink, "Chaos on the Earth," 733.

14. Imam Khomeini, *Governance of the Jurist (Velayat-e Faqeeh): Islamic Government*, trans. Hamid Algar (Tehran: The Institute for the Compilation and Publication of Imam Khomeini's Works, Original publication 1970), 36, accessed 15 July 2016, [http://www.iranchamber.com/history/rkhomeini/books/velayat\\_faqeeh.pdf](http://www.iranchamber.com/history/rkhomeini/books/velayat_faqeeh.pdf).

15. Hamas Covenant, "The Covenant of the Islamic Resistance Movement–Hamas," 14 February 2006, The Middle East Media Research Institute website, accessed 29 July 2016, <http://www.memri.org/report/en/0/0/0/0/0/1609.htm>.

16. Roel Meijer, "Commanding Right and Forbidding Wrong as a Principle of Social Action: The Case of the Egyptian al-Jama'a al-Islamiyya," in *Global Salafism: Islam's New Religious Movement* (London: Hurst, 2009), 189–220, accessed 15 July 2016, [http://www.clingendael.nl/sites/default/files/20090700\\_cdsp\\_global\\_salafism\\_chapter\\_8\\_meijer.pdf](http://www.clingendael.nl/sites/default/files/20090700_cdsp_global_salafism_chapter_8_meijer.pdf).

17. Gesink, "Chaos on the Earth." This quote was in response to the Saudi government jailing scholars who spoke out against them.

18. Michael Cook, *Commanding the Right and Forbidding the Wrong in Islamic Thought* (2000; repr., Cambridge, UK: Cambridge University Press, 2010), 33–34.

19. *Ibid.*, 517, 522. Historically, forbidding wrong was debated as mix of individual and community duties at the local level that required various modes of one's hand, tongue, heart, or faith to either positively enjoin good or negatively to forbid evil. The contemporary and competitive nature of organizational politics in the Middle East has led to the view that Islamic states must manage this duty with a particular interest in "proceeding with the hand." This is justified by looking back into scattered references throughout history by scholars such as Al-Ghazzali (518, 554), Ibn Taymiyya (524), and Nawawi (526).

20. Jamie Roberts, "The Jihadist Next Door," Youtube video, accessed 11 July 2016, 15:30 and following, <https://www.youtube.com/watch?v=6DsG9yQrdD4>. "This is a type of jihad for you, that you came out, doing dawa, enjoining good and forbidding evil"; Vice News, "The Islamic State," Vice News website, 26 December 2014, accessed 15 July 2016, <https://news.vice.com/video/the-islamic-state-full-length>.

21. Michael Weiss, "How ISIS Picks Its Suicide Bombers," The Daily Beast website, 16 November 2015, accessed 15 July 2016, <http://www.thedailybeast.com/articles/2015/11/16/how-isis-picks-its-suicide-bombers.html>; Lina Khatib, "The Islamic State's Strategy: Lasting and Expanding," Carnegie Endowment for International Peace website, 29 June 2015, 8, accessed 15 July 2016, <http://carnegieendowment.org/2015/06/29/islamic-state-s-strategy-lasting-and-expanding-pub-60511>. This article documents the case of Hasan Jazra and his gang, who had been acquitted by Syrian officials due to personal connections, but were executed by IS, to the relief of Raqqa residents.

22. Jurgen Todenhofer, "Inside ISIS: Rare access to Islamic State," CNN Video, 22 December 2014, accessed 15 July 2016, <http://www.cnn.com/videos/world/2014/12/22/amanpour-exclusive-inside-isis.cnn>; Khatib, "Islamic State's Strategy," 21. "In a way the group has trapped itself; it has turned to violence so often that it cannot de-escalate without losing credibility."

23. "Shari'ah Alone Will Rule Africa," *Dabiq* 8, 1436 jumada al-akhirah, 31, accessed 15 July 2016, <https://azelin.files.wordpress.com/2015/03/the-islamic-state-e2809cdc481biq-magazine-8e280b3.pdf>. "An American airstrike killed him along with five of his companions on Monday 21 Rabi al-Akhir. Shaykh Abu Talhah thereby attained shahadah at the age of forty-five after a life of jihad, hisbah, and da'wah. We consider him such and Allah is his judge. May Allah have mercy upon him and his companions in martyrdom."

24. Rachel Scott, "An 'official' Islamic Response to the Egyptian al-Jihad Movement," *Journal of Political Ideologies* 8, no. 1 (2003): 55, accessed 15 July 2016, <http://www.rcvt.edu/about-us/people/faculty/Scott.pdf>.

25. Abdullah II bin Al-Hussein, "Amman Message," Jordan Embassy—Berlin website, 9 November 2004, accessed 15 July 2016, <http://www.jordanembassy.de/Amman%20Message%20English.pdf>.

26. "An Open Letter to Baghdadi," Letter to Baghdadi website, chap. 13, 2014, accessed 15 July 2016, <http://www.letterto-baghdadi.com/>.

27. Contemporary Islamic scholars affirm that democracies can be consistent with Islam. An example is Al-Azhar et al., "Al-Azhar Document," statement about the future of Egypt, 20 June 2011. "Al-Azhar supports establishing a modern and democratic

state according to a constitution upon which Egyptians agreed on and which separates between the state authorities and its governing legal institutions"; *Tunisia's Constitution of 2014*, trans. United Nations Development Programme, Constituteproject.org website, 28 September 2015, accessed 18 July 2016, [https://www.constituteproject.org/constitution/Tunisia\\_2014.pdf](https://www.constituteproject.org/constitution/Tunisia_2014.pdf). Article 6 states, "The state is the guardian of religion. It guarantees freedom of conscience and belief, the free exercise of religious practices and the neutrality of mosques and places of worship from all partisan instrumentalisation. The state undertakes to disseminate the values of moderation and tolerance and the protection of the sacred, the prohibition of all violations thereof. It undertakes equally to prohibit and fight against calls for *takfir* (accusations of apostasy) and the incitement of violence and hatred"; George Sadek, "The Role of Islamic Law in Tunisia's Constitution and Legislation Post-Arab Spring," The Law Library of Congress website, accessed 1 December 2015, <http://www.loc.gov/law/help/tunisia.php>. The specific debates revolved around the role of Islamic law in the constitution, the prohibition of blasphemy, and the legal and constitutional rights of women.

28. Gianni Martin, "The Relevance of Religion" (chap. 1) and "The Sources of Conflict" (chap. 3), *The Force of Faith: Conflict in the Abrahamic Traditions and the Impact on Military Operations in the Middle East*, Defense Language Institute Foreign Language Center DVD series, June 2010.

29. Khomeini, *Governance of the Jurist*, 8.

30. Kurt Ebaugh, Lt. Col., U.S. Marine Corps, retired, conversation with author, July 2015.

31. Raj Bhala, *Understanding Islamic Law* (San Francisco: Matthew Bender, 2011), 1177. *Haqq adami* (claims of man). "No transgression in this category is explicitly forbidden by Allah in the Qur'an ... Commission of these offenses certainly is unacceptable, and the Qur'an suggests punishments for certain of them, notably, murder." To paraphrase Bhala, punishment of haqq adami crimes is discretionary. Depending on the specific offense, enforcement discretion lies with one of two parties: (1) an Islamic *qadi* (judge) who may order a *ta'zir* (discretionary) punishment or a *hadd* (mandatory) punishment (a fine, imprisonment, or a combination thereof), or (2) the victim or family of the victim who may use *qisas* (legal retaliation), or *diya* (blood money); Patricia Asfura-Heim, "No Security Without Us: Tribes and Tribalism in Al Anbar Province" (Arlington, VA: CNA Analysis & Solutions, June 2014), accessed 2 August 2016, <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA604289>. "Only cases of murder or serious inter-tribal disputes are typically dealt with at the *ashira* (tribal) level. Following the sectarian violence that occurred in Baghdad during the civil war, the high demand for tribal dispute resolution resulted in more serious cases being resolved at the *fakhda* (clan) level."

32. Roel Meijer, "Commanding Right and Forbidding Wrong as a Principle of Social Action," 209–10.

33. Brian L. Steed, "Bees and Spiders: Applied Cultural Awareness and the Art of Cross-Cultural Influence" (Houston, TX: Strategic Book Publishing and Rights Co., 2014), 43–49.

34. Peter Cook, "Statement from Pentagon Press Secretary Peter Cook on Hostage Rescue Mission in Iraq," U.S. Department of Defense website, 22 October 2015, accessed 28 July 2016, <http://www.defense.gov/News/News-Releases/News-Release-View/Article/625236/statement-from-pentagon-press-secretary-peter-cook-on-hostage-rescue-mission-in>.



# The Chemical, Biological, Radiological, and Nuclear Terrorism Threat from the Islamic State

Carole N. House

**C**hemical, biological, radiological, and nuclear (CBRN) terrorism emerged as a significant concern to many American policymakers after 9/11. However, although it remains a stated concern in political rhetoric, real concern appears to have waned among some. For example, in their 2005 study, authors Sammy Salama and Lydia Hansell discounted a serious terrorist CBRN threat from al-Qaida due to a general lack of capability to produce the weapons and the potential backlash from using such cruel methods.<sup>1</sup> Notwithstanding, while the same is likely true of the Islamic State (IS) today, the demonstrated ruthlessness and extensive resources of this nonstate actor call for a closer examination of the viability as well as the probability of an IS-sponsored CBRN threat.

## CBRN Versus Weapons of Mass Destruction

This article seeks to analyze the threat of IS using CBRN weapons—rather than *weapons of mass*

*destruction* (WMD)—in warfare or acts of terror. Though the latter term is often equated with CBRN, WMD is a broad and ambiguous term that does not



Iraqi Police discovered this improvised explosive device on 7 November 2005 in eastern Baghdad, Iraq, and disarmed it before it could be detonated in a terrorist attack. (Photo courtesy of U.S. Army)

address the specific tool, its size or amount, its yield, or the purpose of its use. WMD describes an effect, not a specific tool. To clarify the difference further, not all CBRN elements may cause “mass destruction,” and many conventional arms not considered WMD are more destructive than CBRN weapons. In

this article, I will assess the viability of the threat of IS using various types of CBRN weapons.

## Ideological Motivation Underpinning Pursuit of CBRN Weapons

The rise and overt brutality of IS caught much of the world by surprise. Beginning as a branch of Abu Musab al-Zarqawi’s al-Qaida terrorist group in Iraq, IS has evolved into a pseudo-state led by a conventional army that frequently resorts to terrorism as a controlling mechanism and as a complementary means of



A militant Islamist fighter riding a trailer mounted with a captured missile gestures as he takes part in a military parade along the streets of Syria's northern Raqqa Province 30 June 2014. The capture of systems capable of delivering CBRN weapons poses a serious threat to the United States and its allies. (Photo by Reuters)

conquest.<sup>2</sup> Moreover, IS seeks to expand its caliphate through whatever means it can.<sup>3</sup>

IS is attempting to acquire and integrate elements of a CBRN arsenal to support its uncompromising political objectives. Any success IS has in acquiring such weapons will increase the threat it poses to regional stability, local populations, and opposition forces. Therefore, I will explore several factors to assess the extent of the CBRN threat from IS as follows: interest, attainability, efficacy, and acceptability.

## Interest

The extent of IS's interest in CBRN weapons is revealed by its past behavior, its religious motives, and the lack of an effective international deterrent to its activities.

According to several credible news sources, IS has used chemical warfare agents in the past.<sup>4</sup> The U.S. Army Training and Doctrine Command identifies the previous use of a chemical warfare agent as indicating the potential for a future CBRN attack.<sup>5</sup> Al-Qaida experimented with the weaponization and use of biological and chemical agents since the 1990s. In "Does

Intent Equal Capability? Al-Qaida and Weapons of Mass Destruction," Salam and Hansell describe how al-Qaida's doctrinal texts, instruction manuals, and social media posts document al-Qaida's intention to develop and use biological and chemical agents, radiological dispersion devices (RDDs), and nuclear weapons.<sup>6</sup> IS, as al-Qaida's more conservative and brutal spin-off, has publicly expressed in its propaganda its intention to acquire and use them.<sup>7</sup>

Moreover, IS appears dispassionate in its use of such weapons, including callous disregard for the collateral damage to innocents. This stems from its interpretation of ultraconservative Salafi jihadism that aims to establish a caliphate by force and spread its control without regard for human life by whatever means necessary, beginning with the removal of so-called apostate regimes in the Middle East, and followed by a program of merciless religious purification of the Muslim community.<sup>8</sup> These goals, compounded by the pious obsession of those who believe that IS's war portends the "end times" prophesied in Quranic text, create a completely incompatible world view between IS and any of its



opponents: al-Qaida, Shia, diverse non-Muslim ethnic groups, or state governments. IS's uncompromising commitment to its objectives suggests the futility of attempting to negotiate with it. Its obsession foreshadows instead a brutal fight to the end, in which IS likely would employ any CBRN weapons it could acquire. IS's drive to establish a caliphate also suggests that it would, for now, put its highest priority on targeting opposition forces and *infidel* populations in the Middle East rather than Europe or the United States. Nevertheless, the growth of IS influence in Western countries could lead to opportunities to smuggle some developed CBRN weapons into Western countries to expand its attacks into the West.<sup>9</sup>

IS perhaps has felt it could get away with using chemical weapons because it perceives itself free from effective outside interference in "moderate" use of CBRN weapons. One reason is that the international community did not seriously punish Bashar al-Assad for his use of chemical weapons against Syrian rebels.<sup>10</sup> Moreover, its leaders may feel it can operate with impunity since forces arrayed against it currently do not threaten IS with total destruction. Though IS has lost some terrain, it has proven to be tenacious.

IS and the global community know the West is war-weary and would likely be hesitant to commit heavily to another intervention in the Middle East, even if provoked and taunted by IS using CBRN weapons. This IS perception has been further emboldened by the March 2016 announcement by Russian President Vladimir Putin of withdrawals of Russian forces from Syria. This also could be perceived as signaling Russian reluctance to become further involved in the situation even if IS were to use a CBRN device.

If the United States and Russia were interested in intervening to prevent IS from using CBRN weapons, the question would become, "What can realistically be done to stop their use?" Most actors outside IS (including the United States) do not possess sufficient intelligence on it to craft a feasible and confident deterrent—one that would be expected to de incentivize use of CBRN weapons.<sup>11</sup> Also, IS's occupation of urban centers and its presence among civilian populations foster concerns regarding possible collateral damage. Such concerns prevent nations like the United States from using massive bombing campaigns to target IS—and from holding a credible nuclear deterrent against potential CBRN

weapons use. Additionally, IS cares little about international taboos against chemical or nuclear weapons use because it is not interested in participating in the international nation-state system. As a pseudostate, IS uniquely straddles the lines of rationale of state governments (e.g., governing within its borders, and funding itself) and of terrorist groups (e.g., a desire to recruit and mobilize the Sunni Muslim population).

Clearly, IS is interested in weapons that can effect massive destruction and terror. However, its sweeping statements and ambitious objectives do not help narrow the scope of the types of weapons it might use. The past use of chemical weapons identifies a pattern of use of specific tools. Assessing the feasibility of acquiring and the usefulness of implementation of CBRN weapons will help refine the threat assessment.

## Attainability

The most practical challenges to using CBRN weapons arise from the acquisition or development, weaponization, and delivery of the weapons. At each stage, nuclear weapons are ruled out as a viable threat. International tracking systems of enriched uranium tend to ensure against IS's ability to acquire fissile material, and IS has no access to the amounts of low-grade uranium and processing facilities required to manufacture its own fissile material. Additionally, acquisition of a "loose nuke" from a country such as Pakistan is highly unlikely. There would be no incentive for a state to sponsor a weapon transfer to IS due to the unpredictability of how IS would use it. Additionally, there is an extreme likelihood of successful attribution, and subsequent retribution by the United States and other nations, against the supplier.<sup>12</sup>

Certain radiological materials that would be useful for an RDD, or "dirty bomb," are potentially more accessible. An RDD requires less quantity and a lower grade of radioactive material than is needed for a nuclear weapon. However, IS would also need significant logistical measures for safe materiel transport and handling, making this an unappealing option of CBRN weapons. In 2014, IS was reported to have acquired ninety pounds of low-grade uranium that might be of limited use for a dirty bomb. However, it would be hard for IS to acquire and appropriately handle radioactive material such as cesium-137, which could cause effects quickly and could be dissolved in water for mass dissemination.<sup>13</sup>



Medics assigned to 2nd Battalion, 502nd Infantry Regiment, Task Force Strike, along with other coalition partners, evaluate a simulated casualty during chemical, biological, radiological, and nuclear exposure training in Erbil, Iraq, 23 May 2016. This was among the first training exercises the regiment's soldiers conducted with their coalition partners during Operation Inherent Resolve. This training is an integral part of multinational efforts to train Iraqi Security Force personnel to defeat the Islamic State. (Photo by 1st Lt. Daniel Johnson, U.S. Army)

Nonetheless, vulnerabilities in legitimate states' control of radioactive material may present opportunities for IS. As IS exploits its territorial holds over areas with civil infrastructure and gains more recruits abroad, it might be able to steal cesium-137, used in cancer therapies, from hospitals. Law enforcement has intercepted attempts by criminal organizations to sell cesium-137, believed taken from Russian hospitals, to IS.<sup>14</sup>

Illicit trade offers IS potential access to materials not currently within their reach. There are concerns in Iraq and some Western countries over reportedly stolen iridium-192, and Belgian authorities have speculated that IS operatives are searching for places in Europe to steal radioisotopes to use in an RDD.<sup>15</sup>

IS's control over territory provides it access to industrial areas with toxic industrial chemicals and laboratory facilities that could enable the development of biological toxins or chemical agents. Dual-use chemicals such as chlorine are relatively easy to acquire and can be disseminated via aerosols and other crude, easily developed

methods. IS's geographical location in Syria and Iraq, countries that likely hold undisclosed stockpiles of old chemical munitions, also could facilitate IS's acquisition of complete chemical munitions that it could deliver via artillery systems. As long as IS holds territory, it can enjoy a relatively safe haven for unimpeded experimentation with CBRN weapons. However, intelligence leaks present a clear vulnerability. A recently captured IS chemical weapons specialist provided detailed reports on IS's chemical weapons program, resulting in allied air strikes against key targets.<sup>16</sup>

Despite some freedom for experimentation, development of deliverable biological toxins would remain very difficult. While IS could easily get strains of toxins like anthrax, very sophisticated technology and expertise are required to produce it into a powdered form for maximum effect.<sup>17</sup> Chemical agents are generally easier to manufacture and weaponize than biological agents.

Two resources other than territory also enable IS's potential to attain CBRN capabilities: money and





Soldiers from the *Yanshuf* (Owl) Battalion of the Israeli Army Defense Force, specializing in CBRN warfare, conduct training 1 November 2010 at the Israeli-occupied Syrian Golan Heights, during the final military exercise of the Squad Commanders Training Course. (Photo by Ori Shifrin, Israeli Defense Force Spokesperson's Film Unit via Wikimedia Commons)

recruits. IS has enormous financial resources, which is unusual for a terrorist group. In February 2015, revenues from oil assets were estimated at \$1–2 million per day, and it uses ransoms, taxes, and human trafficking to raise more.<sup>18</sup> This provides ample funding for its priority missions of fighting and governing while also allowing investment in developing a CBRN program. IS also has a major advantage over other terrorist groups in the expertise of its personnel due to its size. While the core of al-Qaida holds only a few hundred members, in the spring of 2015, IS was estimated to have over thirty thousand fighters with diverse backgrounds from over eighty countries.<sup>19</sup> IS's unprecedented recruitment ability provides a remarkable pool of expertise from which it can draw. This means that IS can find people with the necessary skills to help create weapons while also being able to absorb and replace losses from dangerous experimentation.

## Efficacy

Understanding the usefulness of CBRN weapons to IS requires considering conventional warfare and terrorism since IS has shifted across the spectrum

between terrorist group and pseudo-state. Armies can use CBRN agents, particularly chemical weapons, for area denial against enemy forces and to slow enemy movement.<sup>20</sup> However, they are inconsistent weapons at best. Dynamic weather conditions such as humidity, temperature, and wind can have a significant effect on the potency and dispersion of agents.<sup>21</sup> Even if a military possessed the technical capacity to weaponize chemical agents, those weapons are very hard to use to reap mass casualties, as is evident in the relatively low death rates of IS chemical attacks.<sup>22</sup> Agents that deliver well over a large area (typically nonpersistent gases) dissipate quickly. Agents that have more long-lasting effects (persistent liquids) do not affect as wide an area and deny all parties, including the source military, access to that terrain.

Most biological toxins are very difficult to engineer and even more difficult to control, making them unfavorable for use in conventional warfare. Blowback during production and dissemination is a concern for both chemical and biological weapons. The risk of exposure to friendly forces is high due to the difficulty of detecting toxins and the communicability of diseases.

Out of an instinct for self-preservation, armies tend to avoid biological warfare.

While I have ruled out nuclear weapons as a viable threat, IS likely is pursuing the capability for an RDD.

However, any dirty bomb that IS detonates will likely be more for experimentation or for inflicting terror rather than for inflicting heavy casualties. The uranium IS currently possesses likely is too low grade to be very effective, but even highly radioactive material poses efficacy issues. Dirty bombs are peculiar devices that instill fear in the public but in reality are not very different from any normal bomb. Radiation exposure is related to material amount, proximity, and time.<sup>23</sup>

A bomb's explosion would disperse its radioactive material in small pieces over a wide area. People not killed or seriously injured in the blast would move away from the site, removing them from more damaging exposure. The greatest physical threat comes from the explosion itself and from potential inhalation of radioactive dust particles in the area.<sup>24</sup> RDDs work best for area contamination and psychological impact. The public is afraid of the effects of radiation. Although the physical damage caused by an RDD would be limited, its detonation or release (or even a false claim of an RDD detonation) would instill fear in the population and drain resources from any government body trying to detect and decontaminate the area.

Tactical CBRN weapons can have strategic effects through deterrence and intimidation, which can support the perpetrator's political agenda. Here, the

ambiguous term "WMD" works in IS's favor by attaching a stigma of horror and devastation to the public's view of any CBRN tool. IS could use a small chemical weapons arsenal to deter intervention by foreign powers and to intimidate a rebellious domestic population under its control. Use of CBRN weapons could provoke greater sectarian fighting while also discrediting other opposition groups and governments by exposing their inability to protect their populations from suffering, all of which would serve IS's objectives. These examples of strategic effects point to IS leveraging CBRN weapons as an instrument of terror in the region.

Psychological effects, especially fear, are key elements of IS's governance and expansion. The suffering CBRN weapons could cause, and mystery surrounding them, can intimidate potential opponents into submission or desertion. IS likely will continue to use chemical weapons and will attempt to branch out to other

CBRN methods to reinforce fear of resistance as well as to draw attention from the news media. As IS continues to rely upon media coverage to spark recruitment and influx of foreign fighters, CBRN weapons could be a means for it to stay relevant and visible, and to recruit individuals attracted to IS's successes.

Based on IS's probable lack of CBRN protective equipment and its desire to continue expanding the boundaries of the caliphate, IS most likely would resort to using chemical weapons for conventional tactical purposes primarily as a means to slow or hold off a



Army and Navy explosive ordnance disposal technicians prepare unexploded ordnance for demolition at a safe disposal area 11 October 2003 in Baghdad, Iraq. The joint teams work diligently to destroy the sizable quantities of ordnance to reduce and ultimately eliminate weapons and ammunition available to insurgents for use against coalition troops. (Photo by Journalist Seaman Erica Gardner, U.S. Navy)



major enemy ground offensive approaching its defenses. However, the psychological effects for population control and recruitment hold CBRN weapons' greatest value to IS. For a force that is willing to use them, CBRN weapons are likely a psychological weapon, or a measure of desperation.

## Acceptability

I have outlined the feasibility and purpose of IS acquiring and using CBRN weapons. The final step in the threat assessment is determining the acceptability within IS to resort to these methods of violence. IS has a history of barbarism paired with feigned religious justifications that reveal no qualms with using such weapons, although a logical analysis of the response costs by IS leadership ought to spark some hesitancy.

IS uses acts of terror on a daily basis as a means of statecraft and conquest. These include the systematic rape and enslavement of women, agonizing public executions (e.g., beheadings, immolations, and crucifixions), and suicide bombings.<sup>25</sup> Next to these, the effects of some chemical weapons may seem unremarkable to IS fighters, except in the aura of terror that surrounds the WMD label. IS relies on a *fatwa* (an Islamic religious ruling) to provide religious legitimacy for the use of WMD.<sup>26</sup> With many IS fighters holding apocalyptic world views, CBRN weapons would just be other necessary tools for establishing the kingdom of God on Earth. Clearly, IS holds no moral reservations about using CBRN weapons against its enemies.

While IS leadership and fighters would find the suffering caused by CBRN acceptable, they may not welcome certain response costs that would be inflicted by foreign powers or even the local populations.

Nations like the United States and local communities find the use of CBRN weapons abhorrent, and IS most likely does not want to provoke a more significant Western involvement in the region at this time as it continues its struggle to shore up territorial control. Unlike usual terrorist groups, IS perceives and administers itself as a state with infrastructure, territory, and a military, which present vulnerabilities to an intensive Western conventional military confrontation.<sup>27</sup> The West's willingness to intervene is limited, and IS would benefit from the West's maintaining that preference because IS would avoid becoming the target of European and American armies. Based on its use of violence, acceptable use of CBRN weapons for IS includes periodic but limited use as an element of psychological warfare to maintain order and discipline, to incapacitate and impede non-Western opponent forces, and in a final measure of conventional defense.

## Conclusion

With IS's vicious tactics becoming commonplace and a limited international political will to step in, periodic low-level use of chemical weapons is becoming relatively routine in Iraq and Syria. IS has displayed interest in all aspects of CBRN weapons and currently has the capacity to acquire and effectively use chemical agents. Though it may experiment with radiological and biological means, chemical weapons pose the most likely threat to IS's enemies. ■

*The views expressed in this article are the author's and do not necessarily reflect the views of Office of Management and Budget, the administration, or the U.S. government.*

## Biography

*Carole House is a former U.S. Army captain who served as a chemical officer and a military intelligence officer until November 2014. She is currently a presidential management fellow in the Office of Management and Budget. She holds a BA in international affairs from the University of Georgia and an MA in security studies from Georgetown University. She deployed to Kandahar Province, Afghanistan, from 2012 to 2013 in support of Operation Enduring Freedom.*

## Notes

1. Sammy Salama and Lydia Hansell, "Does Intent Equal Capability? Al-Qaeda and Weapons of Mass Destruction," *Nonproliferation Review* 12, no. 3 (November 2005): 643–44.
2. Daniel Byman and Jennifer Williams, "ISIS vs. Al Qaeda: Jihadism's Global Civil War," *The National Interest* online, 24 February 2015, accessed 19 July 2016, <http://www.nationalinterest.org/feature/isis-vs-al-qaeda-jihadism%E2%80%99s-global-civil-war-12304>; Audrey K. Cronin, "ISIS Is Not a Terrorist Group: Why Counterterrorism Won't Stop the Latest Jihadist Threat," *Foreign Affairs* (March–April 2015), accessed 19 July 2016, <https://www.foreignaffairs.com/articles/middle-east/isis-not-terrorist-group>.
3. William McCants, *The ISIS Apocalypse: The History, Strategy, and Doomsday Vision of the Islamic State* (New York: St. Martin's Press, 2015), 1, 124.
4. In 2014–2016, IS used chlorine and mustard gas against civilians, Kurds, and other rebels. See Frank Gardner, "IS, al-Qaeda, and How Jihad Uses Chemical Weapons," BBC News website, 16 September 2015, accessed 19 July 2016, <http://www.bbc.com/news/world-middle-east-34262447>; Associated Press, "Iraq Officials Say Islamic State Chemical Attacks Kill Child, Wound 600," Fox News website, 12 March 2016, accessed 19 July 2016, <http://www.foxnews.com/world/2016/03/12/iraq-officials-say-islamic-state-chemical-attacks-kill-child-wound-600.html>.
5. Field Manual (FM) 3-11.14, *Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical Vulnerability Assessment*, obsolete, (Washington, DC: U.S. Government Printing Office [GPO], 2004), cited in U.S. Army Training and Doctrine Command (TRADOC), TRADOC G2, Supplemental Handbook 1.04 [to DCSINT Handbook No. 1], *Terrorism and WMD in the Contemporary Operational Environment* (Fort Eustis, VA: TRADOC, 20 August 2007), B-3, accessed 18 July 2016, <https://www.hsdl.org/?view&did=482640>.
6. Salama and Hansell, "Does Intent Equal Capability?" 618–21, 631.
7. "The Perfect Storm," *Dabiq* 9, 2015, 74–77, accessed 20 July 2016, <https://azelin.files.wordpress.com/2015/05/the-islamic-state-e2809cdc481biq-magazine-9e280b3.pdf>; Adam Withnall, "ISIS's Dirty Bomb: Jihadists Have Seized 'Enough Radioactive Material to Build Their First WMD,'" *The Independent* website, 10 June 2015, accessed 19 July 2016, <http://www.independent.co.uk/news/world/middle-east/isis-dirty-bomb-jihadists-have-seized-enough-radioactive-material-to-build-their-first-wmd-10309220.html>.
8. Byman and Williams, "ISIS vs. Al Qaeda."
9. Jack Moore, "CIA Director: ISIS Has Used and Can Continue to Make Chemical Weapons," *Newsweek*, 12 February 2016, accessed 19 April 2016, [http://www.newsweek.com/cia-director-isis-has-capability-continue-chemical-weapons-use-425749?piano\\_t=1](http://www.newsweek.com/cia-director-isis-has-capability-continue-chemical-weapons-use-425749?piano_t=1).
10. Adam Entous, "Assad Chemical Threat Mounts," *Wall Street Journal*, 28 June 2015, accessed 19 April 2016, <http://www.wsj.com/articles/assad-chemical-threat-mounts-1435535977>.
11. Robert Caruso, "Here's How the U.S. Can Build the Intelligence Capabilities Needed to Defeat ISIS," *Business Insider* website, 8 September 2014, accessed 19 July 2016, <http://www.businessinsider.com/the-us-needs-better-humint-to-beat-isis-2014-9>.
12. John Mueller, "The Atomic Terrorist?" *The CATO Institute's Nuclear Proliferation Update*, January 2010, accessed 19 July 2016, [http://object.cato.org/sites/cato.org/files/pubs/pdf/npu\\_january2010.pdf](http://object.cato.org/sites/cato.org/files/pubs/pdf/npu_january2010.pdf); Keir Lieber and Daryl Press, "Why States Won't Give Nuclear Weapons to Terrorists," *International Security* 38, no. 1 (2013): 104, accessed 19 July 2016, [http://www.mitpressjournals.org/doi/pdf/10.1162/ISEC\\_a\\_00127](http://www.mitpressjournals.org/doi/pdf/10.1162/ISEC_a_00127).
13. Alexander Smith, "Nuclear Experts Play down Threat of Uranium Stolen by ISIS," NBC News, 10 July 2014, accessed 19 July 2016, <http://www.nbcnews.com/storyline/iraq-turmoil/nuclear-experts-play-down-threat-uranium-stolen-isis-n152926>.
14. Matthew Weaver and Associated Press, "FBI Foils Plot to Sell Nuclear Material in Moldova," *The Guardian* online, 7 October 2015, accessed 19 April 2016, <http://www.theguardian.com/world/2015/oct/07/fbi-foils-plot-sell-nuclear-material-moldova-isis>.
15. Ahmed Rasheed, Aref Mohammed, and Stephen Kalin, "Radioactive Material Stolen in Iraq Raises Security Concerns," Reuters website, 17 February 2016, accessed 19 July 2016, <http://www.reuters.com/article/us-mideast-crisis-iraq-radiation-idUSKCN-0VQ22F>; Patrick Malone and R. Jeffrey Smith, "The Islamic State's Plot to Build a Radioactive 'Dirty Bomb,'" *Foreign Policy*, 29 February 2016, accessed 19 April 2016, <http://foreignpolicy.com/2016/02/29/the-islamic-states-plot-to-build-a-radioactive-dirty-bomb/>.
16. Helene Cooper and Eric Schmitt, "ISIS Detainee's Information Led to 2 U.S. Airstrikes," *New York Times* website, 9 March 2016, accessed 19 July 2016, [http://www.nytimes.com/2016/03/10/world/middleeast/isis-detainee-mustard-gas.html?\\_r=0](http://www.nytimes.com/2016/03/10/world/middleeast/isis-detainee-mustard-gas.html?_r=0).
17. Amanda Onion, "Lessons from Failed 1993 Biological Attack," ABC News, 5 October 2015, accessed 19 July 2016, <http://abcnews.go.com/Technology/story?id=98249>.
18. Ashley Fantz, "How ISIS Makes (and Takes) Money," CNN, 19 February 2015, accessed 19 July 2016, <http://www.cnn.com/2015/02/19/world/how-isis-makes-money/>.
19. Cronin, "ISIS Is Not a Terrorist Group."
20. Persistent agents are used for area denial and nonpersistent agents as an antipersonnel weapon.
21. Joint Publication 3-11, *Operations in Chemical, Biological, Radiological, and Nuclear Environments* (Washington, DC: U.S. GPO, 2013), A-2, I-4.
22. Associated Press, "Chemical Attacks Kill Child, Wound 600."
23. United States Nuclear Regulatory Commission (NRC), "Fact Sheet on Dirty Bombs," NRC Library, last modified 12 December 2014, accessed 19 July 2016, <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-dirty-bombs.html>.
24. Office of Public Health Preparedness and Response, "Frequently Asked Questions about Dirty Bombs," Center for Disease Control and Prevention, last modified 17 October 2014, accessed 19 April 2016, <http://emergency.cdc.gov/radiation/dirtybombs.asp>.
25. Rukmini Callimachi, "ISIS Enshrines a Theology of Rape," *New York Times* website, 13 August 2015, accessed 19 July 2016, [http://www.nytimes.com/2015/08/14/world/middleeast/isis-enshrines-a-theology-of-rape.html?\\_r=0](http://www.nytimes.com/2015/08/14/world/middleeast/isis-enshrines-a-theology-of-rape.html?_r=0); Cronin, "ISIS Is Not a Terrorist Group."
26. Herald Doornbos, "Found: The Islamic State Terror Laptop of Doom," *Foreign Policy*, 28 August 2014, accessed 19 July 2016, <http://foreignpolicy.com/2014/08/28/found-the-islamic-states-terror-laptop-of-doom/>.
27. Shiv Malik, "The Isis Paper: Leaked Documents Show How Isis Is Building Its State," *The Guardian* online, 7 December 2015, accessed 19 July 2016, <http://www.theguardian.com/world/2015/dec/07/leaked-isis-document-reveals-plan-building-state-syria>.





