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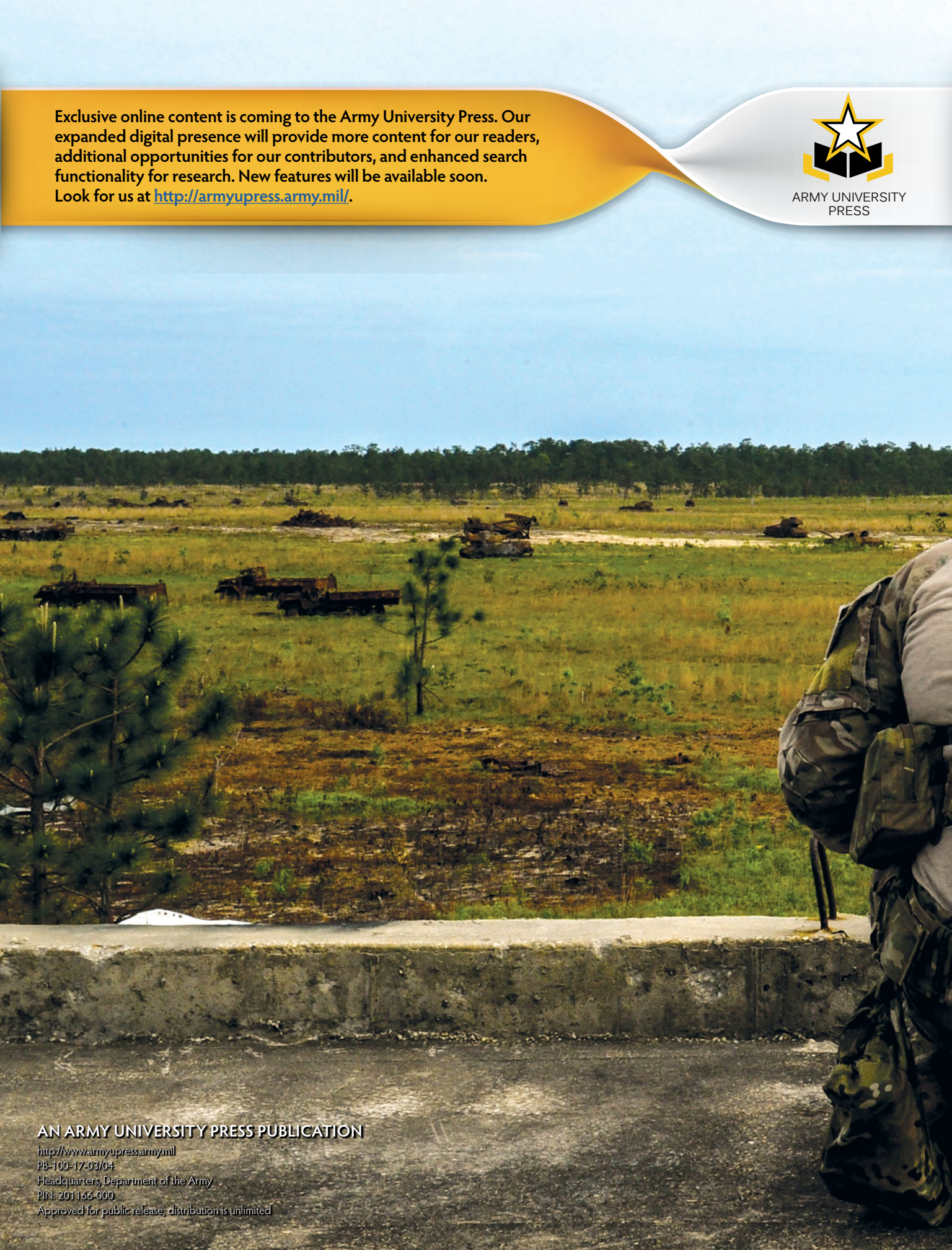

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Military Review

THE PROFESSIONAL JOURNAL OF THE U.S. ARMY

MARCH-APRIL 2017

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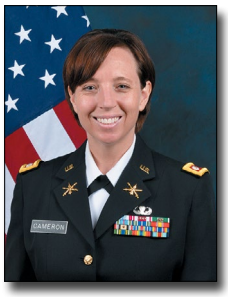

Greetings!

After months of anticipation, the new Army University Press website will be up and running in March. I encourage our readers to check it out at http://armyupress.army.mil. The site features articles and books from *Military Review*, the *NCO Journal*, and the Combat Studies Institute, as well as information and education material from our writing, Staff Ride, and Military History Instruction programs. It will grow to include complementary audio and video content. To improve your user experience and enhance readability and searchability, we are now using HTML formatting for our content in addition to continuing the popular downloadable PDFs.

The new website brings with it changes in how *Military Review* will publish. While we will continue to publish a hard-copy journal that is available online, we will now be publishing additional exclusive online-only articles. This change allows us to publish more authors and to be a venue for more rapid, timely publication of articles on issues of the day.

Because we value the quality of our journal above all else, all selected and published *Military Review* articles, online and print, will be held to the same high standards and receive the same white-glove treatment for which we are known. Our assurance to authors means top-notch editing and layout support, accessibility online, circulation through social media, authentication through the U.S. Government Publishing Office (GPO), and archiving with Army University Press and govinfo.gov.

Due to your feedback and the popularity of our *Military Review* book reviews, they are now available exclusively online. You will no longer have to wait two or more months to see the latest ones, and we will update them frequently to keep you better informed. Bookmark our book review section online at http://armyupress.army.mil/Journals/Military-Review/MR-Book-Reviews/.

The Army University Press website will soon also include content from our newest publication, the *Journal of Military Learning*. This peer-reviewed academic journal, dedicated to advancing ideas and insights that improve military education and training, will be available online in May. We are already calling for papers for our October edition, so start writing.

This edition of *Military Review* has an international flavor, bringing you insights on how national values are impacting the Army in Singapore, what it will take to restore democracy after the state failure of Venezuela, and the political and military implications of the recent dramatic rapprochement between the United States and our sometime ally Argentina. These and other articles are all available online.

So keep an eye on our website, and check us out on Facebook and Twitter to receive updates on the newest Army University Press releases. We encourage our readers to contribute to the professional discourse by submitting articles and sharing your comments about our publications on our social media sites. Thank you for reading *Military Review*. ■

A double rainbow arches over tents housing U.S. and Canadian soldiers participating in Exercise Ulchi Freedom Guardian 2016 on 24 August 2016 in Yongin, South Korea. (Photo by Staff Sgt. Ken Scar, U.S. Army)

2017 General William E. DePuy

Special Topics Writing Competition

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Themes and Suggested Topics for Future Editions

Global Challenges

- What nations consider themselves to be at war or in conflict with the United States? How are they conducting war, and what does this mean for the Army?
- What are the ramifications of increased Russian military presence in the Middle East?
- What are the military implications of China's economic penetration into Latin America, Africa, and broader Asia?
- What must the U.S. military do to prepare for possible contingency operations in the South China Sea?
- What are the security implications of the growing Islamic presence in Europe? Elsewhere in the world?
- What must the Army do to prepare to fight in urban terrain or megacities? What are the ethical challenges to operating in this type of environment?
- What operational and logistical challenges arise from domestic and foreign infrastructure limitations and how can we mitigate them?
- How can we better prepare soldiers to operate against atypical combatants (i.e., nonuniformed or child warriors) and under conditions where noncombatants are difficult to distinguish?

Previous page: Sgt. Allan G. Torres and Pfc. Roman O'Doherty of the California Army National Guard's 1st Battalion, 184th Infantry Regiment, look for survivors during Vigilant Guard 17 on 17 November 2016. Vigilant Guard 17 is an exercise simulating a massive disaster response to a powerful earthquake in Los Angeles, California. (Photo by Staff Sgt. Eddie Siguenza, U.S. Army National Guard)

The Changing U.S. Army

- Are U.S. Army rotational units as effective as permanently assigned, forward-deployed units?
- Does the Army need designated security force assistance brigades? How should they be organized?
- Have associated units helped or hindered readiness?
- How is gender integration changing the Army and how it operates?
- How does Army doctrine need to change to incorporate the cyberspace domain?
- Is there a role for the Army in homeland security operations? What must the Army be prepared for?

Sgt. John Arriaga recovers his parachute after participating in an airborne proficiency operation during Exercise Arctic Aurora on 9 June 2016 at Joint Base Elmendorf-Richardson, Alaska. (Photo by Justin Connaher, U.S. Air Force)

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

Official:

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

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Inside the Minds and Motives of the Islamic Terrorists Trying to Destroy America

John G. Breen, PhD

The author critiques a book by James E. Mitchell and Bill Harlow that discusses enhanced interrogation techniques, their effectiveness, and their morality, from the viewpoint of two Central Intelligence Agency insiders.

Next page: Sniper Spc. James Wanser keeps watch in the early morning hours of 8 September 2011 while his battle buddy catches a few precious minutes of sleep in Paktika Province, Afghanistan. (Photo by Spc. Ken Scar, U.S. Army)

Poem of a Soldier

By 2nd Lt. George Bruner, U.S. Army

You praise the man I was, and curse the man I am.
Depending on which God you love, who I will be may be damned.
Yet still I'll sell my soul for you, I'll save us all from our worst selves,
I know no other love than this, I fear no other hell.

I am what I am, 'cause I was made to be.
I raise the mountains, bring them down, and push the seven seas.
I reap the grapes of wrath, I am the hand that feeds,
I am the brimstone falling from the angel wings.

I damn the damned, and bless the weak.
For the lame walk, and for the mute speak.
The poor and oppressed find their rest in me,
I break the chains and bring forth the free.

The destroyer of worlds, I am become of death.
I am enveloping nights, approaching bayonets.
I am the darkest valley where the sword is whet,
the shadow of death is my silhouette.

I was forged in a fire lit long ago.
Born of a crucible not my own.
Yet by this birthright in man am I mold,
I am strength multiplied by a thousand fold.

I am the photos of loved ones, now nothing but memories.
I am folded flags, torn, tattered and history.
Yet it is I who held high these in Pyrrhic victory,
I am the Idea that we've died for, for all of eternity.

I am the scorching heat, I am the bitter cold.
I am the broken sleep that shakes your soul.
I am the naive youth, and the fearful old,
I am the hell you pray you'll never know.

I am a soldier, and no one asked me to be.
I raised my right hand and said "God, send me!"
I am the man that the boy I was wanted to be,
The incarnate nightmare of my enemies' dreams.

I am the comforting safety we've known at home.
I am the cogs of wars we hope we won't.
Pray you never need me, yet when you do,
I am also the fear which caused you to.

I am the cherubim, and original sin.
I rule the fallen world, and the broken men.
From the depths of the waters to the roaring winds,
I am new beginnings and imminent ends.

Recruits recite the Singapore Armed Forces pledge during a Basic Military Training graduation parade 12 December 2015 at the Marina Bay Floating Platform in Singapore's city center. The city skyline and the cheering families are visual reminders of what the recruits have sworn to protect. (Photo courtesy of the Singapore Armed Forces)

The Role of the Singapore Armed Forces in Forging National Values, Image, and Identity

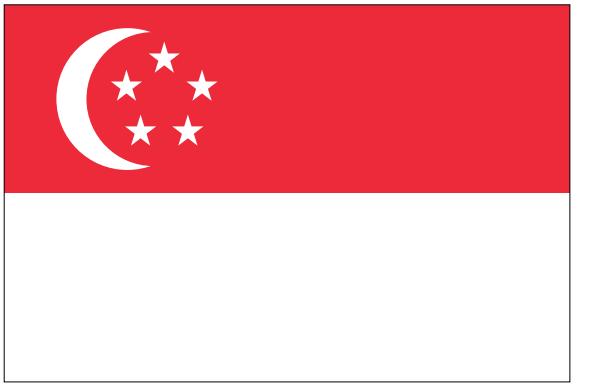
Col. Fred Wei-Shi Tan, Singapore Armed Forces

Senior Lt. Col. Psalm B. C. Lew, Singapore Armed Forces

Nothing creates loyalty and national consciousness more speedily and more thoroughly than participation in defence and membership of the armed forces … the nation building aspect of defence will be more significant if its participation is spread out over all strata of society. This is possible only with some kind of national service.

—Dr. Goh Keng Swee

Singapore as a young country is unique in many ways. Its geo-strategic position at the crossroads of the world's busiest trade lanes has created a multiethnic and multiracial society, which is still attracting many foreign talents through immigration, bringing with it the challenge of establishing a unique and enduring national identity. The national flag carries a waxing crescent moon to embody the spirit of this young and growing country, and it is widely recognized in Singapore that the work of nationbuilding is never done.



The national flag of Singapore reflects that nation's ideals, beliefs, and values. Red stands for universal brotherhood and equality of man. White symbolizes pervading and everlasting purity and virtue. The crescent moon represents a young nation on the ascendant, and the five stars depict Singapore's ideals of democracy, peace, progress, justice, and equality. (Image courtesy of Wikimedia Commons; description from the Singapore National Heritage Board)

Adding to the challenge of nationbuilding, Singapore's limited size, small population, and lack of natural resources necessitate a unique approach to its defense. It meets its security requirements through the implementation of national service (NS) in the military. Here, the Singapore Armed Forces (SAF) is both the guardian of the country's national interests and sovereignty as well as a national institution that brings together people from all walks of life.[1] As such, there arises an important role for the SAF, through NS, which is to build a common set of beliefs within young Singaporeans that will define the people of Singapore collectively. This role for the SAF is already widely recognized and is echoed in Singaporean popular culture, with national service being the theme of many dramas and movies such as *Ah Boys to Men*, which will be filming its fourth sequel in 2017.[2]

Conscription as a Social Leveler

The practice of conscription in the past five decades has created the "NS citizen soldier"—a unique form of military professionalism where three hundred thousand national servicemen (NSmen) are part of the main fighting force alongside fifty thousand active-duty personnel.[3] The SAF has deliberately integrated active-duty personnel and NSmen. For example, a Singapore infantry brigade comprises a mix of active and NSmen units. The brigade headquarters is also staffed by both active-duty personnel and NSmen.[4]

The SAF has identified the need to sustain Singaporeans' commitment to defense as a key strategic objective. Toward that end, much effort and many resources have been invested into related initiatives such as values inculcation programs in the curriculum of military schools to help young Singaporeans affirm their national loyalty.

The values being inculcated in these programs are by design and top-down driven. They are not the result of a long common historical experience.

Col. Fred Wel-Shi Tan is the head of the Singapore Armed Forces Centre for Leadership Development. He holds a BS from the U.S. Military Academy, West Point, New York, and an MS in human resource management and development from New York University. He previously commanded an infantry brigade and was deployed in Timor Leste as part of the United Nations Mission of Support in East Timor and in Aceh, Indonesia, as part of the Aceh Monitoring Mission.

Senior Lt. Col. Psalm B. C. Lew is the head of plans of the Singapore Armed Forces Army Information Centre. He holds an MA in international communications from the University of Leeds and a BSc (1st Class Honors) in psychology from the University of Birmingham in the United Kingdom. He previously commanded a national service infantry battalion, and he was also head of schoolhouse leadership development in the Singapore Armed Forces Centre for Leadership Development, responsible for the introduction of the new leadership and values curriculum.

Lew is the primary author for this article.

The same conscious design applies to development and promotion of Singapore's code of Shared Values.

Singapore Armed Forces and the Continuous Journey of Nationbuilding

Five shared national values to be promulgated among citizens were proposed by a parliamentary committee and then passed by the Parliament of Singapore on 15 January 1991:

- Nation before community and society above self
- Family as the basic unit of society
- Community support and respect for the individual
- Consensus, not conflict
- Racial and religious harmony[5]

The SAF Core Values and Singapore Shared Values are routinely reviewed to ensure their continued relevance. In August 2012, the Singapore government launched Our Singapore Conversation, an initiative involving over 47,000 Singaporeans in over 660 dialogue sessions. Whilst one of the key perspectives was to build a Singapore anchored on values, there continues to be an open question on which of the Shared Values expressed in 1991 should be retained.[6]

Evolving Concepts of Values and Ethics in the Singapore Armed Forces

One of the first SAF manifestos to be published was the 1967 SAF Code of Conduct.[7] Its release coincided with the development of the first generation SAF. The six-line code prescribes a set of rules, standards, and obligations for all SAF servicemen and servicewomen:

1. We always honor our nation. We will do everything to uphold it and nothing to disgrace it.
2. At all times, we must bear in mind that we are the protector of our citizens.
3. We are loyal to the armed forces and we take pride in our unit, our uniform, our discipline, our work, our training, and ourselves.
4. We must be exemplary in our conduct. We respect others, and by our conduct win the respect of others. We are courageous but not reckless.
5. We are devoted to duty but not to ourselves.
6. We guard our weapons as we guard secrets.

When the SAF Code of Conduct was launched, the following declaration was made by Secretary of Defence Goh Keng Swee to clarify its intent:

> Members of the SAF have a unique role; they are not only the ever-vigilant guardian of our nation but are also required to be an example of good citizenship. … Now therefore, I Goh Keng Swee, on the authority of the Army Board of Singapore hereby prescribe the Code of Conduct for members of the SAF. I prescribe that every member of the SAF shall abide by the Code of Conduct and measure up to the standards embodied therein.[8]

The SAF Code of Conduct was driven by necessity; Singapore was a young nation in 1967 and did not have a professional officer caste. There was an urgent need to use the Code of Conduct to ensure that a sense of dignity and purpose prevailed throughout the SAF as young Singaporeans were conscripted for NS. Yet, at the same time, the declaration also expressed the intent of the country's founding fathers to imprint upon Singapore's NS citizen-soldiers a set of ideals that each enlisted male citizen should have.

Singapore Armed Forces Core Values

In the late 1980s, the military began its transformation from a first to a second-generation SAF. The idea emerged to create a new "institute of excellence" that would eventually serve as the home of the SAF officer corps.[9] In creating this institute, the idea also included identifying a set of SAF core values in order to create a common set of attributes for SAF officers. After a series of rigorous discussions, the SAF Core Values—Loyalty to Country, Leadership, Discipline, Professionalism, Fighting Spirit, Ethics, and Care for Soldiers—were formalized and subsequently promulgated in 1996.[10] In 2013, Safety was added as the newest Core Value. These values were also incorporated into the SAF's Knowledge-Abilities-Qualities (KAQ) model of leadership under "Qualities," along with twelve other qualities of leadership.[11]

With senior leadership's emphasis and Singapore's system of mandatory national service, these values were inculcated in the SAF's officers who passed through the grounds of the SAFTI Military Institute—the home of the SAF officers corps—and then, through the officers, the values eventually were passed on to the soldiers.

Singaporean soldiers stand with a police patrol on board an underground train. Singaporean national servicemen make meaningful contributions to defense, such as in the enhancement of homeland security operations. (Photo courtesy of the Singapore Armed Forces)

In 2016, as SAFTI Military Institute commemorated its fiftieth anniversary, it was recognized by the prime minister as a key institution of the SAF. It continues to play an important role in Singapore's security, particularly in imbuing the values such as leadership by example and overcoming adversity with courage.[12]

Definitions of the SAF Core Values

Loyalty to Country is best expressed in the Oath of Allegiance every SAF soldier, sailor, and airman takes upon entering service with the SAF.[13] In taking the oath, they become members of the SAF.

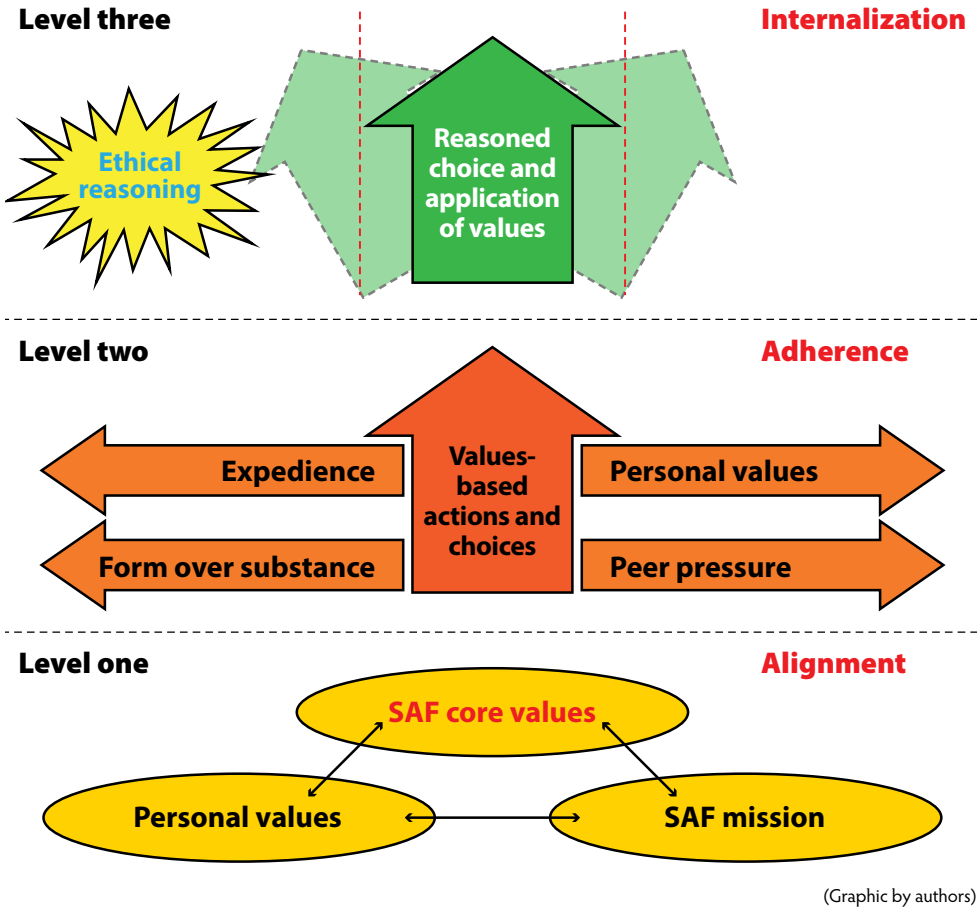
Service members demonstrate this Core Value by their duty and their commitment to defend their country and, if need be, sacrifice their lives for their country. This Core Value requires their respect and adherence to the military law and civilian law. It entails their willingness to bear arms in defense of their country until released by lawful authority while putting national interests ahead of personal interests. At its core, these are the fundamental obligations of all members of the SAF.

Leadership in the SAF is neither about the leader as a person, nor is it about the rank and authority that he or she holds. Leadership is the process of influencing people to accomplish the mission, inspire their commitment, and improve their organization. Service members demonstrate this Core Value by influencing people not only through their competence and skills, but also through their personal character of living their values each day. This value entails leading by personal example, presence, and involvement—by embodying the SAF Core Values each day. It involves leading with integrity, taking responsibility, and demonstrating selfless service

to the Singaporean people, the SAF, and the country. Finally, it involves developing others to achieve their full potential while inspiring them to give their best to serve their country.

Discipline ensures the readiness to respond to emerging threats. It requires an appreciation of the military system and the role the military plays in the defense of the nation. This appreciation allows for the responsible obedience to orders and the timely and accurate execution of assigned tasks. Discipline is instilled through tough training and through mission command.

Service members demonstrate this Core Value by performing their duties to the best of their abilities, even when it is difficult and demanding. This means having the inner strength, self-control, mental stamina, physical toughness, and perseverance to accomplish assigned missions. Lastly, it means respecting established procedures and systems while being flexible and adapting appropriately to change, keeping the higher command's intent in mind at all times.



(Graphic by authors)

Figure 1. The SAF Core Values Inculcation Framework

Professionalism is exhibited through job proficiency and being consistently reliable in every action. Service members demonstrate this Core Value by continuously striving to learn, improve, and excel; by rejecting complacency; by setting high standards for everything they do; by training hard; and by always endeavoring to do their best.

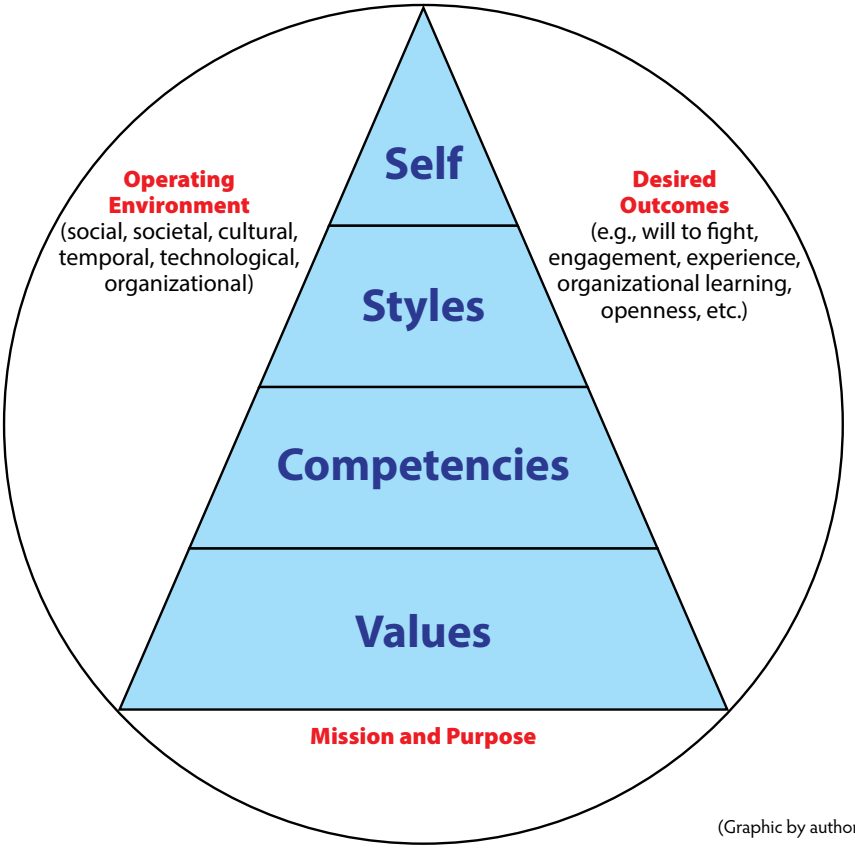
Fighting Spirit is the tenacity and determination to succeed in any undertaking. Service members demonstrate this Core Value by showing aggressiveness and perseverance in training and by having the courage to engage decisively in battle and win. Having a fighting spirit means resolutely overcoming all odds with determination to accomplish the mission and having the mental fortitude to withstand fear and uncertainty while remaining vigilant in routine or mundane tasks.

Ethics is exercising principled conduct and having the moral strength to always do what is right rather than taking the easy way out or giving in to temptations. Service members demonstrate this Core Value by choosing to do what is right with convictions, unyielding even at personal cost; by being upright and trustworthy; and by being honest and accurate in reporting. Service members must have integrity when dealing with others, and they must not misuse their positions or power against anyone. They must think of the consequences before acting and accept responsibility and accountability for their actions.