Sgt. 1st Class Trevor Munn, right, an infantryman with Headquarters and Headquarters Company, 2nd Battalion, 508th Parachute Infantry Regiment, 2nd Brigade Combat Team, 82nd Airborne Division, repeats the oath of enlistment with Lt. Gen. Stephen Townsend, the commander of XVIII Airborne Corps, aboard a C-17 Globemaster III prior to conducting an airborne operation 17 February 2016 at Fort Bragg, North Carolina. (Photo courtesy of U.S. Army)

# Growing Army Professionals Closing the Values Gap

Lt. Col. Thomas R. Matelski, U.S. Army

*[We will] foster continued commitment to the Army Profession, a noble and selfless calling founded on the bedrock of trust.*

—U.S. Army Gen. Raymond T. Odierno

As the U.S. Army transitions from the conflicts of the last fifteen years to a more home-station-focused effort on training and readiness, it has spent intellectual and developmental energy on defining its future as a profession vice a bureaucracy. In Army Doctrine Reference Publication (ADRP) 1, *The Army Profession*, Army leadership has established a sound framework for a professional force dedicated to protecting the nation that has been entrusted to its care.

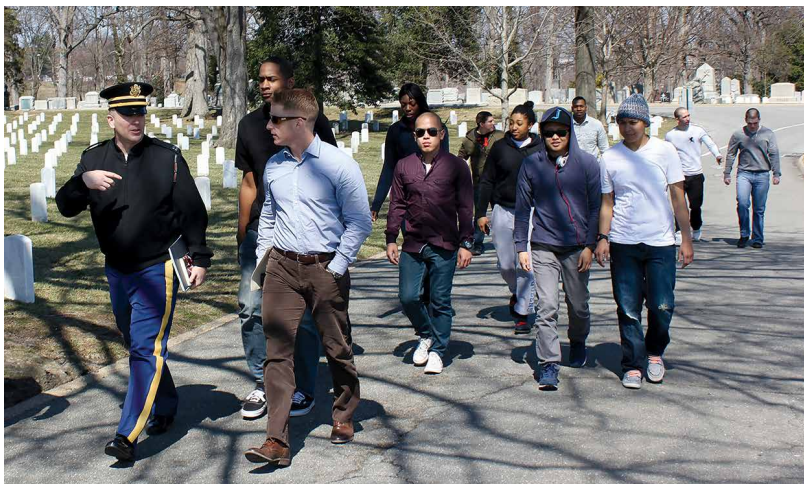
Unfortunately, while the Army profession has been studied, described, and written about, a transition in culture has been taking place within the very core of the Army profession. With changes to social and cultural values in the last decade, the Army now has a gap between the norms of the profession that ADRP 1 seeks to foster and the core values of its newest soldiers.<sup>1</sup> Those soldiers often do not identify with the seven Army Values that are the foundation of honorable service as understood by the Army. The values of loyalty, duty, respect, selfless service, honor, integrity, and personal courage resonate quite differently now with soldiers from a culture that has evolved toward relativism focused on the circumstances of the moment.<sup>2</sup>

How, then, do we close the gap between the Army profession and the younger soldiers that increasingly comprise the profession itself? Our battalion successfully accomplished this through a unique training concept that reinforced training on the Army Values with

real-world vignettes presented at historical venues that demonstrated what happened when those values were applied correctly and incorrectly.

## An Essential Discussion: Can Values Be Taught?

Before addressing how to bridge the gap between societal values and the Army Values, it is important to ask the question of whether values can be taught.



97th Civil Affairs Battalion (Airborne) soldiers tour Arlington National Cemetery in Arlington, Virginia, during the unit's March 2014 Army Values training trip. (Photo courtesy of Lt. Col. Thomas Matelski, U.S. Army)

Values and moral education are typically seen in a spiritual education aspect, but this does not adequately describe their purpose; values transcend faith. For example, the United Nations maintains a set of universal core values.<sup>3</sup> And, businesses such as Delta Airlines establish core values.<sup>4</sup> The Army, then, with

the Army Values, is not unique in its conviction that values can, and should be taught.

In a study conducted in the 1980s, William H. Bruening proposed that the question is not whether values can or cannot be taught, but how to align the form of instruction with the particular content. Bruening writes, "The form, then, must allow the students to freely choose his/her values and accept the consequences for the choices. ... The teachers of courses in moral education must then be viable role models for the students."<sup>5</sup> He goes on to establish that values cannot be directly taught but can be learned indirectly through instruction that is relevant and gives students a choice. Based on Bruening's conclusion, the question is not whether values can be taught to new soldiers, but what method is effective for bridging the values gap between them and the Army profession.

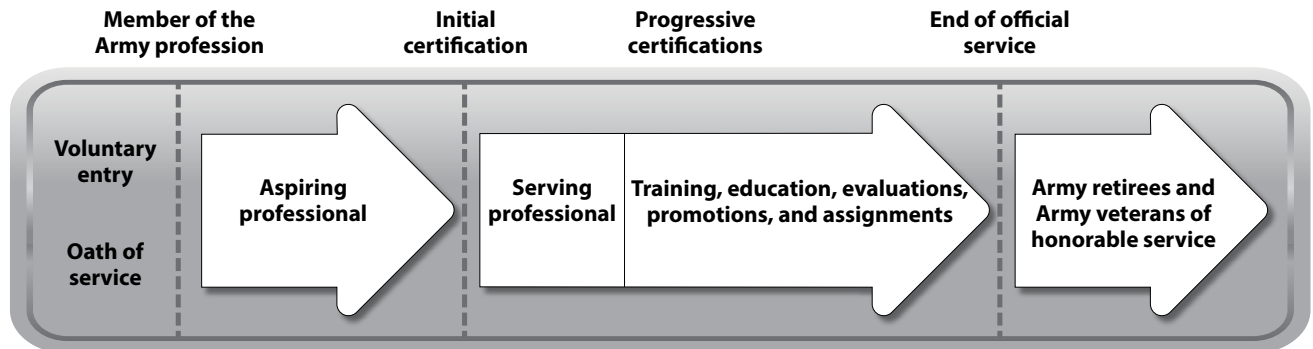
## More Than a Valid Concern: Challenges from the Top

During the Pre-Command Course, board-selected officers and command sergeants major at the battalion



and brigade levels attend sessions in which they receive insights and guidance from Army senior leaders. One such session was provided by then Chief of Staff of the Army Gen. Raymond T. Odierno and then Sergeant Major of the Army Raymond F. Chandler in April 2013. Having heard disturbing statistics on incident trends

as journeypersons, and career soldiers can be deemed Army professionals. As an apprentice, a soldier in Initial Entry Training receives exposure to the basic soldier skills and technical expertise required to operate at the entry level of the Army profession. Education in the Army Values takes the form of a set of briefing slides de-



(Graphic reproduced from Army Doctrine Reference Publication 1, *The Army Profession*, 2015)

**Figure 1. The Army Professional Certification Process**

across the Army from the provost marshal of the Army, Chandler challenged the assembled leadership: “We need your help. Our Initial Entry Training is not sufficient ... to enculturate our soldiers to the Army Values. That job now falls to you commanders and command sergeants major to figure out innovative ways to ingrain our soldiers to the values that drive our Army.”<sup>6</sup> The sergeant major of the Army’s challenge resonated through the crowd, and, as an incoming battalion commander, I took that challenge seriously.

Additionally, through a series of high-visibility misconduct situations across the Department of Defense, public speculation is rampant that the senior leaders of today’s Army do not understand how to recognize change and implement actions to adapt to change.<sup>7</sup> Simply put, the Army must change its perspective (its frames of reference) to address the growing gap between the values of incoming soldiers and those of the Army profession.<sup>8</sup>

## Addressing Values in the Army Professional Lifecycle

In ADRP 1, the Army professional certification model is laid out as a lifelong process (see figure 1).<sup>9</sup> Along with membership in the Army profession, service to the Nation can be viewed in terms of a technical profession: initial-entry soldiers can be considered apprentices, soldiers past their initial term can be regarded

as journeypersons, and career soldiers can be deemed Army professionals. As an apprentice, a soldier in Initial Entry Training receives exposure to the basic soldier skills and technical expertise required to operate at the entry level of the Army profession. Education in the Army Values takes the form of a set of briefing slides de-

veloped by the Army Training and Doctrine Command (TRADOC). Inculcation of the Army Values is just one aspect of the overall developmental process. However, the first opportunity for most soldiers to readily identify and experience the influence of the Army’s values is in their first unit assignment. In their first unit assignment, new soldiers find continued focus on the Army Values driven by the command climate within their units, as well as by their commanders’ prioritization and emphasis on various training and operational activities. How, then, does a unit commander enculturate the Army Values and foster a sense of belonging to the Army profession? As a soldier transitions from apprentice to journeyperson, few tools are available to leaders of the units in which they will serve.

## How to Proceed in a Resource-Constrained Environment

Army leaders are now being required to do the same tasks with as much vigor as before, but with significantly fewer resources. “Innovation” becomes a cliché for making more happen with less. In finding effective ways to foster the Army profession, innovation is precisely what is needed, and with a good measure of ingenuity as well. Making the Army Values a real, impactful part of the transition to journeyperson in an innovative way can



The unit ministry team leads members of the 97th Civil Affairs Battalion (Airborne) during a visit to the U.S. Marine Corps War Memorial as part of the battalion's March 2014 Army Values training trip to Washington, D.C. (Photo courtesy of Lt. Col. Thomas Matelski, U.S. Army)

help overcome the challenges of cultivating the moral development of junior Army professionals.

A senior Army leader once shared his insights with respect to planning and execution, saying not to plan for a constrained set of objectives. He instructed his staff to tell him what they needed to do. He considered it his job to get resources if they were important for execution.<sup>10</sup> In that light, our leadership team took our eyes temporarily off resources and planned for an overall objective: Develop and implement an innovative values-based training concept. The following vignette provides one example of how this committed group of individuals took that challenge on.

### Example of a Values-Based Training Concept

In the fall of 2013, our battalion chaplain, Capt. Rob Nofsinger, sat down with our command sergeant major and me to discuss guidance for developing a unique training concept focused on the Army Values. The guidance was simple: develop a set of vignettes

focused on aspects of the seven Army Values, and use an experiential learning model to increase the soldiers' ability to relate to Army culture. The intent was to demonstrate what happens when Army Values are applied correctly and incorrectly, particularly within the context of U.S. history. Given the close proximity of the National Capital Region to Fort Bragg, we recommended looking at Arlington National Cemetery and the National Holocaust Museum as venues that would reinforce the lessons.

Over the next few weeks, the staff conducted a series of idea sessions with some of the junior non-commissioned officers (NCOs) in the battalion to gain insights on how to make the training more relevant. For the junior NCOs, this opportunity was more challenging than running a range: it was an opportunity to make a lasting impression on the junior soldiers. The team worked through connections in the National Capital Region to determine the best way to conduct the event. We queried our soldiers to assess the interest of attending a values-based training event. The



response was overwhelmingly positive but also very telling: a majority of the respondents had never been to their national capital!

The emerging concept was simple: transport twenty-five soldiers and three trainers to Washington, D.C., conduct training, learn and apply the Army Values, and then return to home station. The intent was to keep overhead low and provide maximum opportunity to challenge our soldiers. Nofsinger and the junior NCOs envisioned a discussion-focused event rather than a typical briefing-style class. The soldiers would learn from

their peers as well as from participating leaders. The memorandum of instruction provided the overall concept of operations: AR [Army Regulation] 600-100 and [www.army.mil/values](http://www.army.mil/values) were used as the basis for the guided discussions. Various dictionary definitions and word uses further enhance the discussions. The stories and settings of each of the locations in Washington, D.C., will provide context and examples of how each of the values can be demonstrated. Throughout the presentations and discussions, three basic questions are addressed: What? How? Why? First, we discuss what each value is, then how it can be expressed, and, finally, why each value is vital for each soldier to demonstrate. Each soldier will be given the task to give

a final presentation of 5–10 minutes highlighting how they specifically deepened their understanding of one or more of the Army Values throughout the training.<sup>11</sup>

It sounds easy and executable, right? But, it was not so easy.

## Barriers to Innovation: Staff Coordination

The problem with innovation is that it is all about perceptions. The idea of providing effective, high-quality

training for soldiers soon was mired down in staff processes and traditional modes of instruction. Questions arose such as “Why can’t your soldiers just conduct classroom training with PowerPoint slides?,” “How much money is this going to cost? You know that we are worried about spending money,” and “Is this mission-essential training?” The one-page white paper outlining the training concept and budget estimate was not sufficient for quick and easy approval for execution. What seemed evident to our battalion seemed foreign and difficult to grasp to others.

Each of the conversations ended with the following statement: “I’m not sure whether you should be doing this. I’ll ask my counterpart at higher headquarters.”

**97<sup>th</sup> Civil Affairs Battalion (Airborne)**  
**Army Values Training Event**  
**20-23 March 2014**

**Evaluation Form**

How do you rate the overall event? Excellent      Satisfactory      Unsatisfactory

What was your favorite part of the training? Visiting all the monuments/Capitol tour  
 Why? Wishing all the monuments/memorials spoke volumes to me in regards to the army values and witnessing the efforts of all soldiers that present. The Capitol tour was amazing in the way that we got to see some of the biggest decisions of the US were made.

What was your least favorite part of the training? Presentation partially.  
 Why? Only because I wish I had better materials/online access to give a better presentation.

How was your understanding and commitment to the Army Values strengthened?  
As explained above, hands on seeing and understanding everything we visited (events, tours, walks, monuments, museum etc.) centered and brought out all the meaning of each of the values. The

What did you appreciate about the presentations and how can they improve?  
Each of the presentations were thorough and in depth, I learned alot. As far as improvement here not much just maybe more guided tours.

How did this workshop meet your expectations?  
It exceeded my expectations by opening my eyes to alot more and seeing everything we saw lots of great officers were visited.

What are you looking forward to on the next training?  
Learning new things and or reinforcing my values/army values to better me as a person.

Please rate the following:	Excellent	Satisfactory	Unsatisfactory
Barracks Space:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friday Activities:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Saturday Activities:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sunday Activities:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presenter(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please use this space or the back of this form to make more detailed comments or suggestions. Your feedback is very important to helping to plan the next event.

(Image by Lt. Col. Thomas R. Matelski, U.S. Army)

## Figure 2. Soldier Feedback on Values-Based Training

After receipt of the final legal review, there still were questions that required answers. Approval for execution was granted, but only with the guarantee of a detailed after-action review upon completion. The result was an approved concept: Four days for twenty-five soldiers and three trainers to go to Washington, D.C., and conduct

UNCLASSIFIED				
 <b>TRAINING SCHEDULE</b>				
SUN 22 FEB	MON 23 FEB	TUE 24 FEB	WED 25 FEB	THU 26 FEB
<p><b>0830 - 0900:</b> Accountability</p> <p><b>0900 - 1900:</b> Depart FBNC/Travel to NYC</p> <p><b>1900 - Curfew:</b> Arrive NYC (lodging location TBD)/Team time/Brief development</p>	<p><b>0830 - 0900:</b> Accountability/Travel to 9/11 Memorial via public transportation</p> <p><b>0900 - 0915:</b> Team 1 brief on Personal Courage Case Study and significance of 9/11 Memorial</p> <p><b>0915 - 1100:</b> 9/11 Memorial Tour</p> <p><b>1100 - 1300:</b> Lunch</p> <p><b>1300 - 1330:</b> Travel to Ellis Island</p> <p><b>1330 - 1345:</b> Team 2 brief on Loyalty Case Study and significance of Ellis Island</p> <p><b>1345 - 1600:</b> Ellis Island Tour/Statue of Liberty Tour (optional)</p> <p><b>1600 - 1800:</b> AAR/Group dinner</p> <p><b>1800 - Curfew:</b> Team time/Brief development</p>	<p><b>0630 - 0700:</b> Accountability/Clear NYC lodging</p> <p><b>0700 - 0900:</b> Depart NCY/Travel to Philadelphia</p> <p><b>0900 - 0915:</b> Team 3 brief on Integrity Case Study and significance of Independence Hall</p> <p><b>0915 - 1100:</b> Independence Hall Tour</p> <p><b>1100 - 1300:</b> Lunch</p> <p><b>1300 - 1315:</b> Team 4 brief on Honor Case Study and significance of Liberty Bell</p> <p><b>1315 - 1500:</b> Tour of Liberty Bell</p> <p><b>1500 - 1800:</b> AAR/Team time/Brief development/Dinner</p> <p><b>1800 - 2100:</b> Depart Philadelphia/Travel to Washington DC</p> <p><b>2100 - Curfew:</b> Arrive at Washington DC (lodging location TBD)/Team time/Brief development</p>	<p><b>0830 - 0900:</b> Accountability/Travel White House (pending ticket request approval)</p> <p><b>0900 - 0915:</b> Team 5 brief on Respect Case Study and significance of the White House</p> <p><b>0915 - 1130:</b> White House Tour (pending ticket request approval)</p> <p><b>1130 - 1330:</b> Lunch</p> <p><b>1330 - 1345:</b> Team 6 brief on Duty Case Study and significance of the US Capitol</p> <p><b>1345 - 1600:</b> US Capitol Tour (tickets secured)</p> <p><b>1600 - 1800:</b> AAR/Group dinner</p> <p><b>1800 - 1815:</b> Team 7 brief on Selfless Service Case Study and significance of Memorial Row</p> <p><b>1815 - 2030:</b> Memorial Row Tour</p> <p><b>2030 - Curfew:</b> Team time/Brief development</p>	<p><b>0830 - 0900:</b> Accountability/Travel to Holocaust Museum</p> <p><b>0900 - 1130:</b> Holocaust Museum Tour</p> <p><b>1200 - 1300:</b> Lunch</p> <p><b>1300 - 1430:</b> Army Values Practical Exercise/Discussion/Check on Learning/AAR</p> <p><b>1430 - 2000:</b> Depart Washington DC/Travel to FBNC</p> <p><b>2000 - 2100:</b> Van turn in/Commence trip</p>
UNCLASSIFIED				
<i>95<sup>th</sup> Civil Affairs Brigade (Airborne)</i>		<i>"Order From Chaos"</i>		

(Graphic from Lt. Col. Thomas Matelski, U.S. Army)

**Figure 3. Values-Based Training Concept, February 2015**

values-based training. The program would include stops at Arlington National Cemetery, the United States Holocaust Memorial Museum, the United States House of Representatives, and the National Mall. Billeting was provided free at Fort McNair. The total cost of the event comprised the cost of using two vehicles.

We were primed and ready for execution. Excitement in the battalion was palpable. The event was something new and unique. The junior NCOs provided a thoughtful, meaningful set of learning goals for our soldiers. Nofsinger provided the leadership team with periodic updates, and the immediate feedback was that the event was turning out to be a home run. The results were better than expected.

### Feedback, After-Action Review, and Revision

Upon completion of the first values-based training event, we conducted a thorough after-action review with

the battalion staff, as well as a feedback session with the soldiers who participated. Our soldiers returned from the event excited and eager to share what they learned with their peers. The junior NCOs and leadership team saw firsthand what a little innovation, ingenuity, and hard work could produce. The training was of significant value and exceeded all expectations in helping soldiers understand the importance of the Army Values. It illustrated how maintaining the Army culture as a part of the profession of arms is truly important.

The greatest impression came from the facilitator-led interactive vignettes and the authentic historical events the facilitators recounted to add historical context. For example, a vignette on selfless service was followed by a visit to Arlington National Cemetery to observe the changing of the guard at the Tomb of the Unknown Soldier. The Holocaust Museum tour followed a discussion on respect, and the National Archives provided insights into the importance of the Army and the



Nation's early history. Every venue, to include a twilight tour of the National Mall, provided context for a meaningful discussion of Army Values. Through this training, our soldiers saw the relevance of the Army Values and their ties to the Army profession.

It is important to note that the cost of the first event was kept low because of a network of trust-based relationships made possible by the Army. Trust, as described in *The Army Profession*, "serves as a vital organizing principle that establishes the conditions necessary for mission command. Trust is earned and reinforced as Army professionals contribute to the mission and perform their duty, seeking and communicating the truth and acting with integrity."<sup>12</sup> In the case of the values-based training event, it was the trust between soldiers with varying years of service that enabled the event to become reality.

The Arlington Cemetery tour was arranged by a chaplain who previously served in the same brigade as our battalion. The backstage tour of the U.S. Capitol Building came because of coordination with a former brigade officer serving in the Office of the Chief Legislative Liaison. Finally, billeting was arranged through NCO connections at Fort McNair barracks.

Individual soldier feedback provided the most compelling evidence of the success of the event. "I'm glad my unit made the investment in me important enough to allow me to attend," one soldier said. "I now have a deeper understanding of why I joined the Army."<sup>13</sup>

Another soldier commented, "It actually taught me the Army Values, and allowed me to see them in action and get a better understanding of them."<sup>14</sup> Figure 2 (page 80) provides a detailed example of the feedback from a soldier who attended.<sup>15</sup>

## Round Two: Bigger and Better

The feedback from the first iteration immediately drove us to conduct the values-based training a second time. Although several key players changed after the first iteration, the intent and concept for execution remained largely the same: stay focused on soldier-led discussion and synthesis; show practical application in real, historical examples; and replicate the results in a regular, periodic concept of operations. We would challenge our junior NCOs even more by expanding the scope of events.

Challenged by the commander of U.S. Special Operations, Army Gen. Joseph Votel, during a

commander's conference in August 2014, we decided that New York City and Ground Zero would be an exciting venue to see and understand why we fight.<sup>16</sup> We decided to incorporate additional locations of historical relevance to the training concept: Ellis Island in New York City and Independence Hall in Philadelphia. Time in the National Capital Region would be conducted at the end of the event.

The staff process would be similar, but the concept was approved for execution. Figure 3 (previous page) highlights the overall concept of the operation.<sup>17</sup>

The staff challenges were similar to the first values-based training event, but this time there was solid feedback from the first iteration of training. The second iteration proved to be as successful as the first, but, unfortunately, the values-based training event was restricted to the National Capital Region because of competing operational requirements. Funding was not approved through traditional budgetary processes, but the Fort Bragg Chaplains' Tithes and Offerings Fund provided funds for the vehicles used. Our commitment remained the same: execute the event and to continue to provide a venue for soldiers to understand the Army culture and experience it in real and tangible ways.

Feedback was almost identical from the previous event, which confirmed the value, because only one soldier had attended both training events. The results convinced us that the values-based training concept should be applied across the Army. The concept proved to be an invaluable tool to connect soldiers to the Army in which they served and created a more cohesive team at work.

## Recommendations and Final Thoughts

The values-based training was executed well with no issues of soldier indiscipline. Because the participants were a part of the learning and execution process, the prevailing mood was to "do things right and make it worthwhile." The time-constrained nature of the second iteration reduced the number of available options, but the effects were the same. When queried about the desire to reenlist when the time came, the majority of responses were, "Yes! Absolutely." Additionally, the training concept has been shared with other battalions at Fort Bragg and Joint Base Lewis-McChord.

The values-based training concept provides real, iterative connections with apprentice-level soldiers

and provides a deeper understanding of the Army profession. This makes it more likely that a group of apprentices would transition to journey person status and eventually become lifelong Army professionals.

The concept is applicable to all Army organizations. The proximity to the National Capital Region allowed ease of access for us, but there are historical venues

close to nearly every Army installation that can provide relevant context for the Army Values. The values-based training concept can be applied across the Army similar to the Strong Bonds program, which helps soldiers improve personal relationships.<sup>18</sup> Values-based training is essential to building a desire to be a lifelong member of the Army profession. ■

### Biography

*Lt. Col. Tom Matelski recently completed assignment as a U.S. Army War College Fellow at the Daniel K. Inouye Asia-Pacific Center for Security Studies. He holds a BS from the University of Wisconsin-Milwaukee and an MMAS from the U.S. Army School for Advanced Military Studies. He commanded the 97th Civil Affairs Battalion (Airborne) at Fort Bragg, North Carolina.*

## Notes

**Epigraph.** Raymond T. Odierno, 38th Chief of Staff of the Army, *Marching Orders: America's Force of Decisive Action, January 2012* (Washington, DC: U.S. Government Printing Office [GPO], 2012), 2, cited in Army Doctrine Reference Publication (ADRP) 1, *The Army Profession* (Washington, DC: U.S. GPO, 14 June 2015), 1-1.

1. Don Snider, "Addressing the Army's Values to Virtues Gap," *Army Magazine*, 16 May 2014, accessed 1 August 2016, <http://www.armymagazine.org/2014/05/16/addressing-the-armys-values-to-virtues-gap/>.

2. John A. Vermeesch, "Trust Erosion and Identity Corrosion," *Military Review* 93, no. 5 (September-October 2013): 2-10; Army Doctrine Publication 1, *The Army* (Washington, DC: U.S. GPO, 6 August 2013), fig. 2-2.

3. United Nations, *United Nations Competencies for the Future* (New York: United Nations office of Human Resources Management), accessed 21 July 2016, [https://careers.un.org/lbw/attachments/competencies\\_booklet\\_en.pdf](https://careers.un.org/lbw/attachments/competencies_booklet_en.pdf). The United Nations' core values are integrity, respect for diversity, and professionalism.

4. Delta Airlines, "Corporate Information," Delta website, accessed 21 July 2016, [http://www.delta.com/content/www/en\\_US/about-delta/corporate-information.html](http://www.delta.com/content/www/en_US/about-delta/corporate-information.html). Delta Airlines' core values are honesty, integrity, and respect.

5. William H. Bruening, "Can Values Be Taught?" (research paper, January 1980), 9-10, Education Resources Information Center (ERIC) 164397, accessed 21 July 2016, <http://files.eric.ed.gov/fulltext/ED164397.pdf>.

6. Raymond T. Odierno and Raymond Chandler, "Senior Leadership," lecture at the Army Pre-Command Course, Fort Leavenworth, Kansas, April 2013.

7. Stephen J. Gerras and Leonard Wong, *Changing Minds in the Army: Why it is So Difficult and What to Do about It* (Carlisle

Barracks, PA: U.S. Army War College Strategic Studies Institute, October 2013): 20-21.

8. *Ibid.*, 6.

9. ADRP 1, *The Army Profession*, fig. 5-3.

10. Charles T. Cleveland, commander, Special Operations Command-Central, mission analysis briefing feedback comments, MacDill Air Force Base, Florida, October 2009.

11. Thomas R. Matelski, "Memorandum of Instruction, Army Values Training Event, 20-23 March 2014," Fort Bragg, North Carolina, 97th Civil Affairs Battalion (Airborne), February 2014, 2.

12. ADRP 1, *The Army Profession*, 3-2.

13. Rob Nofsinger, Army Values Training Participant Evaluation Form, Fort Bragg, North Carolina, 97th Civil Affairs Battalion (Airborne), March 2014, 3.

14. *Ibid.*, 4.

15. *Ibid.*, 2. Feedback was anonymous and not directly attributed by name.

16. Joseph Votel, in opening remarks by the commander, United States Special Operations Command, at the U.S. Army Special Operations Command Commanders Conference, Fort Bragg, North Carolina, 9 September 2014. Gen. Votel in his opening remarks talked about the importance of providing soldiers with the understanding of why they were deployed.

17. Phillip Rittermeyer, "Concept of Operations: Army Values-based Training Event," Fort Bragg, North Carolina, 97th Civil Affairs Battalion (Airborne), January 2015.

18. The Army Strong Bonds Program, "What is Strong Bonds?" Strong Bonds website, accessed 3 August 2016, [https://www.strongbonds.org/skins/strongbonds/display.aspx?moduleid=9eed30c4-706f-4895-8532-14bac5c094ec&mode=user&CategoryID=dc607770-7cbe-407a-90d6-2e0f518e2892&Action=display\\_user\\_category\\_objects#6b94a239-e26b-4663-ad55-a78060a63c06](https://www.strongbonds.org/skins/strongbonds/display.aspx?moduleid=9eed30c4-706f-4895-8532-14bac5c094ec&mode=user&CategoryID=dc607770-7cbe-407a-90d6-2e0f518e2892&Action=display_user_category_objects#6b94a239-e26b-4663-ad55-a78060a63c06). "Strong Bonds is a unit-based, chaplain-led program that helps soldiers and their families build strong relationships."



# How the Army's Multi-Source Assessment and Feedback Program Could Become a Catalyst for Leader Development

Col. Kevin McAninch, U.S. Army

*Developing strategic thinkers, planners, and leaders is one of the most important things we do, and is grounded in the best possible training, education, and experiences.*

—Gen. Mark A. Milley, Chief of Staff of the Army

The U.S. Army considers it important to develop leaders who can operate in the dynamic strategic environment of the twenty-first century. A component of the Army's training and leader development, and a tool in the self-development domain, is the Multi-Source Assessment and Feedback (MSAF) program.<sup>1</sup> The MSAF is a 360-degree leader development tool. It provides feedback to leaders who then can use it to inform and focus their self-development.<sup>2</sup>

Implemented in 2008, the MSAF ostensibly allows users "to navigate complex leadership challenges, to enhance leader adaptability and self-awareness, and to identify Army leaders' strengths and weaknesses," and it "guides their preparation for future leader responsibilities."<sup>3</sup> Many civilian organizations use 360-degree feedback for employee development.<sup>4</sup> In the Army, officers are required to initiate assessments, provide assessments of others, and annotate the date of their MSAF event on their officer evaluation report (OER).<sup>5</sup>

However, requiring participation does not equate to developmental effectiveness. Civilian studies on post-assessment feedback from 360-degree programs indicate

widespread employee performance improvement is unlikely.<sup>6</sup> Additionally, when the feedback is solely in the hands of the individual, accountability in interpreting it is lacking, and an inability to implement behavior changes is likely.<sup>7</sup> Development fails to occur when rated officers are unaccountable, when they see the feedback as supplemental information, or when they view the assessment as an administrative event instead of part of their developmental process.<sup>8</sup> In other words, the tool can become just a bureaucratic hoop to jump through.

In their groundbreaking work *Lying to Ourselves: Dishonesty in the Army Profession*, Leonard Wong and Steven J. Gerras discuss the Army's MSAF:

Requiring all officers to attest on their OERs that they have initiated a multi-source assessment and feedback (MSAF) in the last three years probably has the well-intended purpose of socializing the force to 360-degree feedback. But, the unanticipated outcome has been the diminution of the gravitas of an officer's signature as rated officers, raters, and senior raters dismiss the requirement as an administrative nuisance rather than an ethical choice.<sup>9</sup>

The Army is failing to make effective use of the MSAF. This failure is not because 360-degree assessments are inherently flawed. Instead, it is because the Army's implementation is flawed. With certain changes, the MSAF could be a powerful means for building the



Newly commissioned 2nd Lt. Alix Schoelcher Idrache became the Maryland Army National Guard's first U.S. Military Academy graduate 21 May 2016. Idrache, originally from Haiti, graduated at the top of his class in physics and will attend Army aviation school at Fort Rucker, Alabama. If properly implemented, multi-source assessment and feedback has the potential to greatly improve the development process for young officers like Idrache. (Photo by Sgt. Ryan Noyes, U.S. Army)

kind of relationships that would enhance leader development. The purpose of this article, therefore, is to influence the Army to improve how it uses the program.

The discussion first shows how and why the MSAF is failing to meet its goals. Then it describes a critical weakness in Army leader development efforts that a 360-degree assessment tool could address, if implemented effectively. Next, it analyzes ways the Army could respond to the evidence that Army leaders are scarcely benefitting from the MSAF. Finally, it recommends the Army adopt four initiatives that could make the MSAF an effective catalyst for leader development.

## How the Army's Multi-Source Assessment and Feedback Program Measures Up

Each year, the Center for Army Leadership conducts surveys to assess leadership in the Army. It produces annual reports known as the *Center for Army*

*Leadership Annual Survey of Army Leadership (CASAL)*.<sup>10</sup>

The reports cover a wide range of topics and capture "assessments from the field about leadership and leader development."<sup>11</sup> The center has been assessing the MSAF since 2010. The 2014 report, published June 2015, describes the goal for the MSAF program: "The optimal impact of the process (i.e., improving leadership capabilities) is realized through the assessed leader's actions that follow feedback receipt, such as requesting additional feedback from others, interacting with a coach, developing an individual leader development plan (ILDP), and self-initiated learning."<sup>12</sup>

**Unmet program goals.** The 2014 CASAL highlights the disappointing state of the MSAF program. The report shows that most officers using MSAF do not value the program, do not devote effort to self-development and improvement, and do not internalize their feedback. The goals of the MSAF program are not being achieved. Indications also suggest "a culture of resistance" from



officers toward the MSAF and the mandated OER block entry.<sup>13</sup> Indicators from the 2014 CASAL include that—

- About 80 percent of officers had participated as an assessed leader over the thirty-six months before the survey date.
- In the Active Component, 32 percent of field grade, 33 percent of company grade, and 38 percent of warrant officers rated the MSAF as effective.
- About two-thirds of officers and three-fourths of warrant officers only initiated MSAF to meet OER requirements.
- Seventy percent of leaders did not complete an ILDP.
- Two thirds reported devoting minimal effort to the MSAF feedback.
- Only 10 percent used virtual improvement coaching.<sup>14</sup>

The 2012 and 2013 CASALs report similar findings that indicate a downward trend in the effectiveness of the MSAF as a catalyst for leader development. Table 1, which compares CASAL results over three years, indicates virtually no positive trends in the Army’s MSAF program between 2012 and 2014. The 2010 and 2011 CASAL reports used different indicators to assess the MSAF so those results are not included in table 1. Of note, in 2010 only 27 percent and in 2011 only 29 percent of leaders rated the MSAF as having a great or moderate impact on their development, and in 2010 only 56 percent of respondents reported taking full advantage of the program.<sup>15</sup>

The 2014 CASAL survey asked respondents to rate thirteen leader development practices according to whether they had a large, moderate, or small positive impact on their development as a leader. Among all respondents combined, the MSAF came in last: 54 percent rated it as having the least impact of all development activities.<sup>16</sup> Despite weaknesses in how the program typically is used, however, 22 percent found it had a large impact on their growth as leaders. If the program were better managed, this number could become much higher.