Care for Soldiers is the genuine concern for the well-being of fellow comrades, their families, and those that service members are pledged to protect. Care goes beyond ensuring safety and providing welfare to support the physical, emotional, and mental wellness and health

of comrades. It is demonstrated by ensuring they are properly equipped, provided with adequate sustenance, adequately rested, and thoroughly trained to fight and survive in battle. Lastly, care is shown by providing a personal touch and by having respect for one another.

Last, *Safety* is an integral part of training, operations, and mission success. Service members demonstrate this Core Value by conducting proper risk management and by vigilantly adhering to safety standards when performing all tasks. Safety is an individual, team, and command responsibility. Everyone is expected to be a safety advocate, championing safety in his or her own area of work. As members of a team, service members must always look out for one another and take care of each other.



(Graphic by authors)

Figure 2. The SAF Leadership Development Framework

Three Levels of Values Inculcation

To holistically implement values inculcation in the SAF, the SAF Centre for Leadership Development (CLD) has mapped out a three-level values inculcation process: alignment, adherence, and internalization (see figure 1, page 12).

Level 1 (Alignment). Conducted in workshops across all the key SAF route-of-advancement courses, this first level begins with clarification of each individual's personal values through self-reflection and values prioritization. This is followed by individual mapping, or alignment, of personal values to the SAF Core Values.

Level 2 (Adherence). This level focuses on helping leaders "do the right thing" whilst managing their concerns about punishments and conformity. To support the development of SAF leaders, CLD resources include case studies, SAF Core Values software through online learning platforms, and serious games. CLD also advocates character development through participation in sports in all SAFTI Military Institute courses.

Level 3 (Internalization). In this level, SAF leaders learn to internalize and apply the SAF Core Values in context by considering the tensions between the various Core Values to arrive at the *best* course of action. Modules like the "Ethics in Command," "Peace-Keeping Operations Scenario-Based Discussions," and "Storytelling of Personal Experiences" have been included in the curriculum of senior warrant officer courses, advanced-level officer courses, and the Command and Staff Course. Through these ethics modules, SAF leaders begin to reflect on what the SAF Core Values mean to them personally and how they can uphold these values in their daily lives. In doing so, it also prepares these leaders to sustain a values-based leadership culture in the units and military schools that they will eventually go on to lead, ultimately having a positive impact on the Core Values inculcation in young Singaporean conscripts.

> To deter a potential aggressor, the most powerful national image for a small nation is one of a technologically advanced military coupled with committed, confident soldiers and cohesive units, anchored on a set of values shared by the people they defend.

Values as the Foundation of Leadership

As the military profession in Singapore transforms into a third-generation SAF, CLD has created a framework to help servicemen understand the ethics and values Singapore is striving to inculcate in its population. Since 2003, the SAF Leadership Development Framework (see figure 2, page 13) has guided commander's discussions about leadership in the SAF.[14]

Of the four components of leadership presented in the framework's triangle, Core Values is placed at the bottom because it is the foundation of effective leadership in the SAF. The framework's circle describes the context (i.e., SAF's mission and purpose, the operating environment, and desired outcomes) that shapes how SAF commanders lead and operate.

Whilst there has been no study to examine how many of the twenty thousand enlistees each year have adopted the SAF Core Values as their own, it would not be an exaggeration to argue that the SAF Core Values permeate Singapore's national character because 50 percent of the national population is fulfilling its NS obligation.

Forging Singapore's National Values through National Service

As the SAF Core Values evolve over the years, they recognizably shape the national values through the NSmen, who are both citizens and soldiers. With the NS system, the SAF's values are woven into the country's social fabric. This was only made possible through the many years of effort to engender strong support for NS. Today, for all Singaporeans, NS is considered a rite of passage to adulthood, and it is an undertaking close to the people's hearts.

Beyond the two-year, full-time NS, Singaporean males also serve as NSmen until they are fifty years old, with annual in-camp training and physical fitness requirements.

National service (NS) is also one path for permanent residents (foreign nationals) to becoming accepted as Singaporeans.[15] It is no longer a surprise to see a young man of European descent or first-generation immigrants from Asian countries training alongside Singaporeans in NS. Regardless of background in terms of race, language, religion, or social status, NS in Singapore is a "melting pot" for all to be trained as soldiers, sailors, and airmen with the common goal of defending the country. The shared NS experience of Singapore citizens and permanent residents greatly enhances the social cohesion of Singaporean society. Additionally, those who are beyond the age of enlistment can join the SAF Volunteer Corps. As auxiliary security trooper Philip Von Meyenburg said, they can "join the brotherhood … of the SAF."[16]

Very few countries in the world share the same sense of military-social integration. The SAF epitomizes the values and belief systems held by its citizens, since the profession is formed by its people. A physical manifestation of the integration of the military service into the Singaporean social fabric is evidenced from the local saying that in every neighborhood and apartment block in Singapore, a few sets of military uniforms will always be seen hanging out to dry, especially on weekends when the soldiers return home.[17]

Therefore, in developing and building every new generation of soldiers, sailors, and airmen with the SAF Core Values, the SAF is building their character and preparing them for life as citizens with a common Singaporean identity. This process is in itself part of the nation-building effort to strengthen and reinforce Singapore's national values in its population.

Forging Singapore's National Image

The values shared by the soldiers and citizens shape Singapore's national image. Here, the SAF's role in projecting the national image is inherent in its mission, which is "to enhance Singapore's peace and security through

deterrence and diplomacy, and should these fail, to secure a swift and decisive victory over the aggressor."[18] Deterrence in this case is contingent on the national image of Singapore from the perspective of the global publics. A positive national image of Singapore as an economically, socially, psychologically, and militarily strong country with civil preparedness along the five pillars of total defense creates deterrence and supports diplomacy.[19]

Branding the national image of Singapore is no longer just the mission of the Singapore Tourism Board; branding Singapore is arguably an integral part of the SAF mission.

As it stands, SAF has 350,000 active and national servicemen. This provides Singapore with a unique edge over many countries because, through NS, approximately 10 percent of the country's national population are ambassadors branding the national image regardless of whether they are in or out of their uniforms. Here, there are no elaborate programs or briefings to teach NSmen how to be ambassadors for their country; this is simply achieved through the inculcation of the SAF Core Values that are then overtly put on display in action by active-duty personnel and NSmen during operations that range from local missions such as the protection of key installations to overseas missions such as the support for the International Security Assistance Force in Afghanistan.

Additionally, it is our view that to deter a potential aggressor, the most powerful national image for a small nation is one of a technologically advanced military coupled with committed, confident soldiers and cohesive units, anchored on a set of values shared by the people they defend.

A Singapore national service promotional poster from a previous year. The Singapore Armed Forces celebrates the fiftieth anniversary of national service in 2017.

Forging Singapore's National Identity

Whilst individual values can be inculcated through daily living, and an image built through living out those values, national identity is forged through common experience. Accordingly, the SAF has played an important role in all of Singapore's key national events in the past fifty years. Whilst the SAF actively participates in celebratory events such as the organization of Singapore's Golden Jubilee in 2015, it has more importantly come forward during national crises. For example, the SAF conducted the emergency distribution of face masks during the trans-regional haze in 2014 and when Singapore was affected by severe acute respiratory syndrome (SARS) in 2003. And, in the face of terrorist threats, the SAF has been mounting operations to protect key installations such as the Jurong Island refinery, which supplies a significant percentage of the world's refined petroleum products.[20]

On all these occasions, the SAF has provided generations of conscripts an opportunity to stand shoulder-to-shoulder with fellow Singaporeans during crises, thereby strengthening their identification with Singapore and also helping a heterogeneous population act and feel as one.

Conclusion

Over the last fifty years, the SAF has provided a strong foundation to support Singapore's nation-building progress. As the former prime minister of Singapore, the late Lee Kuan Yew, told SAF officers

at his last official engagement with them, "Without a strong SAF, there is no economic future, there is no security."[21] Through the SAF's national service system, generations of Singaporean citizens are reminded that "what you cannot defend is not yours."[22] In his preface in the SAF's fiftieth anniversary book, *Our SAF: Giving Strength to Our Nation*, Prime Minister Lee Hsien Loong said, "Indeed, the SAF is the cornerstone of the Singapore Story. It has given us the peace and security to build a home, the strength to forge a cohesive society, and the freedom to pursue our dreams and chart our own destiny."[23] ■

Notes

Epigraph. Minister for Defence Dr. Goh Keng Swee, speech to Singapore Parliament on the National Service (Amendment) Bill, 13 March 1967, *Parliament Debates 25: 23 February 1966–24 May 1967*, col. 1160.

1. "Speech by the Minister of Defence, Dr Goh Keng Swee, in Moving the Second Reading of the National Service (Amendment) Bill in the Singapore Parliament on Monday, 13th March, 1967," Singapore Government Press Statement, accessed 20 December 2016, www.nas.gov.sg/archivesonline/data/pdfdoc/PressR19670313b.pdf.

2. Jack Neo, *Ah Boys to Men* (Singapore: J Team Productions, 2012), DVD.

3. All Singaporean males who reach the age of eighteen are conscripted to render national service (NS) to the country. NS comprises two years of full-time service and at least ten years of NS liability, during which they render service up to a maximum of forty days per year. Upon completing ten years of NS liability, they will enter the Ministry of Defence Reserve. In essence, every male is a national serviceman. Those serving full-time are known as national servicemen, or NSFs, as opposed to national servicemen (NSmen) who serve annually.

4. Tim Huxley, *Defending the Lion City: The Armed Forces of Singapore* (Singapore: Talisman Publishing, 2004), 123–25.

5. *White Paper on Shared Values* (Singapore: Singapore National Printers, 1991), Call number: RSING 306.095957 SIN.

6. Singapore Ministry of Communications and Information, "Perspectives Arising from Our Singapore Conversation," Our Singapore Conversation website, accessed 20 December 2016, https://www.reach.gov.sg/oursgconversation.

7. The Singapore Armed Forces (SAF) initially printed the SAF Code of Conduct as little booklets with a red hardcover binding, which the soldiers were supposed to carry in their left breast pocket.

8. The SAF Code of Conduct was launched at a formal parade at the former Singapore Ministry of Interior and Defence on 14 July 1967. The late Dr. Goh Keng Swee, then minister of defence, signed a declaration that is on display at the Army Museum of Singapore.

9. The original institute, the Singapore Armed Forces Training Institute (SAFTI), was founded in 1966. The Singapore Armed Forces Training Institute Military Institute (SAFTI MI) was officially opened in 1995; the new institute maintains its lineage from the original.

10. *The SAF Core Values: Our Common Identity* (Singapore: SAFTI MI, 1996).

11. Kim-Yin Chan et al., *Spirit and Systems: Leadership Development for a Third Generation SAF*, Pointer Monograph No. 4 (Singapore: SAFTI MI, 2005), 73, accessed 28 December 2016, https://www.mindef.gov.sg/content/imindef/publications/pointer/monographs/mono4/_jcr_content/imindefPars/0005/file.res/System%26Spirit.pdf.

12. Singapore Ministry of Defence, "SAFTI MI a Key Institution that Produces the SAF Leaders of Today and Tomorrow: Prime Minister Lee Hsien Loong," news release, 26 June 2016, accessed 20 December 2016, https://www.mindef.gov.sg/imindef/press_room/official_releases/nr/2016/jun/26jun16_nr.html#.WE7qOU00Njo.

13. For more information on the Core Values, see "The SAF Core Values," SAF Centre for Leadership Development website, accessed 20 December 2016, https://www.mindef.gov.sg/imindef/mindef_websites/atozlistings/saftimi/units/cld/keyideas/corevalues.html; for more on the Oath of Allegiance, see "Our Beginnings," *Our Army Customs and Traditions: Understanding Why We Do What We Do* (Singapore: Ministry of Defence, April 2006), 13–14, accessed 20 December 2016, https://www.mindef.gov.sg/dam/publications/eBooks/More_eBooks/ourArmyCustomsTraditions.pdf.

14. Kim-Yin Chan et al., *Spirit and Systems*, 17–22.

15. Male permanent residents in Singapore would generally be offered citizenship if they served national service.

16. Chan Lou Er, "First Cohort of SAFVC Volunteers Mark End of Basic Training," *Channel NewsAsia,* 27 June 2015, accessed 20 December 2016, http://www.channelnewsasia.com/news/singapore/first-cohort-of-safvc/1944666.html.

17. Carl Skadian and Psalm B. C. Lew, *40 Years and 40 Stories of National Service* (Singapore: Landmark Books, 2007), 242.

18. "Mission," Singapore Ministry of Defence website, accessed 20 December 2016, https://www.mindef.gov.sg/imindef/about_us/mission.html.

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20. Jared Yeo, "10 Years of Vigilance: Steadfast We Stand," *Army News* 193 (October 2011), accessed 20 December 2016, https://www.mindef.gov.sg/content/dam/imindef_media_library/graphics/army/army_news/download_our_issues/pdf/193.pdf.

21. "Mr Lee Kuan Yew Speaks with SAF Officers and Defence Officials at Dinner Dialogue," Singapore Ministry of Defence Official Release, 18 May 2012, accessed 20 December 2016, https://www.mindef.gov.sg/imindef/press_room/official_releases/nr/2012/may/18may12_nr.html.

22. Lt. Gen. Lim Chuan Poh, "Interviews with the Chiefs of Defence Force," SAF50 website, accessed 20 December 2016, https://www.mindef.gov.sg/imindef/mindef_websites/topics/saf50/stories/collection_of_stories/chapter9/chapter9_pg8.html.

23. Lee Hsien Loong, "Message," *Giving Strength to Our Nation: The SAF and Its People,* SAF50 website, 13, accessed 20 December 2016, https://www.mindef.gov.sg/saf50/saf50_book/1_Preliminaries.pdf.

Antigovernment protesters clash with police 12 March 2014 in Caracas, Venezuela. Supporters and foes of Venezuelan President Nicolas Maduro took to the streets of Caracas a month after similar rival rallies led to bloodshed in a wave of unrest around the nation. Red-clad sympathizers of Maduro's socialist government held a "march for peace" while opponents wearing white gathered to denounce alleged brutality by security forces during Venezuela's worst political troubles in a decade. (Photo by Carlos Garcia Rawlins, Reuters)

The Venezuelan Crisis

What the United States and the Region Can Do

Gustavo R. Coronel

Venezuela is a failed state. A humanitarian crisis already exists there and is at imminent risk of becoming a major regional tragedy. For several years, the Venezuelan political, economic, and social situation has been deteriorating under the essentially passive eyes of the United States and most of the Latin American states. Such passivity has served to intensify a crisis that can no longer be ignored. Further delay in regional action to restore democracy and political and social stability in Venezuela would represent an act of collective irresponsibility. This article describes how Venezuela ended up as a failed state and analyzes the potential role the United

States and the rest of the countries in the region can play in restoring democracy and stability to the country.

1999–2007: From Imperfect Democracy to Dictatorship

In December 1998, Hugo Chávez was elected president of Venezuela. Seven years earlier, in 1992, he had unsuccessfully tried to reach power through a bloody military coup that had been years in the planning. Once in power by electoral means, Chávez rode very efficiently the wave of discontent with the previous administrations in order to dismantle existing democratic institutions and replace them with new ones loyal to him. During the initial period of his presidency, he was given unconditional support by most of the country, which he utilized adroitly to convert Venezuela into a dictatorship. How he succeeded can be summarized as follows:

14 December 1994. After being released from prison, where he was incarcerated as a result of his failed coup d'état, Chávez visited Fidel Castro in Havana. This visit marked the start of Castro's political mentoring of Chávez. His older brother Adan had already converted to Marxism.

6 November 1998. Legislative and state governor elections were held in Venezuela. Candidates endorsed by Chávez obtained eight governorships and eighty-seven seats in Congress, but non-Chávez followers obtained a clear majority, fifteen governorships and 168 seats in Congress.

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6 December 1998. Chávez was elected president.

2 February 1999. During his presidential inauguration ceremony, Chávez violated the traditional oath of office. When asked, "Do you swear before God and the fatherland to fulfill the duties of Constitutional President, to obey and promote obedience to our Constitution?" he replied [author's translation], "I swear before God and the Fatherland, before my people and over this moribund constitution, that I will promote the transformations required for the new republic to have a new constitution adequate to the times."[1]

Immediately after his inauguration, he issued a presidential decree to convene a Constituent Assembly that not only would draft a new constitution but also would "transform the state and create a new judicial order based on a different model of government to the existing one."[2]

10 March 1999. To elect the representatives to the Constituent Assembly, the rules for proportional representation of minorities were replaced by Chávez in favor of a winner-take-all type of election. This arbitrary change in the rules made it possible for Chávez to obtain 96 percent of the seats in the assembly with the support of only 30 percent of the registered voters.

April 1999. In a letter to the Supreme Court of Justice, Chávez claimed, "Only the President had exclusive authority over the management of State affairs," and threatened the magistrates with popular retaliation if they did not rule in line with his wishes.[3]

August to September 1999. The Constituent Assembly, under control of Chávez, established its own bylaws, which included supraconstitutional powers. On 8 September, the assembly designated an "Emergency Commission for the Judicial Power" that summarily dismissed all national judges and named provisional replacements, many of whom are still provisional seventeen years later.

22 December 1999. The Constituent Assembly decreed the elimination of all existing public powers: the National Congress, the Supreme Court of Justice, the National Electoral Council, the attorney general, and the general comptroller. A report by the Organization of American States' Inter-American Commission on Human Rights concluded that this measure "weakened the validity of the constitution and prevented the proper constitutional designation of the proper authorities of the Venezuelan powers."[4]

30 December 1999. A new Venezuelan constitution was approved by the Constituent Assembly, written by Chávez's followers and giving him inordinate powers.

25 February 2001. The Inter American Press Association and the Committee to Protect Journalists denounced Chávez for the lack of freedom of expression

Representatives of the member states of the Organization of American States (OAS) vote to suspend membership of Honduras at a special general assembly 5 July 2009 at the organization's headquarters in Washington, D.C., following the coup d'etat that expelled Honduran President José Manuel Zelaya from power. The OAS voted to readmit Honduras 1 June 2011 after Zelaya was permitted to return from exile. Similar measures could be initiated against Venezuela (although many Caribbean states in the OAS still support Venezuela in exchange for oil subsidies). (Photo courtesy of the Presidency of the Nation of Argentina)

in Venezuela, claiming he was violating the Universal Declaration of Human Rights and the Inter-American Democratic Charter.[5]

8 November 2001. The Military High Command made public its support to the Chávez revolution, in violation of the constitution that did not allow political pronouncements by the military.

12 December 2002. The Inter-American Commission on Human Rights urgently requested that the Organization of American States (OAS) act against the deterioration of the rule of law in Venezuela.[6]

15 December 2002. In his television program *Alo Presidente*, Chávez instructed military members, governors, and public employees to ignore judicial rulings that would contravene his presidential decrees.

February to March 2003. Chávez fired about eighteen thousand managers and technicians of the state-owned petroleum company who had gone on strike to protest the politicization of the management of the company.

14 May 2004. The Venezuelan National Assembly, by simple majority, which was in violation of the law, revised the structure of the Supreme Tribunal of Justice, expanding it from twenty to thirty-two members to guarantee a Chávez majority. Human Rights Watch claimed that this move eliminated the autonomy of the judicial power.[7]

June 2005. The Venezuelan National Assembly changed the rules of the Venezuelan Central Bank, allowing Chávez to use up to $5 billion of the country's international reserves for current government expenditures.

January 2007. By this time Chávez had nationalized telecommunications and power utilities, taken over foreign oil company activities, ended the autonomy of the

Venezuelan Central Bank, and disbanded all government political parties to form one single party.

2007–2012: Absolute Power Leads to Unprecedented Corruption

By early 2007, total political power was firmly in the hands of Chávez. During this period of increasingly authoritarian rule, the management of Venezuelan national wealth went from unsatisfactory to chaotic. Oil income had been steadily increasing. In 1998, the average price of oil had been $10.57 per barrel; in 2007, it was $64.74 per barrel; and, in 2008, it jumped to $86.48 per barrel, staying at around that level until 2012. During this six-year period, Chávez had access to about $500 billion in oil income, and he utilized this extraordinary windfall to consolidate his political power at home and abroad. By 2009, close to $40 billion had already been distributed by Chávez to foreign governments in order to buy political loyalties.[8] By 2012, the amount of handouts abroad had increased to no less than $150 billion, particularly to Castro's Cuba, since one hundred thousand barrels per day of Venezuelan oil were being sent to Cuba, to be paid back in sports training, medical services, and other services. This arrangement allowed the Castro government to send some fifty thousand Cubans to Venezuela, many of whom went to control strategic areas of Venezuelan public administration, including identification and economic matters. Chávez instituted a system of domestic handouts that put money in the pockets of the poor but did not solve the structural problems of poverty.

I have documented some of the most notable cases of Chávez corruption during this period in two papers.[9] In a summarized version of those papers, I described how Venezuela had been subjected to an unprecedented level of corruption, placing the country among the twelve most corrupt countries in the world in the Perception of Corruption Index prepared every year by Transparency International.[10] The concentration of decision making in a very small government oligarchy inevitably led to a total breakdown of transparency and accountability in the country. Corruption was, arguably, the only component of Chávez's political system that became more democratic since, in contrast with the dictatorships of the past, where the exercise of corruption was the privilege of the few, Chávez allowed his followers to share, in various degrees, the oil income "piñata" that should have been used for the benefit of all Venezuelans. In replacement of the traditional Venezuelan middle class, a new and corrupt *chavista* social class rapidly emerged, made up of government bureaucrats, friendly contractors, relatives, and armed forces officers.

Most corruption was generated in four main areas of government: the presidential palace, the oil enterprise, the military, and the finance ministry.

Presidential Level. At this level, the nature of corruption was mostly political, although significant amounts of cash were kept without control at the presidential palace, to be utilized as necessity dictated.

The presidential palace was the place where violations of the constitution were decided and the president exercised his abuse of power. In the palace, Cubans controlled sensitive intelligence matters, illegal financing of foreign electoral campaigns occurred, bribes of friendly leaders in the hemisphere were allocated, and political strategies were agreed upon with brotherly dictatorships in Cuba, Belarus, Syria, Iran, Libya, and Zimbabwe, and with authoritarian regimes in Argentina, Bolivia, and Nicaragua.

Petroleos de Venezuela (PDVSA). By 2008, PDVSA was no longer a conventional oil company but a "social" company engaged in diverse businesses that ranged from importing and distributing food to building low-quality housing. Contracts without bidding were often assigned to friends of the regime. Kickbacks became customary. The management of the company and the national comptroller systematically ignored PDVSA's scandals, such as the 2010 contracting of the offshore drilling rig Aban Pearl to a ghost company, rampant overpricing in procurement contracts to benefit contractors and company insiders, and the illegal use of the employee's pension fund for speculative purposes. The president of the company, Rafael Ramirez, was also the minister of energy and petroleum, and he systematically diverted PDVSA's funds from the company into the pockets of the executive branch, to be used without accountability. By 2012, PDVSA was deep into debt in spite of high oil prices, since its income was diverted to partisan political activities. Due to lack of proper infrastructure investment, oil production and the condition of plants and equipment had deteriorated significantly, causing refinery accidents and numerous oil spills due to leaking pipelines.[11]

The Defense Ministry and the National Guard. A 2009 report by the U.S. Government Accountability Office to the U.S. Congress reported increasing corruption among the Venezuelan military, especially

the national guard.[12] Corruption, said the report, had reached the ministerial level of the government. In particular, the links of the Venezuelan military and the Colombian terrorist and drug trafficking group known as the FARC (Revolutionary Armed Forces of Colombia) had been clearly established, as proven by the contents of the laptops belonging to deceased FARC leader Raul Reyes. The U.S. government named three high members of the government as drug kingpins for providing material support to the FARC. Gen. Henry Rangel Silva, Gen. Hugo Carvajal, and former Minister of the Interior Ramon Rodriguez Chacin are still active members of the Venezuelan regime.

Ministry of Finance. The management of Venezuelan finances from 2007 to 2012 was chaotic. Utilizing the mechanisms of dual exchange rates and exchange controls without transparency, finance ministers, officers and friendly bankers and brokers became instant millionaires. Parallel financial funds were established and operated without accountability and received billions of dollars, much of which ended up in the pockets of members of the regime.[13] By eliminating the autonomy of the Venezuelan Central Bank, international reserves were diverted into the hands of the executive branch, in order to be used for current expenditures and for political purposes.

2012–2016: Venezuela Becomes a Failed State

After the death of Chávez in either December 2012 or early 2013 (Venezuelans have never known the exact date or cause of death), former Finance Minister Jorge Giordani denounced the manner in which the huge loans received from China had been largely utilized to finance the Chávez presidential campaign in 2012, when he was already a dying man and clearly incapable of surviving another six-year term as president. Giordani admitted that the electoral victory of Chávez had been obtained thanks to a significant portion of the $60 billion in loans received from China and to the use of inorganic money (paper currency without gold backing) printed by the Venezuelan Central Bank.[14] Although victorious, Chávez was dying, and before leaving Venezuela to be treated in Cuba for the last time, he asked Venezuelans to accept Nicolas Maduro as his replacement. Acting on his wishes, the regime violated electoral regulations in order to designate Maduro as a candidate. His narrow electoral victory over the opposition candidate, Henrique Capriles, was so murky that the United States withheld recognition of the new government. U.S. Secretary of State John Kerry demanded a recount.[15] Fearing a massacre of civilians if he took to the streets, Capriles ceased in his claims of fraud, and the United States was left without basis to keep challenging the results of the election.

Under Maduro's presidency (2013 to 2017), Venezuela has been almost totally destroyed. Consider this evidence:

- According to former Secretary General of the United Nations Ban Ki Moon, Venezuela is in a state of humanitarian crisis, with food and medicine severely restricted and thousands of Venezuelans leaving the country by land, air, and sea.[16]
- Medicine sent to Venezuela by charitable organizations is not allowed to enter the country, or it is confiscated by regime customs agents for their own purposes.[17]
- Inflation is at 500 percent, the highest in the world.[18]
- The national murder rate is at some fifty-eight deaths per one hundred thousand inhabitants, the second highest rate in the world, while the murder rate in Caracas is 119 deaths per one hundred thousand inhabitants.[19]
- Large gangs of armed criminals called "colectivos" control large areas in the capital city of Caracas. In other cities, they are engaged in war with the armed forces.
- In 2015, Venezuela was listed as the ninth most corrupt country in the world by Transparency International.[20]
- Venezuela was rated by the knowledge web-portal globalEDGE as having "the highest-risk political and economic situation and the most difficult business environment. Corporate default is likely."[21]
- PDVSA, the state oil company, has suffered a production drop of about eight hundred thousand barrels per day since 1998.[22] The country needs the price of oil to be at least $80 per barrel to make ends meet, but the price of oil remains much lower than that, and no relief is in sight.
- About a dozen high level members of the government, including ministers, generals of the armed forces, and state governors, have been named by the U.S. government for violating human rights or for engaging in drug trafficking.