**Table 1. Comparison of Leadership Survey Results for the MSAF, 2012–2014**

Indicators	2012	2013	2014	Trend
Percent of assessed leaders who feel the MSAF experience was effective at increasing their awareness of their strengths and developmental needs	58	59	53	↓
Percent of assessed leaders who feel the MSAF was effective for improving their organization	36	37	30	↓
Percent of senior noncommissioned officers who view the MSAF favorably	79	77	71	↓
Percent of senior noncommissioned officers who view the MSAF favorably	71	75	63	↓
Percent of noncommissioned officers who initiated an MSAF for their own self-development	48	48	42	↓
Percent of field grade officers who rate the MSAF program as effective in improving their leadership capabilities	38	41	32	↓
Percent of company grade officers who rate the MSAF program as effective in improving their leadership capabilities	41	44	33	↓
Percent of warrant officers who rate the MSAF program as effective in improving their leadership capabilities	45	44	38	↓
Percent of all active-component respondents who rate the MSAF as effective for extending improvement to their organization	36	36	32	↓
Percent of officers who only initiated the MSAF to fulfill an OER block check requirement	59	59	66	↑
Percent of warrant officers who only initiated the MSAF to fulfill an OER requirement	51	51	74	↑
Percent use VIC	9	10	10	↔
Percent who use VIC who rate it as effective	65	63	Not assessed	↔
Percent who reported knowing about the VIC	31	33	Not assessed	↔

**Legend**  
 MSAF—Multi-Source Assessment and Feedback    OER—officer evaluation report  
 VIC—virtual improvement coaching

(Graphic by Kevin McAninch)

**Reasons 360-degree feedback fails.** Considering the data in table 1, it might seem too early to draw a definitive conclusion on trends in the effectiveness of the MSAF program. However, this article proposes a second analytical rubric that suggests similar conclusions. Table 2 aligns general summary statements of the CASAL’s MSAF results to leadership trainer Craig Chappelow’s “Eight Reasons 360 Feedback Fails.”<sup>17</sup> Chappelow bases the eight reasons on his fifteen years’ experience in managing a 360-degree

assessment program for the Center for Creative Leadership (CCL). He calls the eight reasons mistakes because they lead to failure. Therefore, the arrows in column three represent this article’s interpretation of the MSAF results in relation to Chappelow’s eight reasons for failure: A green upward-pointing arrow indicates a favorable comparison (the MSAF is not failing because of that specific reason); a red downward-pointing arrow indicates that the MSAF is trending toward failure in that category; and an amber horizontal arrow indicates a neutral trend.<sup>18</sup>

### How Army Leaders Fail to Develop Others

One other negative trend regarding Army leader development, as observed in the 2010–2014 CASAL reports, stands out: Army leaders consistently rate low in *developing others*:

- In 2014, developing others was rated as the Army’s lowest leader competency and the only category below the Army’s established benchmark, with “more than half [of Army leaders] receiv[ing] in-formal performance feedback occasionally or less often.”<sup>19</sup>
- In 2013, “Develops others continues to be the competency most needing improvement.”<sup>20</sup>
- In 2012, “Develops others continues to be the competency most needing improvement.”<sup>21</sup>
- In 2011, “One consistent exception in strong indicators is the *Develops Others* competency. Many leaders are perceived as not providing useful counseling, nor encouraging individual development, and not showing genuine concern for subordinate development.”<sup>22</sup>
- In 2010, “*Develop Others* is also identified in Army MSAF data as the greatest developmental need of leaders.”<sup>23</sup>

**Table 2. Comparison of MSAF Survey Results to Reasons 360-degree Feedback Fails**

Chappelow’s eight reasons 360-degree feedback fails	Representative CASAL findings for the MSAF	Interpreting the MSAF results based on Chappelow’s eight reasons
1. Unclear Purpose	Guidance and purpose clear in Army regulations and the MSAF website	↑
2. Dumbing it Down	The MSAF generally is not seen as an opportunity for leader development: two-thirds of officers participated to fulfill OER requirement	↓
3. Project Bloat	Soldiers report a declining view of its usefulness: effectiveness rates are dropping, and the MSAF generally is rated as the lowest-valued leader development tool	↓
4. No Support from Senior Executives	Senior Army leaders have indicated support for the program and have led the effort by using the General Officer 360 assessment	↑
5. Misreading Organization’s Readiness	Misreading the organization’s readiness involves a culture of feedback avoidance: declining participation and effectiveness coupled with poor VIC utilization indicate a culture of resistance	↓
6. Growing Your Own	The Army created the MSAF; however, the questions appear to be modeled after CCL products, indicating the Army did not entirely grow its own	↔
7. Poor Communication	Expectations about the requirement and impact are not met: declining participation and low VIC utilization	↓
8. Confusing Assessment with Development	No feedback mechanism for development exists. There are indicators of minimal effort applied: 70 percent of leaders surveyed did not create an ILDPP	↓

**Legend**  
 CASAL—Center for Army Leadership Annual Survey of Army Leadership    CCL—Center for Creative Leadership  
 ILDP—individual leader development plan    MSAF—Multi-Source Assessment and Feedback  
 OER—officer evaluation report

(Graphic by Kevin McAninch)

While the MSAF is directly related to the leader competency called *prepares self*, the inability for Army leaders to *develop others* shows the alarming rate at which leaders are not taking responsibility to those they lead.<sup>24</sup> This is an individual and a leader responsibility that clearly is not occurring to the extent needed. A well-implemented MSAF could help the Army remedy this problem.

More structure is needed to link a rated officer’s MSAF assessment with other leaders who can fulfill the responsibility to develop others.<sup>25</sup> The consistent negative perception of assessed leaders toward those they view as responsible to develop them, combined



with a negative trend in the MSAF program, represents a failure for the Army.

However, the situation also presents an opportunity for the Army to assess potential positive impacts of the MSAF on leader development resources. The 2014 CASAL suggests that a linkage between developing others and self-development is important to the Army:

The practice of subordinate development (i.e., leaders' abilities to develop others) has been consistently found to be an area for improvement in past CASAL surveys, and should continue to receive the Army's attention and focus. Subordinate leader development requires a concerted effort in both enabling superiors to do it well and holding them accountable for this leadership responsibility. Further, given the frequent percentage of superiors who are rated ineffective or neutral, the role of every Army leader in their own development is elevated in importance.<sup>26</sup>

## How the Army Could Address the MSAF Trends

The MSAF is not the catalyst for leader development that it could be. With Army leaders indicating they consider the MSAF program of limited effectiveness, declining in value since 2012, and increasingly only initiated to meet an OER requirement, the Army needs to address the way ahead for the MSAF. Four options are worthy of discussion: keeping the program as it is, scrapping the program, making the program voluntary, or improving the program.

**Keeping the program as it is.** The first option is to do nothing and leave the current program just as it is: a low-cost, easy-to-use, web-based application that puts the professional responsibility on the individual to seek and implement self-development. Small but positive improvements from the program benefit some users. However, with the trends over the past few years as mostly negative, doing nothing would be, at best, complacency. Moreover, it would increase mistrust in an Army program of record.

**Scrapping the program.** A second option is to scrap the program altogether (due to its generally ranking lowest in value for leader development) and eliminate the requirement for the OER block check (due to the inadvertent creation of the culture of resistance). This

would satisfy Wong and Gerras's recommendation to put a "restraint in the propagation of requirements and compliance checks."<sup>27</sup> However, because of its low cost and the positive impact to some professionals who use the MSAF as intended, this option is not recommended. Eliminating the program would also run counter to a 2014 RAND report that concluded, "making 360 feedback available for developmental use in the military services is a good idea."<sup>28</sup> Eliminating the program would also run counter to current research that supports the need: "Leadership development is one of the most pressing issues facing organizations globally today—and represents a great chance for them to seize competitive advantage in their industries ... 'the future success of organizations lies in the bench strength of its leaders and in the developmental opportunities that are afforded to them.'"<sup>29</sup>

**Making the program voluntary.** A third option would be for the Army to continue to make the tool available but change it to voluntary. This would likely change the negative perception and the culture of resistance if the OER requirement were also dropped, while still providing a resource to those with interest to take advantage of the program. As a voluntary program, it could mirror the execution of the Army War College's Strategic Leadership Feedback Program. This program offers 360-degree multirater assessments, comparisons with other students' assessments, and outreach and feedback.<sup>30</sup> A voluntary system, it reports an annual class participation rate of 93 percent, with 91 percent of participants rating it "a critical component of their professional military education experience."<sup>31</sup>

**Improving the system.** The last and most advisable option is to improve the system of implementation and gradually add more guided or structured self-development to the MSAF program. Initiatives to support this option would require increased organizational support and effort. The Commander 360 program illustrates examples of specific improvements. As of February 2016, it directs centrally selected commanders at the rank of lieutenant colonel and colonel to conduct two 360-degree assessments during their command tenure, and it directs increased rater involvement; therefore, could the MSAF do the same?<sup>32</sup> This increased organizational support and effort in the Commander 360 program focuses on enhancing leader growth, increasing rater involvement

in the development process, and encouraging greater leader-to-leader development.

As the CCL indicates, “The goal of an effective 360-feedback implementation should be positive, measurable, long-term leadership growth and development ... in conjunction with organizational support.”<sup>33</sup> Organizational support must come from the leader; the person charged to develop others. The superior, rater, or senior rater must invest the time in developing others and focus on the MSAF beyond just the initiation and OER data entry. Leaders have a responsibility to do this, not only to develop others but also to ensure the Army’s bench strength of leaders remains strong and the Army does not develop a leadership gap in which new leaders lack critical skills.<sup>34</sup>

## How to Make the Multi-Source Assessment and Feedback Program Effective

This article recommends improving the MSAF program through four initiatives consistent with research on 360-degree feedback programs:

1. Enforce follow-up.
2. Require development of an ILDP.
3. Train leaders to coach and mentor in professional military education (PME).
4. Restructure tools to support vertical development.

These initiatives would return the MSAF to its intent of “a better-led force, with leaders who are capable of leading in a range of military operations.”<sup>35</sup>

**Initiative 1: Enforce follow-up.** Research indicates follow-up from an initial 360-degree event is important. Currently, there is no formalized feedback process for follow-up within the MSAF program. With no follow-up or accountability to encourage leaders to pursue self-development, they check the block and move on to the next task, missing a key step in internalizing feedback and improving leadership behavior.

A follow-up requirement now exists for the Commander 360, establishing a precedent for possible inclusion in the MSAF.<sup>36</sup> The CCL further elaborates on post-assessment follow-up with this recommendation: “Every few months participants should be held accountable for their progress toward accomplishing their goals. This may include follow-up meetings with the working group that provided feedback, follow-up with the supervisor who helped

establish the developmental goals, or follow-up with coaches.”<sup>37</sup> Reinforcing a follow-up feedback session could also help reverse the downward trend in developing others.

**Initiative 2: Require an individual leader development plan.** Creating an ILDP that includes setting developmental goals is one way to institutionalize feedback mechanisms. This is important because “development is what happens afterwards; and development is what matters most to organizations. For the organization and the individual to get the most out of a 360, there needs to be a process for creating a development plan, support, and follow-through.”<sup>38</sup> The Commander 360 has added a requirement for a developmental discussion two weeks after commanders receive their assessment, reinforcing “the Army’s expectations that raters will help their subordinate commanders grow as leaders.”<sup>39</sup>

In addition, setting goals enables individual leaders to focus on what is important to them and on areas where they need feedback. “Feedback should be focused on your goals—you should have a good idea what your goals are ... [and] also have fresh ideas on new skills and perspectives you want and need to develop.”<sup>40</sup> The link from self-awareness to goal to behavior change is how the intended development occurs. As the CCL reiterates, “A significant goal will require a change in your behavior, and changing your behavior is hard work.”<sup>41</sup>

**Initiative 3: Train leaders to coach and mentor in professional military education.** How does the Army train leaders in PME on how to ask for and provide feedback, or how to mentor and provide coaching so others can integrate their feedback into a developmental plan? To address the need to improve developing others, the Army could institute a leaders-as-teachers program. Using an organization’s leaders as a key component of a successful learning strategy seems obvious: “Why not use the potential of these leaders to inspire, mentor, coach, and train other talented leaders ... to enable them to reach their full potential?”<sup>42</sup>

A leaders-as-teachers program could take on a few different forms. First, the Army could require rater and senior rater involvement before an MSAF event. This would put a focus on goal development and identification of desired feedback. Subordinate development is a leader’s responsibility, and active



involvement before an MSAF could result in more focus and, subsequently, greater developmental impact. Second, the Army could require post-MSAF mentoring outside the chain of command. Rated officers could seek outside coaches and mentors to help them interpret the MSAF and build relationships across the Army. These leader-coaches could help clarify inputs needed for development.<sup>43</sup> Because they would be outside the chain of command, the likelihood of negative effects on careers or evaluations would be lessened.

Finding outside coaches and mentors could also have a positive networking effect, whereby “healthy relationships of mutual respect, honest communication, and genuine support” would be more dependable.<sup>44</sup> Army doctrine states, “Trust-based mentorship can help focus self-development efforts to achieve professional objectives.”<sup>45</sup> Additionally, according to coaching and mentoring expert Douglas Riddle, “every leader must be engaged in developing the leadership capabilities of those around them, or future organizational growth cannot be assured.”<sup>46</sup> This is critical to avoid the development of a leadership gap in the Army.

**Initiative 4: Restructure tools to support vertical development.** The current MSAF is a horizontal development tool focused on competencies, but it does not assist in vertical development. Per coaching and mentoring expert Nick Petrie, “Horizontal development is about knowledge, skills, and information.”<sup>47</sup> Alternately, vertical development is based on different levels or stages of thinking. It “involves gaining new perspectives and leadership mindsets needed to make the business strategy work.”<sup>48</sup> The MSAF format and content have undergone modest improvements, but the Army is still using one form of the MSAF for second lieutenants through colonels. This seems illogical given that the Army’s description of leadership identifies three different levels: direct, organizational, and strategic, which all have different foci and required skills.<sup>49</sup> The current MSAF lacks vertical development assessments to help leaders achieve new levels of thinking and self-development.

The introduction of new OERs in 2014 acknowledged that different competencies were required at the three different levels of leadership. If performance evaluations should assess different competencies, then the Army should provide different leader

development tools as well. Research by Ellen Van Velsor, Jean Brittain Leslie, and John W. Fleenor supports this, stating, “An instrument targeted towards all levels of management might not be right for middle managers in your organization because the capacities assessed are not in line with company-wide management development goals.”<sup>50</sup> Additionally, “Employees come into their roles with different experiences, skills, perspectives, and stages of development.”<sup>51</sup>

## How an Improved Multi-Source Assessment and Feedback Program Could Enhance Leader Development

Indicators from the CASAL reports suggest it will be a challenge to add structure to the MSAF program due to possible cynicism and a culture of resistance. Research outside the Army suggests otherwise. According to talent development expert Edward Betof, “Career experts agree that the first level of responsibility for ongoing learning and career personal development begins with the individual. Yet, a committed leader-teacher and coach with a real interest in the growth and development of others is an important part of an individual’s journey towards success.”<sup>52</sup> Diane Reinhold, Tracy Patterson, and Peter Hegel propose “at-work learning partners,” because “people apply what they learn more effectively when they have a developmental relationship with someone who understands the organizational context and is committed to helping them be successful.”<sup>53</sup> This sounds like *developing others*.

According to the CCL, “coaching is one of an organization’s best tools for developing and retaining internal leaders with the capability to secure current and future success.”<sup>54</sup> Betof, citing behavioral scientist Bernard Haldane, describes reasons people (such as leaders and superiors) want to coach (develop) others by sharing expertise:

- Most people have good will and thus will help others with their career challenges in the workplace.
- Many people are proud of what they know or have accomplished, especially if they are regarded as experienced, competent, or experts by others.
- Many individuals’ sense of self is enhanced when asked to share their experience, competence, or expertise with others.<sup>55</sup>



Staff Sgt. Shannon Knorr and 1st Sgt. Bryan Smethurst, both of Headquarters and Headquarters Company, 1st Battalion, 211th Aviation Regiment, Utah National Guard, conduct an end-of-tour counseling session 18 November 2012 in Kunduz Province, Afghanistan. (Photo by Sgt. Duncan Brennan, U.S. Army)

The creation of a coaching culture could help with “building leadership development into the organizational fabric” of the Army.<sup>56</sup> According to Douglas Riddle, a coaching culture can improve an organization’s “competitive advantage” when leaders are committed to developing others in formal or casual mentoring relationships.<sup>57</sup>

All of these initiatives for the MSAF program are about making the learning stick, and, by extension, making the leader—both the *developer* and the *developed*—better. The focus needs to be on the “learning transfer” to “ensure people apply what they learn.”<sup>58</sup> Learning transfer is a social process. Learning—and the desired performance that comes from learning—does not take place in isolation. The work context, including the level of support from role models, mentors, peers, coaches, and bosses, has a powerful impact on turning lessons learned into leadership in action.<sup>59</sup> One of the greatest leadership challenges the Army needs to

overcome is when the operational and learning cultures in organizations clash, and “learning transfer barriers such as lack of team support, leadership, and organizational culture” impede development.<sup>60</sup>

## Conclusion

The Army’s leader development system and the MSAF program warrant improvements. Keeping the MSAF program as it is or eliminating the program are not viable choices. The importance of leader development to ensure the Army’s ability to succeed in an increasingly complex world and to avoid a leadership gap is too important to neglect. If the Army would enforce follow-up, require an intermediate leader development plan, train leaders to coach and mentor in professional military education, and restructure tools to support vertical development, the MSAF could help Army leaders’ improve their performance in developing others. ■



## Biography

Col. Kevin A. McAninch, U.S. Army, is the commander of the Army Support Activity, Soto Cano, Honduras. He holds a BS from the U.S. Military Academy, West Point, New York; an MA from Central Michigan University, Mount Pleasant, Michigan; an MMAS from the School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas; and an MS in National Security Studies from the U.S. Army War College. He commanded the 519th Military Intelligence battalion during Operation Enduring Freedom XIII.

## Notes

**Epigraph.** Mark A. Milley, in *Advance Policy Questions for General Mark A. Milley, USA [United States Army] Nominee for Chief of Staff of the Army*, 21 July 2015, prepared for the U.S. Senate Committee on Armed Services Confirmation Hearing to Consider the Nomination of General Mark A. Milley, USA, to Be Chief of Staff of the Army, 24.

1. Army Regulation (AR) 350-1, *Army Training and Leader Development* (Washington, DC: U.S. Government Printing Office [GPO], 19 August 2014). The Army's training and leader development occur in three training domains: institutional, operational, and self-development. On page 4, the regulation states that self-development "encompass[es] the planned, goal-oriented learning that reinforces and expands the depth and breadth of an individual's knowledge base, self-awareness, and situational awareness."

2. For this article, multi-source assessment and feedback (MSAF) refers only to the Leader MSAF and does not address others tools such as Commander 360, General Officer MSAF, or Unit MSAF.

3. AR 350-1, *Army Training and Leader Development*, 200.

4. 3D Group et al., *Current Practices in 360-Degree Feedback: A Benchmark Study of North America Companies* (Emeryville, CA: 3D Group, 2013), as cited in Chaitra M. Hardison et al., *360-Degree Assessments: Are They the Right Tool for the U.S. Military?* (Santa Monica, CA: RAND Corporation, 2015), 9. Sixty-nine percent of organizations surveyed by 3D Group indicated their feedback results were used for developmental purposes, whether planning programs or self-directed efforts.

5. ALARACT 124-2008, "Multi-Source Assessment and Feedback Program," 12 May 2008; Army Directive 2011-16, "Army Directive 2011-16 (Changes to the Army Evaluation Reporting System)," memorandum from John M. McHugh to principal officials of Headquarters, Department of the Army et al., 15 September 2011; and U.S. Army Human Resources Command (AHRC-PDV-E), Milper Message 11-282, "Enhancement to the Officer Evaluation Reporting System," 16 September 2011, para. 3(B).

6. James W. Smither, Manuel London, and Richard R. Reilly, "Does Performance Improve Following Multisource Feedback? A Theoretical Model, Meta-Analysis, and Review of Empirical Findings," *Personnel Psychology* 58, no. 1 (Spring 2005): 33.

7. David W. Bracken, "Multisource (360-Degree) Feedback: Surveys for Individual and Organizational Development," cited in Allen I. Knaut, ed., *Organizational Surveys: Tools for Assessment and Change* (San Francisco: Jossey-Bass, 1996), 123.

8. Ibid.

9. Leonard Wong and Stephen J. Gerras, *Lying to Ourselves: Dishonesty in the Army Profession* (Carlisle Barracks, PA: U.S. Army War College Press, 2015), 31, accessed 6 July 2016, <http://www.strategic-studiesinstitute.army.mil/pubs/display.cfm?pubID=1250>.

10. Center for Army Leadership (CAL), "Center for Army Leadership Annual Survey of Army Leadership (CASAL) Leader Development Resources," Leader Development Resources page of the Center for Army Leadership website, accessed 11 July 2016, <http://usacac.army.mil/organizations/mccoe/cal/ldrdevelopment>. The center, a subordinate element of the U.S. Army Combined Arms Center at Fort Leavenworth, Kansas, provides numerous leadership products and services for the Army.

11. Ryan P. Riley et al., *2014 Center for Army Leadership Annual Survey of Army Leadership (CASAL): Military Leader Findings*, Technical Report 2015-01 (Fort Leavenworth, KS: CAL, June 2015), v, accessed 11 July 2016, <http://usacac.army.mil/sites/default/files/documents/cal/2014%20CASAL%20Military%20Leader%20Findings%20Report.pdf>.

12. Ibid, 90. As of the date this article was written, the 2015 CASAL had not yet been published.

13. Ibid.

14. Ibid., 89–90.

15. Ryan P. Riley et al., *2011 Center for Army Leadership Annual Survey of Army Leadership (CASAL): Main Findings*, Technical Report 2012-01 (Fort Leavenworth, KS: CAL, May 2012), 59–60, and 70; Ryan P. Riley et al., *2010 Center for Army Leadership Annual Survey of Army Leadership (CASAL): Volume 2, Main Findings* (Fort Leavenworth, KS: CAL, May 2011), 64–65.

16. Ryan P. Riley et al., *2014 Center for Army Leadership Annual Survey of Army Leadership (CASAL): Military Leader Findings*, Technical Report 2015-01 (Fort Leavenworth, KS: CAL, June 2015), 88.

17. Craig Chappelow, "Eight Reasons 360 Feedback Fails," Center for Creative Leadership (CCL) website, accessed 1 July 2016, <http://www.ccl.org>. Note: All subsequent CCL articles cited can be found at this website.

18. Clemson Turregano, CCL's director of global digital products, provided information and analysis pertaining to Table 2, row six, column two, in a telephone interview with the author 6 January 2016. He further indicated that the Army's MSAF questions are very similar to the CCL's *Benchmarks* assessment, which is a standard, industry-recognized leader development product.

19. Riley et al., *2014 Center for Army Leadership Annual Survey of Army Leadership (CASAL)*, x.

20. Riley et al., 2013 *Center for Army Leadership Annual Survey of Army Leadership (CASAL): Main Findings*, Technical Report 2014-01 (Fort Leavenworth, KS: CAL, April 2014), Abstract.
21. Riley et al., 2012 *Center for Army Leadership Annual Survey of Army Leadership (CASAL): Main Findings*, Technical Report 2013-1 (Fort Leavenworth, KS: CAL, April 2013), Abstract.
22. Riley et al., 2011 *Center for Army Leadership Annual Survey of Army Leadership (CASAL): Main Findings*, Technical Report 2012-01 (Fort Leavenworth, KS: CAL, May 2012), Abstract.
23. Riley et al., 2010 *Center for Army Leadership Annual Survey of Army Leadership (CASAL): Volume 2, Main Findings*, Technical Report 2011-1 (Fort Leavenworth, KS: CAL, May 2011), 16.
24. Riley et al., 2014 *Center for Army Leadership Annual Survey of Army Leadership (CASAL)*, Abstract. In 2014, CASAL results revealed assessments of all leader attributes except one, surpassed their benchmark the Army established by an additional 6 to 21 percent. The one exception was the attribute of developing others, with only "62% of the uniformed leaders ... rated effective or very effective."
25. AR 350-1, *Army Training and Leader Development*, 95. Despite the 2014 CASAL feedback that showed ratees' preference for individual self-development, adding more structure and moving the output stage of the MSAF from self-development into guided or structured self-development, where the leader would assume a greater role to develop others, could reinforce the importance of leader development and the MSAF as a tool in the process.
26. Riley et al., 2014 *Center for Army Leadership Annual Survey of Army Leadership (CASAL)*, 73.
27. Wong and Gerras, *Lying to Ourselves*, ix.
28. Chaitra M. Hardison et al., *360-Degree Assessments: Are They the Right Tool for the U.S. Military?* (Santa Monica, CA: RAND Corporation, 2015), xi.
29. CCL, "Driving Performance: How Leadership Development Powers Sustained Success," white paper (Greensboro, NC: CCL, 2015), 5. The paper quotes Bersin & Associates, "High-Impact Leadership Development for the 21st Century," Oakland, CA, July 2011.
30. The United States Army War College Strategic Leadership Feedback Program website, accessed 14 July 2016, <http://www.carlisle.army.mil/orgs/SLDR/feedback.htm>.
31. Ibid.
32. Army Directive 2016-06, "Army Directive 2016-06 (Commander 360 Program)," memorandum from Patrick J. Murphy to principal officials of Headquarters, Department of the Army, et al., 3 February 2016.
33. Jean B. Leslie, "360 Degree Feedback: Best Practices to Ensure Impact," CCL website, 2011, 1.
34. Jean B. Leslie, "The Leadership Gap: What You Need, and Don't Have, When it Comes to Leadership Talent," white paper (Greensboro, NC: CCL, 2015), 1. "Poor organizational practices identifying, selecting, and developing talent" result in a lack of skilled leadership.
35. AR 350-1, *Army Training and Leader Development*, Appendix K, 200.
36. Army Directive 2016-06, "Army Directive 2016-06 (Commander 360 Program)," memorandum from Patrick J. Murphy to principal officials of Headquarters, Department of the Army et al., 3 February 2016.
37. Leslie, "360 Degree Feedback: Best Practices to Ensure Impact," 1.
38. Craig Chappelow, "How to Avoid Pitfalls of 360-Degree Feedback," CCL website, 2014.
39. Army Directive 2016-06, "Army Directive 2016-06 (Commander 360 Program)," memorandum from Patrick J. Murphy.
40. Karen Kirkland and Sam Manoogian, *Ongoing Feedback: How to Get It, How to Use It* (Greensboro, NC: CCL, 1998), 10.
41. Ibid.
42. Edward Betof, *Leaders as Teachers: Unlock the Teaching Potential of Your Company's Best and Brightest* (Alexandria, VA: American Society for Training & Development, 2009), 1.
43. Frederic Funck, "The Leader-Coach: 3 Essential Steps that Make all the Difference ...," CCL website, 25 November 2015.
44. Douglas Riddle, "The Intricacies of Creating a 'Coaching Culture,'" Talent Management website, 12 November 2015, accessed 26 July 2016, <http://www.talentmgt.com/2015/11/12/the-intricacies-of-creating-a-coaching-culture/>.
45. Army Doctrine Reference Publication (ADRP) 6-22, *Army Leadership* (Washington, DC: U.S. GPO, August 2012), 7-6.
46. Douglas Riddle, "The Intricacies of Creating a 'Coaching Culture.'"
47. Nick Petrie, "Developing Talent: What You're Probably Missing," CCL website, n.d., accessed 7 July 2016, <http://insights.ccl.org/articles/leading-effectively-articles/developing-talent-what-youre-probably-missing/>.
48. Ibid.
49. ARDP 6-22, *Army Leadership*, 2-24–2-39.
50. Ellen Van Velsor, Jean Brittain Leslie, and John W. Fleenor, *Choosing 360: A Guide to Evaluating Multi-rater Feedback Instruments for Management Development* (Greensboro, NC: CCL, 1997), 3.
51. Nick Petrie, "Developing Talent: What You are Probably Missing."
52. Edward Betof, *Leaders as Teachers: Unlock the Teaching Potential of Your Company's Best and Brightest*, 64.
53. Diane Reinhold, Tracy Patterson, and Peter Hegel, "Make Learning Stick: Best Practices to Get the Most out of Leadership Development," white paper (Greensboro, NC: CCL, 2015), 7.
54. CCL, "When Your Job is to Prep Leaders for the Unknown," CCL website, n.d.
55. Betof, *Leaders as Teachers: Unlock the Teaching Potential of Your Company's Best and Brightest*, 67.
56. Douglas Riddle, "The Intricacies of Creating a 'Coaching Culture.'"
57. Ibid.
58. Reinhold, Patterson, and Hegel, "Make Learning Stick: Best Practices to Get the Most out of Leadership Development," 1.
59. Brian D. Blume et al., "Transfer of Training: A Meta-analytic Review," *Journal of Management* 36, no. 4 (2010): 1065–1105, as cited in Reinhold, Patterson, and Hegel, "Make Learning Stick: Best Practices to Get the Most out of Leadership Development," 3.
60. Reinhold, Patterson, and Hegel, "Make Learning Stick," 1.



# Ten Lessons Learned about Host-Nation Construction in Afghanistan

Vikram Mittal, PhD

The 26th Maneuver Enhancement Brigade notified me in January 2011 that I was to serve as a design engineer for our bases in Kabul,

Afghanistan. That year, *Money as a Weapon System—Afghanistan* (MAAWS-A) was in full effect, and U.S. Army vertical engineers were in short supply.<sup>1</sup> Therefore, the Army relied heavily on Afghan companies for new construction. During the deployment, I was responsible for designing this new construction in the Kabul Base Cluster, projects totaling \$170 million. My responsibilities expanded midway through the tour when I assumed the additional role of overseeing all construction operations in the region.

Having no prior experience as a civil engineer, these jobs were well above my expertise. Prior to deployment, my engineering experience focused on vehicles and

robotics, with my only civil engineering training being in the Basic Officer Leadership Course (BOLC). So, like any good soldier, I learned, adapted, and overcame.

Over the course of the year, I learned a lot about Afghan construction. The following ten lessons proved invaluable to me and could likewise prove useful for others overseeing construction operations in Afghanistan.

## Lesson 1—The Process for New Construction Was Straightforward but Took Time

The process for approving new construction in Afghanistan was similar to that in the United

States. The process began with a commander submitting a request for new construction. This was followed by a site survey and a design for the construction project. The project proposal went before a Joint Facilities Utilization Board, where a general officer, who had approval authority for projects under \$750,000, could approve it.<sup>2</sup> The money was allocated after the project was approved.



An Afghan contractor poses for a photo while assisting with the removal of blast-resistant concrete barriers 6 November 2013 at Multinational Base Tirin Kot, Afghanistan. Civilian contractors assisted U.S. and Australian troops with the drawdown of the base and the transfer of the remaining facilities to the Afghan National Security Forces. (Photo by Cpl. Mark Doran, Australian Defense Force)



Afghan contractors reinforce the roof of a school under construction 19 January 2012 in Garmsir District, Helmand Province, Afghanistan. Twelve permanent schools were under construction by Afghan contractors in the Garmsir District. A civil affairs team in support of the 3rd Battalion, 3rd Marine Regiment, visited several of the sites to inspect the structures and ensure compliance with the quality assurance standards of the Afghan government. (Photo by Cpl. Reece Lodder, U.S. Marine Corps)

While the money was being procured, a complete set of engineering drawings and a statement of work (SOW) were completed. Those documents became available to Afghan construction companies so they could bid on projects. Interested companies could submit a technical proposal and a bid. We then reviewed the technical proposals. (These were often just reiterations of the SOW for technical feasibility.) Subsequently, the contract was awarded to the company with the most technically feasible proposal and the lowest cost.

Following the award of a contract, there would be a kick-off meeting with the Afghan companies at which time we would go through the SOW, answer any questions, and reiterate key deadlines. A contract officer representative would be assigned for each project with instructions to contact us with any technical issues that arose between inspections. The project would then begin, with a typical period of performance of ninety days, although

they typically ran thirty to sixty days over. Over the course of the project, we would have monthly job-site inspections to check progress and adherence to the SOW.

When a project was completed, it would undergo a final inspection, and projects that were on a major base required an additional inspection by the Logistics Civil Augmentation Program (LOGCAP). LOGCAP is a program where an American company contracts logistics support for the military. The LOGCAP included companies such as KBR, DynCorp, and Fluor.<sup>3</sup> In my region, Fluor had the LOGCAP contract. Fluor representatives would inspect the new construction, and, upon a successful inspection, they would take ownership of the upkeep and maintenance of the building.

Expedited projects could go through this entire process in four to six months; however, most projects would take six to eight months. Due to the length of the process, which often overlapped unit deployments,



the majority of our construction was designed by our predecessors. Similarly, the majority of our designs were built by our successors.

## Lesson 2—Afghan Companies Often Would Mislead You to Get a Contract

Afghanistan has been in turmoil since the Russian invasion in 1979. With the high level of danger associated with living in an active war zone, many Afghans have developed a Darwinian survivalist mentality and a keen sense of opportunism, especially about competing for money, which is viewed as the key for survival. This ruthlessly competitive impulse was whetted with the appearance of the U.S. Army, which had a substantial amount of money that it was clearly anxious to spend on new construction.

Not surprisingly, in the ensuing scramble for money, Afghan companies desiring to secure construction contracts often provided misleading technical proposals and bids. For example, Afghan companies would claim that they possessed capabilities they did not have. Similarly, Afghan companies would agree to schedules that they had no ability to meet.

Moreover, as a money-bilking strategy, Afghan companies would habitually belabor the cost of any modifications that were made in our designs. Although our designs went through significant scrutiny, due to the sheer volume of new construction and the short timelines in which such construction was expected to be completed, it was difficult to catch all the planning oversights.

For example, we were constructing a two-story barracks building that required a staircase. However, though the drawings included the staircase, the SOW failed to specifically mention it. In response, the Afghan company demanded an additional \$100,000 for the staircase. Although we could have had another company construct

it for a fraction of the cost, we would have needed to start a new construction process, and the barracks would have been uninhabitable for another six months. So we determined that it was more cost effective to pay the additional cost in the interest of time to meet the mission. The lesson is to ensure the SOW is precise not only for the sake of intrinsic accuracy but also to avoid the necessity of caviling with greedy Afghan contractors who demand outrageous sums to rectify ostensible planning oversights.



Afghan contractors help Afghan National Army soldiers build a latrine 7 February 2013 near Takir, Afghanistan. (Photo by 1st Lt. Gerrelaine Alcordo, U.S. Army)

## Lesson 3—Ownership of “Afghan” Construction Companies Was Often Obscure and Dubious

Opportunism was not exclusive to Afghans. A major collateral intent of MAAWS-A was to put money into the Afghan economy, but some of the construction companies were not owned by Afghans. Although upper-class Afghan citizens owned the bulk of the companies, several were owned by American expatriates who had previously been in Afghanistan as contractors or as part of the military. Such expatriates apparently saw the large amount of money that the Army was willing to pay for projects and the low cost of labor. Consequently,



Navy Lt. Stephen Gustafson, Khost Provincial Reconstruction Team (PRT) engineer, teaches proper masonry supply storage to local engineers, construction contractors, and foremen during a monthly contractor training session on 14 November 2009 at the Civil Military Operations Center in Khost, Afghanistan. Engineers from the Khost PRT provided construction quality-assurance training to locals to facilitate high-quality construction practices in the region. (Photo by Staff Sgt. Stephen J. Otero, U.S. Air Force)

among such, the bulk of the money that was intended to infuse the Afghan economy no doubt ended up infusing personal economies elsewhere.

For example, during one preconstruction meeting, the owner of one Afghan company arrived; he was a tall American with a common access card (CAC) that indicated he was a GS-15-level U.S. government employee. I had our base security investigate him and found that his CAC had been issued the previous year when he was working for the U.S. government.

During another job-site inspection, I met with a dubious owner of another company. Although Afghan, he had been a refugee who grew up in England, received a master's degree in engineering from Oxford Brookes University, and returned to Afghanistan to take over the family construction company. Former Afghan refugees owned a number of construction companies; although the majority had been refugees in Pakistan, several had returned to Afghanistan from

Europe and North America, attracted by the potential of earning lucrative windfall profits from the U.S. Army construction program.

Among all such companies, even those owned by local Afghans, there appeared to be a pervasive degree of corruption at some level. For example, in one bidding process, we discovered that multiple construction companies were owned by a single individual and that these companies were submitting competing bids for projects during a process that attempted to hide their true ownership. Later, this set of companies was blacklisted when it was discovered that the owner had close ties to the Taliban.

However, it is worth noting that the corruption we found in the ownership of Afghan companies did not extend to Afghan labor. Afghan laborers were typically paid \$5 per day. These personnel were working to provide the minimum necessities for their families, and \$5 per day was adequate to feed a family.



## Lesson 4—Afghan Lifestyle Meant Timelines Had to Be Flexible

Our mobilization training had prepared us for the term *inshallah* (God willing) and the fatalistic concept implied by it. The Afghans would often use this term to describe failure to meet work timelines, especially when they had little intent on meeting them. In response, we would typically be compelled to add 50 percent contingency time onto the end of project timelines to mitigate the Afghan inability to stick to an American-style construction schedule.

However, another unexpected issue arose from the final LOGCAP inspections of projects. Fluor would often reject the electrical or plumbing work, and would then ask for substantial amounts of money to fix it. Though paying Fluor to resolve the issues would have been much more expedient, we legally had to return to the Afghan companies as part of their original contract. We would then be forced to watch over the work to ensure that all corrections were properly made. It would typically take two to four months from the project-completion date before the construction was fully complete and the facility was ready for use.

Another large problem with keeping on project schedules was caused by Ramadan. The construction schedules submitted by companies routinely did not account for work slowdown during the Muslim holy month resulting from the religious obligation for workers to abstain from food and water throughout daylight hours extending from sunrise to nightfall. Though Ramadan was a significant societal event with practical impact on the lifestyle of most Afghans, management would not put projects on hold, and construction crews were still expected to work during Ramadan. A common result was that, due to fasting, crews would be so exhausted from the heat that, by midday, they would attempt to escape the sun, and the majority of physically demanding labor would come to a halt. As a result, the construction timelines would have to be pushed into the night after crews had broken their day's fast after sunset.

## Lesson 5—The Bulk of the Construction Material Came from Russia

The civil engineering courses that I attended during BOLC taught reliance on American

construction materials (e.g., lumber and I-beams). However, similarly graded materials up to American standards were often difficult for Afghan companies to secure domestically since Afghanistan did not have the natural resources or production infrastructure to manufacture them. Therefore, most of the construction materials were imported from Russia, and the cost of importing those materials drove up the price for projects. For example, standard pressure-treated Russian lumber was five times more expensive than U.S. lumber, and many sizes were not available.

Despite the seeming challenge of acquiring suitable substitutes for American-grade building materials, Afghan construction companies nevertheless still insisted that they could get any of the requested materials. For example, we had a project that required I-beams, and my original design called for American standard I-beams that were calculated from Field Manual 3-34.40, *General Engineering*.<sup>4</sup> We included a similar Russian I-beam that would be more readily available in Afghanistan, but the Afghan construction company insisted that they had American I-beams.

However, upon starting construction, we observed that the contractors were welding sheets of metal to replicate I-beams in form. These ad hoc I-beams clearly did not have the adequate structural properties required for the heavy construction contemplated. Notwithstanding, the owner of the Afghan company proceeded to vehemently argue that the welded sheets were, in fact, I-beams delivered from the United States.

A key lesson is the necessity to closely monitor the construction materials employed by Afghan companies since these companies often attempt to substitute substandard materials for those stipulated in the contract.

## Lesson 6—Afghans Have Experience with Concrete but Typically of Dubious Quality

The Afghans have used concrete for construction for centuries so they have experience with it. However, their standards for mixing concrete were significantly less stringent than what we required and designed for, as our designs would call for 4,000-psi reinforced concrete. Unfortunately, it was our experience that we were often given falsified test reports that stated that the concrete was 4,000-psi when it



Mohammed Mohsin, a deputy provincial manager with the Central Asia Development Group, discusses a construction project with Lt. Col. Joseph Cetta, 3rd Stryker Brigade Combat Team and Combined Task Force Arrowhead, and Trisha Bury, a field program officer with the U.S. Agency for International Development (USAID), on 23 July 2012 outside the district center at Spin Boldak, Afghanistan. The project is part of an effort by USAID and the Afghan government to keep military-aged males and at-risk populations employed in programs that will improve the community. (Photo by Staff Sgt. Brendan Mackie, U.S. Army)

came time to pour, but would then fail the slump test that we gave it to verify the test report.<sup>5</sup>

The consequences of using poorly mixed concrete were everywhere. For example, as part of a humanitarian project, a well was built in one of the villages on the outskirts of Kabul. When I inspected the well, parts of the concrete broke off in my hand. Clearly visible in the mix were twigs and debris from the ground. Upon further analysis, it appeared that the contractor had used loose soil instead of sand in the concrete blend.

The issue of substandard concrete arose in large measure because Afghan construction companies typically preferred hand-mixing concrete. Hand-mixing involves dumping sand, rocks, cement, and water onto the ground and mixing it with shovels. The resulting concrete often failed to meet the basic standards for

concrete. In one instance, we tested out a sample of hand-mixed concrete and it readily fractured at pressures well below that of 4,000-psi concrete, not even exceeding the standard for 1,000-psi concrete.

## Lesson 7—Afghan Carpentry Had to Be Closely Monitored

The standard Army building on semipermanent bases is the barracks hut (B-hut), which is a twenty-by-forty-foot wooden structure. My base, Camp Phoenix, had roughly eighty B-huts. Army engineers built some of these B-huts, and Afghan construction companies built some as well. Those constructed by the Afghans were not outwardly distinguishable from those made by the Army engineers.

However, two issues arose from the use of wooden structures. First, the lumber was at a premium and



was typically imported from Russia. As such, the selection was limited and expensive. Second, though the outer surfaces of the wooden structures were painted in an attempt to help prevent deterioration from weather, the Afghan carpenters had used gasoline instead of turpentine or other more suitable additive to dilute the paint, and the gasoline had impregnated the wood. As a result, during the dry, windy season, the B-huts were prone to catching fire. Not surprisingly, our brigade commander did not allow his soldiers to stay in those B-huts due to the fire risk.

## **Lesson 8—Afghan Electrical Work Did Not Meet American Standards**

The Afghans had few electricians trained to U.S. electrical standards. However, the Afghan companies would never admit they did not have adequately trained electricians because our SOWs required them. On the contrary, the technical proposals from construction companies would routinely indicate they had a licensed electrician that met the SOW requirement. However, from evaluating hundreds of technical proposals, we discovered that every company claimed the same three licensed electricians. As it turned out, these electricians were American expatriates who were presumably in very high demand. But, notwithstanding their assured presence in the proposals approved, over the course of the year, we never saw any of these electricians on any of our job sites.

Additionally, the quality of electrical supplies Afghan companies attempted to use was a major issue—many of the electrical components were fake. We found wires that had the wrong gauges and certifications stamped on them. Additionally, though our SOWs required that our electrical panels be “UL/CE approved,” more often than not, Afghan companies would attempt to pass off counterfeit panel boxes merely by affixing “UL/CE approved” stickers to them.<sup>6</sup>

To mitigate these problems, we were able to provide significant oversight on the electrical work since our National Guard team included a signal noncommissioned officer who was a civilian master electrician. He would go through initial inspections, help the Afghans, and perform general quality control. Due to the ubiquitous attempts by Afghan companies at deceit and fraud associated with electrical work, over the course of the year, he was one of the busiest men in Kabul.

## **Lesson 9—Afghan Plumbing Work Did Not Meet American Standards**

The Afghans’ ability to do plumbing was on par with their ability to do electrical work. Similar to the poor quality of their electrical work, plumbing was characterized by leaks caused by mismatched fittings, bad welds, and poor seals. Additionally, Afghan contractors would use imported counterfeit parts from Russia when they thought they could get away with it.

One of our larger projects was construction of four two-story barracks with a latrine on each floor. Each floor could house a hundred and twenty soldiers. The projects were expected to be completed by mid-2009. However, the plumbing had to be reinstalled twice, both times due to a large number of leaks in the pipes. Not surprisingly, these were caused by mismatched fittings, bad welds, and poor seals.

We also had issues with latrine-shower-sink (LSS) units. These were eight-by-twenty-foot shipping containers converted into latrines with showers, toilets, and sinks. However, while the majority of Afghans were not familiar with Western plumbing, the issue with the units was more than that. Though our initial inclination was to blame the contractors, a real contributing problem was that our SOWs and drawings were incomplete. In the end, the issue was largely resolved by updating the documents.

## **Lesson 10—Safety Standards Are Fairly Lax on Afghan Job Sites**

Our SOW mandated that the construction sites were Occupational Safety and Health Administration (OSHA) compliant. However, although we had no safety incidents for the entire year, the construction sites were far from compliant. The Afghans loathed personal protective equipment and never wore hearing or eye protection, even while welding or operating heavy equipment. They were expected to wear hard hats, and they would bring them to job sites, but they would never wear them. At one point, we saw them using their hard hats as mixing bowls for concrete. Additionally, the Afghan labor would walk up and down the ladders backwards, even on icy days, and they would stand on top of fifteen-foot Texas barriers as the cranes were moving them.

It is hard to know what lesson one derives from such a situation other than to try to be understanding and supportive within the cultural context one is confronted.

## Conclusion

Although the number of U.S. forces in Afghanistan has decreased, Afghan companies will continue to perform the majority of new construction required on our bases. Awareness of the ten lessons discussed above gleaned from personal experience and observations are intended to help any soldier placed in charge of designing or overseeing Afghan construction prepare for the challenge. I suggest that the major overall lessons are that the Afghan companies hired to perform the work require

close monitoring and significant oversight, and that we appreciate the necessity of operating with a reasonable expectation that there will be cost and schedule overruns.

Though the situation described above might seem at first depressing, it is important to note that the structures we constructed were eventually built to standard, and the construction missions were successfully accomplished. For a war that had been going on for fifteen years and cost \$5 trillion, our schedule and cost overruns to complete them seemed trivial. ■

## Biography

Vikram Mittal, PhD, is an assistant professor in systems engineering at the United States Military Academy, West Point, New York, and a company commander in the Massachusetts Army National Guard. He earned a BS from the California Institute of Technology, an MSc from Oxford University, and a PhD from the Massachusetts Institute of Technology. Mittal deployed to Afghanistan in 2011 as a brigade engineer in the 26th Maneuver Enhancement Brigade, where he oversaw construction operations in the Kabul Base Cluster.

## Notes

1. U.S. Forces-Afghanistan (USFOR-A) Publication 1-06, *Money as a Weapon System-Afghanistan* (Afghanistan: USFOR-A, 13 February 2012), accessed 30 June 2016, [https://www.jagcnet.army.mil/Sites%5C%5Ccontractandfiscallaw.nsf/0/9A566BF0D10C631B-85257B0100650290/\\$File/MAAWS-A%20-%20Feb%2012.pdf](https://www.jagcnet.army.mil/Sites%5C%5Ccontractandfiscallaw.nsf/0/9A566BF0D10C631B-85257B0100650290/$File/MAAWS-A%20-%20Feb%2012.pdf).

2. Patrick Jors, *Construction of Military Facilities in Afghanistan: Is the United States Utilizing the Best Course of Action?* (Quantico, VA: Marine Corps University, 2 May 2011), 11, accessed 30 June 2016, <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA600744>.

3. Rock Island Contracting Center, "LOGCAP Presentation," PowerPoint presentation, 15 June 2011, accessed 12 July 2016,

[http://www.acq.osd.mil/dpap/ccap/cc/corhb/Files/Surveillance/BCOT\\_LOGCAP\\_PCO\\_Presentation\\_20110802\[1\].ppt](http://www.acq.osd.mil/dpap/ccap/cc/corhb/Files/Surveillance/BCOT_LOGCAP_PCO_Presentation_20110802[1].ppt).

4. Field Manual 3-34.400, *General Engineering* (Washington, DC: U.S. Government Printing Office, 2008). This field manual was superseded as of 25 February 2015 by Army Techniques Publication 3-34.40, *General Engineering*.

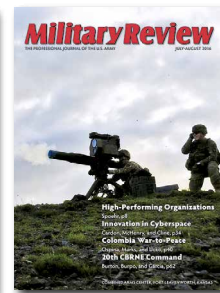
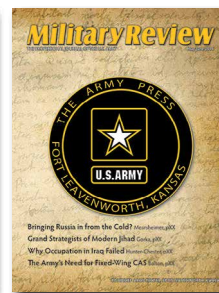
5. A slump test is used to measure consistency (ease of flow), or workability, of concrete.

6. The "UL" listing mark means a product meets Underwriters Laboratories safety standards. The "CE" mark means a product has met health and safety standards of the European Union.

## Interested in getting a personal subscription to *Military Review*?

The Government Printing Office handles subscriptions to *Military Review* requested by private citizens.

For information on cost and instructions for subscribing online, go to: <https://bookstore.gpo.gov/products/sku/708-099-00000-7?c-tid=1387>.





# Training for Decisive Action

Maj. Will Shoemate, U.S. Army

Maj. Benjamin Jensen, U.S. Army

In traditional Western military thought, decisive action refers to massing combat power at the right place and time for achieving success. The 1910 *Field Service Regulations of the United States Army*, the doctrine of its day, states, “decisive results are obtained only by the offensive,” and commanders will “make a powerful effort at the decisive point.”<sup>1</sup>

A decisive action would be the offensive effort—the main attack—that would win the battle. A decisive point would be understood as the place and time the main attack would occur. Commanders

seized the initiative and sought out a decisive battle that would destroy their enemy’s ability to resist.

In contemporary joint doctrine, a *decisive point* is “a geographic place, key event, critical factor, or function that, when acted upon, allows commanders to gain a marked advantage over an adversary or contribute materially to achieving success.”<sup>2</sup> While this construct allows for more than combat operations at specific geographic locations, modern planners tend to use the idea of decisive points traditionally, to map lines of operation that synchronize actions.

In 2012, Army Doctrine Reference Publication (ADRP) 3-0, *Unified Land Operations*, modified the

foundational concept of what it means to be decisive in modern war. The Army now defines *decisive action* not as the massing of offensive combat power at the right place and time but as “the continuous, simultaneous combinations of offensive, defensive, and stability or defense sup-

port of civil authorities tasks.”<sup>3</sup> Simultaneous combinations of tasks reflect a broader understanding of modern operations, which are not a sequence of set-piece linear battles with clear termination criteria.

Instead, modern warfare involves flowing combinations of combined arms maneuver and wide area security against amorphous threats. Therefore,

Army exercises need to

prepare agile and adaptive leaders capable of combining offensive, defensive, and stability tasks successfully.

This article discusses ways the Army can provide training that ensures units are ready to conduct unified land operations through decisive action.

## The Right Operational Framework for Combining Tasks

Army unit leaders start by describing operations in terms of time, space, purpose, and resources. Consistent with Army operational doctrine and the “FORSCOM Command Training Guidance (CTG)—Fiscal Year 2016,” Army combat training



Bradley Fighting Vehicles of the 3rd Armored Brigade Combat Team, 1st Cavalry Division, from Fort Hood, Texas, move out for the live-fire portion of their decisive action training in January 2013 at the National Training Center, Fort Irwin, California. (Photo by David Crozier, *NCO Journal*)



Soldiers of the 173rd Cavalry Airborne Reconnaissance Squadron from Fort Bragg, North Carolina, meet at a rally point after parachuting into the Urban Operations Complex in the Nevada Test and Training Range, Nellis Air Force Base, Nevada, 18 November 2009. The soldiers are part of the biannual U.S. Air Force Weapons School Mobility Air Forces Exercise, which provides realistic training for air combat forces, air mobility forces, and U.S. Army personnel. (Photo by Michael R. Holzworth, U.S. Air Force)

centers (CTCs) are using the “Decisive Action Training Environment” (sometimes known as DATE) to replicate complex operating environments involving high-intensity conflict and hybrid threats.<sup>4</sup> This program offers complex, realistic training scenarios that require brigade combat teams (BCTs) to integrate limited resources such as combined arms battalions, aviation, information collection, information operations, and engineers.<sup>5</sup> In particular, a BCT executing an attack must ensure the integration of key enablers to identify disruption zones and main defensive belts in order to array forces for relative advantage. A BCT must synchronize and integrate information collection and joint fires to attrit an enemy’s ability to increase its defensive posture.

Simultaneous to the integration of key enablers in support of the attack, a BCT also must execute offensive or defensive tasks along with stability tasks to secure the populace. The simultaneity of these tasks is

essential for sustained situational awareness and shared understanding of the environment.

I (contributing author William Shoemate) served as an observer at the Army National Training Center (NTC) from June 2014 to July 2015. During my experience gained over ten training rotations, I found that units applying the deep-close-security operational framework conducted decisive action more effectively during training. Army doctrine encourages leaders to establish an operational framework for each operation but does not dictate a specific framework. ADRP 3-0 suggests three: deep-close-security, decisive-shaping-sustaining, and main and supporting efforts.<sup>6</sup>

In a deep-close-security operational framework, commanders usually articulate their vision in terms of the terrain and the sequence of events. They plan actions based on deterring the commitment of uncommitted forces while focusing on speed and mobility to



rapidly overwhelm the enemy in a critical place and time to exploit the initiative.

In a decisive-shaping-sustaining framework, they visualize a focal point—a decisive operation—that will determine the outcome. They plan based on a grand conceptualization that focuses resources on a singular operation that accomplishes the mission.

In a main-and-supporting-efforts framework, they prioritize the tasks of subordinate units based on capabilities. The main-and-supporting-efforts framework can complement other frameworks.<sup>7</sup>

In the training events I observed at the NTC, when BCT leaders conceptualized engagements as deep-close-security, they were more likely to integrate enablers to attrit enemy forces early in the fight, while simultaneously focusing stability tasks across the area of operations to complement their ability to execute core competencies of combined arms maneuver and wide area security.

In all cases, conducting wide area security is essential for sustaining relative advantage and retaining initiative. Wide area security is “the application of the elements of combat power in unified action to protect populations, forces, infrastructure, and activities; to deny the enemy positions of advantage; and to consolidate gains in order to retain the initiative.”<sup>8</sup> Activities such as protecting populations and infrastructure, and consolidating gains, imply stability tasks.

For example, during rotation 15-01 at the NTC, a BCT was challenged throughout to ensure relative advantage through simultaneity of operations. To leverage opportunities to employ limited resources,

the unit’s leaders continuously assessed the operating environment. They developed a shared understanding across the BCT, which allowed for timely decisions to sustain a relative advantage. The significance of this training was that any BCT would need to synchronize and execute wide area security while deterring the

commitment of uncommitted forces through joint fires and information collection.

During three training rotations from September to November 2014, I observed that BCTs employing the decisive-shaping-sustaining operational



Soldiers detach concrete barriers, also known as “T-Walls,” from a crane during an effort to improve security in the southern portion of the Sadr City district of Baghdad on 3 May 2008. (Photo courtesy of U.S. Army)

framework limited their ability to analyze and assess operations in support of wide area security. The doctrinal language describing this framework, indicative of the earlier meaning of the word *decisive*, led staffs to only think of one decisive battle as opposed to combining effects. For example, during rotation 14-08, the BCT restricted its capability by focusing resources on the decisive operation. This allowed enemy forces to commit overwhelming combat power at their designated place and time to sustain a position of relative advantage. The BCT’s framework for conceptualizing and integrating resources to apply overwhelming combat power at a specific place and time was degraded based on its inability to attrit enemy forces early.

## Historical Examples of Forces Combining Tasks in Operations

Coalition operations in Tal Afar, 2005, and in Sadr City, 2008, are examples of how U.S forces and coalition partners conducted operations in a manner consistent with the 2012 decisive-action operational





U.S. soldiers from the 1st Battalion, 36th Infantry Regiment, 1st Brigade, 1st Armored Division, conduct a combat patrol with Iraqi policemen during Operation Iraqi Freedom in Tal Afar, Iraq, 29 April 2006. (Photo by Staff Sgt. Aaron Allmon, U.S. Air Force)

concept. The 3rd Armored Cavalry Regiment, commanded by then Col. H.R. McMaster, employed combined arms maneuver and wide area security

for persistent relative advantage at echelon.<sup>9</sup> In order to enable offensive operations within the city, the 3rd Armored Cavalry and Iraqi forces isolated enemy strong points through simultaneous offensive, defensive, and stability operations. Coalition forces mobilized Iraqi elements within the city to establish an inner and outer cordon. This task, secure-to-isolate, was supported through continuous area reconnaissance. Simultaneously, coalition forces made inroads with the local populace through repairing critical infrastructure and enabling freedom of maneuver around the city for commerce.

The 3rd Armored Cavalry integrated joint fires and intelligence collection assets to close with the isolated enemy forces. They showed that a unit's ability to integrate joint fires and information collection assets to find, fix, and finish enemy forces is a key to successful operations. In Tal Afar, successful management of transitions and continuous enabler integration led to success.

Similar to Tal Afar, the 2008 battle for Sadr City demonstrated that simultaneous execution of offensive, defensive, and stability tasks can lead to successful operations.<sup>10</sup>





U.S. Army soldiers from the 3rd Armored Cavalry Regiment and Iraqi soldiers cross an intersection during a routine security patrol in downtown Tal Afar, Iraq, on 11 September 2005. The purpose of the patrols was to disrupt insurgent safe havens and to clear weapons caches in the area of operations. (Photo by Petty Officer 1st Class Alan D. Monyelle, U.S. Navy)

The integration of enablers by 4th Infantry Division and coalition forces, from joint fires to information collection assets, shaped the operating environment and created multiple dilemmas for the dominant insurgent force, Jaish al Mahdi. In Sadr City, coalition forces conducted wide area security through ground maneuver, while engineers, protected by snipers, constructed a barrier to secure the population by isolating malign elements. Simultaneously, coalition special operations forces conducted raids against high-value individuals, while attack aviation interdicted enemy rocket teams.

The integration of enablers by coalition forces in Sadr City in 2008 was strikingly similar to CTC activities by the most successful BCTs I observed. Success in both training exercises and operations appears to hinge on the ability of friendly forces to transition rapidly between offensive, defensive, and stability tasks while further enabling mission command at every echelon. In Sadr City, this was achieved through

the execution of combined arms maneuver and wide area security to isolate the enemy and seize the initiative. The elements of this version of decisive action were applied consistently throughout the fight.

The U.S. Army is not the only military force adopting simultaneous combinations of offensive, defensive, and stability tasks. For example, in the 2006 war with Israel, Hezbollah employed a sophisticated military strategy that integrated attritional guerilla warfare in the defense, offensive rocket fire, and stability operations in areas it controlled.<sup>11</sup> Hezbollah used unmanned aerial vehicles and rockets supplied by Iran in its equivalent of asymmetric main and deep fights.<sup>12</sup> The unmanned aerial vehicles enabled tactical reconnaissance and antiarmor ambushes, while the rockets attacked population centers in an effort to pressure Israel to withdraw. According to scholar Iver Gabrielsen in “The Evolution of Hezbollah’s Strategy and Military Performance, 1982–2006,” its fighters employed thirteen principles of warfare that emphasized aspects of

stability operations. For example, principles related to shaping civil conditions were, “The media has innumerable guns .... Use them in the battle!” and “The population is the treasure—nurture it!”<sup>13</sup>

During the Crimea and Donbass campaigns, the Russian military employed the Gerasimov doctrine. It calls for “the broad use of political, economic, informational, humanitarian, and other non-military measures applied in coordination with the protest potential of the population ... to create a permanently operating front through the entire territory of the enemy state.”<sup>14</sup> This approach clearly seeks relative advantages through combining offensive, defensive, and stability tasks.<sup>15</sup>

In Crimea, Russian forces used special operators and proxies to seize the initiative by combining propaganda to win over ethnic Russians while simultaneously using covert elements to seize key terrain such as airfields and ports. These actions were supported by long-range rocket and artillery fire. Additionally, they protected their forces using a sophisticated integrated air-defense network while using threats of strategic escalation (such as nuclear posture changes and snap military exercises) to deny external support.

## The Evolution of the Army's Operational Concept

When the 2012 ADRP 3-0, *Unified Land Operations*, replaced *full spectrum operations* with decisive action, the Army began to guide commanders to use continuous and simultaneous combinations

of offensive, defensive, and stability tasks to seize the initiative and gain a position of relative advantage.<sup>16</sup> In contrast to the traditional idea of decisive ac-

tions as massing combat power, the reason for a change in meaning of decisive was explained as follows: The operational concept addresses more than combat between armed opponents. Army forces conduct operations amid populations. This requires Army



An Israeli Merkava tank destroyed by the Hezbollah during its 2006 war with Israel. (Photo courtesy of Wikimedia Commons)

forces to defeat the enemy and simultaneously shape civil conditions. Offensive and defensive tasks defeat enemy forces whereas stability tasks shape civil conditions. Winning battles and engagements is important but alone may not be the most significant. Shaping civil conditions (in concert with civilian organizations, civil authorities, and multinational forces) often proves just as important to campaign success. In many joint operations, stability or defense support of civil authorities tasks often prove more important than offensive and defensive tasks.<sup>17</sup>

The need for operating forces to combine and synchronize a wide range of tasks has remained consistent from past to present and will continue into the future. Like most Western militaries, however, the U.S. Army has a long tradition of defining decisive action as the application of superior firepower or maneuver elements against an enemy at the optimal place and time. In the 1923 *Field Service*



*Regulations*, decisive action implied “the ability of the command to concentrate forces at decisive points.”<sup>18</sup> In 1976, FM 100-5, *Operations*, stated the application of superior forces included fires. The manual told soldiers that, “decisive results require skillful concentration of firepower.”<sup>19</sup>

Starting with the introduction of “AirLand Battle” doctrine in 1982, the meaning of decisive started to expand in three significant ways. First, the doctrine, which called for using combat power to engage in deep strikes that destabilized the adversary, reintroduced an emphasis on maneuver. Whereas the 1976 “Active Defense” doctrine focused on firepower and using suppression to enable movement in the close fight, AirLand Battle advocated using both fires and maneuver in the deep and close fights. According to the 1982 edition of FM 100-5, *Operations*, “the AirLand Battle will be dominated by the force that retains the initiative and, with deep attack and decisive maneuver, destroys its opponent’s ability to fight and organize in depth.”<sup>20</sup>

Second, AirLand Battle introduced the concept of battlefield dynamics, and a broader understanding of combat power and the intangible factors that would determine outcomes in war. The manual defined combat power by its elements: “maneuver, firepower, protection, and leadership.”<sup>21</sup> Each of these elements of military power had a role in helping commanders marshal the right mix of forces at the decisive point. Additionally, the manual referred to the range of intangibles shaping outcomes as the dynamics of battle. According to the manual, “force ratios and the effects of fire and maneuver are significant in deciding battles; however, a number of intangible factors often predominate, [including the] state of training, troop motivation, leader skill, firmness of purpose, and boldness—the abilities to perceive opportunities, to think rapidly, to communicate clearly, and to act decisively.”<sup>22</sup>

Whereas the 1982 AirLand Battle doctrine extended the battlefield and the idea of what constituted combat power, in 1986, Army operational doctrine expanded the understanding of the range of battlefields. The 1986 edition of FM 100-5 explained, “guerrillas, special operations forces, and

terrorists will seek to avoid set-piece battles and to strike at scattered points of vulnerability.”<sup>23</sup> The 1986 manual stressed adapting AirLand Battle to contingencies short of major theater war.

Despite this broader focus, the 1986 manual still stressed deep attack against enemy high-value targets as decisive points on the modern battlefield. In fact, in the 1986 edition, the doctrine called for thinking across multiple battlefields and anticipating adversary adaptation. The manual also addressed the potential of precision munitions, stating, “potent ground and air systems, complemented by closely coordinated precision-guided munitions, will be able to concentrate enormous combat power, especially at decisive points.”<sup>24</sup>

## From Effective Doctrine to Effective Training

The word *decisive* has evolved beyond its twentieth century roots. Today, a single, linear decisive battle is likely to be elusive. Forces often conduct operations between war and peace as, for example, in urban areas that do not lend themselves to massing combat power against a single, geographic decisive point. The unit able to simultaneously and continuously combine offensive, defensive, and stability tasks, as captured in Army doctrine, will be the one most able to achieve a position of relative advantage against an enemy. The operational framework, or frameworks, a commander selects—such as deep-close-security, decisive-shaping-sustaining, main and supporting efforts—greatly influences how the commander arranges the mix of offensive, defensive, and stability tasks. Every commander needs to arrange tasks in the way that best leverages combined arms maneuver and wide area security.

To enhance readiness, units need time and space for realistic home-station training. Training should emphasize individual-to-collective training on decisive-action skill sets, especially long-range fires, reconnaissance, security, and enabler integration. Additionally, staff exercises, consistent with the CTC model, need to be shaped to prepare agile and adaptive leaders capable of combining offensive, defensive, and stability tasks in a deep-close-security framework. ■

## Biographies

Maj. William H. Shoemate, U.S. Army engineer, is the executive officer for the Asymmetric Warfare Group. He holds a BA from University of the Ozarks and an MS from the U.S. Army Command and General Staff College. He has commanded in the 2nd Infantry Division and the Asymmetric Warfare Group. From 2014–2015, he was an observer controller/trainer at the National Training Center.

Maj. Benjamin M. Jensen, U.S. Army Reserve, is a military fellow in the Chief of Staff of the Army Strategic Studies Group. He holds a BA from the University of Wisconsin, Madison, an MS from the National Intelligence University, and an MA and a PhD from the American University, School of International Service. He has commanded in the 629th and 323rd Military Intelligence Battalions and served in joint intelligence billets for United States European Command. He is an academic chair at the Marine Corps University and a scholar-in-residence at American University, School of International Service, Washington, D.C.

## Notes

1. *Field Service Regulations of the United States Army* (Washington, DC: U.S. Government Printing Office [GPO], 1910), 157 and 160, obsolete, accessed 6 May 2016, <http://cgsc.cdmhost.com/cdm/ref/collection/p4013coll9/id/900>.
2. Joint Publication 5-0, *Joint Operation Planning* (Washington, DC: U.S. GPO, 2011), GL-8.
3. Army Doctrine Reference Publication (ADRP) 3-0, *Unified Land Operations* (Washington, DC: U.S. GPO, 2012), GL-2.
4. Department of the Army, Headquarters, U.S. Army Forces Command [FORSCOM], Memorandum for Commanders, Major Subordinate Commands/Units Reporting Directly to FORSCOM, Army National Guard Bureau, Office, Chief Army Reserve and Army Service Component Commands, "FORSCOM Command Training Guidance (CTG)—Fiscal Year 2016," 19 October 2015, accessed 5 May 2016, <https://fce.forscom.army.mil/FC-DocMgmt/SiteAssets/Default.aspx> (login required), 12.
5. For an overview of training at the U.S. Army National Training Center, see Operations Group, U.S. Army National Training Center, *Training for Decisive Action: Stories of Mission Command* (Fort Leavenworth, KS: Combat Studies Institute Press, 2014) accessed 12 July 2016, <http://usacac.army.mil/CAC2/cgsc/carl/download/csipubs/TrainingForDecisiveAction.pdf>.
6. ADRP 3-0, 1-10–1-12.
7. Ibid.
8. Army Doctrine Publication 3-0, *Unified Land Operations* (Washington, DC: U.S. GPO, October 2011), GL-7.
9. George Packer, "The Lesson of Tal Afar: Is it Too Late for the Administration to Correct Its Course?" *The New Yorker* online, 10 April 2006, accessed 12 July 2016, <http://www.newyorker.com/magazine/2006/04/10/the-lesson-of-tal-afar>.
10. David E. Johnson, M. Wade Markel, and Brian Shannon, "The 2008 Battle of Sadr City" (occasional paper, RAND Corporation, 2011).
11. Iver Gabrielsen "The Evolution of Hezbollah's Strategy and Military Performance, 1982–2006" *Small Wars & Insurgencies* 25, no. 2 (June 2014), doi:10.1080/09592318.2014.903636.
12. Marc Lindemann, "Laboratory of Asymmetry: The 2006 Lebanon War and the Evolution of Iranian Ground Tactics," *Military Review* 90, no. 3 (May-June 2010).
13. Gabrielsen, "The Evolution of Hezbollah's Strategy and Military Performance," 258.
14. Valery Gersimov, "The Science of Military Prediction," *Military-Industrial Kurier*, 27 February 2013, as quoted and translated in Robert Coalson, "Top Russian General Lays Bare Putin's Plan for Ukraine," *The World Post* online, 2 September 2014, accessed 5 May 2016, [http://www.huffingtonpost.com/robert-coalson/valery-gerasimov-putin-ukraine\\_b\\_5748480.html](http://www.huffingtonpost.com/robert-coalson/valery-gerasimov-putin-ukraine_b_5748480.html).
15. For an overview of the campaign in Crimea, see Kristin Ven Bruusgaard, "Crimea and Russia's Strategic Overhaul," *Parameters* 44, no. 3, (Autumn 2013).
16. ADRP 3-0, 2-2–2-6.
17. Ibid., 2-3.
18. *Field Service Regulations, United States Army: 1910* (Washington, DC: U.S. GPO, 1923), 56, obsolete, accessed 15 November 2015, [http://carl.army.mil/docs/field\\_service\\_1923.pdf](http://carl.army.mil/docs/field_service_1923.pdf).
19. Field Manual (FM) 100-5, *Operations* (Washington, DC: U.S. GPO, 1976), 3-5, obsolete, accessed 15 November 2015 <http://cgsc.cdmhost.com/cdm/ref/collection/p4013coll9/id/42>.
20. FM 100-5, *Operations* (Washington, DC: U.S. GPO, 1982), obsolete, 1-5.
21. Ibid., 2-4.
22. Ibid.
23. FM 100-5, *Operations* (Washington: Department of the Army, 1986), obsolete, 3.
24. Ibid.