Antigovernment protesters demonstrate 16 March 2014 in Caracas, Venezuela, in part to protest the dominant Cuban influence on the Venezuelan government. Venezuelan President Nicolas Maduro warned protesters to clear a main square in Caracas or face eviction by security forces. Plaza Altamira, in upscale east Caracas, was the focus of antigovernment protests and violence during six weeks of unrest around Venezuela that killed twenty-eight people. (Photo by Tomas Bravo, Reuters)

- Members of the Venezuelan armed forces at all levels, including those in the National Guard and the Army, are significantly involved in drug trafficking, while the High Military Command is openly backing the unconstitutional government of Maduro. Diosdado Cabello, considered the number two man in the government hierarchy, has been denounced as being the czar of the Venezuelan military drug cartel by a former bodyguard who is currently in the United States as a protected witness.[23]
- Two nephews of Maduro, raised by his wife, Cilia Flores, have been convicted in a New York court of drug trafficking. They were holding Venezuelan diplomatic passports and enjoyed a lifestyle only possible as a privileged member of the Venezuelan regime.
- The Supreme Tribunal of Justice is completely made up of Maduro's followers. The president of the Tribunal, Maikel Moreno, was arrested in 1987 for murder.[24]
- The Supreme Tribunal of Justice has systematically invalidated all activities of the Venezuelan National Assembly, duly elected in December 2015, to the point that opposition lawmakers denounced the actions as "a rupture of the constitutional order" in the country, and the secretary–general of the OAS, Luis Almagro, "threatened to invoke the Inter-American Democratic Charter, which could lead to sanctions being imposed on Venezuela."[25]

These and other components of the current Venezuelan political, economic, and social situation characterize the country as a failed state, defined as "a nation in which the government has lost political authority and control and is unable to fulfill the basic responsibilities of a sovereign state."[26] The only entities still working in an organized manner are the police and

the armed forces, which are engaged in the repression of Venezuelan citizens.

What Can the United States and the Region Do to Help Venezuela?

Given that Venezuela is a failed state, what can be done to help the country to regain democracy, respect for human rights, and political and economic stability? There is a deeply ingrained tendency in Latin America to refrain from intervention in the internal affairs of other countries, mostly because intervention has led in the past to violations of the sovereignty of weaker states at the hands of stronger states. However, since 2011, the OAS has incorporated as a fundamental part of its mission the provisions of the Inter-American Democratic Charter, which will allow the OAS to intervene in a country when democracy and the rule of law are seriously threatened.[27] Consequently, the work of the OAS has become very difficult because of these seemingly opposite mindsets: intervening as required by the Inter-American Democratic Charter versus the tendency to adhere to the older, deeply ingrained doctrine of nonintervention.

This apparent contradiction has been skillfully exploited by member countries that oppose intervention in another country for ideological reasons or because of economic interests. This has been the case in Venezuela during the last decade. Countries friendly to the Venezuelan regime's ideology, or countries that have been beneficiaries of the Chávez financial largesse such as Cuba, Nicaragua, Bolivia, Argentina, Uruguay, Honduras, and some of the English-speaking Caribbean countries, have integrated a bloc in the OAS that has prevented any action against Venezuela. However, the current dramatic economic crisis in Venezuela has contributed to the weakening of this bloc.

The United States and the region at large should be prepared to prevent or to minimize the impact of a political, economic, and social implosion in Venezuela.

What the United States Can Do

In his 2009 inaugural address U.S. President Barack Obama said,

> We reject as false the choice between our safety and our ideals. Our founding fathers, … faced with perils that we can scarcely imagine, drafted a charter to assure the rule of law and the rights of man—a charter expanded by the blood of generations. Those ideals still light the world, and we will not give them up for expedience sake.[28]

In the case of Venezuela, Obama's promise was not fully kept. U.S. policy toward Venezuela has not been so much guided by principles as by short-term political interests. In the view of the United States, Chávez and Maduro, although dictators, gave Venezuela a degree of stability that kept the country from becoming a regional problem. The Venezuelan regime kept Cuba subsidized, sending significant amounts of oil to the island, which helped prevent a major stampede of Cubans into the United States. For the United States, it seemed preferable to permit sacrificing some degree of political freedom of Venezuelans for the sake of maintaining a precarious balancing act in the Caribbean. However, the extended life given to the Venezuelan regime by this U.S. posture is generating a humanitarian crisis of major proportions that seriously threatens regional stability. A change of policy must no longer be postponed.

Below are fourteen considerations for U.S. policy that would have a positive effect on Venezuela. The United States should—

- discard direct, unilateral military action as a course of action. The price to pay for such a move would be too high in terms of a loss of prestige and a generation of regional resentment. A military intervention in Venezuela could only be considered as a joint regional action decided by the OAS, or even the United Nations, in response to major internal turmoil with loss of life.
- have no doubt that it is dealing with a dictatorship—with a failed state that was able for a long time to mask its true nature under pseudodemocratic pretenses. This is no longer the case.
- no longer promote a dialogue between the Venezuelan opposition, the victims of the dictatorship, and the regime, since such a dialogue has only served to keep the opposition immobilized while the dictatorial regime maintains its grip on power.
- recognize that a change of political regime in Venezuela is urgent and act to make this possible. In particular, it should demand an immediate electoral solution to the Venezuelan crisis, which would allow a new government to be installed.
- vigorously promote the application of the OAS Inter-American Democratic Charter to Venezuela,

working in close connection with the OAS secretary general and with the countries that have already given indications of pursuing this objective. Sanctions against Venezuela could be economic and political, and they could even include the expulsion of Venezuela from the organization.

- place greater focus during investigations by the Federal Bureau of Investigation, the Drug Enforcement Administration, and Department of Homeland Security on those Venezuelan civil and military members of the regime responsible for violating human rights or engaging in administrative corruption and drug trafficking. Many of those Venezuelans have assets in the United States that are being and should continue to be frozen by the U.S. government. Maximum publicity should be given to these actions since they would give a significant boost to the morale of Venezuelans who are frustrated by the absence of justice in their country.
- publicly warn the Venezuelan regime that abuse and repression of Venezuelan citizens are crimes that the United States does not condone and that are punishable by international law.
- warn Cuba that for the current improvement of relations between the two countries to continue, it should cease intervening in Venezuela. The degree of Cuban intervention in Venezuela has been unparalleled in recent Latin American history, essentially reducing Venezuela to a Cuban political satellite playing the role of a "sugar daddy" to the Castro regime.
- try to persuade China that a change in the Venezuelan political regime would work in its best economic interests. China's continued support of the current regime might create a backlash from future Venezuelan governments that would put their investments in jeopardy. Moreover, the current regime can no longer guarantee the normal development of Chinese investments.
- promote the political and economic isolation of the Venezuelan regime among European and Asian partners.
- take the initiative in planning and coordinating a shared humanitarian response for potentially devastating conditions in Venezuela. It should work with the OAS and, particularly, with the Venezuelan neighbors—Colombia, Brazil, Curaçao, Aruba, and Bonaire—that would be most affected by a massive flood of Venezuelan refugees into their countries. The territorial fragility of the Caribbean islands mentioned above would also merit the attention of the Netherlands, a country having significant historical, economic, and political links with the islands. Such a plan should include provisions for temporary housing, food availability, and medical attention.
- support a plan for financial assistance to a new Venezuelan government, since the Venezuelan national treasury will be found in ruins. Assistance should be a coordinated effort among the International Monetary Fund, the Inter-American Development Bank, and the Andean Development Corporation.
- be ready to advise a new democratic Venezuelan government on security matters, which have been highly compromised by the Cuban presence in Venezuela. In particular, urgent help will be needed for police operations and prison administration.
- reestablish close links with the Venezuelan military after a new democratic government is established in Venezuela.

What the Region Can Do

While the United States has the opportunity to positively influence the situation in Venezuela, other countries in the region also can take actions that would be beneficial to Venezuela and the region:

- Twenty-one former presidents of Latin American nations have already taken a proactive attitude toward the Venezuelan situation, calling for immediate release of political prisoners and for an electoral solution to the crisis.[29] There are no valid reasons why incumbent presidents should not do the same, since their countries do not depend on Venezuelan handouts to bolster their economies. Argentina, Mexico, Brazil, Chile, Uruguay, and many of the other countries in the region could clearly speak up, both individually and within international organizations such as the United Nations, the OAS, the Union of South American Nations, and the Southern Common Market (known as MERCOSUR).
- The countries of the region should unite behind a policy of international isolation against a Venezuelan regime that is no longer defensible as legitimate.
- The countries of the region should intensify action against the Venezuelan regime within MERCOSUR,

since the grip of the Venezuelan regime on this organization can be more easily neutralized than in the OAS, where Caribbean states still vote for the Venezuelan regime in exchange for oil subsidies.

- MERCOSUR should expel Venezuela.
- Brazil and Argentina should take the initiative in these efforts against the Venezuelan regime. They were clearly the most active supporters of Chávez at the time Lula da Silva (Brazil) and Néstor and Cristina Kirchner (Argentina) were in power, but now those countries have governments of a different nature.

Conclusion

Some of the suggestions made above could be considered naïve in U.S. or regional diplomatic spheres. However, I share Matthew Spalding's views when he says, "An allegiance to principle and a clear recognition of the requirements of international security can be complementary. When rightly understood, they are inseparable—at least, this is what the American Founders thought."[30] The call for principles-driven diplomacy is also contained in Obama's previously cited first inauguration address. This was also the way former President Ronald Reagan, sometimes considered naïve in international matters, saw his job when he met with Russian Prime Minister Mikhail Gorbachev in Reykjavik in 1986. Reagan used a mixture of principles, idealism, and candor, which found a strong sympathetic response. Reagan's approach is credited with ending a suicidal arms race.

When talking about composer Camille Saint Saens, his colleague Hector Berlioz once said, "This young man knows everything, but he lacks inexperience."[31] This is a piece of advice that U.S. and Latin American policy makers, often intent on sophistication, should always keep in mind. ■

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Supporters of presidential candidate Mauricio Macri of the *Cambiemos* (Change) Party gather at their headquarters 22 November 2015 in Buenos Aires, Argentina. Conservative opposition candidate Macri comfortably won Argentina's presidential election after promising business-friendly reforms to spur investment in the country's struggling economy. (Photo by Ivan Alvarado, Reuters)

Argentina at the Crossroads Again

Implications for the United States and for the Region

Dr. R. Evan Ellis

The inauguration of Argentine President Mauricio Macri on 10 December 2015 started a dramatic transformation for the country and its relationship with the region. The incoming president began his work under the most difficult of circumstances, symbolized by the refusal of his predecessor, Cristina Fernández de Kirchner, to keep with decorum and publicly hand over the presidential sash. More problematically, her

outgoing team reportedly provided almost zero transition support, and in some cases, took computer hard drives and otherwise removed or destroyed data needed by the incoming government.[1]

Macri's legislative achievements in his first year in office were remarkable. Although his *Cambiemos* (Change) coalition was a minority in both houses of the *Congreso de la Nación Argentina* (Argentine National Congress), his government passed approximately ninety laws during the period, working with dissident members of the previously in power Peronist Party and using the national government's significant financial contribution to provincial budgets as leverage in influencing their senators.

(Map courtesy of Wikimedia Commons)

Figure. Major Drug Trafficking Routes through Argentina

During his first year, Macri moved quickly to resolve outstanding debt claims against the country and reestablish its access to international financial markets, to reduce costly subsidies to public utilities, to lower export taxes undermining agricultural and mining output, and to correct other economic distortions. Within that time, he also declared a national emergency and frontally attacked narcotrafficking and rising criminality in the country, redeploying elements of the elite police gendarmerie, giving new life to Argentina's Financial Intelligence Unit, and authorizing the military to protect the nation's airspace against drug flights.

In foreign policy, Macri took significant steps to broaden and reorient the country's international engagement, rebuilding Argentina's relationship with the United States while continuing to do business with extraregional actors such as China and Russia, albeit through a more conservative filter of Argentine laws and institutions. He also sought to diversify those relationships to include expanded engagement with a broader range of actors such as Japan, Korea, and others while taking a critical stance toward Venezuela and other populist-socialist regimes within the hemisphere.

While not by design, Macri's reorientation of Argentina advances the interests of the United States and the region. While his administration's policies and legislative initiatives have been controversial within Argentina and are not beyond reproach, they have launched Argentina on a constructive new path that, if successful, will not only contribute to the development and prosperity of Argentina, but will also strengthen the institutional framework of the region.[2] The outcome of Macri's efforts will almost certainly influence debates in the region

regarding development policies and foreign engagement. If successful, Argentina could serve as an example for others regarding how a competent bureaucracy—applying technically sensible, market-oriented policies while working to strengthen institutions, transparency, and rule of law—can advance security, prosperity, and development. With respect to foreign policy, Argentina will showcase how the United States treats its friends, even while highlighting a path for how a nation can participate as a dignified, sovereign actor in the international system, benefiting from interactions with a broad range of international players and constructively participating in international institutions.

This article examines the policies of the Macri government with an emphasis on security and defense policies and foreign engagement, including their significance for the United States and the region. It concludes with policy recommendations for how the United States can help Argentina succeed on its promising new path.

Argentina's Fight against Narcotrafficking and Insecurity

During the administrations of Néstor Kirchner and his wife, Cristina Fernández, from 2003 through 2015, Argentina became a significant transit country for cocaine and other drugs originating in Peru and Bolivia, principally destined to supply the European market. Contrary to widespread perception that the principal drug transit problem is narcoflights, most drugs move through Argentina overland or by river (see figure, page 28).[3] Cocaine, for example, is most typically smuggled across the porous land border with Bolivia, where it is accumulated into larger quantities that are periodically shipped south in trucks and other vehicles to Argentina's principal population centers including Cordoba, Rosario, and Buenos Aires. A principal alternative method is to load drugs onto barges on the Paraguay River (generally near the drug-hub Paraguayan city of Pedro Juan Caballero), and then smuggle them down the Paraguay and Parana Rivers (sometimes in combination with contraband commercial products) to major Argentine ports such as Rosario, Campana, or Buenos Aires. The route from the interior of the continent down the Paraguay and Parana Rivers presents particularly significant challenges, since the quantity of commercial barge traffic on the river is enormous, and its status as an international waterway impedes the *Prefectura Naval* (Argentine Coast Guard) from inspecting vessels without probable cause.

At the major Argentine ports, the drugs are smuggled onto container ships and other oceangoing vessels for shipment across the Atlantic to Africa and eventually Europe. Argentine enforcement efforts have also sometimes forced traffickers to use ports further to the south such as Mar de Plata and Bahia Blanca, as well as the Port of Montevideo, where the Uruguayan government has relatively fewer resources monitoring maritime commerce for narcotics.[4]

With time, the flow of drugs through Argentina's major population centers has created an expanding local drug market for products such as low-purity cocaine, highly addictive and lethal alternatives such as "paco" (similar to "crack" cocaine), and, for more affluent consumers, synthetic drugs principally imported from Europe.[5] These drugs have fueled expanding violence and insecurity in the greater Buenos Aires area (*conurbano*) and other major urban centers. Rosario, as a commercial and narcotics hub port, fed by drug flows from the north along both Route 9 and the Parana River, is contested by multiple narcotrafficking groups. The city—and more broadly, the province of Santa Fe in which it is located—has become one of the most dangerous parts of the country.[6]

The drug challenge in Argentina is further complicated by the fractured nature of the criminal landscape. Numerous small groups are involved in different parts of the smuggling and transforming of drugs, and innumerable small gangs play a role in drug distribution and crime in the more troubled neighborhoods of the conurbano. While there are individual Colombian, Mexican, Bolivian, and Peruvian narcotraffickers in the country, the major cartels of the region such as *Sinaloa* and *Jalisco Nueva Generación* (Mexico) and the *Gulf Clan* (Colombia) have not yet made a meaningful effort to dominate

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and organize the market. Indeed, even external drug *demand* is fractionalized, with a range of actors that includes the Italian mafia and even Serbians.[7]

One of Macri's first major policy actions upon assuming office in December 2015 was to declare a national drug emergency, and through Decree 228, to task the military to support the Ministry of National Security and provincial and local forces in combating the threat.[8] Given that Argentina's 1988 defense law explicitly prohibits the military from engaging in an internal security role, its principal tasking under the decree has been limited to operating radar systems and patrolling the national airspace to deter drug flights in support of "Operation Northern Shield."[9]

Argentina's military has expanded radar coverage against drug flights by increasing the number of operating hours of radar systems positioned in the north and deploying new radar systems (including those produced domestically) to the north of the country, although efforts have been impeded by local governments such as that of Formosa Province, which has moved slowly in building the infrastructure necessary to support the deployment of the new radar systems.[10] The Argentine Air Force also has a small number of aging Pucara, Pampa, and A4 aircraft to use as interceptors, but their age creates maintenance issues that severely restrict their availability.[11] Such challenges notwithstanding, and although the Argentine military has not shot down a single aircraft, the act of deploying these radar systems and interceptor aircraft has contributed to a 20 percent decrease in suspected narcoflights detected during the past year.[12]

The Macri government has not, however, confined the focus of its counterdrug collaboration to the military. To overcome longstanding challenges of communication and coordination between federal and provincial organizations, the Macri government is working to establish a series of five intelligence fusion centers, with the first to begin operating in Jujuy Province in early 2017.[13] With the support of the U.S. Drug Enforcement Administration, it has also established a series of interagency task forces, also focused on the north, with the first established in the province of Salta in late 2016 and one slated to begin functioning in the province of Misiones during the first half of 2017.

The Macri administration is also committed to combatting money laundering. In March 2016, Argentina's Financial Intelligence Unit renewed cooperation with the U.S. Department of Treasury's Financial Crimes Enforcement Network. Cooperation had been suspended by the United States after the Fernández government used U.S. financial intelligence against political opponents.[14] Furthermore, in order to combat the risk of corruption in the security forces generated in the course of their fight against narcotrafficking, the government has implemented new regulations and laws, including one obliging all organizations within the national security ministry to declare their assets, as a vehicle for identifying illicit enrichment.

At the subnational level, the government has established a new high-level police school to increase the capability and standardization of provincial-level police, such as the notoriously corrupt *Bonarense* (of the province of Buenos Aires).[15] And, in order to enhance security in troubled urban areas with limited police resources, the government has deployed elements of the gendarmerie, its elite militarized police, to such neighborhoods, albeit at the cost of drawing them away from other missions such as border security. Indeed, in December 2015, in an effort to make an additional 1,500 gendarmerie available for urban patrolling, the Minister of National Security asked Macri for a decree assigning the military to protect critical infrastructure such as hydroelectric facilities, currently the responsibility of the gendarmerie.[16]

Military Capacity Building

When Macri took office, he inherited a military demoralized by predecessor governments, which had severely limited its budget, publicly ignored it or emphasized its role in the "dirty war" against leftist insurgents during the 1970s, and regularly interfered with its internal system for the promotion of officers.[17] During the Fernández administration, the government moved from a threat-based to a capabilities-based acquisition planning model, removing the military's ability to use external threats to politically argue for its budget, even while not funding the capabilities that the military planned for under the new methodology.

Argentine military budget. By the time Macri took office, procurement and operations spending had become so reduced that 80 percent of the military budget was dedicated to personnel. Argentine Air Force assets had become deteriorated to the point that the military was hard pressed to scramble two aging fighters to intercept

a small Cessna aircraft that had inadvertently entered restricted airspace during President Barack Obama's visit to the country in March 2016; if the acquisition of new aircraft continues to be delayed, the Argentine armed forces are projected to have no fighter-interceptor capability whatsoever by 2018.[18] Argentina's only icebreaker had been in dry dock awaiting funding for repairs for so long (seven years) that when it was finally ready for sea trials, the channel had filled in with mud and needed to be dredged before the ship could leave the port. The Argentine navy's three submarines had reportedly spent so few days at sea that an analysis by Jane's Sentinel Security Assessment-South America argued that Argentina had effectively lost its subsurface capability.[19]

The Macri administration was able to give the military a small budget increase for 2016 and eliminated billets for twenty-three general officers to free up resources for modernization. Yet, the increase in operating costs to support the counternarcotics campaign in the north has diverted resources, forcing the military to restructure acquisitions, including postponing purchasing new interceptor aircraft until at least 2018 (the Korean KA-50 is rumored to be favored as the front-runner) and reducing the acquisition of Beechcraft T-6 Texan trainers from twenty-four to twelve planes.[20]

Argentine land forces. The army is modernizing its *Tanque Argentino Mediano* (main battle tank, or TAM), the core of its armored force, as well as upgrading its domestically developed artillery vehicles and aging U.S. M113 armored personnel carriers.[21] Yet, while it aspires to shift from tracked vehicles to more wheeled vehicles that are better suited for current missions, budget limitations have forced the postponement of the acquisition of 6x6 or 8x8 armored vehicles such as the Chinese VN-1, the Brazilian Guarani, or the (rumored favorite) U.S. Stryker vehicle.

Argentine maritime capabilities. Argentina's resolution of disputes over its defaulted debt has removed the threat that twice manifested itself during the previous administration of Argentine ships being seized in foreign ports based on international legal actions.[22] Nonetheless, Argentina's surface and submarine fleets remain small, with expired munitions, as well as delayed upgrades and service-life extensions for its core surface combatants, its four Meko 360 destroyers and six Meko 140 frigates. The purchase of ocean patrol vessels from China or France has also been postponed, while Argentina's three submarines spent so little time underwater in 2014, that the country is assessed to no longer have a submarine capability.[23] Even the rental of Russian tugboats as part of the nation's campaign to support its bases in the Antarctic had to be abandoned following problems with the bidding.

> The selection of the Georgia National Guard to work with Argentina in the U.S. State Partnership Program has opened up an array of new cooperation opportunities, including in humanitarian assistance and disaster response, border security, aviation, environmental matters, and preparation for peacekeeping missions.

U.S.–Argentine military relationship. During the Fernández era, Argentine military attaches were not even permitted to talk to their U.S. counterparts without Ministry of Defense approval.[24] The United States was expelled from offices that it once occupied in the Argentine defense ministry, and the assets of a U.S. military training team were seized at the airport. By contrast, since Macri's inauguration, military cooperation has been one of the most fruitful areas in the rapidly expanding U.S.–Argentina relationship.

While new U.S. arms sales to Argentina's military concentrated on the previously mentioned twelve T-6 Texans, it has significantly expanded military-to-military exchanges. Training opportunities now include billets for Argentine officers in the U.S. Joint Interagency Task Force South facility in Key West, Florida; instructor billets at the Western Hemisphere Institute for Security Cooperation; and student billets at the Naval War College and possibly at the Army War College. Perhaps most significantly, however, the selection of the Georgia National Guard

Argentine Defense Minister Julio Martínez, U.S. Ambassador Noah Mamet, and Georgia Adjutant General Brig. Gen. Joe Jarrard sign an agreement 13 December 2016 at the U.S. embassy in Buenos Aires, forming a partnership between the Argentine military and the Georgia National Guard that enables them to carry out joint activities as part of the U.S. Department of Defense's State Partnership Program. This collaboration allows the Georgia Guard and the Argentinian military forces to train together for disaster preparedness, environmental issues, and other opportunities. (Photo courtesy of the Georgia National Guard)

to work with Argentina in the U.S. State Partnership Program has opened up an array of new cooperation opportunities, including in humanitarian assistance and disaster response, border security, aviation, environmental matters, and preparation for peacekeeping missions.[25]

Argentina's New Foreign Engagement Posture

Macri has reoriented Argentina's foreign policy within the region and with respect to the United States, and he has fostered less ideological, more diverse relationships with extrahemispheric actors. Macri has moved Argentina away from giving a privileged position to anti-U.S. actors in the Western Hemisphere and to U.S. geopolitical rivals beyond it, to a more pragmatic posture that seeks mutually beneficial commercial and political ties with countries such as China and Russia. He has substantially reconstructed Argentina's close relationship with the United States, renewed engagement with traditional international institutions (including renewed access to international capital markets), and pursued relations with a broader group of extraregional actors of all ideological orientations, including Australia, South Korea, and Japan. By contrast to his predecessor, Macri has taken a far more critical stance toward Venezuela and other socialist-populist governments in the region. Macri's unifying theme in all of these engagements has arguably been to expand the nation's options, avoiding an excess of dependency on a single ally or an ideological block such as *Alianza Bolivariana para los Pueblos de Nuestra América* (Bolivarian Alliance for the Peoples of Our America, or ALBA) that could undermine Argentine sovereignty.

China. Macri began his administration by suspending a broad range of commercial and military projects with Russia and the People's Republic of China (PRC). However, while most of the deals with

Russia were abandoned, Macri ultimately proceeded forward with many of the projects with Chinese companies. This included continuation of a PRC-built and -operated deep space radar in the province of Neuquén (securing a commitment from the Chinese that the facility would not be used for military purposes), as well as construction of two nuclear reactors in the Atucha complex and modernization of the Belgrano Cargas railway system.[26]

Although the president's father, Franco Macri, has been one of the key figures involved in business deals in Argentina with Chinese partners, the elder Macri's ties have arguably not defined his son's outlook, since he developed that part of his business at a stage in his career when his son was involved in other activities, such as running the Boca Juniors soccer team and serving as mayor of Buenos Aires. Yet, Mauricio Macri has experience with China in his own right. When the Chinese traveled to Buenos Aires in July 2014 to promote business between the PRC and the city, then Mayor Macri called China "a great opportunity."[27]

Despite the previously mentioned successes and Macri's experience and receptivity toward China, multiple important projects with PRC-based companies have foundered during his administration. These include construction of a gas pipeline in Cordoba, frozen by a dispute over the supply of the tubing by a Chinese vendor who beat out the local supplier, Techint, on price.[28] It also includes two hydroelectric projects on the Santa Cruz River, halted on environmental grounds by the Argentine Supreme Court.[29] In addition, none of the major weapons sales negotiated by Macri's predecessor have gone forward, including plans to purchase Chinese FC-1 fighters (with some production in Argentina as an offset), armored vehicles such as the Norinco WMZ-551 and VN-1 personnel carriers, Z-9 helicopters, and offshore patrol vessels (the endurance of which was reportedly insufficient for the operational demands of the long Argentine coastline).[30]

Perhaps Macri's biggest fight with the Chinese has been his refusal to formally recognize the PRC as a market economy within the framework of the World Trade Organization. Argentina's production minister Francisco Cabrera stated publicly in December 2016 that the government would not make a definitive declaration, but would instead review Chinese activities on a case-by-case basis, suggesting concern that overtly rejecting China's market status could endanger Chinese investments in the country.[31]

Beyond the PRC, Macri's efforts to broaden Argentina's engagement with Asia include the visit by Japanese Prime Minister Shinzo Abe to Argentina in November 2016, as well as his meetings with the leaders of South Korea, Australia, and India during the G-20 summit in Hangzhou, China.[32]

Russia. Macri's presidency has contributed to the derailing of multiple military and commercial deals between Argentina and Russia, although he has tried to do so without sending an overtly hostile message. Argentine Defense Minister Julio Martinez and joint chiefs of staff head Bari del Valle Sosa traveled to Russia in the fall of 2016, meeting with defense officials and arms suppliers, yet almost none of the arms contracts discussed at the end of the Fernández administration have gone forward, including purchase of Su-24 Flanker fighters.[33] Even the controversial renting of Russian ships for the nation's Antarctica campaign was canceled in September 2016, and questions have emerged regarding the purchase of three Russian Mi-17 helicopters.[34]

Nor has Russian commercial engagement with Argentina prospered under Macri. In December 2016, plans for construction of the Chihuido hydroelectric facility by the Russian company InterRao were halted over a dispute over the rate of interest for financing the project. Even the Russian-language television channel *Russia Today* was taken off the air in June 2016, in what Russian Foreign Minister Sergei Lavrov called an "unfriendly act." *Russia Today* later reached an agreement allowing it to continue on the air.[35]

Iran. The Macri government has effectively ended the informal rapprochement with Iran that President Fernández had pursued since her January 2013 meeting with Hugo Chávez and Fidel Castro in Havana, Cuba. Indeed, in December 2016, Macri's justice ministry opened an investigation into his predecessor's possible cover-up of Iran's role in terrorist attacks against Jewish targets in Buenos Aires in 1992 and 1994.[36] Yet, on the commercial front, the January 2016 termination of international sanctions against Iran creates the opportunity for Iran's commerce with Argentina to significantly expand, including the possibility that it could increase direct purchases of Argentine grains and rice.