# A Financial Comparison of the Blended (New) Retirement System and the Current (Soon to Be Old) Defined Benefit System

John B. White, PhD, professor of finance, U. S. Coast Guard Academy



**T**he 2016 National Defense Authorization Act (NDAA) included a number of provisions, but none is more far-reaching or fraught with as much confusion as the new military retirement system. Prior to the 2016 NDAA, military retirement was not vested until the twenty-year mark. Once earned, annual military retirement was computed using the simple formula *2.5 percent x number of years of service x annual base pay*. This produced a pension equal to 50 percent of the retiree's preretirement base pay at twenty years. The annual salary used in the formula was the average of the

retiree's highest thirty-six-month period of service, which was usually the final three years of service.<sup>1</sup>

The 2016 NDAA reduced the retirement formula from 2.5 percent per year of service to 2 percent per year, which lowers the defined benefit from 50 percent of the retiree's preretirement income to 40 percent at the twenty-year mark. However, servicemembers can supplement their pensions by contributing to the Thrift Savings Plan (TSP). While it was always possible to save money on the side for retirement, the new system provides a matching feature. After two years of service, the

government matches the servicemember's contribution of up to 5 percent of their salary, making the servicemember's 5 percent contribution a 10 percent deposit in his or her retirement account.<sup>2</sup>

## Analysis

To evaluate these two retirement systems, it is first necessary to determine the income stream (or cash flows) each would produce. For officers to retire with twenty years of service, they must at a minimum attain the grade of O-4 (the rank of major in the Army, Air Force, and Marine Corps, or a lieutenant commander in the Navy or Coast Guard), unless they had prior enlisted service. They become eligible for promotion to O-5 (a lieutenant colonel in the Army, Air Force, and Marines, or a commander in the Navy or Coast Guard) at year sixteen, so they may retire at twenty years as an O-5.

This analysis can also be applied to enlisted servicemembers, as they face the same retirement

be eligible for an immediate annuity of 50 percent of this salary, or \$45,005 and \$49,873, respectively.

So, once a servicemember has completed twenty years of service and has vested the retirement benefits, what is the present value of this series of pension payments? In other words, what dollar amount would be required in a retirement fund at year twenty to pay out an equivalent series of payments? In order to determine the value of these pension payments (that are often called annuities in finance), two variables must be determined. First, how many payments will be made? Since this is a lifetime pension, answering the question requires an estimate of mortality. Government estimates of life expectancy currently average 79.26 years, with female life expectancy exceeding that of males by four years (eighty-two years vs. seventy-eight years).<sup>5</sup> Using the average is acceptable for Social Security and Medicare projections, since they are dealing with a large population pool. However, an individual's life expectancy may be above average, which



(Graphic by Arin Burgess, *Military Review*)

decision as their officer counterparts. However, their promotions are much less regular, making it more difficult to predict base pay at various years of service. For instance, a Navy petty officer can retire with twenty years of service at a rank anywhere from E-6 to E-9.<sup>3</sup> Because of this high degree in enlisted rank variability eligible for a twenty-year retirement, this study focuses only on officers.

The 2016 military pay chart shows an annual salary for an O-4 over twenty years \$90,320.40, and \$100,660.80 for an O-5.<sup>4</sup> Under the old system, these officers would

would mean exhausting his or her retirement fund if the payout were based on the average life span. To ensure that this analysis does not underestimate life expectancy, a life expectancy of ninety-seven years will be used. This implies that if an officer were commissioned at age twenty-two, he or she would have twenty years of service at age forty-two, and then would receive the retirement payment for the next fifty-five years.

The second variable that needs to be assumed in the value calculation is a discount rate, or rate of return, that is associated with the cash flows. The rate of return varies



**Table 1. New System Maximum at O-4**

Year	Monthly salary	Annual salary	5% retirement contribution with match	I = 6% retirement balance	I = 7.5% retirement balance	I = 9% retirement balance
1	\$ 2,972	\$ 35,669	\$ 2,081	\$ 2,081	\$ 2,081	\$ 2,081
2	\$ 2,972	\$ 35,669	\$ 2,140	\$ 4,346	\$ 4,377	\$ 4,408
3	\$ 3,900	\$ 46,804	\$ 4,680	\$ 9,287	\$ 9,385	\$ 9,485
4	\$ 4,492	\$ 53,903	\$ 5,390	\$ 15,234	\$ 15,480	\$ 15,729
5	\$ 5,287	\$ 63,446	\$ 6,345	\$ 22,493	\$ 22,985	\$ 23,489
6	\$ 5,287	\$ 63,446	\$ 6,345	\$ 30,187	\$ 31,054	\$ 31,948
7	\$ 5,541	\$ 66,488	\$ 6,649	\$ 38,647	\$ 40,032	\$ 41,472
8	\$ 5,541	\$ 66,488	\$ 6,649	\$ 47,615	\$ 49,683	\$ 51,854
9	\$ 5,819	\$ 69,826	\$ 6,983	\$ 57,454	\$ 60,392	\$ 63,503
10	\$ 5,819	\$ 69,826	\$ 6,983	\$ 67,884	\$ 71,904	\$ 76,201
11	\$ 6,746	\$ 80,950	\$ 8,095	\$ 80,052	\$ 85,391	\$ 91,154
12	\$ 6,746	\$ 80,950	\$ 8,095	\$ 92,950	\$ 99,891	\$ 107,453
13	\$ 7,082	\$ 84,978	\$ 8,498	\$ 107,025	\$ 115,880	\$ 125,621
14	\$ 7,082	\$ 84,978	\$ 8,498	\$ 121,944	\$ 133,069	\$ 145,425
15	\$ 7,315	\$ 87,779	\$ 8,778	\$ 138,039	\$ 151,827	\$ 167,291
16	\$ 7,315	\$ 87,779	\$ 8,778	\$ 155,099	\$ 171,992	\$ 191,125
17	\$ 7,449	\$ 89,392	\$ 8,939	\$ 173,344	\$ 193,831	\$ 217,265
18	\$ 7,449	\$ 89,392	\$ 8,939	\$ 192,684	\$ 217,307	\$ 245,758
19	\$ 7,527	\$ 90,320	\$ 9,032	\$ 213,277	\$ 242,637	\$ 276,909
20	\$ 7,527	\$ 90,320	\$ 9,032	\$ 235,106	\$ 269,867	\$ 310,862
<b>Average top three years \$ 90,011</b>			<b>Σ = \$140,927</b>			
<b>x 40%</b>			<b>Present value of</b>			
<b>\$36, 004.32</b>			<b>40% payment =</b>	<b>\$ 670,885</b>	<b>\$ 670,885</b>	<b>\$ 670,885</b>
			<b>Total value =</b>	<b>\$ 905,991</b>	<b>\$ 940,752</b>	<b>\$ 981,748</b>

(Graphic by John B. White)

inversely with risk. Since the pension payments are obligations of the federal government, and are essentially free of default risk, it is reasonable to use the market's risk-free rate of interest, the government's rate on Treasury bills (T-bills) as the appropriate discount rate. The government's T-bill rate has averaged approximately 5 percent since 1928.<sup>6</sup> Using a 5 percent discount rate, it would take a fund of \$838,607 to fund fifty-five annual payments of \$45,005 (O-4) and \$937,886 to fund fifty-five annual payments of \$49,873 (O-5). Under the new system, the 40 percent payments after twenty years of service are \$36,004 (O-4) and \$39,898 (O-5). At 5 percent, the fund necessary to make these payments for fifty-five years would be \$670,885 and \$743,440, respectively. In both cases, the value of the defined benefit portion of the new system is only 80 percent of the defined benefit portion of the old system. This is a reflection of the new system's payment of 40 percent of the base pay, while the old system pays 50 percent of the

base. These differences represent a significant amount of money in retirement.

However, the new system also comes with a defined contribution feature wherein the government matches a servicemember's savings of up to 5 percent of his or her salary. This matching feature does not begin until after two years of service. (After sixty days of service, under the new plan, the government will contribute 1 percent of a servicemember's salary.<sup>7</sup>) How much would a servicemember accumulate if he or she opted for the new plan and took maximum advantage of government matching over a twenty-year career? The answer depends on the rate of return earned on savings. The TSP has several funds that are options for retirement savings. These funds reflect government bonds (G fund), a fixed-return fund (F fund), large-firm stocks (C fund), smaller-firm stocks (S fund), and international stocks (I fund). The G, F, and C funds have been in existence for nearly thirty years, while the S and I funds

**Table 2. New System Maximum at O-5**

Year	Monthly salary	Annual salary	5% retirement contribution with match	I = 6% retirement balance	I = 7.5% retirement balance	I = 9% retirement balance
1	\$ 2,972	\$ 35,669	\$ 2,081	\$ 2,081	\$ 2,081	\$ 2,081
2	\$ 2,972	\$ 35,669	\$ 2,140	\$ 4,346	\$ 4,377	\$ 4,408
3	\$ 3,900	\$ 46,804	\$ 4,680	\$ 9,287	\$ 9,385	\$ 9,485
4	\$ 4,492	\$ 53,903	\$ 5,390	\$ 15,234	\$ 15,480	\$ 15,729
5	\$ 5,287	\$ 63,446	\$ 6,345	\$ 22,493	\$ 22,985	\$ 23,489
6	\$ 5,287	\$ 63,446	\$ 6,345	\$ 30,187	\$ 31,054	\$ 31,948
7	\$ 5,541	\$ 66,488	\$ 6,649	\$ 38,647	\$ 40,032	\$ 41,472
8	\$ 5,541	\$ 66,488	\$ 6,649	\$ 47,615	\$ 49,683	\$ 51,854
9	\$ 5,819	\$ 69,826	\$ 6,983	\$ 57,454	\$ 60,392	\$ 63,503
10	\$ 5,819	\$ 69,826	\$ 6,983	\$ 67,884	\$ 71,904	\$ 76,201
11	\$ 6,746	\$ 80,950	\$ 8,095	\$ 80,052	\$ 85,391	\$ 91,154
12	\$ 6,746	\$ 80,950	\$ 8,095	\$ 92,950	\$ 99,891	\$ 107,453
13	\$ 7,082	\$ 84,978	\$ 8,498	\$ 107,025	\$ 115,880	\$ 125,621
14	\$ 7,082	\$ 84,978	\$ 8,498	\$ 121,944	\$ 133,069	\$ 145,425
15	\$ 7,315	\$ 87,779	\$ 8,778	\$ 138,039	\$ 151,827	\$ 167,291
16	\$ 7,315	\$ 87,779	\$ 8,778	\$ 155,099	\$ 171,992	\$ 191,125
17	\$ 8,159	\$ 97,902	\$ 9,790	\$174,195	\$ 194,682	\$ 218,116
18	\$ 8,159	\$ 97,902	\$ 9,790	\$194,437	\$ 219,073	\$ 247,537
19	\$ 8,389	\$ 100,667	\$ 10,067	\$216,170	\$ 245,570	\$ 279,882
20	\$ 8,389	\$ 100,667	\$ 10,067	\$239,207	\$ 274,055	\$ 315,138
<b>Average top three years \$ 99,745</b>			<b>Σ = \$144,699</b>			
	<b>x 40%</b>	<b>\$39,898</b>	<b>Present value of 40% payment =</b>	<b>\$ 743,440</b>	<b>\$ 743,440</b>	<b>\$ 743,440</b>
			<b>Total value =</b>	<b>\$ 982,647</b>	<b>\$ 1,017,494</b>	<b>\$ 1,058,578</b>

(Graphic by John B. White)

only date from 2001. Since most retirement funds are a combination of stocks and bonds, this study looks at returns from the G and C funds. Since inception, these funds have earned an average annual return of 5.43 percent and 10.43 percent, respectively.<sup>8</sup>

This study examines three investment scenarios: one with moderate risk, one with lower risk, and one with higher risk. The annual return assumed in the moderate strategy is 7.5 percent. This would imply a mix of 58.6 percent stocks (C fund) and 41.4 percent bonds (G fund). The low-risk return is assumed to be 6 percent, which corresponds to 88.6 percent bonds and 11.4 percent stocks. Finally, the more aggressive strategy assumes an annual return of 9 percent, which implies 28.6 percent in bonds and 71.4 percent in stocks. A common rule of thumb for determining the appropriate mix of stocks and bonds in a retirement portfolio is to set the percentage of stocks equal to 110 minus the investor's age.<sup>9</sup> Thus, a twenty-year old would have 90 percent stock and 10

percent bonds, a thirty-year old would have 80 percent stocks and 20 percent bonds, etc. Using this rule as a guide makes a portfolio higher risk when a servicemember is young, but decreases the risk exposure as he or she ages, which is exactly how most financial advisors guide their clients. Using this rule, a young officer would have a portfolio with 88 percent stock at age twenty-two (the assumed age at commissioning), and it would decline to 68 percent stock at age forty-two, when he or she becomes eligible for the twenty-year retirement pension payments. Over that twenty-year period, the officer's portfolio would average 78 percent stock and 22 percent bonds. Thus, the general rule of thumb for the mix of stocks and bonds is more aggressive than our aggressive strategy that produces a 9 percent return. If there is a bias in the numerical analysis of this study, it is that the assumptions on the portfolio's rate of return are too low.

For an officer who retired as an O-4 and opted for the new retirement system, used the maximum matching



**Table 3. Old System Maximum at O-4**

Year	Monthly salary	Annual salary	5% retirement contribution no match	I = 6% retirement balance	I = 7.5% retirement balance	I = 9% retirement balance
1	\$ 2,972	\$ 35,669	\$ 1,783	\$ 1,783	\$ 1,783	\$ 1,783
2	\$ 2,972	\$ 35,669	\$ 1,783	\$ 3,674	\$ 3,701	\$ 3,727
3	\$ 3,900	\$ 46,804	\$ 2,340	\$ 6,263	\$ 6,318	\$ 6,374
4	\$ 4,492	\$ 53,903	\$ 2,695	\$ 9,393	\$ 9,487	\$ 9,582
5	\$ 5,287	\$ 63,446	\$ 3,172	\$13,229	\$ 13,371	\$ 13,514
6	\$ 5,287	\$ 63,446	\$ 3,172	\$ 17,346	\$ 17,546	\$ 17,747
7	\$ 5,541	\$ 66,488	\$ 3,324	\$ 21,924	\$ 22,187	\$ 22,450
8	\$ 5,541	\$ 66,488	\$ 3,324	\$ 26,842	\$ 27,175	\$ 27,508
9	\$ 5,819	\$ 69,826	\$ 3,491	\$ 32,297	\$ 32,705	\$ 33,112
10	\$ 5,819	\$ 69,826	\$ 3,491	\$ 38,158	\$ 38,649	\$ 39,139
11	\$ 6,746	\$ 80,950	\$ 4,047	\$ 45,015	\$ 45,595	\$ 46,175
12	\$ 6,746	\$ 80,950	\$ 4,047	\$ 52,378	\$ 53,062	\$ 53,746
13	\$ 7,082	\$ 84,978	\$ 4,249	\$ 60,495	\$ 61,291	\$ 62,087
14	\$ 7,082	\$ 84,978	\$ 4,249	\$ 69,217	\$ 70,136	\$ 71,056
15	\$ 7,315	\$ 87,779	\$ 4,389	\$ 78,733	\$ 79,785	\$ 80,838
16	\$ 7,315	\$ 87,779	\$ 4,389	\$ 88,962	\$ 90,158	\$ 91,355
17	\$ 7,449	\$ 89,392	\$ 4,470	\$ 100,037	\$ 101,390	\$ 102,742
18	\$ 7,449	\$ 89,392	\$ 4,470	\$ 111,943	\$ 113,464	\$ 114,984
19	\$ 7,527	\$ 90,320	\$ 4,516	\$ 124,787	\$ 126,489	\$ 128,191
20	\$ 7,527	\$ 90,320	\$ 4,516	\$ 138,595	\$ 140,492	\$ 142,389
<b>Average top three years \$ 90,011</b>			<b>Σ = \$71,920</b>			
<b>x 50%</b>			<b>Present value of</b>			
<b>\$45,005</b>			<b>50% payment =</b>			
				<b>\$ 838,607</b>	<b>\$ 838,607</b>	<b>\$ 838,607</b>
				<b>\$ 977,202</b>	<b>\$ 979,099</b>	<b>\$ 980,996</b>
				<b>\$ 71,210</b>	<b>\$ 38,346</b>	<b>(752)</b>
				<b>(old-new)</b>		

(Graphic by John B. White)

possible, and earned 7.5 percent over a twenty-year career; he or she would accumulate a retirement fund of \$269,867. (This analysis assumes the individual is promoted at his or her first opportunity through O-4. These promotions occur in years two, four, and ten. Retiring as an O-4 assumes the individual was unsuccessful in his or her promotion to O-5 in year sixteen.) A 6 percent return over the same period would have produced \$235,106, while a 9 percent return would yield \$310,862 (see table 1 on page 112). Even the lowest return produces a retirement fund that exceeds the difference between the values of the 50 percent pension and the 40 percent pension with the match. Thus, the new pension utilizing the government-matching fund would produce a higher retirement benefit than the old 50 percent pension.

Likewise, an officer that retired under the new system as an O-5 (promoted in years two, four, ten, and sixteen),

used the maximum matching possible, and earned 7.5 percent over a twenty-year career, would accumulate a retirement fund of \$274,055. A 6 percent return on the officer's TSP investments would yield \$239,207, while a 9 percent return would amass \$315,138 over the twenty-year career (see table 2 on page 113).

Under the new pension, pre-tax salary is reduced by one's contribution to his or her TSP. It was always possible to contribute to the TSP under the old system, but the contribution was not matched. To make the "old versus new" comparison most accurate, it is necessary to calculate what a 5 percent unmatched TSP contribution would generate for someone under the old system. Assuming a return of 7.5 percent, an O-4 would accumulate \$140,492; at a 6 percent return, that amount would decline to \$138,595, while a 9 percent return would yield \$142,389 (see table 3). Similarly, an

**Table 4. Old System Maximum at O-5**

Year	Monthly salary	Annual salary	5% retirement contribution no match	I = 6% retirement balance	I = 7.5% retirement balance	I = 9% retirement balance
1	\$ 2,972	\$ 35,669	\$ 1,783	\$ 1,783	\$ 1,783	\$ 1,783
2	\$ 2,972	\$ 35,669	\$ 1,783	\$ 3,674	\$ 3,701	\$ 3,727
3	\$ 3,900	\$ 46,804	\$ 2,340	\$ 6,263	\$ 6,318	\$ 6,374
4	\$ 4,492	\$ 53,903	\$ 2,695	\$ 9,393	\$ 9,487	\$ 9,582
5	\$ 5,287	\$ 63,446	\$ 3,172	\$ 13,229	\$ 13,371	\$ 13,514
6	\$ 5,287	\$ 63,446	\$ 3,172	\$ 17,346	\$ 17,546	\$ 17,747
7	\$ 5,541	\$ 66,488	\$ 3,324	\$ 21,924	\$ 22,187	\$ 22,450
8	\$ 5,541	\$ 66,488	\$ 3,324	\$ 26,842	\$ 27,175	\$ 27,508
9	\$ 5,819	\$ 69,826	\$ 3,491	\$ 32,297	\$ 32,705	\$ 33,112
10	\$ 5,819	\$ 69,826	\$ 3,491	\$ 38,158	\$ 38,649	\$ 39,139
11	\$ 6,746	\$ 80,950	\$ 4,047	\$ 45,015	\$ 45,595	\$ 46,175
12	\$ 6,746	\$ 80,950	\$ 4,047	\$ 52,378	\$ 53,062	\$ 53,746
13	\$ 7,082	\$ 84,978	\$ 4,249	\$ 60,495	\$ 61,291	\$ 62,087
14	\$ 7,082	\$ 84,978	\$ 4,249	\$ 69,217	\$ 70,136	\$ 71,056
15	\$ 7,315	\$ 87,779	\$ 4,389	\$ 78,733	\$ 79,785	\$ 80,838
16	\$ 7,315	\$ 87,779	\$ 4,389	\$ 88,962	\$ 90,158	\$ 91,355
17	\$ 8,159	\$ 97,902	\$ 4,895	\$ 100,463	\$ 101,815	\$ 103,168
18	\$ 8,159	\$ 97,902	\$ 4,895	\$ 112,819	\$ 114,347	\$ 115,874
19	\$ 8,389	\$ 100,667	\$ 5,033	\$ 126,241	\$ 127,956	\$ 129,671
20	\$ 8,389	\$ 100,667	\$ 5,033	\$ 140,667	\$ 142,586	\$ 144,505
<b>Average top three years \$ 99,745</b>			<b>Σ = \$73,806</b>			
	<b>x 50%</b>	<b>\$49,873</b>	<b>Present value of</b>			
			<b>50% payment =</b>	<b>\$ 937,886</b>	<b>\$ 937,886</b>	<b>\$ 937,886</b>
			<b>Total value =</b>	<b>\$ 1,078,553</b>	<b>\$ 1,080,472</b>	<b>\$ 1,082,391</b>
			<b>Difference =</b>	<b>\$ 95,906</b>	<b>\$ 62,978</b>	<b>\$ 23,813</b>
			<b>(old-new)</b>			

(Graphic by John B. White)

O-5 would accumulate \$144,505 at 7.5 percent, and \$142,586 and \$140,667, respectively, at 6 percent and 9 percent (see table 4).

For someone who retired under the new system as an O-4, the present value of his or her pension payments at retirement (40 percent of base pay) is \$670,885, to which he or she could add from \$235,106 (6 percent return) up to \$310,862 (9 percent return), giving him or her a retirement valued from \$905,991 up to \$981,748 (see table 1 on page 112). The old system (50 percent of base pay) yields a pension retirement valued at \$838,607, plus an additional \$138,595 (at 6 percent) up to \$162,389 (at 9 percent). This yields a total retirement value range of \$977,202 to \$980,996 (table 3). While the old system produces a higher total value at retirement for the low and moderate risk investor, the new system provides a higher valued retirement portfolio at the 9 percent return.

For O-5 retirees, the present value of their 40 percent pension is \$743,440, which can be augmented by their TSP account. This account would range from \$239,207 at a 6 percent return to \$315,138 at 9 percent. This yields a total value after a twenty-year career of \$982,647 up to \$1,058,578 (see table 2 on page 113). The old system (50 percent of base pay) is valued at \$937,886. Assuming someone under the old system deposited 5 percent of his or her base pay into the TSP, he or she would have an additional \$140,667 (at 6 percent) up to an additional \$144,505 (at a 9 percent return). That produces a total value under the old system ranging from \$1,078,552 to \$1,082,391 for an O-5 retiree (table 4). The old system values exceed those of the new system in each case. However, the difference of \$95,906 at a 6 percent annual return rate decreases to \$23,813 as the annual return rate rises to 9 percent.



### Table 5. Retirement O-4

Commission year	Years to retire	New system			Old system		
		6%	7.5%	9%	6%	7.5%	9%
2016	20	\$ 235,106	\$ 269,867	\$ 210,862	\$ 138,595	\$ 140,492	\$ 142,389
2015	19	\$ 228,811	\$ 261,645	\$ 300,164	\$ 131,646	\$ 133,445	\$ 135,244
2014	18	\$ 222,702	\$ 253,779	\$ 290,069	\$ 125,182	\$ 126,889	\$ 128,597
2013	17	\$ 210,099	\$ 237,775	\$ 269,814	\$ 117,291	\$ 118,887	\$ 120,483
2012	16	\$ 196,405	\$ 220,629	\$ 248,413	\$ 108,838	\$ 110,315	\$ 111,791
2011	15	\$ 181,200	\$ 201,856	\$ 225,303	\$ 99,583	\$ 100,928	\$ 102,273
2010	14	\$ 166,856	\$ 184,393	\$ 204,101	\$ 90,973	\$ 92,197	\$ 93,420
2009	13	\$ 156,674	\$ 167,369	\$ 183,717	\$ 82,580	\$ 83,685	\$ 84,789
2008	12	\$ 139,295	\$ 151,533	\$ 165,016	\$ 74,772	\$ 75,767	\$ 76,761
2007	11	\$ 126,040	\$ 136,063	\$ 146,998	\$ 67,145	\$ 68,031	\$ 68,918
2006	10	\$ 113,536	\$ 121,671	\$ 130,468	\$ 60,050	\$ 60,836	\$ 61,622

(Graphic by John B. White)

### Table 6. Retirement O-5

Commission year	Years to retire	New system			Old system		
		6%	7.5%	9%	6%	7.5%	9%
2016	20	\$ 239,207	\$274,055	\$315,138	\$140,667	\$142,586	\$144,505
2015	19	\$ 232,912	\$265,833	\$304,440	\$133,718	\$135,539	\$137,360
2014	18	\$ 226,803	\$257,966	\$294,345	\$127,254	\$128,983	\$130,713
2013	17	\$ 214,200	\$241,962	\$274,090	\$119,363	\$120,891	\$122,599
2012	16	\$ 200,507	\$224,817	\$252,689	\$110,910	\$112,408	\$113,907
2011	15	\$ 185,301	\$206,044	\$229,579	\$101,655	\$103,022	\$104,389
2010	14	\$ 170,957	\$188,581	\$208,377	\$ 93,045	\$ 94,290	\$ 95,536
2009	13	\$ 156,775	\$171,557	\$187,993	\$ 84,652	\$ 88,778	\$ 86,905
2008	12	\$ 143,396	\$155,721	\$169,292	\$ 76,844	\$ 77,860	\$ 78,877
2007	11	\$ 130,142	\$140,250	\$151,274	\$ 69,217	\$ 70,125	\$ 71,033
2006	10	\$ 117,637	\$125,859	\$134,743	\$ 62,122	\$ 62,929	\$ 63,737

(Graphic by John B. White)

## Implications

The preceding analysis was done from the perspective of having successfully completed a twenty-year career. However, completion of twenty years in the service is not guaranteed. Under the current system, less than 20 percent of all servicemembers leave the service with retirement benefits. That number is considerably higher for officers. While it varies by branch of service, between 30 percent and 40 percent of the officer corps earn retirement benefits. What is surprising is the number who pass the ten-year point (when they become eligible to remain for twenty years) and leave *before* they reach twenty years of service. Roughly one in five who complete ten years of service do not make it to twenty years.<sup>10</sup> While the service can force an officer out prior to promotion to O-4, one is left to assume that those who leave beyond the ten-year point do so on their own. And, in doing so, they abandon an incredibly valuable retirement that they are halfway or more to earning.

Therefore, before one can fully endorse one plan over the other, there is one final value of the new system that needs to be considered—the portability of the TSP portion of the retirement. The portability feature is most valuable to those who do not complete twenty years and vest the defined benefit portion of the retirement. The portability value is the difference between the amount in a TSP under the new system and the value of the TSP under the old system. For example, at the five-year mark and with a 7.5 percent return, the new system 10 percent TSP account exceeds the old 5 percent TSP account by \$9,614 (\$22,985–\$13,371). A 6 percent return yields a difference of \$9,264, while a 9 percent return generates a difference of \$9,975 for the same five-year period. This difference increases with service time. At ten years, the difference ranges from \$29,726 (6 percent return) to \$37,062 (9 percent return). At fifteen years, these differences range from \$59,306

to \$86,453, depending on a 6 percent or 9 percent annual return.

The old system total values at twenty years exceeded those of the new system from \$752 to \$95,906, depending on rank and rates of return, which yields an average difference of \$48,749. Knowing that the old system would exceed the value of the new system in twenty years by an average of \$48,749, what is the value of that difference today when a servicemember must decide *today* whether to opt into the new or remain in the old system? What is the present value today of \$48,749 twenty years from now?

Again, it depends on the discount rate, which reflects the risk of not being able to serve twenty years. While approximately 35 percent of commissioned officers complete twenty years of service, it is not accurate to say they have a one-in-three chance of earning retirement. Many officers leave the service after repaying their initial obligation. It is perhaps more accurate to look at the attrition between the ten-year mark and the twenty-year mark, since these presumably reflect officer exits at their own request. The odds of successfully completing twenty years increase dramatically at the ten-year mark. As previously stated, roughly four out of five officers who hit ten years make twenty years and vest.

If the odds of making twenty years once a servicemember has passed the ten-year mark are only 80 percent, then an appropriate discount rate incorporating that level of risk should be in excess of 24 percent. For simplicity, assume the rate is 25 percent. This implies that the present value of \$48,749 in twenty years is only \$562.

Another way to interpret this \$562 value is to look at it as an insurance premium. For \$562, paid when an officer is commissioned, he or she has insured against the average difference in the value of the new system versus the old system. If an officer was to make the \$562 payment out of each paycheck (240 paychecks over twenty years), the amount deducted from each pay period for his or her "retirement system average difference insurance" is only \$6.39. This \$6.39 payment must be weighed against the excess value of the officer's TSP should he or she leave the service before twenty years.

## Decision Facing Current Officers

Current officers who received their commission after 1 January 2006 must also decide which retirement system

to select. For those who are not considering a twenty-year career, the choice is obvious. Select the new system and leave the service with a retirement that is more than double what is contributed, thanks to the government match and the interest earned.

For those with several years of service who would plan to stay for twenty years, the choice is not so simple. Tables 5 and 6 show what they may accumulate in a TSP account under the new system and the old system, retiring as either an O-4 or an O-5. Each of the projections shows that the estimated amount saved is less than for a new officer, because the individual is saving for less than twenty years. However, as previously stated, the difference is the insurance premium against the chance that he or she does not successfully complete a twenty-year career.

## Conclusions

The NDAA of 2016 presents the officer corps with a significant decision to be made regarding retirement. Both systems have advantages and disadvantages. Individuals will analyze the exact same information and reach exactly opposite decisions. In the end, it will depend on one's attitude towards risk. Risk tolerance will influence the rate of return a servicemember is attempting to achieve with his or her retirement investment portfolio.

Some may contend that the new system shifts the risk, fairly or unfairly, to the servicemembers, as a sizeable portion of their retirement is in their TSP account. Servicemembers must now contend with the variability of market returns and its impact on their retirement, something their predecessors did not have to face.

However, all servicemembers, whether under the current or new system, face the significant retirement risk that they will not successfully complete the required twenty years to earn their retirement. Under the current system, retirement is an all-or-nothing proposition. Serve less than twenty years, and one leaves with nothing. The risk of not completing twenty years still exists under the new system. However, under the new system, one does not leave empty-handed if he or she fails to reach twenty years of service.

Consider a worst-case scenario: tragic life events force an officer to leave the service after nineteen years at age forty-one. Under the old system, that officer leaves with everyone's sympathy, but no pension. If the officer had fully participated under the new system, he or she would have accumulated \$242,637 (as an O-4)



and \$245,570 (as an O-5) at 7.5 percent. If the officer placed that money in an account earning only 6 percent and left it there without making any additional deposits until age sixty (age fifty-nine and one-half is the first opportunity to withdraw from a retirement plan without incurring the 10 percent tax penalty), the retirement account would grow to \$734,122.

This would be enough to pay out \$49,816 until age ninety-seven (our earlier estimated mortality). This payment from the TSP-funded account exceeds the \$45,006 retirement pay an O-4 retiree would receive under the old system. If the officer left the money in until age sixty-seven (the current full retirement age for those born after 1960), the account would grow

to \$1,103,849. At 6 percent, this account could pay out \$80,193 per year for the next thirty years. These payouts are slightly higher if the officer resigns at year nineteen as an O-5. And, all of this future retirement income requires no additional deposits after he or she leaves the service.

As stated before, one's attitude toward risk will play a significant role in deciding which retirement option to select. Rational people will examine exactly the same data and reach exactly opposite decisions. Predicting future events is tricky business. The best one can hope for is that after a thorough examination of available information, a servicemember can live with the decision he or she makes with minimal regret. ■

### Biography

*Cdr. John B. White, PhD, U.S. Navy Reserve, retired, is a professor of finance at the United States Coast Guard Academy in New London, Connecticut, where he teaches courses in economic theory, financial management, and finance topics. He earned a bachelor's degree from the University of North Carolina at Chapel Hill and a PhD in economics from the University of Virginia. He is also a retired U.S. Navy Reserve commander, having served as a Supply Corps officer for over twenty years.*

## Notes

1. Kate Horrell, "What Blended Retirement Means to You," *Paycheck Chronicles*, Military.com website, 1 October 2015, accessed 29 June 2016, <http://paycheck-chronicles.military.com/2015/10/01/what-blended-retirement-means-to-you/>.