A police officer searches a man during an 11 April 2014 drug raid in the "21" slum in Buenos Aires, Argentina. The rising use of drug-trafficking routes through Argentina is also leading to greater drug use within that country, fueling growing violence between gangs battling to control turf and markets. (Photo by Natacha Pisarenko, Associated Press)

Nonstate actors. An estimated two hundred thousand practicing Muslims live in Argentina, and Buenos Aires is the site of the largest mosque in South America (the Saudi Arabia-sponsored King Fahd mosque, affiliated with the Wahhabi sect within Sunni Islam).[37] Yet, the nation takes pride in the relatively peaceful cohabitation of its large Muslim, Jewish, and other communities.

While the Macri administration has not canceled his predecessor's commitment to bring three thousand refugees into the country from Syria, potentially including radicalized Muslims, the onerous screening and placement requirements established by the government have permitted the entry of fewer than ten families, all of whom had applied under the previous government.

Latin America. Macri's presidency has helped to shift the South American region from a center-left pragmatism to a less ideological, center-right one, in which Argentina plays a more active role. Macri has ideological differences with Uruguayan president Tabare Vasquez, including over Venezuela's membership in *Mercado Común del Sur* (Southern Common Market, more commonly known as MERCOSUR). However, Vasquez is a pragmatist, and is reportedly much happier dealing with Macri than with Macri's predecessors such as Néstor Kirchner, who opened a serious dispute with Uruguay in 2005 over the construction of the Botnia paper mill on the border between the two states.

Chilean President Michelle Bachelet has embraced an expanded role for Argentina as an observer of the Pacific Alliance, and a closer relationship between the latter and MERCOSUR—a position that will likely be supported by other Pacific Alliance members as the region looks for new trade integration frameworks to offset the expected U.S. withdrawal from the Trans-Pacific Partnership under President Donald Trump.[38]

With respect to regional institutions, Macri has de-emphasized the two multilateral groups exclusive of

the United States of which Argentina was part— *Unión de Naciones Suramericanas* (Union of South American Nations, or UNASUR) and *Comunidad de Estados Latinoamericanos y Caribeños* (Community of Latin American and Caribbean States, or CELAC)—relegating affairs regarding both to the vice presidency. Correspondingly, Macri has increased Argentine support for using the Organization of American States (OAS) to address regional security affairs. However, given the OAS need for consensus among its members to make key decisions, the continuing anti-U.S. orientation of member states such as Ecuador, Bolivia, and Nicaragua will impede meaningful expansion of the role of the OAS in regional security affairs in the near term.

Near-Term Challenges

While the direction that Mauricio Macri is taking Argentina is promising for the United States and the region, the country stands at a dangerous crossroad. During 2016, the president's utility-sector reforms produced politically painful 300 to 400 percent increases in utility prices, significantly affecting the pocketbook of Argentines and small businesses; further increases are expected in 2017.[39]

Despite Macri administration policy and rhetoric that suggested a more business-friendly environment, investors did not return to the country at the rate expected. They were spooked by opposition-supported legislation in December 2016 that threatened to reimpose the mining export tax and the prospect that the Peronist Party could return to the presidency in 2019, either in the form of (sometimes) Macri political ally Sergio Massa or Cristina Fernández de Kirchner, if she is not sentenced to jail.[40]

Amidst significant protests over utility rate hikes and other policies of the Macri administration, the economy contracted by 1.8 percent in 2016. At the end of December, Finance Minister Alfonso Prat-Gay resigned over differences with Macri in his approach, and the government announced the intention to split the ministry.[41] The combination of painful adjustments and a lack of strong evidence that Macri's policies were producing results increases the risk that Argentina's October 2017 legislative elections could go badly for Macri's Cambiemos coalition, undercutting his ability to further pursue his agenda.

Macri is operating in the shadow of the fact that his is only the third non-Peronist government since Argentina's return to democracy in 1983, and the other two ended prematurely. The first, Raul Alfonsin of the Radical Civic Union party, was president during Argentina's transition to democracy from 1983 to 1989; Alfonsin resigned under pressure six months prematurely as part of that transition. The second, Fernando de la Rua, also of the Radical Civic Union, was president from 1999 to 2001; he resigned amidst Argentina's severe 2001 economic crisis.

Recommendations for the United States

Although the Macri administration in Argentina does not seek to unconditionally ally itself with the United States, its support of a free market economy, strong democratic institutions, and transparent, nonideological international engagement are aligned with the interests of the United States and advance prosperity and democracy in the region. The United States has a stake in helping Macri and his government to succeed.

From an economic perspective, the incoming U.S. administration of Donald Trump should begin by openly recognizing the positive direction Argentina has taken and the progress it has made. The United States—through its public and private statements, technical assessments of the U.S. Treasury Department, the resources of the U.S. Export-Import Bank, and U.S. leverage with the Interamerican Development Bank and World Bank—should facilitate Argentina in obtaining the international credit that it needs to make it through such difficult times. Through such actions, the Trump administration should encourage expanded U.S. investment in the country, while the U.S. Congress should consider special legislation incentivizing such investment. Over the long run, the United States should consider granting Argentina special unilateral trade preferences. Pursuant to Argentina's economic stabilization, the United States should support Argentina's candidacy to the Organization for Economic Cooperation and Development in a more forceful fashion than the gesture made by the outgoing Obama administration.[42]

To support Argentina's fight against narcotics, the new U.S. administration should fully back expanded cooperation between the U.S. Department of Treasury's Financial Crimes Enforcement Network and Argentina's Financial Intelligence Unit. It should

also continue U.S. Drug Enforcement Agency support for the interagency task forces being established in the north of Argentina, and it should provide assistance to Argentina's whole-of-government fight against narcotrafficking and insecurity.

With respect to defense cooperation, the United States should continue to expand engagement, and it should ensure a continued successful linkage between Argentina and the Georgia National Guard through the State Partnership Program. It should also seriously consider offering Argentina access to Foreign Military Financing, reserved for close U.S. friends and allies. Access to this program could be useful for Argentina in the acquisition of defense articles such as the Stryker combat vehicle. It would also demonstrate U.S. support to Argentina and the benefits of working with the United States. The United States should also consider financed billets for Argentine officers at the Army War College and Air University in addition to Argentina's current billet at the Naval War College.

For the United States, the dramatic change in tone in the U.S.–Argentina relationship and the rapid expansion of cooperation with the nation in 2016 was one of the best "good news" foreign engagement stories of the year. Yet, the Macri administration remains worrisomely fragile as it enters 2017. Through modest support for the Argentine government such as the recommendations discussed in the preceding paragraphs, the United States can help Macri succeed and, in the process, advance its own interests, those of Argentina, and those of the region. ■

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Addressing Behavioral Health Impacts

Balancing Treatment and Mission Readiness

Lt. Col. Christopher Landers, U.S. Army

The 2015 *Army Health of the Force Report* found that 17 percent of the force is medically not ready.[1] This rate includes soldiers with both physical and behavioral health concerns. Despite the significantly different challenges faced by soldiers as compared to their civilian counterparts, soldiers continue to demonstrate amazing resilience. Still, 15 percent (2014 prevalence rate) of the force has been diagnosed with a behavioral health disorder for which they require treatment.[2]

If the Army asked commanders in the field what they think is the greatest challenge to individual soldier fitness in recent years, many might tell the Army it is the seemingly steep rise in behavioral health-related problems, jumping from 9.4 percent diagnosed in 2007 to 15 percent in 2014.[3] In a substantial number of cases, the behavioral health condition leads to an inability, at least partially, of a soldier to perform his or her wartime mission. In 2014, soldiers with behavioral health conditions totaled about eighty thousand hospital admissions and one million medical encounters.[4] That is the equivalent of nearly an entire battalion spending three months in the hospital each year. Not included in that estimate are the thousands of patients who received a duty profile that relieves them from performing their assigned function.

The Mission Readiness Challenge

As economic, political, and global considerations drive the Army ever smaller, the challenge of maintaining combat readiness grows. A smaller force is more vulnerable to become less combat ready due to nonavailable soldiers; the smaller the force the greater the operational impact of nonavailable soldiers.

Therefore, issues associated with behavioral health that may determine the availability of a soldier, including anxiety, posttraumatic stress disorder (PTSD), depression, and suicidal behavior have a significant and growing impact on unit readiness across the Army. More worrisome than the scale of the problem is the Army's seeming inability to protect and maintain unit readiness while still providing for the treatment needs of soldiers.

Current protocols for treatment and separation, if required, leave very little flexibility for commanders as they try to preserve readiness. Prevention, diagnosis, and treatment of behavioral health problems have received considerable, and well-needed attention, but as the Army has made strides in suicide prevention, it has created another problem: a decrease in the Army's available population for training and deployment. To deal effectively with the challenge of balancing soldier needs with unit readiness, commanders need flexibility in order to effectively treat those who need care in a way that minimizes impact on unit training and operations.

Addressing the Behavioral Health Problem

In the middle of what is now a fifteen-year war effort, the Army recognized a significant gap in its ability to diagnose and effectively treat behavioral health conditions that were resulting in a sharp increase in PTSD

Staff Sgt. Jerry Majetich holds an emotional Cpl. Charles Dupree, Orlando Warrior Transition Unit, during Operation Proper Exit 16 June 2010 at Contingency Operating Station (COS) Falcon, Iraq. Dupree's unit was attacked in October 2005 in Al Dora. COS Falcon was the wounded warriors' first stop while in Iraq. (Photo by Spc. Jared Eastman, U.S. Army)

and depression-related suicides. In response, the Army requested that the National Institute for Mental Health establish a team of researchers to help with the problem. Subsequently, the Army initiated the Study to Assess Risk and Resilience in Servicemembers (STARRS) program in 2009 and reported each year through 2015. Army STARRS investigators looked for factors that helped protect a soldier's mental health as well as those that put a soldier's mental health at risk.[5] The Army STARRS research team designed and implemented five study components to analyze the problem, looking separately at each to better understand the problem and provide constructive recommendations.[6] Over the last few years, the team of researchers has produced more than thirty studies.

Concurrently, the secretary of the Army directed the vice chief of staff to "take a holistic look and identify

Staff Sgt. Paul Bryant leads a team of service members who are recuperating from injuries in the Wounded Warrior Canoe Regatta 18 August 2013 in Honolulu, Hawaii. (Photo by Mass Communication Spc. 1st Class Daniel Barker, U.S. Navy)

systemic breakdowns or concerns in the Integrated Disability Evaluation System (IDES) affecting the diagnosis and evaluation of behavioral health conditions."[7] To accomplish the task, the Army created the Army Task Force on Behavioral Health (ATFBH) in 2012, which conducted a comprehensive review and produced the *Corrective Action Plan* (CAP) to address and rectify identified breakdowns or concerns.[8]

Findings, Results, and Impacts on Readiness

The Army STARRS research project and the CAP served two key purposes. First, the Army STARRS studies sought to help prevent or predict behavioral health problems by identifying potentially at-risk soldiers and factors or conditions that may put more soldiers at risk (or increase the risk for those already identified as at risk).

According to the study, soldiers are at greatest risk if they are male, white, and junior enlisted. Not having graduated high school and recent punishment or demotion are also identified as risk factors. Being previously deployed or currently deployed also places soldiers at higher risk, especially among the female population.

Contrary to popular belief, however, the study identified a marked increase in suicide events and behavioral health disorders among never-deployed soldiers. Those at perhaps greatest risk for suicidal ideation or attempts are those with preenlistment psychiatric diagnoses. About half of all suicide cases (ideation, plans, or attempts) had preenlistment onset.[9] This is not surprising, as across the United States, "the estimated prevalence of any DSM-IV anxiety, mood, behavior, or substance disorder in this sample was 53.1 percent. ... The vast majority of cases (91.6 percent) had onsets that were prior to expected age-of-enlistment if they were in the Army."[10]

The implications of these research results are significant. Effective preenlistment screening could essentially preclude half of Army suicide-related events by preventing those with anxiety, mood, behavior, or substance

abuse disorders from enlisting. Of course, there are problems with such an undertaking. Though submission of medical records is required for initial screening if the applicant has indicated prior behavioral health treatment, how many are actually disclosing prior treatment? A quick web search reveals hundreds of prospective soldiers, sailors, airmen, and marines in online forums discussing what they should or should not disclose in order to pass screening. With that in mind, compulsory submission of insurance data and claims may reduce successful attempts at deception. Enhanced psychological screening similar to that undergone by special operations forces would almost certainly help reduce the accession of unsuitable soldiers, but the undertaking would likely be cost- and time-prohibitive on such a large scale.

The CAP focused on treatment. Better access to care (e.g., behavioral health specialists embedded with Army brigade combat teams), better understanding of the problem, and more effective and efficient IDES processes all have served to increase the overall quality of care for affected soldiers. The CAP included "24 findings and 47 recommendations to improve the behavioral health diagnosis and evaluations in the context of IDES."[11]

Some of the important recommendations, now implemented, include: an expanded embedded behavioral health program that aligns providers with deployable brigade-sized units; standardization of diagnosis and evaluation of soldiers with PTSD; streamlined IDES process; revision of Army Regulation (AR) 635-40, *Physical Evaluation for Retention, Retirement, or Separation,* into a single, comprehensive regulation for IDES; developed IDES performance measures that graded speed through the process and quality of care; better education for senior Army leaders on behavioral health-related issues in IDES; better training for behavioral health leadership and administration; better personnel manning related to diagnosis and treatment of behavioral health-related issues; clarification of commanders' legal options for administrative action involving soldiers with a behavioral health condition; revised policy on the surgeon general review of all soldiers pending discharge for personality disorder; and several others.[12]

Though it is difficult to state conclusively, the implementation of the ATFBH CAP and other soldier-led prevention programs are likely to have played a major role in the recent downturn in suicides and nonfatal suicide events. Reduction in suicide events appears to be a clear and unmistakable success. There is little doubt that soldiers are more readily diagnosed, more expertly treated and, unfortunately, more often deemed nonavailable (at least temporarily).

Overall, the Army's response to the behavioral health crisis has been generally along two lines of effort. First, to diagnose and treat those with conditions related to military service for whom medical retirement is appropriate. Second, to screen out soldiers who cannot adapt to military life due to preexisting behavioral health conditions. The current system seems to focus more significantly on the former and may not be ideally suited to handle the latter.[13]

Recommendations to Mitigate Impacts to Unit Readiness

Above all, the Army should not change how it now identifies, diagnoses, and cares for its soldiers who suffer from behavioral health conditions that require treatment. The Army has made great strides in prevention, diagnosis, and treatment in recent years. The unintended consequence is that an increase in prevalence has caused a corresponding decrease in unit readiness. Eighty thousand hospital days per year is hard to absorb for an Army whose number one priority is readiness.[14]

While prevention and treatment have been the appropriate focus, more attention must be paid to maintaining unit readiness at the tactical level. Every nonavailable soldier has a significant and growing negative impact on readiness as the Army shrinks while commitments grow. Some additional actions to assist commanders in maintaining readiness are worth consideration.

First, increase the Army's commitment to and utilization of Warrior Transition Units (WTUs) for soldiers whose behavioral health condition prevents them from serving in a productive capacity. Existing at most major installations,

> A WTU closely resembles a "line" Army unit, with professional cadre

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A SIMILAR VIEWPOINT

Cpl. Kyle Click, a dog handler with 3rd Platoon, Kilo Company, 3rd Battalion, 3rd Marine Regiment, and a native of Grand Rapids, Michigan, shares a moment with Windy, an improvised-explosive-device detection dog, while waiting to resume a security patrol 27 February 2012 in Garmsir District, Helmand Province, Afghanistan. (Photo by Cpl. Reece Lodder, U.S. Marine Corps)

A Call for Research on the Impact of Dogs Deployed in Units to Reduce Posttraumatic Stress

Rebecca Segal

There is evidence that dogs should be deployed in forward-operating units to reduce the incidence and severity of posttraumatic stress disorder (PTSD). PTSD is a major medical concern for the U.S. military, yet current therapies are of limited effectiveness, and they do not begin until weeks after a stressful event.[1] The body's response to stress actually begins on day zero and, if severe, is referred to as an *acute stress*

In a related story, "A Call for Research on the Impact of Dogs Deployed in Units to Reduce Posttraumatic Stress," Rebecca Segal espouses deploying support or service dogs to combat theaters to help speed diagnosis and treatment of individuals with posttraumatic stress disorder. Like Lt. Col. Landers, Segal recognizes the significant negative effects that mental health issues such as posttraumatic stress can have on unit readiness. Segal stresses that the costs of this affliction in lost productivity, health care, and unit cohesion make this pet therapy initiative an imperative.

For online access to Segal's "A Call for Research on the Impact of Dogs Deployed in Units to Reduce Posttraumatic Stress" in the November-December 2016 issue of *Military Review*, visit: http://usacac.army.mil/CAC2/MilitaryReview/Archives/English/MilitaryReview_20161231_art015.pdf.

and integrated Army processes that build on the Army's strength of unit cohesion and teamwork so that wounded soldiers can focus on healing before transitioning back to Army or civilian status. Within a WTU, wounded, ill, and injured soldiers work with their Triad of Care—primary care manager (normally a physician), nurse case manager, and squad leader—who coordinate their care with other clinical and non-clinical professionals.[15]

Soldiers in WTUs are solely focused on recovery in preparation for a return to service or transition to civilian life.

Many soldiers assigned to WTUs are concurrently enrolled in the IDES process. In IDES, injured and ill soldiers receive treatment and evaluation to either return the soldier to service or render an "unfit" determination and process the soldier for transition. Like those who are physically unfit, most (there are exceptions) soldiers to be separated for being unfit due to a behavioral health condition must complete the IDES process, with a goal of 295 days from start to finish.[16]

Assigning a soldier to a WTU as early as possible in the evaluation process allows the soldier to continue appropriate treatment while simultaneously helping to sustain unit readiness through the replacement process. Currently, most soldiers enrolled in the IDES process for separation remain assigned to the unit as a nonavailable soldier, with obvious impacts to readiness. A challenge faced by commanders is that AR 40-58, *Warrior Care and Transition Program,* expressly prohibits admission to WTUs for the purpose of maintaining unit readiness through acquisitions. Further, admission for psychological conditions must be of a severity that the soldier poses a *substantial* risk to self or others if the soldier remains in the unit.[17] Few soldiers in treatment meet this threshold (at least initially), though many receive duty-limiting profiles that are detrimental to readiness. As a result, it is not uncommon for a battalion-sized unit to have dozens of soldiers in IDES pending separation—all nonavailable for the entire 295 days (assuming the IDES timeline goal is met).

Second, the Army and the Department of Defense (DOD) should follow through with an important CAP recommendation: a statutory revision of DOD Instruction 1332.38, *Physical Disability Evaluation,* and AR 635-200, *Active Duty Enlisted Administrative*

Spc. Gerrick Cole, Sgt. Michael Harris, and Lt. Col. Zabrina Seaymaynard practice playing the guitar in the Sounds of Acoustic Recovery (SOAR) program at the Dale Wayrynen Recreation Center, Fort Campbell, Kentucky. SOAR is an eight-week program that allows wounded soldiers to learn the basics of guitar or piano, or receive voice lessons at a beginner or intermediate level. SOAR provides therapy to help soldiers remain strong and recover from injuries in preparation for the next phase of their lives. (Photo by Lori Brenae Perkins, *Fort Campbell Courier*)

Separations, to allow up to 365 days for detection of a preexisting behavioral health condition in soldiers who have not deployed.[18] Currently, the preexisting behavioral health condition must be identified within the first 180 days, after which, discovery requires enrollment in IDES for separation. As the CAP states,

> Preexisting BH [behavioral health] conditions often do not manifest in the structured and regimented periods of initial entry training. Allowing detection up to 365 days allows more time to detect an illness.[19]

This change would allow for a separation under chapter 5-11 (separation of personnel who did not meet procurement medical fitness standards) through a soldier's first six months at their first unit. This is especially important as over 75 percent of never-deployed soldiers who have a diagnosed disorder reported a preenlistment age of onset.[20] Not only do three-quarters of diagnosed disorders begin before enlistment, but they are also more powerful predictors of severe role impairment than disorders with post-enlistment onset.[21] The pursuit of a separation under chapter 5-11 via the medical evaluation board should not be construed as a denial of care. Since the CAP recommends that a soldier separated under chapter 5-11 between 181 and 365 days remain eligible for an honorable characterization of service, full VA benefits apply.

The data certainly suggests that limiting accessions of those with pre-enlistment mental disorders could help minimize the problems that materialize later in service, but diagnosis is difficult since symptoms are usually minor in adolescence and too mild to cause rejection from military service.[22] Even if the prospective soldier is aware of a disqualifying diagnosis, he or she is not always going to disclose it since doing so is self-limiting.

Lastly, the Army should consider extending chapter 11, "Entry Level Performance and Conduct," to

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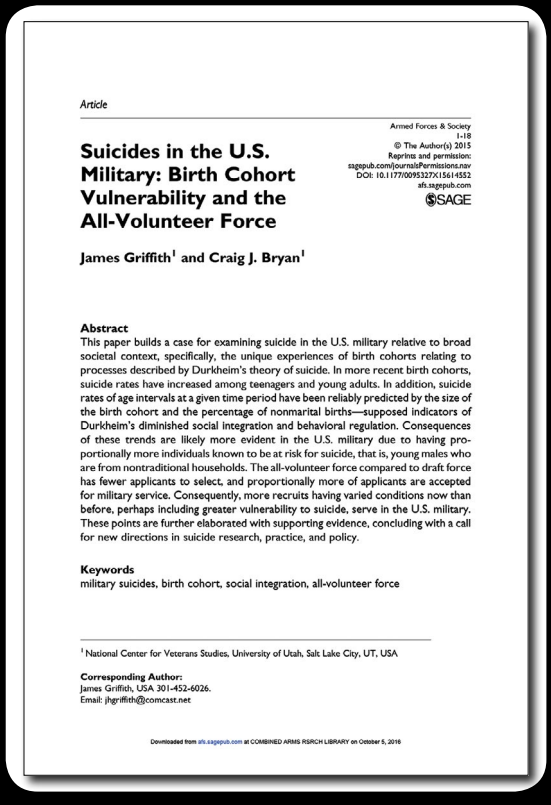
WE RECOMMEND



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Suicides in the U.S. Military: Birth Cohort Vulnerability and the All-Volunteer Force

James Griffith[1] and Craig J. Bryan[1]

Abstract

This paper builds a case for examining suicide in the U.S. military relative to broad societal context, specifically, the unique experiences of birth cohorts relating to processes described by Durkheim's theory of suicide. In more recent birth cohorts, suicide rates have increased among teenagers and young adults. In addition, suicide rates of age intervals at a given time period have been reliably predicted by the size of the birth cohort and the percentage of nonmarital births—supposed indicators of Durkheim's diminished social integration and behavioral regulation. Consequences of these trends are likely more evident in the U.S. military due to having proportionally more individuals known to be at risk for suicide, that is, young males who are from nontraditional households. The all-volunteer force compared to draft force has fewer applicants to select, and proportionally more of applicants are accepted for military service. Consequently, more recruits having varied conditions now than before, perhaps including greater vulnerability to suicide, serve in the U.S. military. These points are further elaborated with supporting evidence, concluding with a call for new directions in suicide research, practice, and policy.

Keywords

military suicides, birth cohort, social integration, all-volunteer force

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Among the most challenging and puzzling issues the U.S. Army has faced among combat veterans returning from Iraq and Afghanistan since 2002 has been the unusually high number of suicides as compared to the number of such incidents associated with previous wars. In "Suicides in the U.S. Military: Birth Cohort Vulnerability and the All-Volunteer Force," originally published in Armed Forces & Society in 2015, authors James Griffith and Craig J. Bryan provide original research from which they develop unique and persuasive explanations for the underlying causes of the unusually high number of suicides occurring among veterans of the U.S. Army. In conjunction, they recommend mitigating solutions aimed at lowering the number of suicides.

To access their paper, visit: http://afs.sagepub.com/content/early/2015/11/16/0095327X15614552.full.pdf+html.

365 days. Like chapter 5-11, separation under chapter 11 (often referred to as a "failure to adapt" chapter) is limited to the first 180 days of service, essentially covering initial entry training only. Relevant to this recommendation, this separation policy applies to soldiers who "cannot or will not adapt socially or emotionally to military life, or have demonstrated character and behavior characteristics not compatible with satisfactory continued service."[23]

Limiting this separation policy to 180 days is overly restrictive if commanders are really measuring a soldier's ability to adapt to military life. Like the previous recommendation regarding chapter 5-11, the regimented nature of initial enlistment training does not adequately replicate "military life," therefore successful adaptation to initial entry training does not equate to successful adaptation to the Army. The day-to-day stressors of looming deployments, field training, personal relationships, family concerns, financial management, and others are far different from the relatively straightforward life while in initial enlistment training. One could argue that a soldier has not really begun to experience military life until he or she arrives and is inculcated into his or her new unit. Only then, confronted with the aforementioned challenges, can the Army measure his or her adaptability. The impact of this recommendation lies in the fact that a statistically significant proportion of soldiers who experience a behavioral health incident (or seek treatment) report that the catalyst is the simple fact that they are in the Army and no longer wish to be. Simply put, they have not adapted and are not likely to.

The danger, of course, is in deception. Like all health treatment programs, the systems and protocols the Army uses to diagnose and treat behavioral health problems are subject to manipulation. One could argue that to a soldier who no longer wishes to serve, the allure of a speedy separation may lead him or her to manipulative behavior in order to get out of the Army. The concern certainly has merit, but there are few alternatives. In the absence of a quick separation, the soldier in question may join the twenty thousand (36 percent) newly accessed soldiers who do not complete their first term, often leaving the service after a lengthy separation for misbehavior or failure to perform.[24] Still worse, he or she may develop a legitimate behavioral health condition that results in roughly 295 days enrolled in IDES and potential long-term disability. The expeditious nature of this separation may outweigh the risk of manipulation by a handful of malingerers.

The Army's response to the behavioral health problem, suicide specifically, has been laudable. The time, resources, and people committed to the effort have created an environment

largely absent the stigma normally assumed to be attached when seeking help. Treatment is readily available and widely relied upon. On the Army's larger installations, behavioral health professionals see several thousand unique patients annually, the vast majority of whom are treated without the knowledge of their chain of command and continue to serve effectively. Increased awareness and ample resources naturally lead to a higher prevalence of behavioral health disorder diagnoses. It is unlikely that there are more people in need of treatment; more probable is that more are being identified as needing care. The result is a sharp increase in the number of nonavailable soldiers due to behavioral health conditions.

In a fiscally constrained Army, balancing treatment and maintenance of combat readiness becomes more critical. The tools exist to identify, diagnose, and treat the soldier. Now, commanders need tools to better manage the nonavailable soldiers and maintain mission preparedness. To be clear, the recommendations set forth here are not an attempt to limit care or overrule the recommendations of behavioral health specialists in the interest of commanders' concerns. In fact, they are the result of commanders working in collaboration with embedded behavioral health and medical staff to better balance the two lines of effort in addressing the Army's behavioral health issues.

The ability to promptly reassign all soldiers enrolled in IDES to WTUs and expeditiously separate soldiers under chapters 5-11 and 11 within the first full year of service may provide the necessary means for commanders to maintain mission readiness. Adverse effects of a growing nonavailable population are exacerbated in a downsizing force, which causes each case to have a unique impact. Moreover, nonavailable soldiers unable to perform their wartime function are collectively a distinct and distracting burden—one that draws leaders' attention from their wartime mission and the fully ready soldiers performing it. With a large and growing population of nonavailables in the Army, most commanders have made a simple observation: accomplishing the mission with fewer soldiers is easier than accomplishing it with nonavailable soldiers. ■

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Fixing the Army's Feeding System

We Can, and Should, Do Better

Maj. Joel M. Machak, U.S. Army

Chow halls, messes, galleys, and dining facilities (DFACs) are a ubiquitous part of military culture, regardless of service affiliation. Their history and evolution can be traced back as far as our military itself. From far-flung outposts to the garrisons that resemble cities, these facilities have served our soldiers, sailors, airmen, and marines for generations. Unlike other aspects of the military, garrison feeding programs have changed very little over time, rendering the current model less capable to address current soldier feeding requirements.[1] That is why it is time for a paradigm shift in how the Army approaches garrison feeding programs.

Garrison DFAC operations cost the Army hundreds of millions of dollars each year, and countless soldier man-hours on a system that continues to lose money.[2] The primary purpose of DFACs is to provide nutritious

Spc. Stanley Jean, 101st Combat Aviation Brigade, and Pvt. Antonio Fonville, 4th Brigade Combat Team, 101st Airborne Division, serve breakfast to hungry soldiers waiting in line at the 4th Brigade Combat Team Dining Facility 12 February 2013 at Fort Campbell, Kentucky. (Photo by Sgt. Kimberly K. Menzies, U.S. Army)

meals to enlisted service members who hold meal cards as part of their overall compensation package, but with an increased variety of meal choices in the private markets in close proximity to bases, coupled with increasingly limited access to DFACs, it is easy to see why utilization rates continue to decline.[3] A prime example of this problem can be seen in the recent closure of the Eagle's Nest Dining Facility at Fort Belvoir, Virginia. Less than a year after completing a $6 million renovation, this facility closed, primarily due to low utilization.[4] This example is not exceptional. In the coming years, the Army plans to close or consolidate one in three dining facilities based on low-utilization rates.[5] While consolidations and closures address unnecessary overspending on underutilized facilities, the underlying issues of limited access and increased competition from the private sector remain.

One of the major underlying causes of declining utilization rates in our DFACs is limited access to the facilities. According to a 2015 Government Accountability Office (GAO) report, junior enlisted members—the target customers for DFACs—indicated that limited access to DFACs often sways their decision regarding where to eat their meals.[6] Issues such as extended or irregular work schedules, distance to the facility, time spent in line, parking availability, or hours of operation negatively impact their ability to utilize their meal entitlements at a DFAC. Often, the easiest meal solution is to purchase a meal from a private vendor, either on or off post. When this happens, the soldier essentially pays for that meal twice: once with the actual rendering of payment for that meal, and again in an unused entitlement.

Consider those times when installations close DFACs, or temporarily consolidate them during the holiday season. The meal card holders who remain in the

barracks are afforded the opportunity to walk to a predesignated bus stop and take a bus to the DFAC, only at designated times, and then return to the barracks on the bus after consuming a meal. These soldiers must repeat this process each time they wish to consume a meal with their meal card under the current construct. Because of the inconvenience involved, meal card holders tend to opt for a more convenient solution, which means paying out of pocket. This then contributes to reduced DFAC utilization and perpetuates the issues of closing and consolidating these facilities. It is unrealistic to think that the current model of garrison, soldier-run dining facilities can continue to meet the requirements of the populations they are intended to support.

Campus-Style Concept

Because of the issues of increasingly limited access to DFACs and the ever-present availability of private options, soldiers often choose to consume meals away from their local DFAC. As a result, in order to optimize use of meal cards for their intended purpose of feeding soldiers, the Army should consider adopting a campus-style concept in which meal cards are accepted at any place that sells food on the installation. Colleges and universities across the country have successfully managed to meet the needs of their students and faculty by providing a wider variety of feeding program options, to include allowing students to use their meal plans at private food vendors located on campus. In fact, in 2012, the Joint Culinary Center of Excellence (JCCoE) conducted a holistic review of the Army's food service program and determined that the Army could benefit from such a model.[7]

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According to the 2011 GAO report, the Air Force has run a pilot test on the campus-dining concept with promising, though as yet tentative, results.[8] Col. Marc D. Piccolo, then commander of the U.S. Air Force Services Activity, asserted that the outcome of this practice has been a more efficient use of the meal card entitlements by service members, significantly increasing the number of meals served to meal card holders.[9] The JCCoE "Holistic Review of Army Food Service" examined the Air Force's pilot Food Transformation Initiative in 2012 and determined that these changes resulted in a 15.2 percent increase in utilization of services, and a 67.3 percent increase in patronage by enlisted meal card holders.[10] By adopting the Air Force approach, which reflects the best practices of colleges and universities, the Army could implement a similar campus-style solution where soldiers could use their meal cards to purchase meals not only at their local DFAC, but also clubs, restaurants paid for out of nonappropriated funds, or even exchange food courts. However, in order to effectively employ this concept, the Army would need to fully transition from the paper DD Form 714 meal card to a common access card-based meal card system and determine the best method to ensure these vendors have the capability to recoup funds from the meal cards.

Under such a campus-style concept, the current meal pricing framework could remain in effect. Let us say it costs a soldier $5.55 to eat lunch in a dining facility. Under the campus-style concept, a meal card holder would have $5.55 to spend on lunch at any restaurant on post. If the amount of food ordered costs more than the allotted amount for that meal period, the soldier would then pay the difference out of pocket.

With this, the Army could potentially divest itself of unit-managed DFACs, with a high potential for cost savings as a result.[11] In other words, the Army could remove the military occupational specialty 92G (food service specialist) soldiers from the DFACs and invite private companies to run feeding programs for profit. Certainly there are private companies who would be very interested in earning a portion, if not most of, an installation's collective meal entitlements. Such private companies would be responsible for all food acquisition, inventory management, marketing, packaging, personnel, and facility management. However, much like colleges and universities, meal pricing should be aligned with entitlements, or meal plans.

It is important to point out that the Army is taking measures aimed at increasing the utilization of its DFACs. Some of these measures include modifying hours, introducing grab-and-go kiosks and food trucks, expanding meal choices options, referring to Army cooks as chefs, and remodeling existing facilities in order to appeal to

Spc. Luke Wilson, Spc. Michelle Santiago-Lopez, Spc. Kallan Clements, and Staff Sgt. Raymond King from the Wiesbaden Strong Teams Cafe Dining Facility prepare meals from a mobile kitchen trailer to feed soldiers at Wackernheim Regional Range Facility 30 March 2016 in Wackernheim, Germany. (Photo by Dee Crawford, U.S. Army)

soldiers. The effectiveness of these efforts and investments remains to be seen. The challenge that remains is competition with commercial restaurants, in other words, the impact of profit motive on effective provision for soldier dining. Restaurants are motivated by one thing—profit, whereas DFACs, and the soldiers who run them, are not.

Additionally, restaurants can make changes more rapidly to their services in an effort to increase profit, and are unencumbered by the oftentimes thick bureaucracy of the military. Perhaps the Army could approach garrison feeding like a business and leverage the expanded, campus-style concept in its favor in order to help ensure that soldiers are making "healthier" choices if allowed to use their meal card at an on-post restaurant.

Meal plans. As an alternative to, or in conjunction with, the campus-style concept outlined above, the Army could adopt a meal plan concept. The Army meal-card program in its current state is both inconsistently applied and needlessly bureaucratic. The Department of Defense Financial Management Regulation 7000.14-R, *Special Military Pay/Personnel Programs and Operating Procedures,* requires single soldiers residing in the barracks be issued a meal card and receive rations from government mess facilities.[12] The accountability and record keeping pertaining to these cards can be complicated at best, or an opportunity for fraud at the worst. To complicate matters, commanders may authorize soldiers to receive full basic allowance for subsistence entitlements based on unique mission requirements or special dietary needs. The management and tracking of this is one of many corollary burdens placed on commanders.

Soldiers who work nonstandard hours may be unable to get a meal at a DFAC during normal operating hours. To mitigate this problem, there should be options for soldiers to adopt a meal plan that best fits their work

Soldiers, civilians, family members, and visitors dine at the Fort Hood Army and Air Force Exchange Service's (AAFES) Mega Food Court 30 September 2015 at Fort Hood, Texas. (Photo courtesy of AAFES)

schedule, and then change that meal plan as their duty hours change. College meal plans offer this sort of flexibility through a wide range of meal plans. For example, let us say that a soldier can only feasibly consume two meals a day during the week and all three meals on weekends. Should this soldier have to give up the entire amount of the basic allowance for subsistence entitlement in exchange for a meal card, even though he or she only consumes 76 percent of his or her meals in a DFAC? Or, could there be a meal plan option that allows that soldier to consume a predetermined number of meals per week and give them the remainder of the entitlement to spend on food elsewhere? By integrating a meal plan concept, soldiers could potentially alter their meal plans online in much the same way as they can set allotments, or change their Thrift Savings Plan contributions.

Consolidated field feeding company. If any of the aforementioned practices were adopted, and soldier-run DFACs were significantly reduced or eliminated, the manning levels of 92G soldiers required to support the Army's feeding programs would be most likely reduced. However, the requirement for the Army to feed itself in times of conflict and training would not disappear. In 2015, Combined Arms Support Command unveiled a consolidated field feeding company concept, where 92G soldiers are consolidated in a single company within sustainment brigades rather than spread across brigade combat teams and functional brigades.[13] The idea is that, as required, units can request a field feeding capability to support training or operational requirements much like they do with regard to transportation, laundry and bath, and other combat service support functions. Employing this concept could potentially eliminate the impact such training and operational events have on unit-managed DFACs.

This concept as currently portrayed, leaves the Army in the garrison feeding business since the 92G soldiers must still run day-to-day operations at DFACs. Additionally, the Army is still in the costly business of purchasing food and operating under-utilized facilities. The dollar figures do not even begin to

capture the opportunity costs involved with all of the other minutiae associated with garrison feeding.

What about the 92G soldiers? If nonappropriation of the DFACs were to occur, as described in the campus-style concept, these soldiers would be free of the obligation to operate and manage these facilities and could focus on their core competencies: field feeding together with basic soldier skills, in support of the Army's larger mission, to fight and win our nation's wars. Currently, commanders who have 92G soldiers in their formations are often forced to make special accommodations in order for these soldiers to meet basic soldier readiness requirements such as command maintenance, weapons qualification, training mandated in Army Regulation 350-1, *Army Training and Leader Development*, and the Army Physical Fitness Test due to the narrow window of hours these soldiers are available to train as a result of their food preparation duties.

By contrast, in a nonunit-managed DFAC model of garrison feeding, soldier-skill training could be more effectively managed since 92G duties would be more predictable as activities are aligned with unit field-duty requirements. However, such a circumstance might also risk downsizing if 92Gs were not fully used in direct support of food preparation to support troops in the field. Clearly, the Army would have to reassess the optimal end strength requirement for this specialty based on the new mission set requirements. In this scenario, there is again a wide range of options to consider, from reduction in active component numbers to military occupational specialty consolidation.

Implementing even a portion of the proposals discussed above would be a difficult endeavor involving a myriad of stakeholders across the Department of Defense and private industry. Additionally, the current culture and attitudes pertaining to how the Army views its relationship with DFACs would have to change. The changes recommended here are in line with those made in a recent article by retired Lt. Gen. David Barno and Nora Bensahel, calling for "long-term institutional support missions" to "be civilianized or contracted to free up both military and civil service manpower."[14]

Joint base situations present another set of concerns, such as disparity in garrison food service from one service to the next. However, ideally, our sister services would work with the Army toward interoperability, mitigating disparity between services on a joint base. In other words, an airman, marine, or sailor should be able to partake in Army garrison feeding programs the same way that a soldier can; and vice versa with regard to entering non-Army food service facilities. To that end, garrison commanders would still maintain some measure of oversight responsibility for the privatized facilities.

The time and effort involved in such a monumental change would be tremendous, but worthwhile. By fundamentally altering the Army's Food Service Program, the Army could focus better on core competencies that allow us to focus on our mission: fight and win our nation's wars, while potentially saving hundreds of millions of dollars each year in the process. ■

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Members of the Peshmerga's Zeravani Force advance toward the front in a convoy 14 August 2016 near the Mosul Dam in Iraq. (Photo courtesy of Ministry of Peshmerga Affairs)

Tactics, Techniques, and Procedures of the Islamic State

Lessons for U.S. Forces

Matthew F. Cancian

Trucks packed with explosives and guided by sacrificial drivers, fields of simple improvised explosive devices (IEDs), and chlorine gas: these tactics, techniques, and procedures (TTP) are familiar to those who have studied or participated in the American counterinsurgency campaigns in Iraq and Afghanistan (collectively, the "9/11 Wars"). Now, however, they are being adapted and practiced on a massive scale along the

seven-hundred-kilometer-long front line between the Kurdish Peshmerga and the Islamic State (IS).

The advancement of TTP used by IS indicates that it is a learning organization that has studied and incorporated lessons from the experience of other insurgents who have fought against the United States. Like any military, IS members are eager to learn from the experiences of others. In response, learning about IS's TTP is essential for U.S. forces if we are going to win the current fight, as others writing for *Military Review* have exhorted us to do.[1] Just as IS has learned from previous nonstate armed groups, other groups can learn and adapt from its TTP. Consequently, U.S. operators would do well to learn about IS's TTP and adapt accordingly for our next confrontation with nonstate armed groups.

I had the opportunity to visit the Kurdistan Region to conduct research three times in 2015 and 2016, staying a few weeks each time. On each occasion, I was able to speak with senior security officials in the Kurdistan Regional Government to gain the perspective of strategic military leaders on the threats they faced before I traveled to the front. On two of the occasions, I visited one unit west of Kirkuk, commanded by Dr. Kemal Kirkuki, and I was thus able to observe some progress on that front. On my last trip, in the summer of 2016, I stayed with the elite Zeravani commando battalion near the Mosul Dam. The Kurds have a keen sense of hospitality, and they were willing for me stay in their patrol bases, discuss their experiences, and observe them on the front.[2]

This article, based on that field research, aims to begin a more rigorous analysis than what is available from media reports. Previous articles on defeating Islamic jihadism, such as Allen B. West's "The Future of Warfare against Islamic Jihadism: Engaging and Defeating Nonstate, Nonuniformed, Unlawful Enemy Combatants," have focused on strategic imperatives; this article primarily focuses on the tactical level.[3] It investigates the principal TTP in IS's conflict in Northern Iraq and makes several recommendations on countering specific TTP for future U.S. commanders who will fight in the Middle East against IS or any group that will have learned from IS. It concludes that the United States should establish a combined lessons-learned team with the Peshmerga to systematically investigate the TTP of IS, the effectiveness of Kurdish responses to them, and how U.S. forces might best respond in future conflicts.

Learning among Militaries

The literature on learning among militaries indicates they tend to learn more during wartime, and that learning is quicker in response to strategic exigencies rather than in response to organizational factors.[4] Being a group at war, with many strategic pressures, IS fits the bill of an organization likely to be highly adaptable. The forerunner of IS, al-Qaida in Iraq (AQI), was nearly extinguished after the Sunni Awakening and the U.S. surge in 2006, which subjected remaining al-Qaida members to high pressure to innovate or be eliminated. The lessons it learned from al-Qaida, combined with the free availability of information about the TTP of other insurgents on the Internet, meant that IS possessed the means and the motivation to adopt new TTP.

Militaries can generate new ideas within themselves, or they can borrow ideas from other organizations. As an example of the latter, Frank Hoffman has written about the learning process for U.S. submarine action in the Pacific, where U.S. "wolf pack" tactics were copied from their use by the Germans in the Atlantic and implemented through an initially top-down process in the U.S. Navy.[5] While many members of IS were members of AQI, they adopted TTP from other insurgent groups, in a manner similar to how U.S. submariners in the Pacific learned from the experiences of the German U-boats.

Many aspects of IS are opaque to outsiders. Generally, IS seems to have a decentralized command structure where tactical learning is left to the discretion of local emirs who draw on the lessons of their past experiences and from their peers, rather than a top-down doctrinal learning format. Previous work on IS's TTP attempted to see them as adaptations of the tactics of the Baathist regime of Iraq under Saddam Hussein because many IS members were formerly officials in that regime. This analysis was unsatisfactory because, though IS does seem to have a penchant for

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firepower similar to the old Iraqi army, there are many differences in terms of intelligence collection, force ratios, and guerrilla tactics.[6]

As a result, IS's TTP should be viewed as an eclectic mix of learned TTP that mostly draw from those used by insurgents during the 9/11 Wars, rather than as an evolution of Baathist military TTP. This conclusion is logical, given the high numbers of IS fighters who participated in the campaigns against the United States in Iraq and Afghanistan, and the similarity of IS's TTP to those employed by other anti-American insurgents.

Improvised Explosive Devices: Quantity Has a Quality if Its Own

The rise of IED use in the insurgencies in Iraq and Afghanistan is well known. From primitive beginnings using widely available military-grade explosives, IED usage evolved over the course of the 9/11 Wars to include a variety of sophisticated triggering mechanisms and employment strategies. The result was that IED attacks caused roughly half of the total U.S. casualties during these wars.[7] The evolution of IED tactics over the course of the war was an excellent example of the interactive nature of Carl von Clausewitz's conception of war (*Zweikampf*, or a duel).[8] When insurgents employed cell phones and radios to remotely detonate IEDs, the coalition developed sophisticated methods of electronic jamming. When the coalition employed mine rollers to detonate pressure-plate IEDs in front of the vehicles, insurgents began to offset the charge from the triggering device (or to delay detonation) to ensure that the detonation would still damage vehicles. For all of the asymmetry in resources between America and the insurgents, the simple fact is that while we could mitigate the IED threat, it remained the most effective single technique that insurgents could employ.[9] The effectiveness of IEDs against U.S. forces meant that they were a highly visible technique for IS to borrow.

Today in Iraq, IS tends to employ large numbers of small, unsophisticated, victim-initiated IEDs made with homemade explosives in order to limit the mobility of the Peshmerga forces and to raise the strategic costs of offensive action. Devices tend to have a small amount of explosives in the main charge, sufficient only to wound or kill a single combatant on foot. IS's IEDs tend not to be daisy-chained together; there is only one main charge for each triggering mechanism. The low-charge, victim-initiated devices are also employed in choke points such as doors and in conjunction with items that the Peshmerga will be tempted to tamper with, reminiscent of the booby traps used by the Viet Cong during the Vietnam War.[10] Over the course of the war, the Kurdish Peshmerga engineering team has defused over eleven thousand IEDs.[11] It should be borne in mind that this is a specialized unit, and the number does not account for all of the IEDs recovered by the maneuver units of the Peshmerga. Some of these IEDs are arranged in dense fields organized along expected axes of advance for any Peshmerga offensive; over twenty tons of IEDs were recovered during a recent offensive in the village of Bashir in southern Kirkuk.[12]

To avoid these IED fields, the Peshmerga try to launch attacks on IS strong points from unexpected locations that are less likely to be mined. The wide-open terrain and long length of the front line mean that it is impossible for both sides to constantly surveil the entire front. While this causes problems for the Peshmerga when IS launches infiltration attacks, it also seems to allow the Peshmerga to advance on IS's fortified towns from unexpected directions. This is an important lesson for the future for tactical decision makers; attacking from an unexpected and unobserved direction is even more important in an IED dense environment.

Conventional militaries emphasize the need for observation of minefields, coordinating the use of direct and indirect fires onto a minefield to prevent the enemy from demining the area. In contrast, IS tends to have a "throw it out and see if it sticks" approach to the employment of IEDs. Some IED fields are positioned so they will impede the Peshmerga and fix them inside a kill zone, but many more are employed where IS could not reasonably expect to observe them. This lack of tactical sophistication means that for the volume of effort IS fighters put into their IEDs, they accrue relatively little tactical advantage. Nevertheless, this strategy is logical given that conflict is between two more or less conventional forces that both hold territory. In this context, it makes little sense to tie up personnel watching and eventually triggering complex command-detonated IEDs. In the case of a conventional attack by the Peshmerga, IS needs all available personnel employing small-arms and crew-served weapons to fight. Tying up manpower by observing command-detonated IEDs is simply not feasible for IS.

By contrast, insurgents fighting the United States during the 9/11 Wars could afford to spend their manpower watching large, command-detonated IEDs, waiting

Peshmerga forces assemble prior to an assault 14 August 2016 near Kirkuk, Iraq. (Photo courtesy of Ministry of Peshmerga Affairs)

for an American to get close, because they did not have to spend manpower holding ground in a conventional fight at the same time. More complicated main charges, such as explosively formed projectiles, are similarly unnecessary given how uncommon armored vehicles are in the Peshmerga. Complicated anti–explosive-ordnance-disposal (anti–EOD) techniques, such as rigging IEDs to trigger when tampered with, were also not reported. These TTP might be used by IS, particularly in other areas of operation where IS functions more as an insurgency and a terrorist group than as a conventional military, but they were not prevalent in any of the areas I visited.

IS employs IEDs to reduce the tempo of the Peshmerga's operations by forcing the Peshmerga to sweep for IEDs and by inflicting casualties that increase the strategic costs of operations. At the beginning of the war, the Peshmerga possessed almost no capability to deal with IEDs on this scale. Today, there are specialized engineering detachments; knowledge of IEDs and the TTP required to defeat them have spread via word of mouth and formal training, held by either the Peshmerga itself or by coalition partners. Some units that I visited, however, still did not even have metal detectors, despite the units having led offensive operations against IS. Even with proper equipment against simple IEDs, no IED detection and removal effort will have a 100 percent success rate. Thus, the IEDs have two chances to inflict damage—first, on the maneuver unit, and second, on the EOD unit clearing IEDs.

Rather than increasing the probability of success or the number of casualties per device, IS bets on simply increasing the number of devices in the hope that some will be undetected and triggered, and that of those that are detected, some will still inflict casualties. Even if there is only a 0.1 percent chance that an EOD unit will trigger a simple device when defusing it, eventually a Peshmerga EOD unit will be unlucky and hit that 0.1 percent, thereby reducing a highly skilled and much needed asset. While this strategy does not have decisive tactical effects, it does slow down operations and inflict casualties.

These TTP have many similarities to Taliban TTP in Helmand Province, Afghanistan. In Sangin, Afghanistan, the Taliban invested significant resources into putting out a high volume of relatively unsophisticated antipersonnel

IEDs. This tactic was successful in limiting the operational mobility of British forces, who were effectively hemmed in to the district center by IEDs. When marines took over in 2010, operational mobility was restored only at the cost of significant casualties.[13]

Similar to the current use of IEDs by IS, operations that would have enhanced friendly control of the area were impeded by the knowledge that any effort would have to navigate a mine field. Strategically, it is hard to say what the specific impact of the marine casualties in Helmand was, but it is generally agreed that democracies are less likely to continue wars in the face of casualties.[14] Again, it is unclear exactly how IS came to adopt the tactics of mass IEDs; however, given the links of IS to Afghanistan and the similarity to TTP employed there, it is reasonable to assume that IS did not reinvent this tactic but rather adopted it from the Taliban's experience.[15] It is similarly reasonable to assume that future enemies will have learned from IS experiences. U.S. forces in the future must be trained and prepared to deal with IEDs in all forms, and in particular with the way that IS employs them; developing a joint doctrine on countering IEDs will be essential, as has been argued elsewhere.[16]

Suicide Vehicle-Borne Improvised Explosive Devices

Up-armored with rusted metal plates and grills, the trucks that IS launches against the Peshmerga look like they belong more to a *Mad Max* movie than to the supposed technologically dominated battlefield of the twenty-first century. Yet, up-armored, "suicide vehicle-borne IEDs" (car or truck bombs whose drivers expect to die in the explosion, known as SVBIEDs) play an important role as IS's analog to the precision-guided cruise missile; they provide IS with the ability to (somewhat) accurately target enemy positions with high explosives, using an expendable human as their targeting hardware instead of sophisticated silicon chips. Any heavy vehicle can be

Kurdish Peshmerga forces observe Islamic State positions 29 May 2016 near Kirkuk, Iraq. (Photo courtesy of Ministry of Peshmerga Affairs)

used as a base on which to build. Some SVBIEDs are based on high-mobility multipurpose wheeled vehicles or mine-resistant ambush-protected vehicles that were captured from the Iraqi Army; others are based on civilian vehicles ranging from pickup trucks to dump trucks. Almost all SVBIEDs are equipped with improvised armor to improve their survivability until they reach their target. This armor is mainly sheets of metal attached to the vehicle to protect it from small-arms and medium machine-gun fire, while grills are hung at a distance from the body of the vehicle in order to prematurely detonate rocket-propelled grenades. Most SVBIEDs also have a narrower field of view than normal for the driver, which is a trade-off that attempts to mitigate this weak point in the armor shielding. Additionally, the windshield is normally replaced by bullet-resistant glass to further protect the driver.