2. Travis J. Tritten, "Military Retirement Overhaul Set to Roll Out during Next Two Years," *Stars and Stripes*, 10 November 2015, accessed 29 June 2016, <http://www.stripes.com/news/military-retirement-overhaul-set-to-roll-out-during-next-two-years-1.378143>.

3. "High Year Tenure," *Military Personnel Manual (MILPERMAN) 1160-120*, chap. 53, 5 October 2015, accessed 29 June 2016, <http://www.public.navy.mil/bupers-npc/reference/milpers-man/1000/1100Recruitinig/Documents/1160-120.pdf>.

4. "Military Pay Charts—1949 to 2016," *Defense Financial and Accounting Service* website, accessed 29 June 2016, <http://www.dfas.mil/militarymembers/payentitlements/military-pay-charts.html>.

5. "Life Expectancy—United States," *Data360* website, accessed 29 June 2016, [http://www.data360.org/dsg.aspx?Data\\_Set\\_Group\\_Id=195](http://www.data360.org/dsg.aspx?Data_Set_Group_Id=195).

6. "Annual Returns on Stock, T.Bonds and T.Bills: 1928–Current," data from Federal Reserve database on New York University website, updated 5 January 2016, accessed 29 June 2016, [http://pages.stern.nyu.edu/~adamodar/New\\_Home\\_Page/datafile/histretSP.html](http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/histretSP.html).

7. Horrell, "Blended Retirement."

8. "Summary of Returns," *Thrift Savings Plan* website, accessed 29 June 2016, <https://www.tsp.gov/InvestmentFunds/FundPerformance/returnSummary.html>.

9. Daniel Kurt, "Is '100 Minus Your Age' Outdated?" *Investopedia*, 27 June 2014, accessed 29 June 2016, <http://www.investopedia.com/articles/investing/062714/100-minus-your-age-outdated.asp>.

10. Tim Kane, "Military Retirement: Too Sweet a Deal," *War on the Rocks* website, 2 March 2015, accessed 29 June 2016, <http://warontherocks.com/2015/03/military-retirement-too-sweet-a-deal/>.



The destroyer USS *Hopper* (DDG 70) launches a Standard Missile-3 as it operates in the Pacific Ocean on 30 July 2009. The missile successfully intercepted a subscale, short-range ballistic missile launched from the Kauai Test Facility, Pacific Missile Range Facility Barking Sands, Kauai, Hawaii. Aegis-class destroyers provide mobile missile-defense capabilities anywhere in the world, creating freedom of action for combatant commanders to pursue regional strategies. (Photo courtesy of U.S. Navy)

# Constructive Effects Focus on Capabilities

Lt. Col. Kevin McCaskey, PhD, U.S. Air Force

**T**he U.S. armed forces have a penchant for producing doctrine, capabilities, and force structures based on previous conflicts—perhaps no branch more so than the Air Force—that continually prescribe silver bullets for future conflicts based on the character of the preceding war. This unsurprising tendency is likely rooted in the simple fact that those generals and admirals preparing to command forces in the next conflict for all branches of the Department of Defense (DOD) were typically field grade officers in the preceding conflict who were profoundly influenced, but narrowly shaped, by

their past personal experiences. Consequently, lessons learned from the previous conflict in which they were engaged, both positive and negative, were naturally internalized by and formative for these future leaders who subsequently ascended to positions of influence where presumed lessons learned were incorporated into doctrine, training, and acquisition. For example, the experience of Desert Storm that exposed such officers to an enemy utilizing traditional military force structure, centralized command and control, and a traditional combined-arms-warfare strategy led directly to



subsequent senior U.S. military leader infatuation with concepts such as network-centric warfare (NCW) and effects-based operations (EBO), which have remained largely theoretical and of little value since Desert Storm.

Consequently, with a myopic view fostered largely by personal experience among senior leaders and little broader institutional effort to incorporate fuller appreciation of the wide and unique variant characteristics of subsequent future conflicts as they emerge, services habitually design their doctrine, strategy, force structure, and capabilities on false premises. This article identifies some of these false premises that currently influence force development and argues that—rather than focusing on attempting to inculcate in doctrine exclusive dependence on the largely destructive effects that yielded positive results during Desert Storm (which were achieved under arguably very unique circumstances unlikely to be replicated in the future)—commanders and planners should focus instead on developing the military’s constructive capabilities to promote operational flexibility because these will be less affected by the inevitable fog and friction of war and more likely to yield predictable, value-added results.

## Applying Lessons Learned

Since World War II, we have yet to see dogmatically templated lessons learned from one conflict applied in a way that led to a victory in the succeeding conflict. As history has repeatedly shown, what works in one war is often inconsequential in subsequent conflicts. For example, a strategy of daylight high-altitude precision bombing resulting from the “lessons learned” by Billy Mitchell and Giulio Douhet in World War I was institutionalized by



A B-17 Flying Fortress heavy-bomber aircraft formation flying 17 August 1943 over Schweinfurt, Germany, bombs ball-bearing factories in an ineffective effort to indirectly hobble Nazi mechanized ground forces. (Photo courtesy of U.S. Air Force)

the Army Air Corps Tactical School (ACTS). However, this strategy proved simultaneously ineffective (it was unable to effectively destroy targets as predicted) and ill conceived (it failed to account for technological advancements in fighter aircraft, radar, anti-aircraft artillery, etc.) when implemented during World War II. Thus, assumed lessons based on the character of World War I actually slowed effective preparation for the next war as the Army Air Corps invested in force structure, doctrine, and capabilities (such as the Norden bombsight) based on the previous conflict.<sup>1</sup>

In another, more recent, example, theoretical constructs based on the presumed lessons learned gleaned from Desert Storm have survived nearly three decades under the guises of NCW, EBO, and the revolution in military affairs (RMA). The experience of planners developing strike missions for Desert Storm led directly to the rapid rise of EBO, thanks in part to articles such as David A. Deptula’s “Effects-Based Operations: Change in the Nature of War.”<sup>2</sup> Published in 2001, the timing meant that EBO and NCW would play a prominent part early in both Operations Enduring Freedom and Iraqi Freedom. For the decade following, military officers at

varying staff colleges wrote a number of theses, journal articles, and even books on RMA, NCW, and EBO.<sup>3</sup>

Perhaps not wanting to miss out on the expected future glory that EBO would garner in the Global War on Terrorism, even air mobility pilots were expounding the virtues of effects-based airlift.<sup>4</sup> This was despite the fact that “the Hump” (World War II resupply operations over the Himalayan mountains), Operation Vittles (the Berlin Airlift), and multiple other examples of innovative airlift and airdrop operations that directly saved thousands of soldiers in the Korean War had already demonstrated that airpower had achieved desired effects on a routine basis, just not necessarily through destructive effects.<sup>5</sup>

## The Logical Fallacies of Network-Centric Warfare, Effects-Based Operations, and the Revolution in Military Affairs

The triumvirate of NCW, EBO, and RMA has dominated literature and academic discussion within the DOD, with advocates asserting that this trinity will govern future conflicts and change the nature of warfare, while detractors exhibit skepticism (if not outright hostility).<sup>6</sup>

In theory, NCW and EBO are enabled by a technological RMA and themselves represent their own “embryonic RMA.”<sup>7</sup> NCW is achieved by advancements in sensor, information, and weapons technology to create an operational environment wherein “the concept of linking all aspects of warfighting into a shared situational awareness and shared understanding of command intent so as to achieve a unity and synchronicity of effects that multiplies the power of military forces.”<sup>8</sup> From this definition, as a practical matter, one can immediately see that the desired end state of NCW and EBO is neither measurable nor achievable.

The notion that all aspects of any dynamic environment can be understood is patently false, and in direct opposition to the notion of fog and friction as immutable aspects of the nature of war. Furthermore, while a shared understanding of commander’s intent is plausible, there can never be any circumstance where actual situational awareness is shared. Shared situational awareness is an illusion based on the idea that information, data, and images constitute situational awareness. As operators at any level of warfare know, situational awareness is the unique combination of external stimuli combined with internal

observation and experience. Simply, situational awareness is a unique perceptual construct and can never be totally shared. Any number of people can experience the same events, but that does not yield a shared situational awareness; instead, it results in different interpretations of the same event, some widely at variance with each other.

Alongside the dilemma of achieving a shared understanding through shared situational awareness is the idea that all political entities can be represented by a “system of systems.” This is the central assumption of both NCW and EBO, without which the entire construct becomes untenable. The chief fault in system-of-systems analysis (SOSA) is that there is always another system together with another level of analysis conducted in an attempt to achieve perfect knowledge. Thus, layers of seemingly endless analysis have the great potential of readily leading to “analysis paralysis” in executing operations.

Paradoxically, in addition to the overly complex analysis requirements inherent in SOSA, the process also oversimplifies the process for dealing with the complexity of human interactions and cognitive decision-making processes.<sup>9</sup> This combination of unattainable requirements such as achieving a complete knowledge of opposing systems, historical methods of warfighting that discounted the human aspects of war (including fog and friction), and a general failure to deliver finally led then Joint Forces commander Marine Corps Gen. James Mattis in 2008 to effectively ban NCW, EBO, and the supporting planning tool “system-of-systems analysis.”<sup>10</sup>

Although the phraseology of “effects” now permeates in both the 2015 *U.S. National Security Strategy* and joint doctrine, while continuing to be a source of discussion among the military colleges, the actual predictions and expected utility of NCW and EBO have never managed to flourish in the post-9/11 operational threat environment as some expected after Desert Storm.<sup>11</sup> This failure of the information RMA and the resulting NCW and EBO constructs can largely be traced to three key logical fallacies embedded within EBO: *straw-man argument*, *transference*, and *linear projection*.

**Straw-man argument.** A straw-man argument is a rhetorical device wherein an advocate for an argued position intentionally puts up a weak premise in order to knock it down easily with presumed logic and evidence. Such straw-man arguments are often used to justify the immediate implementation of EBO. Consequently, if a defender of EBO can persuade others to accept the





Viewed from above, a Royal Australian Air Force KC-30A multirole tanker transport aircraft connects with a U.S. Air Force C-17 Globemaster III aircraft from the 418th Flight Test Squadron 10 February 2016 during a refueling operation over Edwards Air Force Base, California. Rapid global mobility is a key constructive effect that enables global strike capabilities. (Photo by Christian Turner, U.S. Air Force)

rather nonsensical straw-man assertion that the “old way” of combined arms warfare and operational art was not based on achieving desired effects, EBO immediately may thus be framed as the superior product by comparison. After all, what military officer would be against achieving effects, saving lives, and generally being more efficient? Thus, the straw-man foundation of EBO immediately forces a *false dichotomy* upon officers: choose the new and improved EBO approach; or, remain mired in outdated methods.

The historical record, however, demonstrates that—contrary to the implied EBO premise—the goal of formulating specific plans of action to achieve specific effects is nothing new to the military, but is actually thousands of years old. Crops were not burned and land destroyed during the Peloponnesian Wars because combatants were using olive branches as cudgels that ignited tinder unintentionally. The burning and destruction that occurred was done intentionally for a military purpose—an effect. Similarly, long before EBO was formulated as a concept, the Army Air Corps mounted a bombing against the Schweinfurt ball-bearing factory during World War II because officers had concluded (incorrectly, it turned out) that destroying the German capacity to produce ball bearings would have the desired effect

of degrading mechanized military capability.<sup>12</sup> Not only did the Schweinfurt air raids fail to reduce ball-bearing availability, but at a cost of hundreds of aircraft destroyed or damaged, and causing the Army Air Corps to ditch the same daylight high-altitude precision bombing that ACTS developed in the interwar years.<sup>13</sup>

Setting aside the implied EBO assertion that traditional combined arms warfare had not planned for achieving effects, as long as militaries have existed, they have always attempted to achieve effects through their actions—what has changed is the available technological capabilities to cause those effects.<sup>14</sup>

**Transference.** While the straw man/false dichotomy combination helps explain why EBO gained immediate appeal, transference and linear projection explain why EBO has, to date, failed to deliver. In psychology, transference is the unconscious redirection of feelings toward another individual. Intelligence operators would recognize this tendency as “mirror imaging.” When speaking of military planning, transference is the tendency of a military to assume that its adversary shares the same interests and values, and ascribes the same importance to assumed centers of gravity on both sides of the conflict. NCW, systems of systems, and effects-based targeting are all typical of such American constructs and, as such, all

suffer from American mirror imaging of enemy motives, objectives, and assumed vulnerabilities.

The U.S. military can absolutely be considered a system of systems, and therefore, highly codependent across branches, weapon systems, and capabilities. When these methods were used in Desert Storm, they were wildly successful, not because of the premise that all political opponents are vulnerable to NCW and EBO, but rather, at a unique time and place, the weakened and desperate post-Iraq–Iran War Iraq was vulnerable to this approach. Planners got it right, not because the model was all encompassing and universally applicable. It was just the right model in the right conflict against the right opponent under the right, but very unique, circumstances.

To put it another way, in Desert Storm the strategy of military means with suitable strategic ways to accomplish political ends was successful in large measure due to a host of factors that had little to do with the methodology and theory used to shape planning for the actual military operation.<sup>15</sup>

In the future, against a near-peer competitor or a traditional military force, the NCW/EBO model also might succeed. Unfortunately for the model, the U.S. military has not faced such an opponent under the same circumstances since Desert Storm, since before most enlisted personnel and junior officers were born. What our present personnel have known and experienced was asymmetrical and hybrid warfare, which was purposefully designed not to be a system. The very strength of asymmetrical and hybrid warfare from the perspective of our adversaries was that they avoided pitting their vulnerabilities against superior forces.<sup>16</sup>

**Linear projection.** Failure to fully account for the changing character of war since Desert Storm has demonstrated the tendency of the U.S. military to fall victim to the fallacy of linear projection, wherein present circumstances, conditions, and trends are projected into the future while incorrectly accounting for innovation and change occurring among prospective enemies. Occasionally, military strategies, doctrine, or capabilities do account for expected innovation and change but incorrectly result in a reduction of potential benefits. For example, Cold War assumptions on the use of airpower for nuclear war led to U.S. airpower being unprepared for a limited nonnuclear campaign, and eventually to the Air Force fielding F-4 fighter aircraft designed for the Navy and built without guns in Vietnam owing to

incorrect assumptions about the efficacy of air-to-air missiles.<sup>17</sup> Look at any branch of service from Desert Storm forward, and one will see weapons procurement systems and programs based largely upon this same kind of linear projection.<sup>18</sup>

Correctly, the DOD will typically organize, train, and be equipped to face the most dangerous threat rather than the most likely engagement. I do not suggest a change in the practice of gearing for a near-peer conflict in deference to preparation for irregular or hybrid warfare. However, it is appropriate to criticize the notion that doctrinal theory underlying NCW and EBO that accompany the high-tech equipment necessary to defeat a near-peer will also be effective against hybrid-, irregular-, or insurgency-style conflict.

## On Effects: Constructive Versus Destructive

Aside from the logical fallacies underpinning EBO and NCW, they also suffer from an additional critical shortcoming: a nearly complete disregard for constructive or enabling effects. While neither specifically claims to be focused solely on destructive effects, the clear reality is that each is designed exclusively to destroy or degrade critical nodes in the hypothetical enemy system, supposedly creating the desired effect. Therefore, such theories of system analysis operate largely in a vacuum without consideration of broader dimensions of the conflict apart from measures aimed at destroying targets.

As previously pointed out, there is no such thing as shared situational awareness, and therefore no such thing as complete understanding of enemy forces, their motivations, their influences, or even their own view of what they themselves regard as their centers of gravity. Therefore, because of the inherent fog of war, relying exclusively on a methodology that only seeks to impose and measure destructive effects becomes problematic and unreliable. Certainly, eliminating a given target might result in a near-term effect we desire, but the enemy gets a vote in war and will always have a better understanding of its own capabilities than we will as they relate to its ultimate objectives, many of which may lie outside what can be directly or materially destroyed.

Alternately, constructive effects focus on the development and employment of those weapons and doctrines that do not rely on correctly guessing what effects might take place by materially attacking a target,



but from a solid knowledge of what will take place by creating capabilities. Destructive effects focus on the enemy system—while constructive or enabling effects focus on one's own system, which offers the best prospect for achieving the much sought-after reduction in the fog of war since measuring our own capabilities will inevitably prove more tangible than estimating the enemy response to these said capabilities.

If we consider the primary proponent of EBO—the Air Force—what actually becomes clear is that the vast majority of Air Force capabilities are in fact constructive in nature, with relatively few capabilities actually designed for and capable of destructive effects. While often ignored, capabilities that enable constructive effects are the largest component and backbone of the DOD, and especially of the Air Force. This is a new circumstance, vastly different from the Air Force during the Cold War, wherein the focus was predominantly destructive.

The domains of air, space, and cyberspace are all predominantly focused on constructive effects, the latter two almost entirely. Consequently, nearly everything the Air Force does might rightfully be considered a constructive effect. Such capabilities include global positioning systems and other guidance systems; intelligence, surveillance, and reconnaissance (ISR); cyber defense; rapid global mobility; air refueling; command and control; and combat search and rescue.

Moreover, and perhaps more importantly, those relatively few capabilities for conducting destructive effects always require a preceding constructive effect to positively affect mission accomplishment. This truth has stark implications for how our current military should organize, train, and equip, which eventually will determine how it plans. By refocusing instead on what has traditionally been institutionally marginalized in so-called support roles, the military should become more focused on those things it can control (its own capabilities) and less focused on those things it cannot control (how the enemy responds to a given destructive effect).

Irrespective, desired effects rarely occur independently; whether destructive, or constructive and enabling, they are for the most part the products of preceding tasks. These tasks are in turn dependent upon capabilities. We can depict the process of achieving military objectives (the end of strategy) as follows:

Capabilities → Tasks → Effects → Objectives

This linkage intentionally mirrors operational design and joint doctrine as it currently stands.<sup>19</sup> Thus, choosing to focus on constructive effects does not require a revision of joint doctrine, but simply a cognitive and cultural shift to emphasize those capabilities that lead to constructive effects rather than destructive. Put a different way, constructive effects focus on our own centers of gravity as those things we can control, while downplaying the traditional importance of the enemy centers of gravity, those things that are subject to all of the aforementioned limitations of NCW and EBO.

In *Understanding Centers of Gravity and Critical Vulnerabilities*, authors Joe Strange and Richard Iron offer a model to analyze centers of gravity using four interrelated concepts:

*Centers of gravity are enabled by critical capabilities with critical requirements subject to critical vulnerabilities.*<sup>20</sup>

Therefore, refocusing on constructive capabilities matches well with the Strange and Iron model. Recalling the Clausewitzian dictum that a center of gravity is that which gives strength (physical or moral), it becomes clear that U.S. centers of gravity are today largely based on constructive effects. This means that communication networks, ISR, rapid global mobility, cyber capabilities, and GPS must now be considered centers of gravity in the current operational environment. Consequently, enemies of the United States may be expected to focus their efforts on targeting such capabilities to mitigate or diminish them in an attempt to reduce American combat efficacy. In contrast to the past, given the choice, what today's enemies will likely not select to target as centers of gravity are those platforms that can deliver destructive capabilities such as fighter or bomber aircraft. Despite the fascination with the "ace" pilot as the epitome of Air Force warrior ethos, very few things could be considered less strategically relevant today from the perspective of our enemies than a reduction of five fighter aircraft. Unlike constructive effects wherein the capabilities are scarce and critical, when considering destructive effects, most capabilities are redundant and therefore not critical capabilities.

In comparison, there are innumerable means to destroy something across each of the services, but very few means to allow the operation of command and control, ISR, or global mobility. Thus, these constructive effects, which are less subject to fog and friction because the



The U.S. Air Force launches the first of a new generation of military communications satellites, the Wideband Global SATCOM, aboard an Atlas V launch vehicle 10 October 2007 at Cape Canaveral Air Force Station, Florida. (Photo courtesy of United Launch Alliance)

enemy gets less of a “vote,” are more likely to yield predictable results than those destructive effects that rely on assumptions about the enemy center of gravity, capabilities, requirements, and vulnerabilities.

The ongoing air campaign against the Islamic State (IS) serves as an example for the focus on constructive effects. While the effectiveness of the bombing air campaign is currently being argued both ways, what is verifiable is the efficacy of those capabilities that has enabled airpower to identify, track, target, and prosecute IS combatants and capabilities. Thus far, the ISR, command and control, aerial refueling platforms, and space and cyber capabilities that continually enable effects (kinetic and nonkinetic) have been arguably the more important

components of the campaign. With these constructive effects, the enabled destructive effect may actually work, but, without them, the destructive effects never happen.

Since the question “Can airpower alone defeat IS?” is largely impossible to answer (the military always pursues a strategy with the means granted by political authorities), the better question is “How can we ensure that airpower has the capability to execute destructive effects on demand?”

The answer to that question is through constructive capabilities and their resultant effects.

### Concluding Observations— Implications for U.S. Planning

The chief shortcoming with EBO and NCW is the illusion that American warfighters can ever achieve complete understanding of the battlespace and a truly shared situational awareness. One can analyze the enemy to the *n*th degree and establish as many nodes and linkages as desired. However, all of these connections fall apart if the initial assumptions about what really matters (identification of true centers of gravity perhaps) are erroneous or if the enemy adapts in unexpected ways. Yugoslavian air defenses shot down a U.S. F-117 in 1999 by doing precisely this, behaving in a manner planners had not (and likely could not have) predicted. The enemy learned and adapted.

At the Air Force Academy, I routinely attempt to expose cadets to the challenges associated with applying system-of-systems analysis in the simulated fog of war and uncertainty pervading conflict by dividing them into groups and allowing them to war-game two given sides in a conflict. For example, one team might play the United States while the other team plays IS. Each attempts to come up with their own center of gravity and that of the enemy.

The exercise is intended to acquaint the cadets with the complexity of even this seemingly simple task, and, in theory, each team would identify the same two things. Yet, in no scenario to date has each side actually identified the center of gravity that their opponent claims is essential to carrying out their strategy. Each side actually attacks something the other does not consider critical to their center of gravity or strategy. It is not that a team cannot identify their source of power, but rather that they can almost never identify what the enemy itself regards as its true source of power.



This occurs because the center of gravity does not drive strategy—strategy drives the center of gravity. This exercise helps highlight that without a perfect understanding of how an enemy will fight during a conflict, we can never accurately decide what to eliminate until engaged. Operationally, this is why NCW and EBO have failed against a variety of asymmetrical opponents. In many circumstances, we routinely have little ability to gain insight into knowing what the enemy strategy actually is, or how it will execute said strategy, with anything approaching the level of certainty promised by the information RMA necessary to enable NCW and EBO.

Because complete understanding of the enemy is extremely difficult to attain, we return to the assertion that focusing on management of constructive effects is the wisest course for developing our future strategy and doctrine. Moreover, it is important to acknowledge that complete understanding of battlespace is an illusion. As Clausewitz pointed out, “accurate recognition constitutes one of the most serious sources of friction in war.”<sup>21</sup> To continue the farce that more information, data, or imagery will allow the United States to cause complete collapse of the enemy system using surgical attacks against centers of gravity is a fantasy, the unfortunate legacy construct of a singular conflict against a Desert Storm enemy overmatched and ill-prepared for the American approach. Consequently, we would be better advised to deal with the inevitable fog and friction of the future that will arise during future conflict by focusing future planning management on our own constructive capabilities.

A strategy of operations built on logical fallacies and anecdotal evidence should not be considered



A Wideband Global SATCOM satellite has the constructive effect of providing roughly twelve times the bandwidth of previous systems. (Photo courtesy of Boeing)

the end-all in planning. Yes, future wars will focus on achieving desired effects to accomplish political and military objectives, just as militaries have always done for thousands of years. However, we will have greater flexibility in preparing to fight our future wars by focusing primarily on managing and developing the capabilities to apply constructive enabling effects that we control rather than those that apply destructive effects the outcome of which is heavily dependent on historically unreliable assessments of enemy responses. ■

### Biography

*Lt. Col. Kevin McCaskey, PhD, U.S. Air Force, is an assistant professor in the Department of Military and Strategic Studies at the U.S. Air Force Academy, Colorado, where he teaches air, space, and cyber strategy. He holds a BS from the USAF Academy, an MA from American Military University, and a PhD from the Naval Postgraduate School. He is a senior pilot with over one thousand combat hours in support of the Global War on Terrorism.*

## Notes

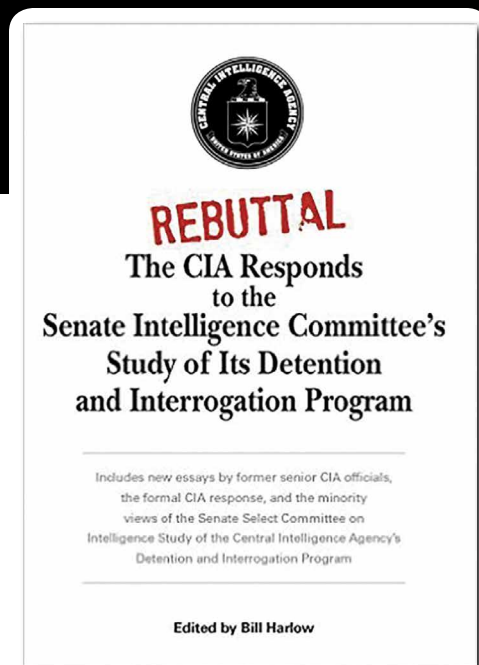
1. Robert T. Finney, *History of the Air Corps Tactical School 1920–1940* (Washington, DC: Center for Air Force History, 1992), 7.
2. David A. Deptula, *Effects-Based Operations: Change in the Nature of Warfare* (Arlington, VA: Aerospace Education Foundation, 2001), accessed 12 July 2016, <http://www.ausairpower.net/PDF-A/ AEF-AFA-Effect-Based-Operations-D.A.Deptula-2001.pdf>.
3. The volume of published theses and manuscripts from various professional military education institutions spans services and coalition allies. For two examples of these phenomena, see Allen W. Batschelet, *Effects-based operations: A New Operational Model?* (Carlisle Barracks, PA: U.S. Army War College, April 2002); Donald Lowe and Simon Ng, "Effects-Based Operations: Language, Meaning and the Effects-Based Approach" (paper presented at the 2004 Command and Control Research and Technology Symposium, San Diego, CA: June 2004), accessed 12 July 2016, [http://www.au.af.mil/au/awc/awcgate/ccrp/ebo\\_language.pdf](http://www.au.af.mil/au/awc/awcgate/ccrp/ebo_language.pdf). Effects-based operations (EBO) was the doctrinal *soup de jour* for much of the decade following Deptula.
4. Ravi I. Chaudhary, "Transforming American Airlift: Effects-Based Mobility, the C-17, and Global Maneuver," *Air & Space Power Journal* 21, 1 March 2007, accessed 12 July 2016, <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj07/spr07/chaudharyspr07.html>.
5. William H. Tunner, *Over the Hump* (New York: Duell, Sloan, and Pearce, 1964), chaps. III, IV, and VI.
6. Literature on the technological revolution in military affairs predates the aforementioned Deptula article. Following Desert Storm, works have included Steven Metz and James Kievit, *Strategy and Revolution in Military Affairs: From Theory to Policy* (Carlisle, PA: Strategic Studies Institute, 1995); Norman Davis, "An Information-Based Revolution in Military Affairs," *Strategic Review* 24 (1996); and Congressional Research Service reports such as Theodor W. Galdi, "Revolution in Military Affairs? Competing Concepts, Organizational Responses, Outstanding Issues," *Congressional Research Service*, 95-1170F (December 1995). In addition, some of these works have flowed from military institutions, think tanks, and academics, many of which are ready to declare Desert Storm a turning point in the six millennia history of warfare.
7. Edward A. Smith, *Effects Based Operations: Applying Network Centric Warfare in Peace, Crisis, and War* (Washington, DC: Department of Defense Command and Control Research Program, 2002), 60.
8. *Ibid.*, 61.
9. James A. Mattis, "USJFCOM Commander's Guidance for Effects-based Operations," *Parameters* (Autumn 2008): 20.
10. *Ibid.*, 23.
11. White House, *National Security Strategy* (Washington, DC: White House, 2015), 4, accessed 12 July 2016, [https://www.whitehouse.gov/sites/default/files/docs/2015\\_national\\_security\\_strategy.pdf](https://www.whitehouse.gov/sites/default/files/docs/2015_national_security_strategy.pdf).
12. Tami Biddle, *Rhetoric and Reality in Warfare* (Princeton, NJ: Princeton University Press, 2002), 224.
13. *Ibid.*, 228.
14. Carl Von Clausewitz, "On Strategy in General," chap. 3 in *On War*, eds. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1989).
15. Colin S. Gray, *The Future of Strategy* (Cambridge, UK: Polity Press, 2015), 10.
16. David Deptula, "How to Defeat ISIL: It's All About the Strategy," Breaking Defense website, 5 September 2014, accessed 12 July 2016, <http://breakingdefense.com/2014/09/how-to-defeat-isil-its-all-about-the-strategy/>. It is worth noting that the even when EBO proves ineffective, airpower advocates refuse to consider that airpower alone cannot accomplish the task. Thus, we see Deptula recommending that force be applied "like a thunderstorm ... against every move of IS forces and personnel." Thunderstorms and every movement are clearly not based on effects, but a return to mass bombing and attrition based warfare that EBO was supposed to supplant.
17. Colin S. Gray, *Airpower for Strategic Effect* (Maxwell Air Force Base, AL: Air University Press, 2012), 172.
18. Office of the Under Secretary of Defense (Comptroller)/CFO, "Program Acquisition Cost by Weapon System, United States Department of Defense Fiscal Year 2016 Budget Request," Under Secretary of Defense (Comptroller) website, 23 January 2015, accessed 12 July 2016, [http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2016/FY2016\\_Weapons.pdf](http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2016/FY2016_Weapons.pdf). A cursory review of the 2016 Defense Budget Program Acquisition cost study reveals services dedicated to the continued pursuit of ever-advanced missile defense, deep-water naval vessels, and advanced strike aircraft. All are necessary components of a successful war against a near-peer competitor, but most programs are designed for their utility in a Desert Storm-type conflict rather than those Balkan, Somali, or Global War on Terrorism conflicts predominant over the last two decades.
19. Joint Chiefs of Staff, *Joint Publication (JP) 5-0 Joint Operation Planning* (Washington, DC: U.S. Government Printing Office, 2011), III-1–III-44. It is also worth noting that, while Gen. James Mattis cited both JP 3-0, *Joint Operations*, and JP 5-0 as the appropriate source of doctrine, both documents are heavily couched in effects. The critique is not that effects are incorrect, but that EBO lacks value for joint operations under the current threat environment.
20. Joe Strange and Richard Iron, *Understanding Centers of Gravity and Critical Vulnerabilities* (Maxwell Air Force Base, Air War College), part II, 7, accessed 12 July 2016, <http://www.au.af.mil/au/awc/awcgate/usmc/cog2.pdf>.
21. Clausewitz, *On War*, 117.



## Rebuttal

### The CIA Responds to the Senate Intelligence Committee's Study of Its Detention and Interrogation Program

Edited by Bill Harlow, Naval Institute Press, Annapolis, Maryland, 2015, 352 pages



John G. Breen, PhD

In early December 2014, the Senate Select Committee on Intelligence (SSCI) released its report on the Central Intelligence Agency's (CIA) Detention and Interrogation Program, concluding that the use of enhanced interrogation techniques (EITs) was brutal and ineffective, and that the CIA misrepresented the program's effectiveness to executive and legislative oversight, as well as to the public. CIA Director John Brennan released a statement the same day: "While we made mistakes, the record does not support the study's inference that the agency systematically and intentionally misled each of these audiences on the effectiveness of the program."<sup>1</sup> More than a year prior, the CIA had offered a highly detailed and introspective response to the SSCI investigation, which highlighted points of agreement, admitted failures, and pushed back on certain findings. Brennan noted in his introductory letter to this response, "I personally remain firm in my belief that [EITs] are not an appropriate method to obtain intelligence and that their use impairs our ability to continue to play a leadership role in the world."<sup>2</sup>

In *Rebuttal: The CIA responds to the Senate Intelligence Committee's Study of Its Detention and Interrogation*

*Program*, editor Bill Harlow reprints the declassified CIA response to the SSCI report from 2013, along with the SSCI's Republican minority response. The CIA response document in particular is worthy of a careful read. *Rebuttal* also includes essays written by senior CIA officials involved with the program—former directors George Tenet, Porter Goss, and Michael Hayden; former deputy directors John McLaughlin and Michael Morell; former counterterrorism deputy director J. Philip Mudd; former acting general counsel John Rizzo; and former counterterrorism center director Jose Rodriguez.

To his credit, Tenet does make an effort in his essay to address the ethical and moral challenges involved with the design and implementation of such a program. He also attempts to argue the "ticking time bomb" scenario, citing his not unreasonable fears of a "detonation of a weapon of mass destruction on American soil," and noting that he briefed President Bush about "reporting that indicated a nuclear weapon had been smuggled into the United States destined for New York City." Yet he goes on to say, paradoxically, that he later suspended the program at a time of "heightened threat" in order to ensure legal protections for the agency and its employees—"the

law was more important than interrogations.” A noble sentiment, and one for which CIA employees owe him greatly, but if you can so readily identify the moral hazards and cite the threat of imminent nuclear annihilation as justification for EITs, how can you suggest that lawyerly cover is even more important? It would have been useful to hear more from Tenet on how to resolve this apparent contradiction.

Goss, who prior to serving as CIA director was the chairman of the House Permanent Select Committee on Intelligence, bemoans partisan agendas and presents ad hominem attacks against his legislative colleagues—“the members of the ‘select’ oversight committees are not always selected for their understanding of the intelligence community.” According to *Rebuttal* coauthor John Rizzo, as detailed in his previously published book *Company Man*, perhaps they would have had a better understanding had Goss briefed them properly.

According to Rizzo, Goss failed to inform Congress that videotape records of waterboarding had been destroyed: “So please tell me, I asked, ‘that you briefed the intelligence committee leaders about the destruction and that there’s a record somewhere of that briefing.’ There was a pause, and then Porter said, ‘Gee, I don’t remember ever telling them. I don’t think there was ever the right opportunity to do it.’ My heart sank. It was the ultimate nightmare scenario.”<sup>3</sup>

J. Philip Mudd offers a thoughtful essay on the value of detainee reporting. He explains the importance of gaining a “decision advantage”—that the accumulation of insights garnered from the detainees vice any “silver bullet” led to a greater understanding of al-Qaida and

aided in efforts to protect the homeland and remove terrorist leadership from the battlefield.