The size and maneuverability of IS's SVBIEDs have varied as the Peshmerga TTP have evolved. The Peshmerga in the Mosul Dam area reported that SVBIEDs gradually grew in size, culminating in a few attacks by dump trucks that had been up-armored and packed with homemade explosives. However, the vehicles were so cumbersome and slow that a simple response was suggested: get out of the way! These monstrous SVBIEDs had gone so far to the extreme of survivability and lethality that they had sacrificed almost all of their maneuverability. The Peshmerga could simply relocate to areas that were inaccessible to wheeled SVBIEDs. Moreover, when SVBIEDs got caught on an obstacle or terrain feature, they would detonate themselves, usually far enough from any Peshmerga forces to prevent any harm to them.

Additionally, the French-made MILAN antitank missile began to appear in the Peshmerga's arsenal, courtesy

of the German armed forces. MILAN missiles are now prized commodities among the Peshmerga as they can defeat any of IS's improvised armor. However, there are currently only sixty launchers for almost seven hundred kilometers of front line. Even with very strategic placement along IS's likely axes of advance, there are simply not enough MILANs to adequately protect the Peshmerga.[17]

The next iteration of the Clausewitzean Zweikampf has been for IS to deploy several up-armored pickup trucks in place of one massive SVBIED. This generates more targets than the overstretched MILAN gunners can handle, with a maneuverability that means the Peshmerga cannot avoid them.

The Islamic State uses trucks such as the one shown above, captured near Kirkuk, Iraq, in 2015, as vehicle-borne improvised explosive devices driven by suicide bombers. The vehicles are fitted with improvised armor to protect the trucks and their drivers until detonation. Note the grills intended to defeat rocket-propelled grenades. (Photo courtesy of Ministry of Peshmerga Affairs)

IS's ability to integrate SVBIEDs with conventional attacks has been very inconsistent. IS units frequently launch SVBIEDs without any sort of follow-on action, even in sectors where they had previously displayed enough tactical sophistication to link direct-fire attacks with SVBIEDs. In its capture of Ramadi, for example, IS integrated the use of bulldozers to remove obstacles, SVBIEDs to destroy Iraqi troop barracks, and small-arms fire to overwhelm the defenders.[18] In some instances, IS has similarly integrated a maneuver element with SVBIED attacks against the Peshmerga in order to generate truly horrible damage.

I passed through one mostly destroyed village where IS had used an eight- to nine-ton truck against the Peshmerga positions after the Peshmerga had concentrated to repel a conventional small-arms attack by IS. In this case, the explosives were highly effective. This level of sophistication, however, seems to be the exception rather than the rule. Even in the same area of the Mosul Dam as the well-coordinated attack cited above, there has only been one other time when SVBIED and conventional attacks were similarly coordinated. The evidence suggests that IS lacks the midlevel military commanders capable of consistently coordinating effects. IS's TTP are therefore reliant on methods that do not expose their knowledgeable cadre to danger.

We should expect our future enemies to have learned from the TTP that IS currently employs. During the 9/11 Wars, U.S. troops adapted to this threat by hardening bases with Hesco barriers, employing serpentine obstacles at the entrances, and training service members to identify and neutralize potential SVBIEDs before they could get close enough to patrols to do damage. Al-Qaida then attempted to use dump trucks full of explosives against marines to counter coalition security measures, prefiguring later IS tactics.[19]

IS's experience in using up-armored SVBIEDs to resist small arms will need to be considered. I predict that, at some point in the next decade, U.S. service members will be killed by an up-armored SVBIED that cannot be stopped with small arms. Much has been made of the fact that the guards of the Marine Corps barracks who were attacked 23 October 1983 in Beirut, Lebanon, did not have ammunition in their weapons to stop the SVBIED.[20] However, small arms would have been irrelevant in the case of a heavily up-armored vehicle. Only the possession of antitank weapons at the lowest level can prevent U.S. service members from becoming the victims of up-armored SVBIEDs. An obvious solution would be to provide U.S. ground forces with light antitank weapons organic to the squad and at all vehicle checkpoints.

Chemical Attacks

Seeming to revel in the barbarity of their tactics, IS forces regularly employ chemical weapons against the Peshmerga and occasionally against civilians. Mustard and chlorine gases are delivered against targets via mortars or rockets. While some of these munitions might be military grade, captured from either Iraqi or Syrian stockpiles, many of them are improvised. In the

Mosul Dam area, chemical attacks were initially very disturbing to the Peshmerga, whether they were mustard or chlorine (differentiated by the fighters there as "yellow" or "white" smoke). Mustard gas, in particular, is a powerful vesicant, and it has caused several Peshmerga to lose their vision for days.

However disturbing those initial attacks were, the chemical attacks of IS are not particularly effective against the Peshmerga who have been trained and who are properly equipped. Most of the Peshmerga are now equipped with gas masks that they carry everywhere. Even without masks, the Peshmerga quickly figured out that moving to higher ground and breathing through a wet cloth were effective countermeasures.

Furthermore, IS's chemical attacks were not well coordinated with maneuver elements, meaning that they rarely had a significant tactical impact. According to a senior official at the Ministry of Peshmerga Affairs, the ministry knew of no cases where a chemical attack had killed a Peshmerga, although many hundreds had been wounded and had to be removed from the front lines.[21] This is entirely consistent with the literature on chemical weapon use in World War I: non–nerve-agent gas attacks can cause many casualties to the unprepared but rarely cause fatalities to prepared soldiers.[22] The number of chemical attacks seems to have tapered off in recent months. Yet, while the Peshmerga attributed this to IS stockpiling chemical weapons for the defense of Mosul, the decrease could be ascribed to the disruption of IS's chemical weapons cell, including the capture of the cell's leader, Sleiman Daoud al-Afari, in Tel Afar, Iraq, in February 2016.[23]

IS's chemical weapons have had operational impacts out of proportion with their tactical effects. When IS launched chemical weapons from the occupied town of Bashir at civilian targets in the Iraqi–government-controlled village of Taza, residents marched and demanded that the government attack the launch sites to prevent further attacks.[24] In response, the government-sponsored Hashd al-Shaabi militia launched several disastrous attacks, being beaten back by IS and incurring many casualties and several prisoners.[25]

The employment of chemical weapons by IS builds on AQI's TTP; AQI used chlorine gas tanks in Iraq to attack coalition forces and Iraqi civilians. From 2006 to 2007, fifteen attacks caused many Iraqi civilian casualties, although many of the fatalities were likely due to the paired explosives rather than the gas itself.[26] IS's use of mortars and rockets as a delivery system indicates an evolutionary advance on AQI's TTP although IS's chemicals seem to be similarly unable to produce fatalities on prepared soldiers.

U.S. planners of future operations should plan to encounter chemical attacks, and they should know the attacks will have a strategic impact on public opinion, even if their tactical impact is minimal. Basic chemical, biological, radiological, and nuclear training for our service members would adequately prepare them for the improvised, unsophisticated attacks that our opponents might learn from IS. Local allies and civilian populations we might be protecting will likely react strongly to even these rudimentary chemical attacks. Local allied forces should be given some modicum of training in preparation, and they should prepare an information operations campaign to inform civilian populations about defensive measures and to assuage fears. Otherwise, it is possible that the use of chemical weapons will create a tension within the local community that manifests itself in distrust of local allies and U.S. forces.

Suicide Vests and Counterintelligence, Surveillance, and Reconnaissance

IS equips many of its fighters with suicide vests, an innovation that might be troublesome to an unprepared U.S. force. In the past, vests of explosives were made for jihadists whose sole mission was a "martyrdom operation"; they were conceived of as separate from the insurgents who would use small arms against U.S. forces and allies. Now, these two categories have merged. While employment seems to vary from area to area based on the judgment of the local IS emir, in most areas, from 40 to 60 percent of fighters will wear suicide vests.[27] This practice is not limited only to the foreign fighters but also is common among the local Sunni Arabs (comprising the majority of IS fighters). IS fighters will also frequently take off their vests, delay their discharge, and throw them as improvised grenades. Americans who are unfamiliar with this tactic of widespread suicide-vest use may suffer casualties, particularly if they adhere to normal techniques of "dead-checking" enemy combatants.[28]

IS uses a variety of TTP to counter coalition intelligence, surveillance, and reconnaissance. Some techniques, such as coating technicals (improvised fighting vehicles) with aluminum foil or mud to try to defeat heat imaging from the air, are likely to be ineffective. Others,

such as the widespread use of tunnel systems, might be effective. Other authors have already pointed to the similarity in TTP between IS and the Palestinian group Hamas in this respect; U.S. military planners would do well to consider countermeasures for these TTP in advance.[29] Finally, IS will employ suicide soldiers who wait in elaborate "hides" until a high-value target gets close; the Kurds lost a brigadier general to this tactic during the recent liberation of villages in the Khazir region.[30]

Conclusion

IS is a protean organization, taking different forms in different areas in order to move toward its apocalyptic vision. Using Robert Shultz's classification of terrorists, insurgents, and militias, it is clear that IS possesses the characteristics of all three.[31] Even just considering its conventional battle tactics against the Peshmerga, IS has exhibited a varied repertoire of TTP that have been seen before in different conflict zones, and which we will undoubtedly see again in the same and other theaters. It would be foolish to not aggregate accounts of these tactics and weigh future responses to them.

To accomplish this, the United States should commission a combined lessons-learned team with the Peshmerga. For a small cost, a combined U.S. and Kurdish team could visit several sections of the front line and interview key leaders to gain a holistic understanding of the enemy's TTP and the responses that have been the most effective against them. Such an effort would benefit both the United States and its allies.

For the doctrine-poor Peshmerga, these results could have an immediate impact if they were distilled into an easily understood pamphlet and then widely distributed. While there are some professional Peshmerga units and a growing level of training thanks to the coalition against IS, many Kurdish best practices are still spread by word of mouth rather than by a formal system of doctrinal promulgation. A combined lessons-learned team could therefore have an immediate impact on the fight against IS by helping the Peshmerga to adapt to IS's TTP and by giving Peshmerga forces a leg up in their current tactical Zweikampf.

For the U.S. defense establishment, a lessons-learned team would expose us to TTP that we possibly will encounter in the future, allowing us to learn relatively painlessly. Whether we believe that the current operating environment is uniquely complex, or that complexity has always been a hallmark of warfare, we need to lean forward in the process of military adaptation or else risk serious setbacks.[32] The Beirut barracks bombing was a painful lesson in the need to harden our outposts abroad against SVBIEDs. Now, those lessons have been partially eclipsed by IS's evolution of SVBIEDs to have armor against small-arms attacks. Rather than waiting for these TTP, or any other of IS's TTP, to cause U.S. losses, we should advance our learning process. With up-armored SVBIEDs, chemical weapons, and widespread suicide vests, the TTP of IS will be on the battlefields of tomorrow, and we would ignore them at our peril. ■

Notes

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2. I would like to thank Dr. Richard Shultz for funding my initial trip and providing me indispensable mentorship and guidance in executing this project. I would also like to thank Dr. Roger Petersen for assisting with my latest trip. Of course, my research would not have been possible without my many friends in Kurdistan, who are too numerous to mention.

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More than forty graduates make their way to the stage to receive degrees ranging from associate to doctoral during the Fort Rucker Army Education Center graduation ceremony 13 May 2016 at the post theater, Fort Rucker, Alabama. (Photo by Nathan Pfau, *Army Flier*)

The Importance of a Long-Term Self-Development Concept to Army Officers

Col. Dean A. Nowowiejski, PhD, U.S. Army, Retired

Many active-duty Army officers struggle to achieve self-development goals related to their profession. Many also retire without a clear plan for transition into their second career, or without having achieved their most ambitious academic goals. They struggle over the course of their careers to complete advanced degrees, make coherent sense of their professional development opportunities, or achieve their full

intellectual potential. The course of their careers is instead littered with discrete opportunities: a sequence of professional military education (PME) courses at intervals of years, certificates of completion for military training, some books read, and a master's degree attained during PME, while always having answered the call of successive assignments with their demanding time requirements. Officers generally arrive at the end of their careers in better academic condition, but many fall short of what they would have liked. They are highly educated, but not with the credentials they had aspired to acquire, perhaps not with that prestigious master's degree or that elusive doctorate.

The Army leader development model is clear. It has three domains: institutional training, operational assignments, and self-development.[1] The first two domains are sound and interrelated. Institutional training and operational assignments both come under the close management of Human Resources Command. I will describe the Officer Education System, which provides institutional training, later in this discussion. Operational assignments come regularly for active-duty Army officers from their assignment officer at Human Resources Command and by design fulfill the goals of that leader development domain.

Department of Army (DA) Pamphlet 600-3, *Officer Professional Development and Career Management*, describes that entire process of making operational assignments.[2] It is an enigma that consumes the emotions and time of Army officers and their families throughout their careers. For those who remain engaged, the professional development objectives outlined for each branch and specialty are often met. Assignments come, and the body of operational experience grows. Some might argue that the progression of assignments for some officers does not fully equip them for the high-level goals of the Officer Education System, but that is not a debate for this analysis. Instead, I will focus on that elusive professional development pillar—self-development—because it is simply underappreciated.

The most cynical readers likely will say this domain of leader development is almost nonexistent for most officers, but my observation is that the majority make a reasonable attempt to stay current in their branch or specialty and with global events, within the limits of time demands from work and home. But, do they achieve the objectives of self-development as outlined in the Army's policy and doctrinal authorities?

Self-development surely cannot be happenstance, without intentionality, plan, or long-term objectives; there must be a clear vision and purpose. Self-development requires a conscious personal strategy, clearly defined goals, and from those, a long-term self-development plan. Just like officers plot their assignments, promotion points, children's graduation dates, and key life milestones onto a time line, they should conceive of what self-development they will accomplish over the course of their careers.

In this article, I will establish some simple concepts to help active-duty Army officers conceive their self-development goals and conceptualize how they will reach those goals. First, I will describe the current facts regarding academic education and self-development. Then, I will argue for a broader concept of self-development. Self-development can help to capitalize in new ways on opportunities now missed over the course of a career. This argument will highlight integrated Army educational and broadening opportunities. I will conclude with some specific considerations to enhance lifelong learning.

The Need for Improved Continuity in Officer Educational Focus

Before I turn to the potential of self-development, let us look at the current state of officer education. This long-standing system has basic and advanced leader courses, intermediate level education (ILE), and senior service college. In many respects, this process is progressive but discontinuous in time and substance. Advanced education is focused on tactical-level, branch, and internal-to-brigade

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considerations. ILE completes tactical education, and it begins the process of operational and strategic education. Senior service college educates in strategy. Though officers spend many years in school, the focus changes as their careers need change.

There are fairly long gaps of years between an advanced course and ILE, and between ILE and senior service college. These gaps must be filled by self-development to form anything resembling a continuous process of learning over the career of an officer.

Maj. Mike Nicholson, U.S. Army, works on an online master of communication degree course offered by the University of Southern California (USC) Annenberg School for Communication and Journalism, while serving in Afghanistan. On 17 May 2013, Nicholson and forty-six other students became the first graduates of the USC Annenberg online program. (Photo courtesy of USC Annenberg)

In truth, the episodic nature of PME means that individual focus on education is also intermittent. Most officers make a valiant attempt at self-development, but they face difficulties in overcoming the obstacles of time demands and higher priorities in duty assignments. Intellectual skills, particularly deep reading and scholarly writing, often atrophy between PME experiences. What should be a progressively and continuously developed ability to write and communicate persuasively often waits for the next PME chance.

Communication skills are at a premium for senior U.S. joint leaders. They must demonstrate high-level personal diplomacy and the ability to solve complex, even intractable, problems. They require personal staff members who can similarly think, write, and communicate. Their staffs must be led by officers who can provide the conceptual support required by Army leader development, built on "sufficiently broad education and experience to operate across the spectrum of conflict."[3] Army officers must strive to develop and refine writing skills as they move forward through their careers. The intervals of time between formal military education opportunities make this hard to do.

The Concept of Self-Development

This policy statement from DA Pamphlet 600-3, *Commissioned Officer Professional Development and Career Management,* makes clear the demanding standards expected of officer self-development:

> The profession of arms requires comprehensive self-study and training. Leaders must commit to a lifetime of professional and personal growth to stay at the cutting edge of their profession. ... Self-development is the key aspect of individual officer qualification that solidifies the Army leader development process.[4]

The self-development domain is critical to the entire leader-development process. It requires that

active-duty officers think carefully about their approach. The main points of this article are derived from close analysis of several pertinent Human Resources Command policy documents on the subjects of officer professional development and education and slating for command.[5] Those points also depend on the guidance given to recent selection boards for the ranks of major, lieutenant colonel, and colonel, the ranks for which active officers qualify as they move toward retirement. All of these documents work within the officer education and professional development systems now dependent on the key component of self-development.

Self-development, as conceptually defined by this policy guidance, depends on a "*lifetime of professional and personal growth* [emphasis added] to stay at the cutting edge of their profession."[6] Self-development depends on lifelong learning. The demands of high-level thinking and writing are too high to be achieved only in short episodes of institutional education. Lifelong learning is instead a marathon component of each officer's professional development, critical to the entire process, but most effective when consistently practiced throughout an officer's career to hone writing, reading, and thinking skills.

The introductory discussion established the long gaps in formal officer education, which are normally filled with operational assignments granting critical experience to the officer. Sometimes, maybe once or twice in a career, an officer is afforded the opportunity for a broadening assignment. Broadening assignments are incorporated into the formal Officer Personnel Management System; they are defined as "purposeful expansion of a leader's capabilities and understanding provided through opportunities internal and external to the Army."[7]

Having received new emphasis during the tenure of former Army Chief of Staff Gen. Raymond Odierno, Army policy states that broadening assignments have the deep purpose of developing "a continuum of leadership capability … which bridges diverse environments and organizational cultures."[8] Odierno saw the need for Army officers who were more accomplished and comfortable operating in complex and sometimes uncertain joint, interagency, intergovernmental, and multinational environments. Operational environments worldwide have grown so interconnected and so complex as to require a higher-order, whole-of-government approach that demands Army officers who are educated to operate outside the Army itself.[9]

Broadening thus supports an expanded concept of what is required for officers to learn. It offers critical information but is a unique and infrequent opportunity. Lifelong learning as the method of self-development is still required over the continuum of an officer's career. Self-development fits into the gaps and smooths the edges between PME and broadening assignments.

What type of self-development meets the lifelong needs of our best officers? Their needs demand a solution that operates over time and provides continuous development. Their needs demand constant intellectual growth. They include broad reading and the ability to accomplish original research. They also include a continuous refinement of writing ability, publication in professional journals, and potentially, a thesis, dissertation, or book. Published work is the key to the reputation of soldier scholars and the quality of professional dialogue. The demands of lifelong learning include these higher-order goals and objectives. Yet, most officers never achieve the plateau of publication or an advanced degree. How can they change this pattern?

For both scientists and social scientists, the ability to conduct research is a required intellectual skill. This ability is first developed as an undergraduate. Some officers barely return to it during a master's degree program, particularly those which do not require a research project or thesis. But, original research is at the heart of the best advanced-degree programs. The ability to construct an original research plan, to establish either an experimental or a research hypothesis, and then to follow it to valid conclusions distinguishes senior academics. Publication of the findings further marks those in the world of academe.

Officers should look to accomplish primary source or original research and writing as part of their intellectual development and personal progress toward advanced degree attainment or publication. There are opportunities to coherently advance this goal over the course of a career, but again, many officers never envision them, as they are separated by years and by operational experience. What if officers could integrate their opportunities for research into a more tightly knit fabric?

The Opportunities of a Career, Sometimes Neglected

The vision of the Officer Personnel Management System is to grow and develop adaptive leaders. Adaptive leaders are "sufficiently broad in education and

experience to operate across the spectrum of conflict, and … culturally astute and able to use this awareness and understanding of foreign environments to innovate in mission execution."[10] The professional development opportunities provided by the Army to an officer alongside his or her self-development should work to fulfill this vision of developing an adaptive leader.

This development begins with undergraduate education—in all of its diversity—during which the initial habits of academic discipline—the ability to research and to write—are established and language and cultural education are introduced. Most officers gain their only foreign language understanding in secondary school or during undergraduate years as a degree requirement. This undergraduate language education is the foundation on which later graduate or Defense Language Institute foreign language education is built. It also is a window into other cultures.

One of the critical considerations for any officer's long-term development is whether to apply for and accept the service obligation of funded graduate education accomplished for the needs of the Army. The debate about whether this time away from operational assignments is worth it is too large for the confines of this article. The point here is that the Army affords officers the opportunity to earn advanced degrees, both masters and doctorates, and this opportunity needs to be carefully considered in the plan an officer develops for his or her own professional education.

If this opportunity is taken, it provides both for increased foreign language capability and cultural awareness—priorities indicated by the professional development vision—and for in-depth primary research and writing. This opportunity to research and write needs to be incorporated into the lifelong approach already established as necessary.

Throughout the time line of an officer's career, the Army offers fellowships that afford additional broadening and research opportunities. These can come prior to ILE or senior service college, and they need to be considered in the panoply of options afforded to officers. They become particularly important if one views them as part of a continuum spanning from undergraduate education through the stages of PME and funded graduate education, with a holistic progression through all of these stages. If one were to conduct original research and writing on constant subjects of inquiry throughout these stages in continuous fashion, it could be very powerful.

Another way the Army has provided an opportunity for officers to progress in their education is to create a program to gain a doctor of philosophy degree through the School of Advanced Military Studies' Advanced Strategic Planning and Policy Program. This program will provide the Army with leaders capable and educated in strategic thought, who gain all the advantages of completing original research and writing a dissertation. This program seems to be the pinnacle of broadening opportunities afforded by the Army.

Taking advantage of these career-broadening opportunities for education often takes moral courage to confront the rigors of time lines and military anti-intellectualism. It takes a conscious judgment as to when the time exists to apply for, compete for, and succeed at a funded graduate opportunity or fellowship. The best officers are always needed by their commanders and their branches to meet the incessant requirements of the operational Army, and they must fight to go to funded graduate school or compete for a fellowship. This takes the courage to see the chance and decide to take it—often against the advice of a mentor who did not take that path or did not have the same opportunities. The decision also works against peer pressure, which resists academic and intellectual achievement. It takes great confidence in one's potential and a vision for possibility to opt for graduate school or a fellowship.

The highest and most current guidance, as fulfilled by the Officer Personnel Management System vision above, makes clear the need for high-level intellectual development and broadening. Through advanced education, research and writing, and active and continuous self-development, officers can fulfill the vision by developing the special abilities required to solve complex global problems requiring language, interagency, and cultural awareness skills.

Achieving a Solution for a Lifelong Self-Development Plan

So, how does an officer tie all these considerations together into a coherent personal self-development concept? One of the primary elements must be for officers to look forward over the course of their careers and conceptualize how all of these components fit together. How can they integrate the course of their desired sequence

Graduates of the 2016 Command and General Staff College Art of War Scholars program (*from left*) Maj. Zach Alessi-Friedlander, U.S. Army; Maj. Bishane Whitmore, U.S. Air Force; Maj. Roland Minez, U.S. Army; Maj. John Zdeb, U.S. Army; Maj. Ian Brandon, New Zealand Army; and Lt. Brian Juskiewicz, U.S. Navy, celebrate their accomplishments with Dr. Wendell C. King, dean of academics, 10 June 2016 as they transition to a program of self-development after leaving Fort Leavenworth, Kansas. (Photo courtesy of author)

of PME with the objectives they achieve in their self-development plan? The beginning point is interest. What subject of original research piques their interest? Which one might be a potential subject for career investigation? Which subject would merit continuous personal investigation in the research opportunities afforded at the various PME institutions, such as the master of military art and science thesis at the Command and General Staff Officers' Course or the monograph at the School of Advanced Military Studies? A carefully selected topic could carry forward to be continued as a strategic research paper at the Army War College, or it could be pursued in individual research efforts during a senior service college fellowship.

Instead of taking these research opportunities discretely, they should be viewed as a continuum. With a determined topic of interest, intentionality, and diligence, Army officers can build academic expertise over the course of time, taking advantage of career research and writing opportunities. Instead of several incoherent PME writing requirements, by wise choice and a forward view, officers can build the components of a book or a dissertation by incorporating their research together over time.

Establishing such a research and writing trajectory can also take into account the deliberate development of expertise to be used in retirement. The ideal solution is to use terminal assignments to finalize *bona fides* for retirement employment and to position oneself geographically or by subject expertise for the transition. This foresight can align professional success along the way. With this in mind, there are several key questions officers should consider early in their careers:

In what area of the world do I want to specialize? The Department of Defense organizes the world geographically by combatant command. Each command is complex enough that one officer cannot know everything.

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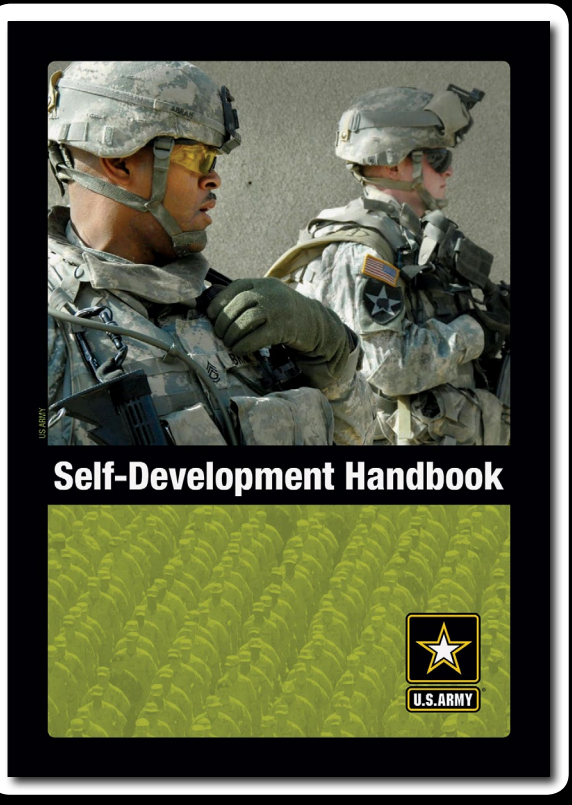

The *Army Self-Development Handbook* draws on lessons from the field, from educational and leadership research, and from applicable Army regulations and doctrine to provide state-of-the-art guidance on designing and implementing a program of self-development. This handbook can help individual soldiers reach the highest levels of professionalism. For online access, visit: http://usacac.army.mil/CAC2/Repository/Materials/CAL_Self-DevHandbook.pdf.

Focused reading and research by region allows individuals to build regional expertise in support of Army rotational unit objectives, and to build the regional knowledge most useful as senior officers in the combatant commands.

What specific cultural expertise is appropriate given that regional focus? The Army professional development vision clearly states that cultural expertise is an important professional development objective. Cultural expertise enables the regional expertise required by leaders of Army rotational units. The promotion board guidance for recent major, lieutenant colonel, and colonel boards all listed the characteristic of being "able to understand the socio-economic environment and [to be] *culturally astute* [emphasis added] in order to successfully operate in complex, uncertain environments" among the key characteristics required by strategic leadership.[11] The lieutenant colonel board also included prescriptive language guiding the board to not penalize officers engaged in civilian education or fellowships, in keeping with this article's emphasis on the importance of outside education.[12]

What foreign language ability aligns with this regional and cultural expertise? Ideally, this language ability began during secondary school or while an undergraduate, but officers can choose a language ability to develop while at graduate school or during self-development or resident education from the Defense Language Institute. Ultimately, joint task force commanders with language ability in the region to which they deploy are best suited to integrate with multinational teams.

What area of operational expertise aligns with this regional, cultural, and language ability that will establish the officer as a resident expert in a senior staff at an Army service component or regional combatant command? Will the officer develop expertise as a cyber, electronic warfare, force protection, fires, or logistics specialist, among others? This expertise is what is expected of lieutenant colonels as senior leaders on service component or joint staffs, and lieutenant colonel is the expected rank at which officers retire or decide to pursue further senior leadership.

Officers are encouraged to begin with the end in mind. Officers currently on active duty must realize that the day comes for all to retire, whether as a major or a general. We all reach the end of the road for our active military career. Too often, we arrive at that point without any clear concept or preparation for what comes next. The optimum solution would be to be in a geographic location or position of experience in our last duty posting to make a natural transition into what will be our second career. The optimum solution would be to honestly

evaluate what we wanted to do when military retirement was reached and to use our educational opportunities, self-development plan, and operational experience to work toward that perceived occupation. The wise choice of research and writing topics over the course of a career ensures continuity and achieves published writing useful in the retirement transition. The same need applies to those who separate short of retirement—for the transition to be seamless and continuous, especially with a final assignment, and to leave the service with expertise in doing what an officer loves to do and is best educated to do.

Obviously, this is not a solution that will work for everyone or in all situations. Not all officers will be able to envision a research topic that will enthrall them or connect to contiguous opportunities over time, but even if they see increased coherence, the conceptualization is worth it. New visions will emerge over time. Much of this potential achievement revolves around intentionality and diligence by the officer concerned. Some of this potential achievement revolves around raw talent and honest self-reflection. But, the skills of honesty, reflection, and intentionality required by this expanded professional self-development concept, integrating all Army educational and broadening opportunities over a career, will be amply demonstrated by our most forward-looking officers. ■

Notes

1. Department of the Army Pamphlet (DA Pam) 600-3, *Commissioned Officer Professional Development and Career Management* (Washington, DC: U.S. Government Publishing Office, 3 December 2014), 5–6.

2. Ibid.

3. Ibid., 9.

4. Ibid., 6.

5. In addition to the references cited in these notes, the following primary sources from Human Resources Command (HRC) were consulted: Chief of Staff, Memorandum to the Deputy Chief of Staff, "Fiscal Year 2016 Centralized Selection List (CSL) Command and Key Billet Slating Guidance," 26 June 2014, accessed 20 December 2016, https://www.hrc.army.mil/Site/Protect/Assets/Directorate/OPMD/FY16%20CSA%20SLATING%20GUIDANCE.pdf (CAC required); Chief of Staff, Memorandum to the Deputy Chief of Staff, "Fiscal Year 2017 Centralized Selection List Command and Key Billet Slating Guidance," 10 September 2015, accessed 20 December 2016, https://www.hrc.army.mil/Site/Protect/Assets/Directorate/OPMD/FY17%20CSA%20CSL%20Slating%20Guidance%20-%20Approved%2010%20SEP%2015.pdf (CAC required); U.S. Army Human Resources Command, Senior Service College/Fellowship/Foreign Service School Information, Academic Year 2016-2017, accessed 20 December 2016, https://www.hrc.army.mil/Site/Protect/Assets/Directorate/OPMD/AY16-17_SSC_Catalog.pdf (CAC required). Information provided in this catalog gives a brief description and pertinent facts regarding each senior service college opportunity, to include fellowships and foreign schools; U.S. Army HRC, MILPER Message 16-101, "FY 16 Army Competitive Category (ACC) Intermediate Level Education Selection Board and Process for Submitting Intermediate Level Education Resident Attendance Preferences," 6 April 2016 (CAC required); MILPER Message 16-114, "FY 17 U.S. Army Human Resources Command Senior Professor of Military Science (PMS) Centralized Selection Board," 19 April 2016 (CAC required).

6. DA Pam 600-3, *Commissioned Officer Professional Development and Career Management*, 6.

7. Ibid., 12.

8. Ibid.

9. For a comprehensive sense of the broad spectrum of broadening opportunities available through the Army, see the Officer Personnel Management Directorate Broadening Opportunities Program Catalog, updated 5 August 2015, accessed 9 January 2017, https://www.hrc.army.mil/bop.

10. DA Pam 600-3, *Commissioned Officer Professional Development and Career Management*, 9.

11. Secretary of the Army, Memorandum for President and Promotion and Selection Board Members, "Fiscal Year 2015 (FY15) Major (MAJ), Army, Operations (OPS), Operations Support (OS), and Force Sustainment (FS) Promotion and Selection Boards (PSBs), 13 March 2015, 3, accessed 23 December 2016, https://www.hrc.army.mil/Site/Protect/Assets/Directorate/TAGD/FY15%20Major,%20Army%20Competitive%20Category,%20Promotion%20Selection%20Board.pdf (CAC required); Secretary of the Army, Memorandum for President and Selection Board Members, "Promotion List for the Fiscal Year (FY) 2016, Lieutenant Colonel (LTC), Operations (OPS), Operations Support (OS) and Force Sustainment (FS), Promotion Selection Boards (PSB), 22 October 2015, 3–4, accessed 23 December 2016, https://www.hrc.army.mil/Site/Protect/Assets/Directorate/TAGD/1.%20FY16%20Lieutenant%20Colonel,%20Army%20Competitive%20Categories,%20Promotion%20Selection%20Board.pdf (CAC required); Secretary of the Army, Memorandum for President and Selection Board Members, "Promotion Lists for Fiscal Year (FY) 2015 Colonel (COL), Operations (OPS), Operations Support (OS) and Force Sustainment (FS) Promotion Selection Boards (PSB)," 9 March 2015, 3, accessed 23 December 2016, https://www.hrc.army.mil/Site/Protect/Assets/Directorate/TAGD/FY15%20Colonel,%20Army%20Competitive%20Category,%20Promotion%20Selection%20Board.pdf (CAC required).

12. Secretary of the Army, Memorandum for President and Selection Board Members, "Promotion List for the Fiscal Year (FY) 2016, Lieutenant Colonel," 4.

Soldiers from the 1st Armored Division's 1st Stryker Brigade Combat Team out of Fort Bliss, Texas, look on as an F-16 Fighting Falcon executes a show of force 12 June 2015 in the skies over the National Training Center, Fort Irwin, California, during a Green Flag 15-08 training exercise. An aircraft executing a low pass over a conflict zone can act as a deterrent to potential enemy combatants. (Photo by Senior Airman Joshua Kleinholz, U.S. Air Force)

Multidomain Operations and Close Air Support

A Fresh Perspective

Lt. Col. Clay Bartels, U.S. Air Force

Maj. Tim Tormey, U.S. Marine Corps

Dr. Jon Hendrickson

Tightening budgets have reignited long-simmering debates on the roles and missions of airpower. The Air Force remains persistent in its recommendation to retire the A-10 aircraft (sometimes called the Warthog). Though there are developmental issues with the A-10's notional replacement, Lockheed-Martin's F-35, mounting fiscal pressures keep the Air Force from changing its plans. As a result, some have even proposed that the Army procure and operate its own fixed-wing ground attack aircraft.[1] In the increasingly complex and contested future operating environment, the optimal warfighting approach for the American military must be centered on multidomain operations. Any parochial service decision would be dangerous and foolhardy. Examining close air support (CAS) in conjunction with other overlapping missions that occur in the intersection of the land and air domains effectively demonstrates the necessity of multidomain operations. Further, multidomain thinking in the CAS arena allows the U.S. military to better understand how to maximize the flexibility and capability airpower provides when applying multirole platforms such as the F-35.

Since the codification of the joint force with the Goldwater-Nichols Act in 1986, the United States uses the combined joint task force (CJTF) structure with coalition partners to conduct warfare. This construct and underlying doctrine were first employed during Operation Desert Storm in 1991. However, the Army often sees itself as the force that exists to win the nation's wars and seeks self-reliance as a service capability.[2] In reality, a CJTF conducts operations reporting to a geographic combatant commander (a joint billet) who reports to the president and secretary of defense.[3] No service fights alone, yet each often thinks and plans individually. This problem of insular planning occurred repeatedly in the twentieth century, in operations from Guadalcanal to Vietnam.[4]

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Behind this insulated thinking is a lack of trust that the Air Force will be present to support the ground scheme of maneuver. This fear highlights an important concern but lacks supporting empirical evidence. Transferring to the Army a single-mission platform such as the A-10 or incorporating a fiscally responsible existing solution like the Beechcraft AT-6 to support the doctrinally defined roles of our services only furthers service stovepiping.[5] This arrangement will not defeat the next adversary, particularly in the current and projected fiscally constrained and contested operating environment. In order to achieve the required level of service cooperation demanded by a multidomain approach, the foundation must be mutual trust. The first step toward achieving increased trust is a common understanding of multidomain operations.

The Multidomain Approach to Warfighting

Since the passage of the Goldwater-Nichols Act, joint operational approaches have proven themselves in combat. For the most part, Goldwater-Nichols has achieved many of its objectives. However, work remains, especially when considering the rapidly changing global operational environment. Further, the joint task force doctrinal structure used over the past fifteen years to promote joint capability has actually driven home incorrect habits of mind that are detrimental in the evolving operational environment. In particular, these habits drive the service components to think about their respective operating areas as if in a vacuum. These concerns reportedly led

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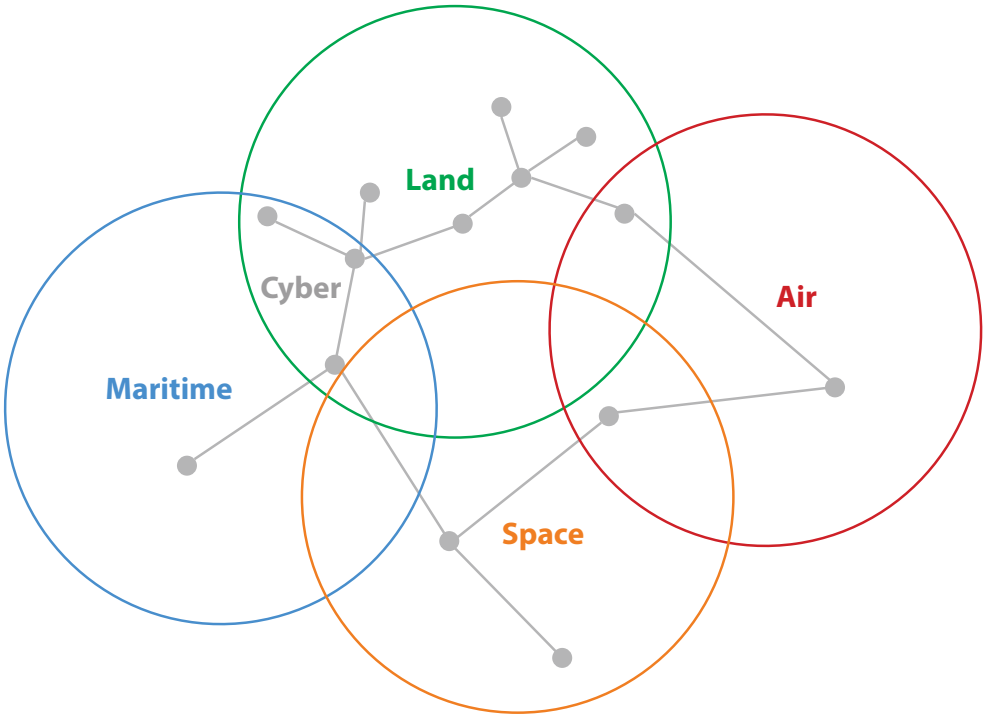
Dr. Jon Hendrickson is a professor of security studies at the Air Command and Staff College. He holds a PhD in military history from Ohio State University, and he has published works on naval history of the late nineteenth and early twentieth centuries.

then Chairman of the Joint Chiefs of Staff Gen. Martin Dempsey to ask in November 2011 what would come after joint, initiating a discussion that continues to this day.[6] What comes next is the best joint force solution to this problem: a multidomain approach.[7]

The essence of multidomain operations is to think about military problem solving in a nonlinear way and to conduct operations focused on achieving objectives rather than on maintaining distinct component lanes. Traditional thinking that rigidly aligns domains and components (land with the Army, maritime with the Navy, and air with the Air Force) will not be effective in the future. The complexity of current and future operations requires breaking this pattern of thought in order to more seamlessly integrate the unique capabilities of each component to create the effects required to meet tactical, operational, and strategic objectives. Multidomain operations will also allow U.S. military forces to leverage the potential of new, emerging domains, such as space and cyber. These domains are integral to modern warfighting, yet there is no cyber force component commander in charge of "cyber" at the joint task force level, where we primarily conduct major military operations. The component lens is not sufficient in this environment because operations are too complex.



(Graphic by Maj. Tim Tormey)

Figure 1. Multidomain Concept

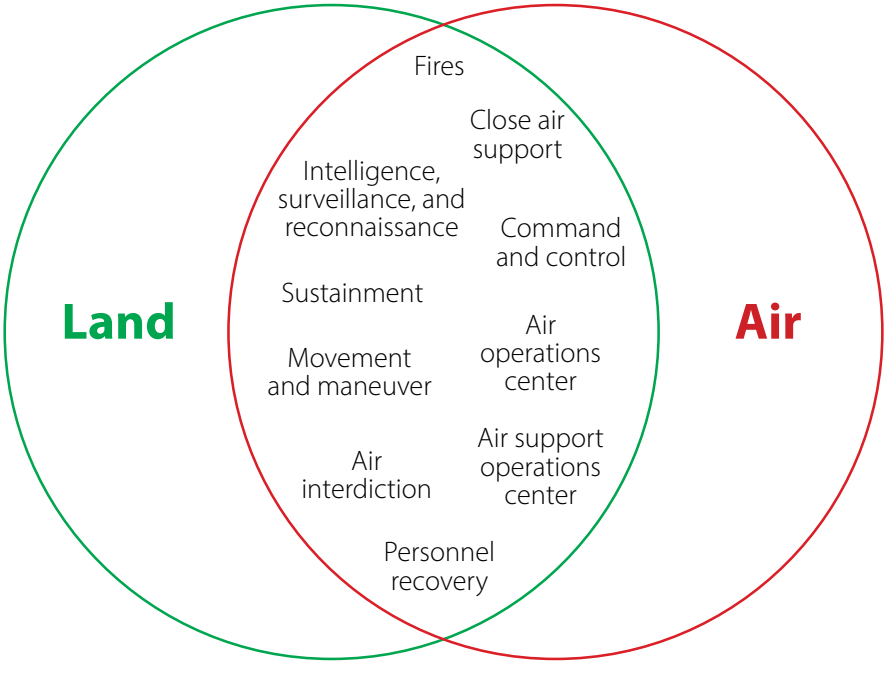
Multidomain operations strive to achieve unity of command or unity of effort through conceptual unity of thought. Operations occurring in the land domain must consider effects in and through the air, maritime, cyber, and space domains, and vice versa (see figure 1). This noncomponent way of thinking minimizes friendly vulnerabilities and provides an effective way to find adversary vulnerabilities for exploitation in and from multiple domains. As efforts to counter U.S. advantages continue, the American military is attempting to disaggregate command and control and push decision making to the lowest level possible due to the requirement for a much faster decision cycle.[8] Because of this, a multidomain approach must be used.

A historical example from World War II illustrates the importance of multidomain operations. On 7 August 1942, American forces landed on the Pacific island of Guadalcanal in the Solomon Islands chain. After they established control over the island's airfield, which they christened Henderson Airfield, the focus of the campaign shifted from preventing or forcing a landing on the island to sustaining and reinforcing the U.S. forces already on Guadalcanal. Both major bases in the area—Rabaul for Japan, and Espiritu Santo for the United States—were about 560 miles from the island. While this may seem like a battle fought in the maritime domain, both sides used a variety of multidomain efforts to try to force and keep open the access routes to Guadalcanal.

For the Americans, these operations focused on stopping the Japanese convoys ferrying troops and supplies from Rabaul to Guadalcanal. Air operations from Henderson Airfield entered the maritime domain, forcing Japanese transports to move at night within the

American air umbrella, which made navigation and cargo handling more difficult. Air forces also supported efforts in the land domain to expand and protect the Henderson Airfield perimeter from Japanese attacks. American naval forces crossed into the land domain, offering naval gunfire support to land forces, harassing Japanese land forces with bombardments, and interdicting supplies as they moved to, and around, the island of Guadalcanal. Naval forces also entered the air domain by using carrier-based aircraft to attack Japanese aircraft carriers intent on raiding Henderson Airfield, as well as interdicting Japanese efforts to bombard the island by sea. Land forces influenced the maritime fight through coast watchers who provided intelligence on Japanese movements by sea and air, as well as providing security to Henderson Airfield from Japanese land attack and artillery bombardment.

The Japanese did not miss out on multidomain opportunities either. Japanese air forces in Rabaul threatened American ships at sea, limiting the areas in which the U.S. Navy could operate safely. They also raided U.S. land positions on the island. Japanese naval forces supported land operations by escorting transports to the island and by sinking several American ships that attempted to blockade the island. They intruded into the air domain by bombarding Henderson Airfield from the sea. Japanese land forces made several attempts to close Henderson Airfield by assault, which would have given the Japanese control of the air over the island to allow movement of supplies by sea. In the end, the ability of U.S. and Allied forces to coordinate their multidomain activities allowed them to enjoy the synergistic benefits of working across domains. The Japanese were less successful in their ability to bring land, air, and sea together into a cohesive operation, and they eventually lost Guadalcanal and other islands as a result.[9]



(Graphic by Maj. Tim Tormey)

Figure 2. Air/Land Domain Intersection

Maximizing Airpower Effects in the Land Domain

Within the broader context of multidomain operations, analyzing airpower effects in the land domain illustrates the value of contemporary force employment that has evolved beyond joint constructs. The intersection of the air and land domains encompasses a myriad of mission sets, to include air mobility; space; cyber; personnel recovery; fires; intelligence, surveillance, and reconnaissance (ISR); and many others (see figure 2). The CAS mission primarily falls under the joint function of fires and is just one small piece of the broader picture that includes protection, command and control, movement and maneuver, intelligence, and sustainment.[10]

Establishing air superiority is the first and most important effect that airpower provides for the land domain and overall joint force. Contemporary airpower theorist Phil Meilinger writes, "whoever controls the air generally controls the surface."[11] In a more nuanced version of the same thought, Colin Gray posits, "control of the air is the fundamental enabler for all of airpower's many contributions to strategic effect."[12] U.S. forces are accustomed to having unfettered access to the air, but potential adversaries are becoming capable of creating an environment where the joint force will not have uncontested

An F-35A Lightning II joint strike fighter completes the first in-flight launch of an AIM-120 missile 5 June 2013 over the U.S. Navy's Point Mugu Sea Range near Oxnard, California. (Photo courtesy of the F-35 Program Office)

freedom of maneuver.[13] Furthermore, active opposition to and increased competition against force projection capabilities are occurring.[14] An acceptable level of air domain control is a prerequisite to enable the ground scheme of maneuver.

Once access to the land domain is achieved, precision fires are an essential element for achieving a joint force commander's maneuver objectives. Joint airpower assets have the capability to directly attack an enemy's center of gravity.[15] No matter the operational or strategic nature of a center of gravity, airpower can affect it because of airpower's inherent flexibility. If the center of gravity is enemy leadership, it can be attacked through strategic strike. If the center of gravity is an enemy naval task force, airpower can combine with naval assets, such as surface ships and submarines, to destroy it. If the center of gravity is an enemy land formation, air and land assets can work to destroy it. In addition, air power's flexibility makes it easier to attack soft targets to achieve follow-on effects in other domains, such as attacking enemy command-and-control facilities to hamper enemy coordination against maneuvers by land and sea forces.

Operation Anaconda, which occurred in March 2002 in Afghanistan, illustrates the advantage of applying multidomain thought (or the disadvantage of not applying it), particularly in terms of operational planning. The ground commander, Army Maj. Gen. Franklin L. Hagenbeck, paid insufficient attention to air planning to such an extent that the combined force air component commander and the combined air operations center were not involved in the planning process at all; they only became aware of the impending operation when the operation order was issued on 20 February.[16] The Taliban provided much more resistance than expected, and a pitched battle occurred with a furious and urgent call for CAS. The major CAS effort began slowly. However as the battle progressed, CAS rapidly improved and ultimately became the "key to winning the battle."[17] Had the planners in Anaconda leveraged a multidomain perspective, effects from other domains could have been integrated from the very start of the operation. Even if their planning resulted in a ground-centric

operation, a multidomain thought process could have ensured the other components were engaged.

In addition to fires, other emerging mission areas should also be considered an integral part of operations to achieve effects in the land domain. Remotely piloted aircraft that provide persistent full-motion video can deliver or direct effective battlefield fires. Airborne ISR and mobility also closely integrate operations in the air domain for effects on the surface; these areas more accurately fall under CAS when considering the word "support."

Thus, an understanding of operations and the synergy created by the land and air domains needs to expand. Airpower is inherently flexible. In order to maximize effects from the air on the land domain, multirole aircraft such as the F-35 are necessary. As an operating environment becomes increasingly contested and degraded, survivable platforms must be employed across the spectrum, from the low-intensity CAS mission to global strike. Basing our force structure solely on the current threat environment would be a mistake because the United States must have capabilities beyond those effective only in a permissive environment. The flexibility of airpower is a true force multiplier in multidomain operations—a must-have for the U.S. joint force.

Understanding Joint Fires and Close Air Support

The first hurdle toward understanding the role of CAS in multidomain operations is agreeing on an adequate definition of CAS. All involved, from the infantryman to the airman, must arrive at a corporate definition so CAS is common language and not an ambiguous concept. Joint doctrine defines CAS as "an air action by manned or unmanned fixed-wing and rotary-wing aircraft against hostile targets that are in close proximity to friendly forces and that require detailed integration of each air mission with the fire and movement of those forces."[18] Under the air-land domain integration umbrella, Derek O'Malley and Andrew Hill recommend five CAS characteristics: CAS should be close so it can be persistent, precise and rapid so it can kill enemies and avoid fratricide, versatile so it can operate in various contexts, scalable so it can use the right amount of firepower for the situation, and integrated with land forces so the air forces can promptly share useful information with the warfighters on the ground.[19]

To achieve a common understanding, a cultural paradigm shift is necessary. Specifically, the land component's thinking and associated lexicon regarding CAS need adjustment. The traditional Army view of CAS has morphed from a maneuver support function to "air cover as a preventive measure with the expectation of enemy contact," according to Mike Benitez.[20] In "How Afghanistan Distorted Close Air Support and Why it Matters," he describes how this view of CAS emerged "after years of fighting asymmetric, low-intensity, guerrilla warfare."[21] CAS as viewed through this protection lens is narrow. CAS should instead be viewed from the fires perspective and not under the protection category of the joint functions. Hostile targets in close proximity to friendly forces have been and will continue to be the exception to the most efficient use of aviation-delivered fires. While airplanes overhead provide a psychological safety net in the event of a miscalculation on the battlefield, the same can be said of any type of precision fires available organically to the land force. Changing this paradigm overcomes a cultural barrier, opening the aperture and allowing alternative, effective, and safe fires.

In this paradigm, the first priority for the ground component is organic to the Army. It includes precision-guided artillery fire, rotary-wing CAS, and even GPS-guided mortars. Nonorganic fires can come from an array of current Air Force or Navy delivery vehicles (e.g., A-10, AC-130W, B-1, B-52, F-15E, F-16 Block 40/50, F-18, F-22, MQ-1, MQ-9, and F-35), many of which have all the desirable attributes of a CAS platform. These types of fires all provide the desired result and do so with the precision required in dangerous close environments.

A consistent impediment to effective multidomain operations and joint fires has been coordination of responsibility and authority. The early phases of Operation Iraqi Freedom clearly demonstrate several doctrinal flaws that a capable adversary could exploit. The fundamental problem was that the speed and complexity of the situation outpaced the capability of the coalition forces to effectively command, control, and integrate air and land domain forces. Doctrinally, deconfliction of responsibility for fires is accomplished by various fire support coordination measures in specific areas of operation, usually controlled by the joint force land component commander.[22] In Operation Iraqi Freedom, the joint force land component commander delegated fire support coordination line authority to the Army's V Corps, which would often

place the fire support coordination line up to one hundred kilometers from the forward edge of troops.[23] In 2003, this definition of the "deep" area forced the combined force air component commander and the 3rd Infantry Division (Mechanized) [3ID(M)] into a cumbersome coordination process that often shut down both surface and airpower fires.[24] The division's after action report states, "the argument seems to be that CFACC [the combined force air component commander] would not adequately address V Corps targeting requirements; 3ID(M) violently disagrees … 3ID(M) believes CFACC is better prepared to engage targets to effectively shape the battlefield."[25]

The lesson in Operation Iraqi Freedom's "race to Baghdad" is not whether the land component or the air component should have had higher authority in delineating targets. Instead, the joint force needs to address the cause of these operational seams to ensure a future adversary does not exploit them. In spite of the implementation of the joint air component coordination element after the lessons of Operation Anaconda, air-ground integration still has room to improve.[26] The multidomain concept provides a helpful lens toward achieving an increasingly integrated and highly agile approach to warfighting. Maneuver in the land domain and maneuver in the air domain should be viewed as equal partners and mutually enabling functions. As a starting point, the term CAS by definition is misleading because it implies a relationship dominated by the ground force.[27] RAND proposes the term "close air attack" as a more accurate way to communicate the partnership between air and ground forces.[28] Trust is fundamental to ensuring this relationship is functional and multidomain thought is institutionalized.