As for the remaining essays, McLaughlin again invokes the ticking time bomb scenario, Morell complains about the press, Rizzo focuses on the legal details, and Hayden spends some time attempting to explain the fine difference between slamming a detainee’s head against a wall and “pushing a detainee’s shoulders into a false plywood wall.” Rodriguez, doubling down on his book *Hard Measures*, attempts to claim that CIA waterboarding, as it was the same technique used in U.S. military survival, evasion, resistance, and escape training, could not have been equated to the waterboarding conducted during the “Spanish Inquisition, or by the Japanese during World War II, or the Khmer Rouge in Cambodia.”<sup>4</sup> Rodriguez seems not to understand the irony of citing these examples to bolster his case.

Most of us can be grateful we did not have to make the hard decisions these former senior leaders were forced to consider, imposed on them, in effect, by terrorists seeking to end our way of life. Several led the agency at a time of extreme crisis, and their decisions are certainly prone to unfair, rearview-mirror judgment. However, other than the contribution by Mudd, their essays do little to press the discussion forward. Their efforts to “rebut” generally amount to the rehashing of previous complaints and quibbling—lack of context, political partisanship, and, most repetitively, that the SSCI conducted no interviews of CIA officials. If their writing reflects the full depth of their thinking on the issue, it seems not much would have been gained had the SSCI actually conducted the interviews. ■

### Biography

John G. Breen, PhD, is the Commandant’s Distinguished Chair for National Intelligence Studies at the U.S. Army Command and General Staff College, Fort Leavenworth, Kansas.

## Notes

1. John Brennan, “Statement from Director Brennan on the SSCI Study on the Former Detention and Interrogation Program,” Central Intelligence Agency (CIA) website, 9 December 2014, accessed 29 July 2016, <https://www.cia.gov/news-information/press-releases-statements/2014-press-releases-statements/statement-from-director-brennan-on-ssci-study-on-detention-interrogation-program.html>.

2. CIA Director John O. Brennan, memorandum for the Honorable Dianne Feinstein and the Honorable Saxby Chambliss, 27

June 2013, CIA Comments on the Senate Select Committee on Intelligence Report on the Rendition, Detention, and Interrogation Program, accessed 29 July 2016, [https://www.cia.gov/library/reports/CIAs\\_June2013\\_Response\\_to\\_the\\_SSCI\\_Study\\_on\\_the\\_Former\\_Detention\\_and\\_Interrogation\\_Program.pdf](https://www.cia.gov/library/reports/CIAs_June2013_Response_to_the_SSCI_Study_on_the_Former_Detention_and_Interrogation_Program.pdf).

3. John Rizzo, *Company Man* (New York: Scribner, 2014), 23.

4. Jose A. Rodriguez, *Hard Measures* (New York: Threshold Editions, 2012), 53.



# LETTERS TO THE EDITOR

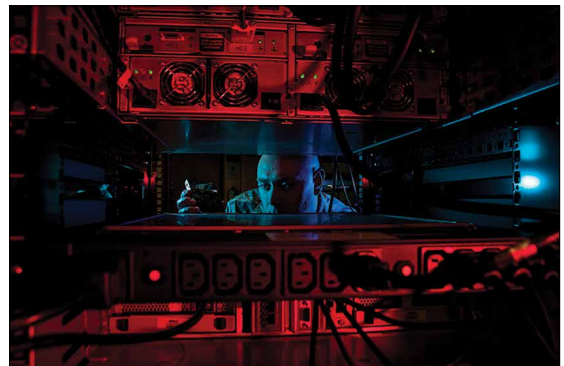
## Response to Maj. Matt Graham, “U.S. Cyber Force One War Away”

(*Military Review*, May–June 2016)

William Thayer

I subscribe to several military publications, and they have many articles on cyberwarfare. The scope of these articles (as with the present article) is always offensive and defensive cyberwar. It is never about “recovery” from a cyberattack. If some nation or subnational groups want to attack our electrical grid, they will eventually succeed. What then? No one is discussing a recovery.

In fact, even worse than a complete takedown of our electrical grid would be an electromagnetic pulse (EMP) attack, which would destroy all microchips even in cars and trucks. An attack on our electrical grid could leave us without power, communication, and even a water supply. An EMP attack would leave us without transportation also. Few books address a recovery: *Civil-Military Preparedness for an EMP Catastrophe* and *One Second After ... in San Diego*. The common theme of these books is that the military will be the only organized force left standing. Military bases will be like lily



©Photo by Spencer Platt/Flickr & Corbis, US Air Force  
U.S. Air Force Staff Sgt. Jerome Duhan, a network administrator with the 97th Communications Squadron, inserts a hard drive into the network control center retina server 24 January 2014 at Abuja Air Force Base, Oklahoma, in preparation for a command cyber readiness inspection.

### U.S. Cyber Force One War Away

Maj. Matt Graham, U.S. Army

**I**n *Wealth of Nations*, published in 1776, Adam Smith explains how division of labor allows the greatest efficiency: farmers focus on producing food, blacksmiths focus on crafting goods from metal, and so on. The principle still holds true today: individuals and organizations develop expertise by focusing on a single activity. In the U.S. military, the division of labor between armed services accomplishes this expertise: the Air Force concentrates on air superiority, allowing the

Army to focus on land warfare and the Navy to concern itself with maritime combat. The Marine Corps develops its expertise in bridging the gap between land and sea.

Although it possesses some very different characteristics from the physical domains, cyberspace has recently emerged as an independent domain that requires its own particular military expertise. With nations seeking advantages in this new domain, competition within cyberspace has assumed many of the traits of warfare, and

MILITARY REVIEW May/June 2016

111

pads for organizing recovery. The military has organization, and it has equipment that will survive either an electrical grid attack or an EMP attack (e.g., the satellite communications systems, air/sea/ground transportation). Yet, no one is writing even a single article on “How to recover from a grid or EMP attack.” The basics that are needed are water, food, communication, and transportation.

**William Thayer, San Diego, California**

# Explaining Suicides in the U.S. Military

## Birth Cohort Vulnerability and the All-Volunteer Force

Col. James Griffith, U.S. Army,  
Retired

Recently, I saw a couple of published news articles on the seventh year of increased suicides in the U.S. military, expecting fewer given the various research and prevention efforts. I am not very optimistic that this phenomenon is going to change much unless more recent birth-cohort characteristics change, and the methods used to obtain those who enter military service change.

I have been investigating suicides in the military, largely the Army National Guard (ARNG), since having been called into active duty to assist the director of the National Guard Bureau to respond to the Vice Chief of Staff of the Army's request to more closely examine ARNG suicides. Tying together the various findings concerning suicide in the military and in the civilian population, Dr. Bryan and I formulated an explanation of increased suicides among military personnel.

Among more recent birth cohorts, age-interval suicide rates among younger ages (adolescents and teens) has increased, with decreased rates among middle adults. Sociologists Stockard and O'Brien reliably predicted these changes by birth-cohort size and nonmarital births, reported in *Social Forces* and *International Journal of Comparative Sociology*. They speculate that these findings demonstrate less social integration among more recent birth cohorts and reason that larger birth cohorts and nonmarital births result in fewer financial resources available and/

or fewer adult providers within a household than in previous birth cohorts. Consequently, members of larger birth cohorts and cohorts with fewer adults in the home are more likely to be influenced by peer relations, thereby creating a "youth culture" that is "relatively insulated from the influence of older generations," resulting in less connection to groups and internalized ways of behaving. Dr. Twenge, a psychologist, reports somewhat disconcerting evidence related to this argument. She examined several large-scale data sets of different generations of high school students and young adults. In published studies, Twenge reported in the *Clinical Psychology Review* and *Social Indicators Research* increased psychopathic deviant, paranoia, hypomania, and depression in more recent generations. Overall, then, there appears to be some fundamental shifts occurring in more recent birth cohorts related to vulnerabilities of negative psychological health.

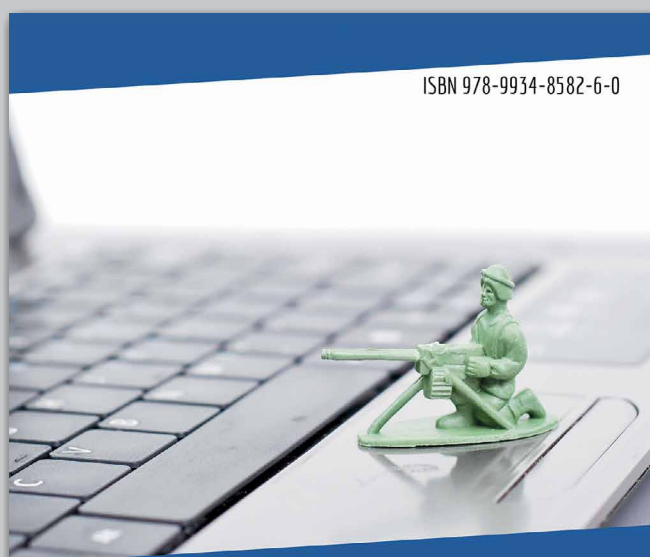
The military is most likely to evidence these shifts relative to suicide. The military, due to its mission, is comprised of those young males that are at risk, as reported by both civilian and military studies— young males. Another primary risk factor is being white, and the Army has become increasingly more white. Military studies have also reported trends in increased psychological problems (personality adjustment and mood disorders) among soldiers visiting medical treatment facilities, increased medical, and misconduct waivers for new entrants, and pre-enlistment history of suicide risk and psychiatric conditions. Further, what makes these vulnerabilities more evident in today's military is the way in which

individuals enter military service. In the all-volunteer force (compared to the draft era), there are far fewer applicants (annually some two hundred thousand), and of these nearly half are taken, with a large percentage with wavered status. During the draft era, millions were considered for military service, but a small percentage taken, and of these, very few were waived for military service. There is also evidence that increasingly applicants come from nontraditional households and are wanting of group membership and identity—the explanatory dynamic of suicide in Durkheim’s treatise on suicide, as offered by Stockard and O’Brien.

While tentative and somewhat speculative, this explanation clearly calls for a different way of thinking about, examining, and preventing suicides in the military. For example, current preventive programs should be aimed more directly at domains related to social integration, such as training and experiences associated with group identity and solidarity, leadership, and group norms that develop individual-to-group ties, providing social connections and control of individual-level behaviors.

**Col. James Griffith, U.S. Army, Retired,  
Salt Lake City, Utah**

ISBN 978-9934-8582-6-0



## SOCIAL MEDIA AS A TOOL OF HYBRID WARFARE

PREPARED BY THE  
NATO STRATEGIC COMMUNICATIONS  
CENTRE OF EXCELLENCE



# MR

## We Recommend

**T**his NATO study examines the development of information technology that has changed the nature of recent conflicts by wearing into them additional factors of complexity. For example, social media and the Internet have been widely employed to coordinate actions, collect information, and influence attitudes of targeted audiences, including mobilizing such audiences for action. The review recent theory associated with the introduction of social media as a new part of the battle space and looks in depth at the use of media by Russia and the Islamic State (Daesh). For more information, please visit [www.stratcomcoe.org/social-media-tool-hybrid-warfare](http://www.stratcomcoe.org/social-media-tool-hybrid-warfare).



# BOOK REVIEWS

---

## THE WAR CAME HOME WITH HIM A Daughter's Memoir

Catherine Madison, University of Minnesota Press,  
Minneapolis, Minnesota, 2015, 256 pages

---

Catherine Madison writes a dramatic account of her father's captivity as a prisoner of war during the Korean Conflict, while simultaneously recounting vivid memories of her childhood. The chapters alternate between her physician father's military service, emphasizing his prisoner-of-war experience, and her childhood encounters with the damaged man who returned home from the war. This skillfully artistic work reads as a novel, lending to its intrigue, as well as shedding light on the consequences of war using primary source accounts from a collection of secret documents found years later. The strengths of the book are its intellectual quality, the compelling nature of the story, and the introspection of both the author and her father, Alexander "Doc" Boysen.

Madison's experience as a journalist and editor lend to the intellectual merit of this book. Her expertise as a writer brings the story and its nuances to life. The sophisticated details prompt the reader to think deeply and critically about the dynamic effects of war, post-traumatic stress disorder, and other consequences of combat for both soldiers and their families.

Her communicative imagery and gripping account maintain the reader's interest because of the veracity and depth of the story—a story of horror, suspense, and hope. What makes the book most riveting is the realistic account of prisoners' suffering from a physician's perspective, from one who fought daily to treat his comrades but was prohibited mostly due to the contempt of

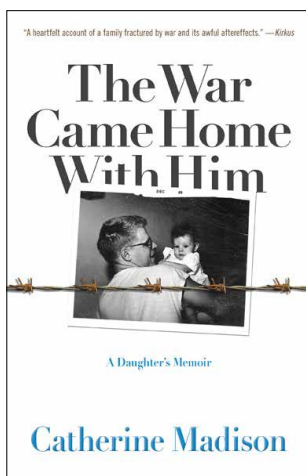
his captors and the severe lack of medical supplies. The gruesome recounting of the rate at which American prisoners died, how they died, and the ruthless denial of treatment stir up emotion by bringing the reader face to face with the "Tiger," and other North Korean and Chinese captors. Then upon returning home, Doc went mentally and emotionally untreated himself, which most likely contributed to the dysfunction of his family and the contempt he showed toward it.

This book does not cover operations or battles during the war. Rather, it takes the reader on a journey through an in-depth look at the depravity of man, a journey that leaves an indelible impression as to how any culture could treat fellow humans so harshly and inhumanely. Not surprisingly, Doc does not engage in much in-depth introspection until his later years, and even then does not seem to comprehend the consequences of the disdainful approach with which he chose to treat his daughter. What appears to be an attempt to offer protection and love comes across as extreme parental control that was distant and uncaring. In the end, it seems

that the veiled cries of his soul were often mistaken for the self-sufficient toughness of a survivor.

The book steers away from politics and opinion but may lead readers to speculate about possible strategies to help veterans such as Doc, who suffered a host of mental, emotional, spiritual, and physical trauma. Because the book is written like a novel, the author does not attempt to provide such remedies, but she leaves the reader free to decide what judgment to render regarding what could or should have been done for America's forgotten heroes who survived some of the most brutal treatment only one short generation ago.

**Chaplain (Maj.) Valeria Van Dress,  
West Point, New York**



---

## HELL BEFORE THEIR VERY EYES

### American Soldiers Liberate Concentration Camps in Germany, April 1945

John C. McManus, Johns Hopkins University Press,  
Baltimore, Maryland, 2015, 189 pages

---

It has been seventy years since the Allies liberated some of the most notorious Nazi concentration camps during the latter months of World War II, yet that experience had a deep and lasting impact on those who took part. While much has been written about the victims and perpetrators of the Third Reich's *Konzentrationslager* system, a new book by military historian John McManus hones in on the unique perspective of the liberators, in this case American forces, as they encountered Ohrdruf, Buchenwald, and Dachau in Germany during April 1945.

Relying on personal testimony, diaries, unit histories, and other primary resources, McManus effectively describes, compares, and contrasts the liberation of these notorious camps in a concise, well-researched, and highly readable work. *Hell Before Their Very Eyes* is a valuable entry in Johns Hopkins's *Witness to History* series, focusing on (as the title suggests) first-person accounts of seminal events in American history.

McManus is at his best by letting the soldiers' words speak for themselves, showing that even battle-hardened veterans experienced emotions ranging from shock, revulsion, and disbelief to shame, anger, and guilt—upon seeing the camps for the first time. Almost to a man, liberators recall that their strongest memory of the experience was the collective stench of the camps, including the dead, the dying, and the living. Perhaps tellingly, many soldiers were guilt-ridden for not having arrived earlier, or for being unable to do more for camp survivors. Fittingly, most liberators were determined to bear witness, perhaps anticipating that their stories would not be believed later.

Another of the book's strengths is balance. While liberation was virtually universally welcomed by the

victims, and the Americans were met with deep gratitude, McManus shows us that not all went smoothly. American forces were woefully unprepared initially for dealing with the human tragedy of the camps, despite the fact that knowledge of their existence was widespread by April 1945. Even worse, the initial shock and ambiguity of encountering the camps led to breakdowns of discipline and even atrocities, such as the incident in the Dachau coal yard where American soldiers executed an estimated twenty to twenty-five unarmed *Schutzstaffel* (SS, Protection Squadron) guards in reprisal.

There is little not to like about *Hell Before Their Very Eyes*, a small gem of a book that is eminently readable, concise, yet packed with emotion and visceral description. It also suggests potential future research, perhaps comparing American forces' experiences with those of British or Russian forces who also liberated concentration camps in Germany and Poland. While the series *Witness to History* primarily targets the college undergraduate, military professionals will find great value in McManus's first-hand accounts of liberators confronting the horrors of the Holocaust—a subject relatively uncommon in today's military literature.

**Col. Mark Montesclaros, U.S. Army, Retired,  
Fort Gordon, Georgia**

---

## 21ST CENTURY ELLIS

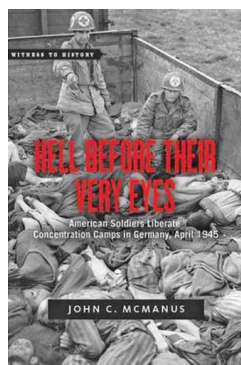
### Operational Art and Strategic Prophecy for the Modern Era

Edited by B. A. Friedman, Naval Institute Press,  
Annapolis, Maryland, 2015, 176 pages

---

**21**st Century Ellis is an edited work that combines the written products of Col. Earl "Pete" Ellis with commentary by Maj. Brett Friedman of the U.S. Marine Corps. This book is part of the Naval Institute Press's *21st Century Foundations* series, which provides a modern perspective on the orists of the past. This is the third in the series and follows U.S. Navy Cmdr. Benjamin Armstrong's superb *21st Century Mahan* and *21st Century Sims*.

Friedman organizes the book into a preface, introduction, and five chapters. The first chapter discusses Ellis's personal experience and the Marine Corps' experience with counterinsurgency or, more specifically,



during the so-called Banana Wars. Friedman features Ellis's 1921 piece, "Bush Brigades." The second chapter discusses Ellis and combined warfare during the First World War. The third and fourth chapters, exceptional both in terms of Friedman's commentary and Ellis's pieces, discusses Ellis's thoughts on naval bases and the Advanced Base Force, both of which had incalculable impact upon the modern Marine Corps, and Ellis and the Pacific theater, respectively. In the fifth chapter, Friedman discusses how Ellis's legacy is useful for our understanding of the modern Pacific.

It is no accident that one of the key books on Ellis is titled *Pete Ellis: An Amphibious Warfare Prophet, 1880-1923*, and Friedman's commentary and selection of Ellis's writings related to amphibious warfare are very convincing. Friedman's section on counterinsurgency, however, is not as convincing as the discussion of Ellis's contribution to amphibious warfare. In *Mars Learning: The Marine Corps' Development of Small Wars Doctrine, 1915-1940*, Keith Bickel treats Ellis's writings on small wars as important; however, he places less emphasis on Ellis's contribution than Friedman. With respect to Ellis and the *Small Wars Manual*, Bickel's most salient and interesting observation is that "they did not invent a new way of waging warfare. Neither did they envision or invent new ways of waging small wars, as Ellis did for waging amphibious landings." This both underlines Ellis's groundbreaking work on amphibious landings and downplays the importance of his work on the *Small Wars Manual*.

This is a great book that combines several of Ellis's key works and Friedman's good contextualization for and commentary on Ellis's thought. In the preface, Friedman writes, "The Marine Corps has on occasion inflated the importance of some aspects of our history, and I feared that Ellis's legacy was more tradition than substance. Instead, I found a trove of ideas with clear indirect applications for ... any era." There is no question of Ellis's importance in the development of amphibious warfare and impact of his thoughts on the Marine Corps, the war in the Pacific, and subsequent amphibious operations. Consequently, Friedman's book is a tremendous resource for those researching those subjects; however, he likely overstates Ellis's importance to the development of the Marine Corps' *Small Wars Manual* and the originality and presence of Ellis's thinking on counterinsurgency. Regardless, this book is invaluable

to those interested in the Pacific during World War II, the Marine Corps, and amphibious warfare in general.

**Lt. Col. Jon Klug, U.S. Army,  
Fort Leavenworth, Kansas**

---

## **THE DEFENSE INDUSTRIAL BASE Strategies for a Changing World**

Nayantara D. Hensel, Ashgate Publishing Company,  
New York, 2015, 290 pages

---

**N**ayantara Hensel is an accomplished economist in academia, the public and private sector, and the Department of Defense (DOD). She argues that the global defense sector is under a plethora of dynamic stressors associated with the highly turbulent international geopolitical and economic environment, requiring strategic transformation in defense planning. These adjustments are necessary in order to effectively maintain peace, deter conflict, and adequately respond to crisis while ensuring the viability of the defense sector looking into the future. Exacerbating this situation is the struggle nations face in managing competing demands—balancing the necessity for preserving or modernizing military equipment and capabilities, while addressing economic growth challenges and cumbersome debt burdens.

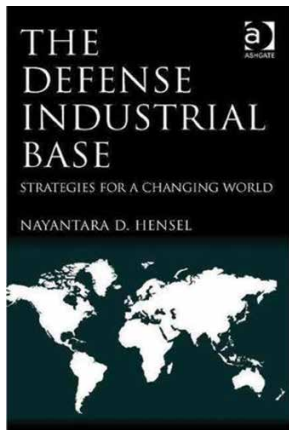
The author does not propose a concrete way ahead for nations nor for the defense industrial base to meet these challenges. What she does provide, with historical context, is a detailed domestic and international overview of the existing environment along with how states and the global defense sector are choosing to respond. She gives specific attention to the interaction of the DOD and military services, the U.S. defense industrial base and defense contractors, their European counterparts, and various developing countries in the Middle East and Asia.

Hensel describes the historical ebbs and flows of the U.S. defense budget and its impact on the U.S. defense industrial base and defense contractors. Highlighted is an account of the U.S. defense budget contractions of the 1990s, along with the corresponding consolidation, mergers, and acquisitions of the U.S. defense industry necessitated by shrinking fiscal means. Further addressed are the long-term benefits of defense contractors building alliances or merging as a strategic



response, such as leveraging collective corporate skill sets, financial resources, infrastructure, research, and development to produce new products, and being better positioned to diversify product lines to compete globally for defense contracts and private sector sales.

The author presents an intriguing investigation into the increasingly globalized and competitive nature of defense sales. What is most revealing is how interconnected the defense sector is among nations. Many



nations are producing critical components for each other's most-sophisticated weapon systems, aircraft, ships, and missiles. Another prominent outcome is the active role U.S. foreign military sales play in promoting state diplomacy, notably, how significant these sales are as a favorable component of U.S. trade figures.

Thoroughly covered are trends in purchases and sales between states. Figures that stand out among many include military expenditures as a percent of gross domestic product (GDP) among the four highest-purchasing nations, including about 4 percent of GDP for the United States and for Russia. However, the figures are 9 percent of GDP for Saudi Arabia and 5 percent for the United Arab Emirates, which attests to the fragile condition of the Middle East. Russia and the United States remain far and away the leading exporters of defense equipment, while India has emerged as the leading importer of defense equipment—attesting to its desire to be a regional military hegemonic power and a military counterbalance to China in Asia. Other nations in Asia—Japan, Taiwan, and South Korea—are also major purchasers of defense equipment for much the same reason.

The book is an exhaustive international defense sector mine of data. As such, the book is not only rich and dense but also a well-articulated and well-researched manuscript. The author presents numerous case studies in illustrative support. The text is full of comparative figures, tables, and diagrams depicting everything from specific defense sector purchases by country of interest by cost, to time series, cross-country defense expenditures of the last twenty years. The book is enlightening,

compelling, and worth the read by anyone wanting a better understanding of the behavioral responses of nations to national security concerns in light of geopolitical and economic pressures, domestic and international. It is a must-read for those operating in the defense industrial base, those involved in defense procurement, defense policymakers, senior military professionals, and defense-oriented economists.

**Dr. David A. Anderson,**  
Fort Leavenworth, Kansas

---

**THE LONGEST YEAR**  
**America at Home and at War in 1944**  
Victor Brooks, Carrel Books, New York,  
2015, 272 pages

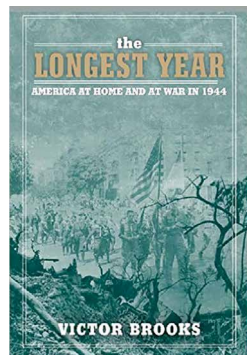
---

In *The Longest Year: America at Home and at War in 1944*, Victor Brooks captures the highlights of the main military campaigns that took place during 1944 in both the Pacific and European theaters of operation during World War II. Written specifically from the American perspective, Brooks illustrates the most important strategic and operational decisions made during this period. He does this while transporting the reader back and forth from the leaders' headquarters on the battlefield to the factory workers at home in the United States. The decisions made by leaders such as President Franklin Roosevelt; Gens. George Marshall, Dwight Eisenhower, and Douglas MacArthur; and Adms. Chester Nimitz and Raymond Spruance during this integral time in the war are written so vividly the reader is able to sense the stress these leaders felt before approving the missions that achieved decisive results in 1944.

*The Longest Year* provides a sequential narrative of the pivotal campaigns and battles fought during 1944, including Anzio, the 8th Air Force's "Big Week," Normandy, Saipan, Leyte Gulf, and Bastogne. The defeat of the Germans in the liberated cities of Rome, Paris, and Nijmegen are also briefly discussed, allowing the reader to get a sense of the coalition leader jockeying occurring among the allied nations.

Victor Brooks is a seasoned historian and professor at Villanova University and is the author of several other acclaimed military history books on World War II. *The Longest Year* is well researched with a wide

variety of both primary and secondary sources ranging from American newspapers and magazines in 1944 to well-respected narratives and interviews covering the epic battles about which Brooks writes.



The most memorable portion of this book is the descriptions about the American home front in 1944. The rationing within the War Production Board, the war bonds campaign, Hollywood and Broadway productions, the “Victory Girls,” and the 1944 presidential election between Franklin Roosevelt and John

Dewey are brilliantly described, leaving the reader wanting more about this largely unportrayed portion of World War II. Although the narratives describing the pivotal American battles that took place in 1944 are intriguing, Brooks’s thesis does not add any new conclusions to other material written on the same subjects.

With the majority of American strategic decision and policy makers already knowing the Allies would win World War II after the successful Normandy landings, this book is relevant and worthwhile to the security community because it provides valuable lessons learned on maintaining and exploiting the initiative after successful operations. Many of the individuals described in this book would later help reshape the international and security communities in both Europe and Asia immediately after the conclusion of the war. *The Longest Year* is valuable to any reader that wants to learn more about one of the most decisive years in American history.

**Maj. Matthew Prescott, U.S. Army,  
Fort Leavenworth, Kansas**

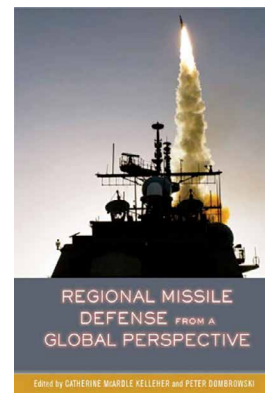
## REGIONAL MISSILE DEFENSE FROM A GLOBAL PERSPECTIVE

Edited by Catherine McArdle Kelleher and  
Peter Dombrowski, Stanford University Press,  
Palo Alto, California, 2015, 328 pages

**T**hrough an informative and highly readable collection of perspectives from national security and industry experts, editors Catherine

McArdle Kelleher and Peter Dombrowski have successfully created an authoritative and timely reference for policy makers, scholars, and defense experts alike. *Regional Missile Defense from a Global Perspective* renews the debate of strategic deterrence in the “Post Post-Cold War” and seeks an answer to the question: is missile defense a game changer or a strategic dead end?

Kelleher and Dombrowski comprehensively address their primary question over the course of fourteen chapters logically arranged within a framework of U.S. policies and programs, regional dynamics, and critical global analysis. Each chapter is designed to be referenced separately from the whole, making the book a convenient policy and defense reference tool. The authors begin their analysis with President Ronald Reagan’s Strategic Defense Initiative announced in 1983, better known as “Star Wars.” They continue their examination through President George H. W. Bush’s realignment of missile defense goals with the technical limitations of the early 1990s. Next, the authors contrast President Bill Clinton’s redirection from national missile defense to theater missile defense systems and President George W. Bush’s assertion that such a distinction is artificial in a



world globalized by intercontinental ballistic missiles. The policy debate examination culminates with the Obama Administration’s decision to cancel plans for missile-defense fixed sites in Europe in favor of a more tailorable approach based on variations of the Navy’s Standard Missile-3 Interceptor, both at sea and on shore.

*Regional Missile Defense from a Global Perspective* highlights important though often overlooked questions of extended deterrence in the modern age. The editors bring the risk versus reward of missile defense to the forefront when it comes to reliability, cost, and the proliferation of ballistic missiles in Iran and North Korea, among other nation-states. Contrasting perspectives are presented on whether missile defense spurs adversaries to pursue a greater quantity of missiles, risking an arms race, or whether missile defense creates critical uncertainty of the outcome of a ballistic missile attack, taking the enemy’s “cheap shot” off the table by

forcing larger salvo-style attacks that the enemy may calculate are to close the U.S. nuclear red-line.

Chapter 4 addresses prominent concerns of reliability and performance in the U.S. national ballistic missile defense system. Simultaneously, it acknowledges the theater-level systems and systems in Israel cofunded by the United States, such as the Iron Dome, have demonstrated consistent success. Since 1985, the Missile Defense Agency estimates \$165 billion has been spent in pursuit of a missile defense system. Yet, broad uncertainty remains in the system's ability to reliably discriminate an enemy warhead among decoy countermeasures during a midcourse intercept, the point at which the currently deployed ballistic missile defense system is designed to destroy intercontinental threats. Proponents contend that likely adversaries do not possess the ability to deploy such countermeasures, and by the time they do, our radars and interceptors will have evolved to keep pace.

Is missile defense a game changer or a strategic dead end? Keller and Dombrowski's work goes a long way to answer this question, but in the end only time will tell. For the near future, America's pursuit of both national and theater missile defense will continue in earnest while actors on the world stage seek elements of leverage wherever their national aims and those of the United States do not align.

**Maj. Jeff Porter, U.S. Army,  
Fort Leavenworth, Kansas**

---

## **AFRICAN AMERICAN ARMY OFFICERS OF WORLD WAR I**

### **A Vanguard of Equality in War and Beyond**

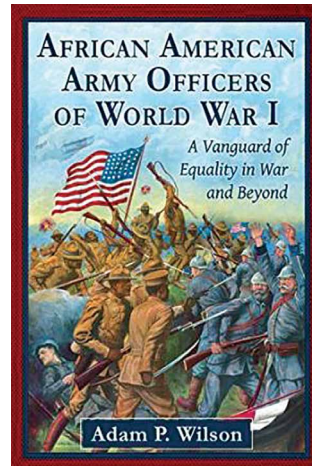
Adam P. Wilson, McFarland, Jefferson,  
North Carolina, 2015, 236 pages

---

**H**istorian and philosopher Adam P. Wilson demonstrates how African-American officers during World War I used the skills developed as military leaders in a segregated U.S. Army to lead change during the Civil Rights Movement. This is a valuable book for those interested in the history of African-American officers who fought the two simultaneous battles of war and racism and their effect on civil rights. Wilson describes the military officership

of African-Americans prior to World War I, during World War I, and during the Civil Rights Movement.

Prior to World War I, only a handful of African-American Army officers served outside of a war. In the first two chapters, Wilson lays out an excellent history of African-American soldier and officer service prior to the war. In chapter 1, Wilson describes the way white Americans perceived African-Americans. Wilson goes on to describe the struggle of African-Americans to attain officership through the United States Military Academy. Chapter 2



highlights the social and political fight to start a segregated African-American officer training camp in Fort Des Moines, Iowa. This chapter highlights leaders including Frederick Douglass and Booker T. Washington, who applied pressure to the War Department and the president to initiate an officer training camp. Howard University students, previously enlisted noncommissioned officers, and middle class lawyers and doctors made up the core of the cadets in the first training camp.

The second portion of the book details the lives of the officers through training camp and during World War I. Chapter 3 provides insight into life at Fort Des Moines and the effect that society had on the camp. Wilson demonstrates the intellectual, social, and political hurdles the officers had to overcome. Upon graduation, the officers were dispersed to their units and deployed to France shortly thereafter as a part of the 92nd Division. Wilson provides many examples of the endemic racism toward the African-American soldiers, and, in contrast, of how receptive the French people were toward them. Their experiences with the French motivated the African-American officers to seek change in the United States. The fight on two fronts, with racism and with the Germans, is the overall theme through this section.

Finally, Wilson ties together the service of the first class of African-American cadets at Fort Des Moines to their leadership in the civil rights movement. This



portion of the book is the focus, as Wilson captures the work of African-American officers in the legal system, press, mentorship, and continued service in the military. The author packs the last five chapters with individual officers' accomplishments, from winning court cases to coaching Olympic athletes.

Wilson masterfully combines the social, political, and military struggles with the contributions to the civil rights effort of the first class of African-American officers from Fort Des Moines who served in World War I. This book is well researched and is a must-read for military personnel wishing to know about desegregation in the U.S. Army.

**Maj. French D. Pope III, U.S. Army,  
Fort Belvoir, Virginia**

---

## WASHINGTON'S IMMORTALS

### The Untold Story of an Elite Regiment Who Changed the Course of the Revolution

Patrick K. O'Donnell, Atlantic Monthly Press,  
New York, 2015, 440 pages

---

“I can assign no other regiment in which I can place the same confidence; and I request you will say so to your gallant regiment.”

In his tenth book, best-selling author Patrick K. O'Donnell offers an outstanding accounting of a group of citizen-soldiers from Maryland and their contributions to the American Revolution. *Washington's Immortals: The Untold Story of an Elite Regiment Who Changed the Course*

*of the Revolution* traces the formation and service of a group of Marylanders who eventually became known as the Immortals, or the Maryland 400.

Sparked by an interest in the story behind a dilapidated and rusting marker in downtown New York City commemorating the death of 256 Marylanders at the Battle of Brooklyn,

O'Donnell embarked on a five-year journey to document the life and service of the Immortals. O'Donnell posits that the citizen-soldiers from this Maryland outfit were the beginnings of the greatest fighting regiment of

the war and made the difference between victory and defeat for the Continental Army. What follows is a meticulously researched detailing of the Immortals' actions throughout the war, from the Battle of Brooklyn in 1776 through the surrender of the British Army by Charles Cornwallis at Yorktown in 1781.

The best aspect of this book is the manner in which O'Donnell details the service of the Immortals. Penned in a narrative history prose, it is enjoyable to read, without the dry, passionless style one often finds with typical regimental or unit histories. While all descriptions of battles (in both the northern and southern colonies) are excellent, the accounting of actions by the Immortals at Stony Point is particularly vivid. Another benefit to this approach is that the reader gains an appreciation for the Revolutionary War in general.

Students of military history and the American Revolution will find this book interesting and useful. It will especially be of interest to those desiring to learn more about the military contributions the state of Maryland made to the war. Today, the 175th Infantry Regiment, Maryland Army National Guard, traces its lineage to the Immortals.

While the author endeavors to educate the reader on the Immortals, readers finish the book with an added benefit—that of a renewed appreciation for what early Americans tolerated in the fight for independence and freedom. Often, the leadership challenges commanders faced, the sacrifices these patriots made, the physical and mental hardships they endured, and the commitments they upheld in the birth of our nation, marvel the reader.

**David D. Haught, Fort Belvoir, Virginia**

---

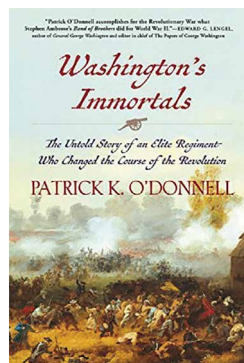
## HALLOWED GROUND

### A Walk at Gettysburg

James M. McPherson, Zenith Press,  
Minneapolis, Minnesota, 2015, 207 pages

---

James McPherson originally wrote *Hallowed Ground* in 2003 as a short account of the major events that occurred on the Gettysburg battlefield in July 1863. The book is essentially a narrative that is augmented to assist the reader in conducting a battlefield tour. McPherson, one of this country's premier Civil War historians, takes the reader to different



locations and expertly paints pictures of the events as they unfolded over the rolling Pennsylvania countryside. The reader can envision him pointing to Little Round Top and “The Angle,” and can easily visualize the lines of blue and butter-nut clashing on these iconic landmarks.

However, in McPherson’s original version, the single glaring limitation was the lack of any visual enhancement to his text. If the reader had never been to the battlefield, he or she likely would have a difficult time visualizing the scenes McPherson describes. In this updated 2015 edition, McPherson relates the adage that “a picture is worth a thousand words” and his intent to enhance his original words with photographs, paintings, and maps. He also updates this edition with the most recent changes to the national park and augments his text with quotes from major participants, such as Abner Doubleday, James Longstreet, and even George Custer.

Having served as a Gettysburg staff ride instructor for many years, I assessed this new edition for its value as a tour guide and as a possible source to build and conduct a staff ride. As a tour guide, this edition has great value. Although the descriptions of movement to different points on the battlefield are somewhat vague, a national park map can be used to augment the reader’s navigation. Once at those points, however, McPherson’s description of the basic actions allows for accurate visualization of the battle against the terrain backdrop. Because of his unique format of terrain orientation and action description, this edition is essential in conducting a battlefield tour.

McPherson’s work is less valuable if the reader is attempting to conduct a staff ride—a more rigorous event that normally requires preliminary study and comprehensive analysis. *Hallowed Ground* lacks the basic components of a staff ride: detailed descriptions of major actions and in-depth analysis of leader decisions, which are needed to fully understand the battle. *Gettysburg*, by Stephen Sears or *Gettysburg: A Battlefield Guide*, by Mark Grimsley and Brooks Simpson, are much better sources for such details.

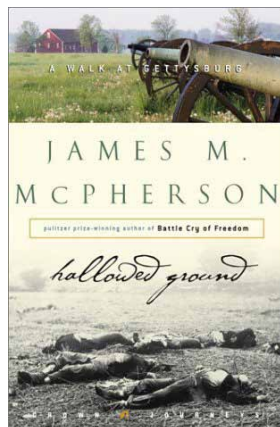
However, *Hallowed Ground* becomes useful for building staff rides in augmenting these basic components. Its strength lies in the general outline of

locations (or “stands,” using a staff ride term) and the description of what you should be able to “see” from that location. More important, these depictions are reinforced with the words of the participants who stood at those same locations over 150 years ago. Knowing the thoughts of the leaders while simultaneously viewing the ground greatly assists staff ride participants in their accurate analysis of the events and ultimately with the development of their critical thinking. Of lesser importance, but still helpful in building a worthwhile staff ride, are McPherson’s insightful vignettes and histories of the battlefield as a national park. This type of information

always enhances the general flow of a staff ride and may assist in reinforcing key points about the Army’s historical legacy.

McPherson has certainly improved his original work and has made it far more useful to the defense community. While of secondary use as a staff ride resource, it is certainly of primary use if one intends to conduct a more limited battlefield tour. Augmented with a National Park Service driving tour map, this book allows the reader to be guided by a premier civil war historian around this nation’s premier hallowed ground.

**Lt. Col. Gary Linhart, U.S. Army, Retired,  
Fort Leavenworth, Kansas**



---

## HENRY CLAY

### America’s Greatest Statesman

Harlow Giles Unger, Da Capo Press,  
Boston, 2015, 336 pages

---

Any biography of Henry Clay is punctuated with names that many readers learned, and then forgot, to pass their high school and undergraduate history courses: the Missouri Compromise, the Nullification Crisis, the Compromise of 1850, and the American System. As speaker of the House of Representatives and, later, as senator from Kentucky, Clay stood at the center of national affairs for most of the first half of the nineteenth century. He brokered compromises to hold the Union

together during political crises over the admission of Missouri to the Union, over South Carolina's embrace of the doctrine of nullification, and in the aftermath of the Mexican-American War. Clay's "American System" offered a legislative program to develop American industry and to bind the young nation together with the ties of commerce. Clay enjoyed a long career, serving in the legislative and executive branches, and funding his career through numerous appearances before the judicial branch. In an era when many Americans faced competing loyalties to their states and to the United States, Clay declared, "It has been my invariable rule to do all for the Union. If any man wants the key of my heart, let him take the key of the Union, and that is the key to my heart," and it was the defense of the Union that was the key to all his great achievements.

Harlow Giles Unger's *Henry Clay: America's Greatest Statesman* tells this story quickly and with zeal. Unger is well positioned to write a biography of Clay. Over the past ten years, Unger has published biographies of John Marshall, John Quincy Adams, James Monroe, Patrick Henry, and other figures from Antebellum American history. Those names also appear in this book, and John Quincy Adams, in particular, is a hero of Unger's. Unger does have definite heroes and villains: Clay and Adams are the former and John Randolph of Roanoke and Andrew Jackson are the latter.

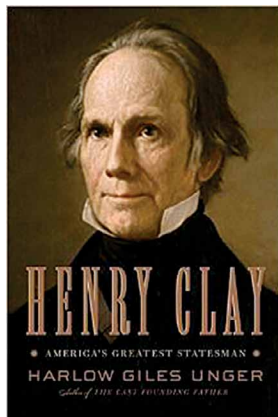
Unger paints in stark terms the opposition to the nationalization advocated by Adams and Clay. Most Americans in the nineteenth century, Unger contends, had too limited a vision: "far from thinking about school or college, the average American man yearned to own property, work its soil, plant, and harvest enough to feed himself and his family, selling any surplus at market. And above all he wanted to be left alone on his land with his family." Further, Unger locates the opposition to Clay's American System in a defense of slavery. Unger argues, "by restricting the extent and ease of transportation, planters could keep blacks and poor whites in their thrall indefinitely. The American System threatened the future of slavery and the wealth of southern oligarchy by opening the South to transportation, commerce, education, ideas, competition,

and emancipation." Readers may well wonder what exactly is wrong with private property ownership and self-sufficiency, as well as why an improved national infrastructure would necessarily have doomed the institution of slavery, rather than making it even more profitable by connecting even more Southern farms to national and international markets.

The author successfully conveys Clay's powerful, affable personality, as well as Clay's certain oily quality that caused him to be dogged by scandal throughout his career. Although Unger is relentlessly positive about his subject, it appears that nineteenth century American voters could perceive Clay as a great showman,

but one not entirely trustworthy. For instance, Unger writes of Clay's speaking style that "to hear Henry Clay speak was a once-in-a-lifetime experience that Americans related to their children and grandchildren. But it did not mean they would vote for him." *Henry Clay: America's Greatest Statesman* offers a glib, relentlessly positive introduction to Clay, but thoughtful readers will likely prefer Robert Remini's older and more thorough biography of Henry Clay.

**Mitchell McNaylor, Harvest, Alabama**




---

## TO PREPARE FOR SHERMAN'S COMING

### The Battle of Wise's Forks, March 1865

Wade Sokolosky and Mark A. Smith, Savas Beatie,  
El Dorado Hills, California, 2015, 252 pages

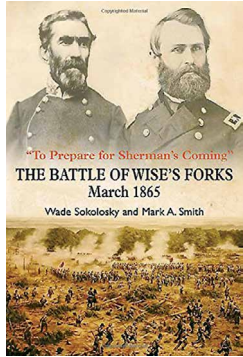
---

Until now, Civil War historians have neglected the Battle of Wise's Forks, relegating it to a seemingly minor skirmish. In fact, it was the first of four major battles fought during a twelve-day period in North Carolina as part of Maj. Gen. William T. Sherman's 1865 Carolinas Campaign. In *To Prepare for Sherman's Coming*, Wade Sokolosky and Mark Smith give the battle its rightful status, while simultaneously linking its importance with the strategic- and operational-level objectives of the U.S. Army during the waning months of the Civil War. The authors have gone to painstaking detail to research and present a succinct



history of the battle (much from original sources), which was fought from 7–11 March 1865.

By the first week of March 1865, Sherman's army had crossed over into the Tar Heel state from South Carolina. Critical to Sherman's army ultimately linking with the Union armies in Virginia was the establishment of a logistics base in Goldsboro with an operating railroad to the North Carolina coast. The authors discuss the significance, condition, and disposition of units on both sides before the battle. Much of the Union effort focused on rebuilding the rail lines between Morehead



City and Goldsboro to further Sherman's advance. Some seventeen miles of rail were completely missing, the rest were in chronic disrepair. The authors analyze the logistical challenges faced by Maj. Gen. Jacob D. Cox, the Union commander whose mission it was to set conditions for refitting and rearming Sherman's army at Goldsboro.

The Confederates, led by the controversial Gen. Braxton Bragg, were determined to delay Cox's advance from the coast, fighting several skirmishes that culminated in the Battle of Wise's Forks. Ultimately, the Confederates withdrew from the field on 11 March, ceding the battle to the Union Army.

The book is most enjoyable, thoroughly researched, and highly documented. It flows extremely well. It is illustrated profusely, with many photos from the author's personal collection. Maps detail troop movements and disposition of forces. The authors define the field commanders and their interactions that shaped the battle. The book does an excellent job of delivering perspectives from soldiers and officers alike, the suffering of soldiers, and the true cost of war.

This reader's questions were answered completely due to the logical flow and completeness of the work. One appendix covers opposing forces and their organization for battle, while another appendix presents analysis on the number of casualties, especially Confederate, as they lacked the institutional record keeping of the Union Army. The authors present a strong argument that the often-quoted number of "about 1,500" Confederate casualties probably should be revised to about 823.

The authors bring a wealth of military knowledge and perspective, having collectively served forty-six years in the U.S. Army. They bring a well-rounded assessment in addition to maneuver and tactics—covering logistics, transportation, and hospitalization, areas sometimes overlooked in tactical studies.

This book is a welcome addition to anyone who values study of the Carolinas Campaign, and a well-written, well-illustrated, and originally researched look into the Battle of Wise's Forks.

**Patrick C. Beatty, Fort Leavenworth, Kansas**

---

## **DELIVERANCE FROM THE LITTLE BIG HORN**

**Doctor Henry Porter and  
Custer's Seventh Cavalry**

Joan Nabseth Stevenson,  
University of Oklahoma Press,  
Norman, Oklahoma, 2013, 232 pages

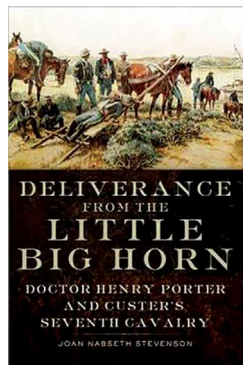
---

**H**ow does a PhD, whose concentrations are Slavic languages and literature, take a fresh look at the Battle of the Little Big Horn through the eyes of a contract physician? The leap for Joan Nabseth Stevenson was not that great, as the daughter of a physician from Bismarck, North Dakota. Her father identified the start of the trail; she then explored and charted it masterfully.

Dr. Henry Rinaldo Porter was a contract physician assigned to the 7th Cavalry Regiment during the ill-fated "Expedition against the hostile Sioux," and the only surgeon who survived Gen. George Custer's foray into the valley of the Little Big Horn River. The only commissioned surgeon, Maj. George Lord, was in Custer's column when it was annihilated. Porter and his contracted counterpart, Dr. James DeWolf, were assigned to accompany Maj. Marcus Reno's battalion. DeWolf was killed in Reno's "charge" from poor terrain in the woods to a more-defensible hilltop. Porter, as the only surviving physician, was responsible for treating the wounded members of both Reno's and Capt. Frederick Benteen's battalions.

The conditions for operating a field hospital under fire were anything but benign. Reno's battalion fought two battles. The first battle was alone in the timber and

the hilltop on 25 June. The second was after Benteen's battalion joined them on the hilltop the next day. Although the position was defensible, Porter's field hospital in a depression in the center of the hilltop was vulnerable to sniper fire from surrounding plateaus, and without water. The approach of Gen. Alfred Terry's "Dakota" column and Col. John Gibbon's "Montana" column caused the Sioux to break off their siege of Reno's and Benteen's battalions, but that hardly relieved Porter from his duty of caring for the 7th Cavalry's wounded. He continued as the only surgeon on site, treating over fifty wounded men, until joined by Gibbon's assistant surgeon, 1st Lt. Holmes Paulding. Porter accompanied and treated the wounded throughout the evacuation from the Little Big Horn Valley to a waiting riverboat on the Big Horn River, and subsequently down the Big Horn, Yellowstone, and Missouri rivers to Bismarck, Dakota Territory, and Fort Abraham Lincoln.



The author weaves the story masterfully, focusing on the battles fought by Reno and Benteen's battalions, and their aftermath, rather than the details of Custer's battle. She also provides an exceptional understanding of the convoluted relationship between Civil War and Indian War era contract physicians and the United States Army they served. This aspect of frontier service is not well known or understood by many. As the title "assistant acting surgeon" would indicate, their relationship to the soldiers and units they served was awkward at best. They were contractors, and just as with contractors today, they accompanied the force but were not part of the force, even though they shared the same hardships and dangers. Contract surgeons were neither enlisted nor commissioned; they had no rank. Their contracts were for a year at a time and could be annulled for any reason or for no reason at all. Porter's contract to serve the 7th Cavalry was in fact his fourth with the Army, and although this particular contract commenced on 15 May 1876, the Army annulled it on 30 September 1876.

Stevenson also highlights another less-known hero of the Little Big Horn story: Capt. Grant Marsh, who

piloted the contract river steamer *Far West* from its landing on the Big Horn River to Bismarck and Fort Abraham Lincoln, a distance of 710 miles by river, in approximately fifty-four hours. It was a phenomenal feat of piloting skill, and critical for the survival of wounded soldiers from the Little Big Horn.

The only flaw in this book is its scarcity of maps. There is only one, a large-scale map that depicts routes taken by the three columns—Montana, Wyoming, and Dakota—that set out from Forts Ellis, Fetterman, and Abraham Lincoln in the spring of 1876. What is missing are battle sketch maps to provide the reader with a clear understanding of the terrain, as well as the positions and spatial relationships of the battalion columns commanded by Custer, Reno, and Benteen. Although the paucity of maps is a significant shortfall, this is still an excellent work, especially for those who enjoy digging into the less-known details of major historical events.

**Thomas E. Ward II, PhD,**  
Fort Leavenworth, Kansas

---

## THE AGE OF CATASTROPHE A History of the West 1914-1945

Heinrich August Winkler, Yale University Press,  
New Haven, Connecticut, 2015, 1,016 pages

---

Few authors have ever been as ambitious in attempting to chronicle the three crucial decades that spanned the World Wars as Heinrich August Winkler. His latest book, *The Age of Catastrophe: A History of the West, 1914-1945*, is the second book of a three-part historical series and it rises to the challenge. At a hefty 1,016 pages, it seamlessly weaves through the political and economic upheavals happening in the various nations of the Western world, from the Soviet Union to the United States of America.

For military readers, the histories of World War I and World War II have been done to death. All too often historians and readers alike tend to study the world wars separately. Instead, Winkler convincingly argues they were part of a second Thirty Years' War, which like that of seventeenth century Europe, dramatically altered the international system. The

Westphalian system, which had emerged in 1648, had given way to a new one where borders were too easily ignored, one where Fascist and Bolshevik powers were freely interfering in the internal politics of other states. This is crucial to the overarching narrative of his trilogy: Western principles of national self-determination, democracy, and inalienable human rights were either difficult to assimilate or at times outright rejected until well into the twentieth century.

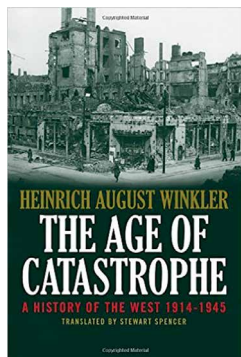
The Great War compelled Germany to adopt democracy and to respect the self-determination of nations; this is common knowledge. What separates *Age of Catastrophe* from the rest is that it tells us how those two principles fed Germany's hegemonic ambitions and set the stage for a continuation of hostilities: the Second World War. Winkler contends that due to fears of a Soviet uprising, both real and imagined, Germany's moderate socialist majority had sided with the army to preserve order, thus leaving power in the hands of the military and conservative elite in the short-lived Weimar Republic. In essence, too much of the old regime had remained. Although Winkler views this historical period as a "German chapter" of the book, he dedicates much attention to the developments happening throughout Europe but with a special focus on the United States and the Soviet Union. One can assume this will be the focal point of the third installment.

Winkler concentrates on Western political and economic history, and in so doing he illustrates how post-World War I peace left behind a fragile international order fraught with mistrust. This fragile order became more and more toxic under the waves of global economic hardships. Where *Age of Catastrophe* falls short is in its lack of coverage of the social conflicts afflicting Europe, and it could have included personal testimonies, as well. These could have provided additional context and a deeper, more personal connection between the reader and the events.

Although it is not a military history, *Age of Catastrophe* would be a wise addition to military readers' libraries. Clausewitz's most quoted passage,

"War is merely the continuation of policy by other means," certainly comes to mind at first. However, his remark that "In war the result is never final" best reflects inter-war Germany, Italy, and the Soviet Union. Whether they were victors (Italy), losers (Germany), or somewhere in between (Soviet Union), these nations were left wholly unsatisfied and undeterred by the post-World War I international order. Each sought to overturn it, first by using means other than war, and eventually, by war itself. In the process of doing so, they simultaneously attempted to destabilize their respective neighbors while embarking on a new enterprise that would remake societies into a brave new world: the totalitarian state.

**Carlo Valle, Montreal, Quebec, Canada**



---

**1916**

**A Global History**

Keith Jeffrey, Bloomsbury Publishing,  
London, 2016, 448 pages

---

Published at the perfect time, the one hundredth anniversary of the Great War, Keith Jeffrey's *1916: A Global History* uses a novel approach to covering this year of consequence. As stated in his introduction, his "aim in this book has been to use emblematic events from each month of 1916 as hooks for a series of reflections through which the astonishing range, variety and interconnectedness of the war-time experience can be charted." These hooks include Gallipoli, Verdun, Ypres, Jutland, the Somme, and various other chapters that cover Asia, Africa, the Balkans, and issues in the United States and Russia.

Aside from his interesting approach to the entire work, the material he covers in each chapter also sheds light on underappreciated aspects of the war. Of note for those of us on the west side of the Atlantic are internal issues in the United States in 1916 and American reactions to the war in Europe. For example, Jeffrey admirably discusses the "potential for traditional allegiances to colour responses to the war" —namely, the impact such groups as the German-American, British-American, and Irish-American communities had on national decision making. This influence included both propaganda and sabotage; the latter focused on



reducing the industrial capacity of the United States to provide Britain and France with war materiel.

Another interesting aspect covered by Jeffrey is the way the American political and economic elite entered the war, despite the neutrality of their government. Americans supported the war by enlisting in the Canadian and British armies, by flying in the Royal Air Force (where “among military occupations ... flying was the only one [now that the cavalry had been dismounted] that gave personal pleasure to the

individual who was doing it”), and by founding ventures to support troops. One of those ventures was the American Field Service, a volunteer ambulance organization. When reading about these dynamics from a century ago, it is not hard for a contemporary mind to be drawn to the stark contrast of the decreased

propensity of today’s political and economic elite to undertake activities in support of military and political activities abroad.

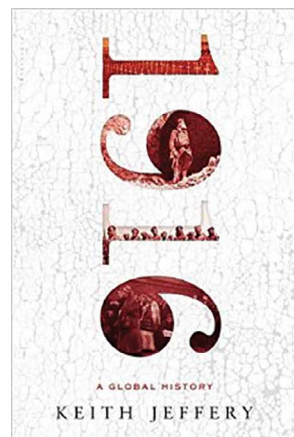
While overall an informative and interesting read, *1916* does get some basic items wrong. The author’s take on the British decision to undertake the Gallipoli campaign is skewed, or at least simplistic. Jeffrey does not cover how opinions differed among members of the British War Council, or how members’ opinions evolved. He indicates all prominent politicians were in favor—even pushing for—an invasion of the Gallipoli peninsula, although eminent historians such as William Manchester, who wrote the seminal tome on Winston Churchill, offer a much more nuanced and detailed view of the decision to undertake the campaign.

Another incorrect item is Jeffrey’s discussion on the Preparedness Movement, an effort to increase the military ability of the United States. Jeffrey ascribes the movement to President Woodrow Wilson, saying he was attempting to address insecurity in Mexico. In reality, this movement was perpetrated by Republicans, namely Theodore Roosevelt and the recently retired Gen. Leonard Wood. What little

Wilson did for preparedness was more likely done to blunt the criticism of such Republicans in the run-up to the election of 1916, where Wilson won under the slogan “He kept us out of the war.”

A quick, engaging read, I recommend *1916: A Global History* to those interested in some of the under-served aspects of the world a century ago. The Great War was much more than trench warfare, and Jeffrey captures this in a novel way.

**Maj. Nathan K. Finney, U.S. Army,  
Fort Leavenworth, Kansas**




---

## THE GERMAN WAR

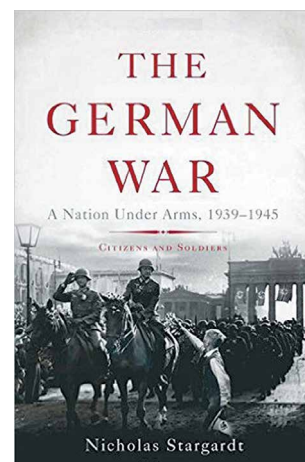
### A Nation Under Arms, 1939-1945

Nicholas Stargardt, Basic Books,  
New York, 2015, 704 pages

---

Nicholas Stargardt, a widely published professor of history at Oxford University, has delivered another outstanding book with *The German War: A Nation Under Arms, 1939-1945*. *The German War* provides an unprecedented portrait of wartime Germany from the perspective of the German people. Stargardt weaves first-person testimonies of Germans from all walks of life to chronicle the German population’s evolving attitudes during the war. Germans found themselves having to reconcile patriotism with the brutal reality that was taking place inside and outside Nazi Germany. Stargardt illustrates how German propaganda, belief in Nazi ideology, and the humiliation of losing World War I combined to create a resiliency in the German populace, which enabled Germany to withstand a level of destruction never experienced in world history.

Stargardt states Germany entered World War II knowing it could not win it. He recounts a conversation on 29 November 1941 between Adolf Hitler and Fritz Todt, Reich minister of armaments and munitions, in



which Todt warned Hitler that the war could not be won by military means but only politically. Todt further warned Hitler of the dire consequences for Germany should the Americans become a direct participant in the conflict. Stargardt asserts that Hitler was not surprised by Todt's comments but had himself shared months prior with Joseph Goebbels his doubt whether the Soviet Union or Germany could ever defeat each other. Hitler would decide to ignore Todt's warning and his own concerns in declaring war against the United States on 11 December 1941.

Stargardt's research challenges the widely held perception that German civilians were unaware of the atrocities committed by German soldiers during the war. He describes the pride and belief of German soldiers serving on the Eastern front who perceived they were protecting western civilization from Bolshevism and a perceived Jewish conspiracy for world domination. German soldiers' participation in the shooting of civilians, accused partisans, and prisoners of war were captured on rolls of film and described in letters home to loved ones depicting to the German populace the horror that was unfolding in Eastern Europe. German citizens would later view the bombing of German cities as retaliation for the murder of Jews in Eastern Europe.

The year 1943 is seen as the turning point for the Germans, when they suffered losses on the battlefield and from the Allied air campaign targeting German cities. The war was no longer viewed as an "intrusion" as the German populace began to openly criticize German leaders and the Nazi party following the round-the-clock bombings of major cities by the Allies. The Allied air campaign would claim 420,000 German lives, many after August 1944 when Germany was losing the war on all of its fronts. Stargardt indicates German resilience remained intact with the belief that emerging "super weapons" would reverse German losses and that the tenuous Allied coalition would unravel. Germany's destruction was complete with the devastation of its cities, the loss of 5.3 million men, and the emergence of a collective guilt for World War II.

Stargardt draws on a range of primary source materials—personal accounts, German records, and military correspondence—in providing an unprecedented view of World War II from the German populace. It may be the most definitive study of German society during

World War II. It is an excellent addition for any historian or student of the war in Europe.

**Jesse McIntyre III, Fort Leavenworth, Kansas**

---

**THE LAST CAVALRYMAN**  
**The Life of General Lucian K. Truscott, Jr.**  
Harvey Ferguson, University of Oklahoma Press,  
Norman, Oklahoma, 2015, 448 pages

---

**M**ost cavalry officers realize that our particular specialty often appears rooted in the past. Bearing that in mind, the title of Harvey Ferguson's book, *The Last Cavalryman: The Life of General Lucian K. Truscott Jr.*, seemed somewhat pessimistic to this reader who is committed to the cavalry's relevance on the modern battlefield. That said, and as the author points out, Truscott is not a well-known figure among today's cavalry officers, and upon receiving the book this reader looked forward to learning something about him.

Ferguson provides interesting glimpses of cavalry life and horsemanship training from the general's early years. He goes to great lengths to communicate the tactical situations that Truscott faced on the battlefields of the Second World War. He documents the general's good tactical judgment. Also interesting to the modern Army officer are glimpses of inter- and intra-service bureaucratic infighting that remain familiar today. His description of the early years of the Central Intelligence Agency (CIA) is fascinating.

Overall, the author provides a skillful portrait of the events in Truscott's life and career. Perhaps due to a shortage of primary material on his subject ("it is likely that Truscott was involved in many more CIA operations than is known"), the author often illustrates important events from the point of view of others who were present. This technique does much to give some sense of the context in which Truscott lived, and it shows how Truscott's life intersected those of well-known contemporaries, but this often-used technique soon becomes a series of digressions from the book's avowed subject. A case in point is Audie Murphy, who served in Truscott's division during the Italian campaign. The reader has a much better sense of Murphy after reading Ferguson's book, but, strangely, not of Truscott.

Ultimately, this is where the book lets the reader down. Ferguson shows you what Truscott does but does not illuminate who he was. Having read the book, the reader is not left with any particularly good Truscott stories to share or any particularly pithy Truscott wisdom to quote (or even any particularly juicy Truscott transgressions to admire). This may be due to a paucity of personal correspondence and notes left behind by Ferguson's subject, it may be due to the type of unexceptionally exceptional man Truscott was, or it may be because this creditable work of scholarship is Ferguson's first book.

Truscott may well be an under-researched American general, but what this book demonstrates is that this may be for good reason. Those seeking greater insight into leadership and the effective use of mounted maneuver will get more from Tom Reiss's *The Black Count: Glory, Revolution, Betrayal, and the Real Count of Monte Crisco*. It is a slightly shorter read, much less expensive, and it won the Pulitzer Prize. Leave this Truscott book to the historians.

**Capt. Garri Benjamin Hendell, U.S. Army,  
Philadelphia, Pennsylvania**

---

## TORCH

### North Africa and the Allied Path to Victory

Vincent P. O'Hara, Naval Institute Press, Annapolis,  
Maryland, 2015, 373 pages

---

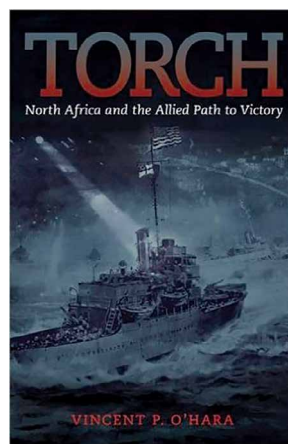
**T**he North African invasion in World War II, Operation Torch, is not a new subject for historians, but Vincent O'Hara takes a fresh look and brings some new perspective. Torch was much larger than a single amphibious invasion. It was a political decision far more than a strategic one. O'Hara dissects both the American and British views in detail. He also looks at a player less commonly considered and successfully integrates the French perspective into the narrative.

Beyond the political concerns of needing to get American troops into the fight in the European theater in 1942, the British and Americans tried to convince themselves that Torch would aid the Russians by engaging German troops. At the time, 70 percent of the German forces were facing the Russians and averaging 1,706 killed per day (over four years). In twenty-six months in North Africa, German casualties averaged

sixteen per day, not exactly compelling evidence for Torch helping the Russians.

O'Hara writes that the Allies feared the Germans would attack through Egypt, to connect with forces in Iraq coming down from Turkey and Iran and ultimately to connect with Japanese troops attacking across the Indian subcontinent. He argues convincingly that this was neither part of the Axis strategy nor realistic based on their logistic capabilities. What the reader does not learn was how much of this strategic fear was "Allied" and how much was British concern for the loss of their empire.

The author moves from the inner sanctums of



Roosevelt and Churchill where the decisions for Torch were made through the conflicts among the Joint Chiefs of Staff to the amateurish cloak and dagger of the diplomats dealing with the French. O'Hara provides a succinct but excellent summary of amphibious doctrine, experience, and equipment up to the time of Torch. Once

the campaign begins, each landing is carefully parsed down to the battalion level. The naval battles are detailed practically salvo by salvo, with extensive comparisons of French and American battles' after action reports. The maps provided are well done and helpful in navigating the narrative. Confusion reigned during operation Torch. Luckily, this was not confined to the Allied forces. Had the French resistance to the invasion been organized, the results could have been catastrophic.

Was Torch a good idea? O'Hara believes it was. He argues it taught the Americans to operate both strategically and operationally in coalition warfare and provided valuable experience in amphibious operations. More important, he contends, it secured French cooperation for the Allies. Had the French forces maintained belligerency against the Allies and actually fought with Germany, the cross-channel invasion, opposed by an additional fifty French divisions, would have been impossible. Torch would make a good scholarly addition to an officer's library, but will likely not appeal to the general reader looking for a historical tale of the invasion.

**Gary Ryman, Scott Township, Pennsylvania**





KETTLES

U.S.

U.S.





Lieutenant Colonel Charles Kettles

# MEDAL OF HONOR

## VIETNAM WAR

**O**n 15 May 1967, soldiers from 1st Brigade, 101st Airborne were battling hundreds of heavily armed North Vietnamese in a rural riverbed near Duc Pho, Republic of Vietnam. They made an urgent request for aviation support to evacuate the wounded and to bring more soldiers into the fight. Answering the early morning call, then Maj. Charles Kettles led a flight of six Huey helicopters, carrying replacements and supplies, to a landing zone near the battle area.

Under heavy enemy fire, Kettles landed his aircraft and kept it there, exposed, until the wounded could be loaded for the return to base. After evacuating them, he returned to drop off more soldiers and supplies, and to pick up additional wounded. On the second trip, his gunner was seriously wounded and his aircraft severely damaged. However, Kettles was able to make it back to base.

Approaching evening, forty-four American soldiers still were pinned down, including four from Kettles' unit. Disregarding the danger, he volunteered to fly his unit's one remaining functional helicopter for a third trip, in which he led five additional evacuation helicopters from another

unit. On the landing zone, soldiers ready for evacuation boarded the helicopters. Then, informed that all American soldiers were accounted for, Kettles took off. However, once in the air, he learned that eight men who had been pinned down under heavy enemy fire while providing covering fire for the others had not made it aboard.

In response, Kettles broke off from formation and returned alone to the landing zone—this time with no aerial or artillery support. As he landed the helicopter, which was now the lone target of the enemy, it suffered extensive damage from small arms and mortar fire, but the eight remaining soldiers were able to make it onto the aircraft. Although the helicopter was now six hundred pounds overweight and carrying thirteen soldiers, Kettles was able to skip it along the ground until it gained enough speed for takeoff, all the while continuing to be hit by enemy fire, including a mortar round that struck the tail. "If we left them for ten minutes," Kettles later said of the rescued soldiers, "they'd be POWs or dead." With exceptional flying skills and uncommon courage, Kettles flew the damaged aircraft back to base, evacuating the remaining soldiers and his crew to safety. ■



Left: President Barack Obama presented the Medal of Honor to U.S. Army Lt. Col. (retired) Charles Kettles 18 July 2016 in the East Room of the White House for conspicuous gallantry during combat operations near Duc Pho, Republic of Vietnam, on 15 May 1967. Kettles is credited with saving the lives of forty soldiers and four of his own crewmembers. (Photo by Sgt. Alicia Brand, U.S. Army)