In addition to a habit of thought, a more flexible fire support coordination command-and-control structure is also needed. Using the principles of mission command, operational agility and integration are increased by pushing decision making down to the lowest level. The Marine Corps already uses a concept that delineates an area between CAS and the fire support coordination line and the battlefield coordination line, for the purpose of allowing Marine air-ground task force aviation to "attack surface targets without approval of a GCE [ground combat element] commander, in whose area the targets may be located."[29] The battlefield coordination line provides an intermediary coordination measure between CAS and deep operations, which allows better exploitation of targets and integration of air and land power. Another solution is to keep the fire support coordination line as close to the forward line of troops as possible. Flexibility in command and control will require changes from both the air and land components to match the current operational context. Finally, battlefield decision making below the component level is required to successfully operate in a contested and degraded air and land environment, especially if air domain superiority falls somewhere on the continuum between localized air superiority and air parity.[30] The joint air operations center, a monolith of centralized control, must delegate decision making and authority to a lower level tightly integrated with land domain operations.[31] A coordinated, domain-focused command-and-control architecture will greatly improve joint force decision making and enable the level of operational agility future threats require.

Furthermore, recent operations provide opportunities to more accurately define CAS. If close air attack is used as a more precise term, then the joint force can begin to view this mission as integrated, domain-based fires. Traditional CAS synchronizes ground and air element resources for a ground-based objective—exactly the way organic Army aviation integrates with its ground forces—in close proximity to and with a regular working relationship that permits increased levels of both situational awareness and effectiveness. However, other missions outside the traditional definition of "danger close" have been conducted under the CAS umbrella, usually because a joint terminal attack controller (JTAC) is clearing the fires. The trend from Kosovo to Operation Enduring Freedom moves away from traditional infantry and armor air support, to a special-operations-forces-heavy integration with precision air that is "far different from traditional notions of CAS, … a novel concept that touched the heart of the always sensitive special operations forces—conventional Army relationship."[32] Today, in Operation Inherent Resolve, aircraft are executing these close air attack missions while the JTAC and ground commander are far from the coordinated fires. They can do so effectively because of technology such as satellite radio, full-motion video, and video downlink. The same precision necessary in CAS is necessary in prosecuting these low-collateral damage, high-value targets.

Thus, our understanding of the doctrinal term CAS needs to expand. Close air attack fires have moved past well-understood concepts first developed in the world

wars, and comprehending this shift is essential to multidomain operations. *CAS is truly platform immaterial.* The most appropriate delivery vehicle should vary based on specific mission parameters and the operational and tactical situation. A wide variety of platform options has the required level of persistence and precision to achieve the desired effects on the battlefield. Applying multidomain thought also illuminates friction areas in coordinating fires using the fire support coordination line for the deep and close ground schemes of maneuver. In order to ensure this does not continue, both the Army and the Air Force need to increase the agility of their respective command-and-control systems to delegate decision making to a lower level. Examining the Air Force specifically and the CAS mission provides deeper understanding of the integration between the land and air domains.

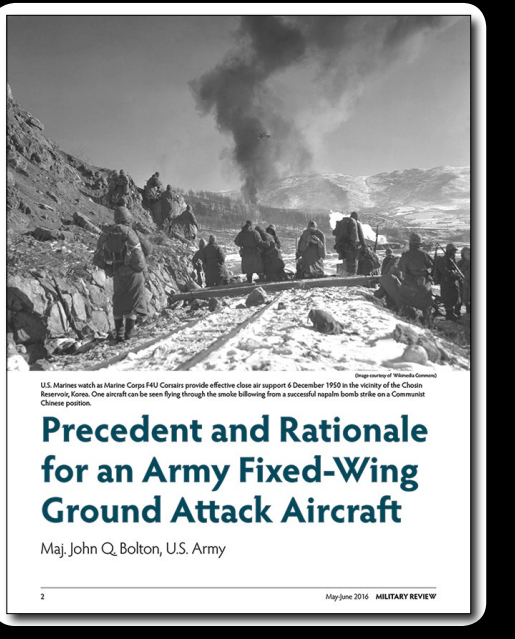
A Closer Look at Air Force Close Air Support

CAS, under any definition, is much more than a platform. The hardware component is a small portion of the overall investment the Air Force has made in championing today's CAS fight. To determine the level to which the Air Force has demonstrated its commitment to CAS, any evaluation must analyze three essential elements, with no special consideration given to platform. First, one must consider the emphasis and resources dedicated to training. Second, one must look closely at doctrine and ideas. Finally, one must examine operational examples that show the commitment of the Air Force to CAS as seen in contemporary operations.

Certainly, the largest investment in CAS comes in the training realm, both for the pilot and the weapons controller on the ground calling in the strike. The controller is the final clearinghouse for weapons release and is in possession of the clearest picture of friendly positions in relation to the enemy. Both combat controller and tactical air control party airmen graduate from the Special Tactical Training Squadron (STTS) at Hurlburt Field, Florida. In 2007, the STTS graduated roughly forty students, and that number has now more than tripled to its current annual throughput of 144 students.[33] Today's students will also earn their advanced JTAC certification from the Special Operations Terminal Attack Controller Course in Yuma, Arizona. In 2009, the Air Force purchased the Special Operations Terminal Attack Controller Course facility from the United States Army Special Operations Command and now also trains all Army JTACs. The Special Operations Wing at Hurlburt funds that training in Yuma at about $4 million per year to cover the CAS assets required to certify each JTAC.[34]

Military Review

A DIFFERENT VIEWPOINT



Maj. John Q. Bolton offers a different point of view on close air support in "Precedent and Rationale for an Army Fixed-Wing Ground Attack Aircraft." The Army aviator argues that the U.S. Air Force considers close air support a high-risk, low-payoff mission, and the Army needs to take over this mission with its own organic fixed-wing aircraft.

For online access to Bolton's "Precedent and Rationale for an Army Fixed-Wing Ground Attack Aircraft" in the May-June 2016 issue of *Military Review*, visit: http://usacac.army.mil/CAC2/MilitaryReview/Archives/English/MilitaryReview_20160630_art014.pdf.

Does this institutional investment provide what the average infantrymen need when they call for CAS? Arguably, they "want," from either experience or legend, the A-10 screaming in low with its seven-barrel, 30-mm Gatling gun roaring and its large payload wreaking havoc and destruction on the battlefield. The psychological effect on the enemy observing this cannot be discounted. But if precisely killing the enemy while avoiding fratricide is the required effect, then the platform delivering the effect is irrelevant. The F-35 is indeed capable in the CAS mission area, and it will have improved capacity over time. However, while the F-35 is conducting a deeper strike at a critical enemy center of gravity, the Air Force has numerous other platforms that will deliver the desired outcomes.

The B-1 Lancer is just one of those CAS-capable platforms that carries the largest payload of any guided or unguided weapon in the entire Air Force inventory.[35] The B-1 can carry an assortment of GPS and laser-guided five hundred- and two thousand-pound bombs and in quantities every JTAC desires. In a show of Air Force commitment to the CAS mission, a 2009 account of soldiers pinned down at Outpost Keating in Nuristan, Afghanistan, clearly demonstrates this reality. "Bone 21," the call sign of the B-1, was diverted from routine patrolling to Outpost Keating, 1,300 miles from its base of origination in Qatar. With a limited understanding of the gravity of the situation on the ground at Outpost Keating, Air Force controllers redirected "Bone 21" at supersonic speeds, to provide plentiful danger close fires to the soldiers in dire threat of being overrun by an estimated three hundred Taliban fighters.[36] This is one of many examples of the level of Air Force commitment to the infantryman.

The Air Force is fully committed to and invested in the CAS mission in support of the joint warfighting environment. The Air Force has institutionalized the battlefield airman and the JTAC construct, which will not go away.[37] Gen. Larry Welch, the previous Air Force chief of staff, pointed out in 2016 that over the last seven years, the Air Force flew on average twenty thousand CAS sorties a year, providing a needed function to the joint combatant commander.[38] Gen. Herbert Carlisle, air combat commander, recently stated, "We are using almost every platform we have to do CAS."[39] Senior leader statements and organizational decisions by the Air Force clearly indicate that support for the land component in general and the CAS mission in particular will be an enduring high-priority mission for the service in the future.

Where Do We Go from Here?

Contentious arguments about retiring a specific airframe clearly indicate a lack of trust between some in the Army and Air Force. The Air Force certainly has contributed to this cultural mistrust. In the drawdown after Desert Storm, the Chief of Staff of the Air Force Gen. Merrill McPeak conducted a loud campaign that offended the other services, going to the point of saying that Desert Storm was "the first time in history that a fielded army has been defeated by airpower."[40] This kind of rhetoric does not tend to move institutions toward cooperative solutions. Then Army Secretary John McHugh accurately summarized the issue when he stated, "What the soldier wants to see and what the command structure in the U.S. Army wants to happen (is placing) explosive ordnance on enemy positions … in a timely and effective manner regardless of platform."[41] If budget dollars were abundant and politics a nonplayer, the A-10 and larger CAS issue would have quietly been resolved. Since that is not reality, however, the services need to cooperate and speak with a single voice under the multidomain construct.

At the tactical level, there are legitimate cultural implications concerning the A-10 retirement. A strength of any single mission platform is that the community becomes extraordinarily good at what they do. As opposed to the "jack of all trades, master of none" philosophy, the A-10 is extraordinary at the CAS mission. It is understandable that the ground component feels slighted when the symbol of CAS is being retired. Furthermore, it is imperative that the Air Force capture the expertise, training, and relationships that are championed by the A-10 community. As more flexible aircraft like the F-35 come online and take on the CAS mission, the Air Force must transfer the CAS tradecraft.

The services must trust that they will continue to support each other, and they need to communicate this. Multidomain thinking should lead the dialogue, which is not simply joint but a step along the way toward true synergy from mere deconfliction. With a better and common understanding of what CAS truly is, the joint force can move toward more agile command and control and greatly improve effects in and through the intersection of the land and air domains. Airpower and land power have been and will continue to be dominant warfighting options for the Nation as a part of the joint force—multidomain integration will only make them stronger. ■

Notes

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16. Richard Kugler, *Operation Anaconda in Afghanistan: A Case Study in Adaptation in Battle* (Washington, DC: Center for Technology and National Security Policy, 2007), 13. Also, a detailed viewpoint of the failures in joint operational planning can be found in Richard B. Andres and Jeffery B. Hukill, "Anaconda: A Flawed Joint Planning Process," *Joint Force Quarterly* 47 (4th Quarter, 2007): 135–40, accessed 1 February 2017, http://ndupress.ndu.edu/portals/68/Documents/jfq/jfq-47.pdf.

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33. Maj. Donnie Seablom, interview by authors, 1 July 2016. Seablom has eight years' experience in the mission support field for special tactics and has significant expertise and involvement in the Air Force training program for battlefield airmen. Additionally, confirmation was received via personal interview on 14 July 2016 by Canadian Maj. Josh Klemen, who is a qualified joint terminal attack controller and teaches an elective on close air support at the Air Command and Staff College.

34. Seablom, interview.

35. Clinton Romesha, *Red Platoon: A True Story of American Valor* (New York: Dutton, 2016), 285.

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An embedded expeditionary cyber team performs surveillance and reconnaissance of various local networks 10 August 2016 at the National Training Center, Fort Irwin, California. The team is part of a pilot program known as Cyber Support to Corps and Below, developed to provide maneuver commanders with an improved situational awareness of the information environment and tools to shape that environment. (Photo by David Vergun, Army News Service)

"More Quaint and Subtle Ways to Kill"

The Operations Process in Future War

Maj. Wesley Moerbe, U.S. Army

He hath at will / More quaint and subtle ways to kill
— James Shirley, "The Last Conqueror"

On 13 September 1862, at a recently vacated Confederate bivouac site, a Union soldier noticed an envelope left behind by the previous encampment. The soldier opened it and found that,

in addition to a few damp cigars, he had discovered Special Order 191, signed by Robert E. Lee's assistant adjutant. As a result, the whole of Lee's operational plans for the upcoming campaign fell into Maj. Gen. George McClellan's lap.[1] Although famously timid in the field, McClellan managed to close with Lee and fought him to a bloody stalemate at Antietam on 17 September, ending the Army of Northern Virginia's first gambit into Maryland.[2]

Few of us have had to face an enemy who, unknown to us, gained partial or complete access to our plans or planning process, but our reliance upon information technology renews old battlefield challenges of planning and executing operations with reliable secrecy. Our adversaries' diligent search for asymmetric advantage leads them—almost inevitably—to our dependency upon networked and interconnected systems.[3] The problem now goes beyond throwing cyberpunches to communication disruption. The heavy use of networks for collaborative planning and decision-making processes also means our operations process itself can be attacked through the mission command system. Therefore, it is plausible that we could suffer our own Special Order 191 crisis.

Precisely such a contingency unfolded during 3rd Infantry Division's Warfighter Exercise in October 2016. Cyberwar ceased to be a future problem. The contest for supremacy in the cyber domain became an urgent and personal tactical challenge for the staff.

The lessons learned from these developments demand integration into our training and preparation for future conflict. I propose that solutions have little to do with technology and quite a bit to do with how we visualize and think about the operations process and mission command as a system in future war.

The Operations Process and Mission Command Systems Unplugged

Before proceeding further, the doctrinal and theoretical basis of U.S. Army decision making deserves exploration. In the simplest terms, the command of our country's land forces requires iteration between thought and action—a cycle of acting, reacting, learning, and adapting.[4] It is easy to take for granted, but how our headquarters makes abstract thought into something tangible carries immense importance. To better understand this, we must first disentangle ideas and processes from the physical objects that support collaboration or enhance thinking.

Use of Language

Imprecise language can infect how we think about decision making and command of our forces. In his pithy style, S. L. A. Marshall explains that in our profession, "if a word comes to mean too many things, it misses fire at the critical point."[5] In this case, he spoke of communications, and opined that it had become a military catchall, meaning so many things that it "quite frequently means nothing."[6]

Concepts embedded in both the mission command system and the operations process suffer a similar loss of clarity today. The Army relies upon the operations process and its activities—plan, prepare, execute, and assess—as cognitive scaffolding throughout operations. This means that as the chosen framework for the exercise of mission command, commanders and their staffs use the operations process to consider what they must do to solve tactical and operational problems.[7] The *how* of this framework manifests as the mission command system, those components of a unit headquarters that most would recognize. The mission command system consists of people, networks, information systems, processes and procedures, and facilities.[8] Thus, some components are tangible and others theoretical.

In keeping with mission command philosophy, this system adapts to the commander, his or her staff, and the environment.[9] To do so, the relationships among these components conform to personalities, the nature of the conflict, and the environment. Like many systems, if overly dependent upon any one component, it becomes vulnerable because it is unable to "absorb disturbances" and remain functional.[10]

The components of mission command systems include the abstract and the tactile, with little distinction made between the two. This helps explain how

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some might mistakenly blend the two aspects of mission command systems. But, the mistake is more than semantic. The use of a physical object to facilitate intellectual effort must not cause one to believe the physical object is a requirement for cognitive processes. If staff members conflate product, process, and tools, they hamper their ability to react to an attack against the mission command system. A logical and inevitable consequence of such conflation is the paralysis of a headquarters' decision making upon the loss of networks or automations capability. Our staffs must realize that wires, laptops, and servers are only meant to assist human thought in operations, and that intelligent planning neither begins nor ends with such enablers.

During my own service in a division-level staff, I found that organizational leaders (myself included) have an impulse to optimize our mission command system for stability environments with an uncontested cyber domain. It has taken discipline and the experience of general officers to expunge such habits. Carl von Clausewitz warned that a certain method or routine can "easily outlive the situation that gave rise to it; for conditions change imperceptibly."[11] I suspect that habits developed over nearly fifteen years of stability operations have created unrealistic expectations based on unexamined or dated assumptions. The most dangerous of these assumptions could be that networks and information systems remain relatively free from enemy interference. However, the evidence indicates that adversaries'

A member of an expeditionary cyber team provides cover for fellow cyber operators who are getting into camouflaged and concealed positions to perform surveillance and reconnaissance 10 August 2016 at the National Training Center, Fort Irwin, California. (Photo by David Vergun, Army News Service)

intentions and capabilities will require our readiness to reconfigure our mission command systems frequently due to enemy action. Adversaries believe, as do some Western analysts, that networks and information systems present such a vulnerability.[12]

The Decline of Information Security

Conrad Crane opens his article "The Lure of Strike" by saying, "there are two approaches to war, asymmetric and stupid."[13] With this aphorism in mind, lingering a moment on the operating concepts of our most capable adversaries is worthwhile.

Open-source documents and recent history show a pattern that both Russian and Chinese militaries try to blend traditional and nontraditional methods of warfare to undermine consensus that a state of war actually exists, creating ambiguity in the nature of the conflict itself. Moreover, they emphasize a complementary array of cross-domain operations intended to attack U.S. vulnerabilities at minimal costs to themselves. It follows that cyber conflict figures largely into both these states' operating concepts.[14]

The now widely referenced work, *Unrestricted Warfare,* looks to the combination of a number of nontraditional forms of warfare to gain advantage over the United States, singling out technology addiction in particular as having disproportionate effect upon Western forces.[15] *Unrestricted Warfare* stresses asymmetry and synergistic effects, and lambasts U.S. military doctrine as overly kinetic and missing the broader potential of information warfare. Written in 1999 without the endorsement of the People's Liberation Army (PLA), this volume represents the theories of two Chinese colonels. That said, unmistakably similar patterns of logic connect *Unrestricted Warfare* to the more authoritative *The Science of Military Strategy*.[16] Western analysis of this official PLA document notes that the Chinese have prioritized preparedness for operating with degraded or collapsed networks, and suggests that they could inflict the same against the United States.[17] A 2015 RAND study assessed that the PLA publications and exercises now enjoin a first strike against enemy computer systems and networks with a mind to "control the flow of information" to and among the enemy.[18]

In Russian doctrine, the holistic approach emphasizes information war and the use of nonkinetic means to shape the battlefield for the physical combat. The Russians call this *bespredel,* and it echoes the concepts that underpin *Unrestricted Warfare*.[19]

Russia's recent belligerence offers evidence of its perspective on cyberwar. During its 2008 conflict with Georgia, Russian hackers deliberately targeted military digital communications, delaying order distribution and sowing confusion among decision makers.[20] This approach, the combination of traditional and nontraditional forms of conflict, integrates the full spectrum of offensive capabilities to create ambiguity.

More recently, operations in Ukraine demonstrated an even more refined execution of gray war and, like earlier conflicts, paralyzed Ukraine's military response by shattering its decision-making cycle through information control.[21] Russian sources, both official and unofficial, place a premium on information isolation.[22]

Understandably, U.S. policy makers and security specialists fix their attention on the possible threats that these doctrines have for the homeland. Certainly, we would prefer to avoid serious disruptions to life in the homeland, but in a major conflict these are inevitable to some extent. In fact, John Arquilla, a noted RAND theorist, criticizes fears over cyberattacks against the homeland as overwrought, citing the resiliency of civilian populations against strategic bombing campaigns in the Second World War.[23] After all, bugs can be patched, financial institutions can rebound, and order can be restored to a major city suffering from cyberattacks against infrastructure.

However, a nation's operational and tactical formations in the midst of an active conflict have little time to recover from a collapse of information networks. Timely decision making will not wait for a trouble-ticket to be processed. In our present age, strategic thinkers must concern themselves with cyber conflict for sure, but we must also consider the resilience of operational and tactical formations against what John Arquilla calls a "bitskrieg."[24]

In a revealing chapter of *Dark Territory*, Fred Kaplan describes how U.S. forces in concert with interagency partners executed a startlingly effective campaign behind the curtain of the Iraq surge conducted by Gen. David A. Petraeus. Less publicized than the counterinsurgency efforts, but just as important, were the efforts of Gen. Stanley A. McChrystal's targeting operations, which effectively

pierced the insurgent network's mission command system and wreaked havoc on their operations process from within. Joint Special Operations Command led enemy forces into ambushes with false information and isolated cells by severing the links between them.[25] Despite the strength and resilience of networked organizations, in this case, enemy forces lost the initiative entirely. Later, Petraeus singled out McChrystal's operations as a critical component of the overall strategy, noting that he had swept "senior and mid-level leaders" from the battlefield, the results of which allowed time and space for the population-centric strategy to work.[26]

Of note, the enemies McChrystal defeated used commercially available tools and Internet capabilities, and while one might suppose that private networks established by state militaries to be more secure, this may not be so for long. The United States now reports it has the capability to access wireless tactical networks like our own.[27] Now imagine if the enemy, rather than McChrystal, had such capabilities. Imagine that an adversary had breached our own mission command system. Indeed, it seems unwise to suppose future enemies will not possess such a capability based on these developments and the findings of a 2013 cybersecurity review panel.[28]

The automations networks of U.S. Army headquarters organizations now form the backbone of our collective brain. In *The Scientific Way of Warfare,* Antoine Bousquet lands squarely on the problem this creates. In our enthusiasm for the potential of networks and information, he warns that we become "utterly dependent" on such capabilities.[29] In essence, the tools by which we collaborate and make decisions in our tactical headquarters have created a fatal vulnerability by merging product and process.

Consider how the Army now conducts the operations process in a division headquarters. The staff forms into working groups or planning teams, often dispersed via the network. Even if they convene in person, the staff captures each step of the planning process in a digital medium of some kind. Briefings to the commander may take place around an analog map, but nearly all orders dissemination occurs through digital media. As operations progress, fragmentary orders go out by e-mail, annexes get posted to portals, and dozens of other supporting products get posted in various digital commons.

Given the risk of concentrating the entire staff and commanders of a division at a single targetable location, even rehearsals may take place not around a terrain model but with leaders huddled around monitors in their headquarters tents. In each case, a capable adversary might plausibly penetrate the operations process.

Once inside our cyberperimeter, the possibilities are as diverse as they are unsettling. An enemy could choose to disrupt planning and executing by shutting down the network, or it could covertly capture plans from within the network and adapt its own operations to increase the odds of success. Worse still, the enemy could develop the ability to corrupt our mission command system by altering or planting false data or information into our network. Considering that both China's and Russia's operating concepts revolve around creating ambiguity, challenging the clarity of planning operations is a likely pursuit of their operations.

As we have already seen, these are not hypothetical capabilities—the technology already exists to realize those ends. The point is not that we ought to live in fear that all our plans are known to the enemy but rather that we cannot assume the impenetrability of our networks or the absolute secrecy of our decision making. This provokes the question, what are the prospects of victory without our accustomed informational advantages?

Preparing for Information Dystopia

Sobering as these possibilities may be, we need not panic. Divining the operating concept behind the threat clarifies our problem. To prepare for potential wars to come requires developing and strengthening two divergent competencies: resilience in our information networks and, simultaneously, the ability to plan, prepare, execute, and assess "in the dark" in the event networks are disabled or fatally compromised.

During the 3rd Infantry Division's October 2016 Warfighter Exercise, even after the enemy gained access to our networks and enjoyed the ability to adapt its scheme of maneuver to defeat our own, the division succeeded. We met with success not through any act of prescience but rather through a plan that permitted subordinate brigade combat teams the flexibility to respond to battlefield circumstances. Let us unpack the

Sgts. 1st Class Richard Miller (*left*) and Brian Rowcotsky of the U.S. Army Cyber Protection Brigade discuss the response to a simulated cyber attack on the 1st Brigade Combat Team, 82nd Airborne Division, with Staff Sgt. Frederick Roquemore (*standing*), a cyber network defender with the 1/82nd, during the unit's rotation 6 November 2015 at the Joint Readiness Training Center at Fort Polk, Louisiana. (Photo by Bill Roche)

possibility of mitigating these developments regarding network integrity.

Coming to grips with the penetrable operations process requires, above all, that the mind be made ready for a new norm. The idea that it could happen should not be a far-off possibility. From Robert E. Lee's saddle, the hazard of an intercepted order, though not necessarily common, was a known possibility. Telegraph wires could be cut or tapped by either side, and couriers killed or captured.[30] Neither the Federal nor the Confederate armies possessed a decisive advantage in information security. The simple recognition of this condition meant that all commanders needed to be mindful of indicators that their plans were known to the enemy, or that their own orders had failed to reach subordinates.

That does not mean we should eschew the multiplicative power of our networked systems but rather train to avoid dependency upon them. The mind can grow accustomed, perhaps addicted, to clarity or certainty that can be artificial or temporary. In *Certain Victory: The US Army in the Gulf War*, Gen. Robert H. Scales describes the unfulfilled hunger for precision intelligence and unfailing communications that many commanders had grown dependent upon during their service in Europe.[31] How fascinating that when weather and distance induced lapses in communication, the intent-based orders of Maj. Gen. Frederick M. Franks Jr. allowed the Seventh Corps to continue planning and executing by "grease pencil and acetate."[32]

With such historical precedents in mind, a severe cyberattack or network collapse must become an anticipated event—as likely as indirect fire in the security

area. Furthermore, the cognitive and procedural adjustment from network-enabled planning to pure analog will not happen of its own accord but requires that leaders act and staff reorganize.

Transition from a computer network-centric to a traditional hand-driven process calls for different responsibilities, outputs, and communication media. The physical act of planning and executing relies upon different agents. Agility, in part, will be the speed at which a staff can reorient on an analog process and then back to a full network-enabled capability without loss of potency.

Those who design exercises and training bear the responsibility of placing stress on these processes. Training the operations process "unplugged," as it were, helps the members of the staff survive this turbulence and retain staff cohesion and functionality. They can better understand the difference between product and process while supporting the commander's decision making. In sum, when buffeted by unreliable networks, we may fall back on sound training, but training and warfighting must proceed from a sturdy and tested operating philosophy—in our case, mission command.

We may be comforted that our forebears successfully coped with the uncertain information environment long before us. During Napoleon's 1809 Danube Campaign, Napoleon's Army of the Danube, and the Army of Italy, under his stepson, Eugene, advanced on Vienna on two distinct axes separated by the Italian Alps. A weeklong ride kept both commanders in the dark as to the success or failure of the other. Eugene blundered into his first engagements but rediscovered his confidence and dealt Archduke John a decisive defeat.[33] He then fought his way into Austria to join Napoleon's forces against Archduke Charles based on little more than an operational approach described to him by dispatches from his commander before departing.[34] I propose that rather than greater information security or dominance, our endeavors must engender a more authentic exercise of mission command.

During our division exercise, I overheard the wry remark by a senior officer, "I know the enemy doesn't know what we're going to do because I don't know what we're going to do." The comment frames a final point worth considering. If the enemy penetrates our mission command system, detailed operational and deception plans become liabilities. The wider the commander's range of options, the more difficult to counter them. Deception has value, but for tactical and operational headquarters, returns may not merit large investment. Retired Brig. Gen. Huba Wass de Czege echoes this sentiment in describing a personal epiphany as a brigade commander at the National Training Center: "Creating ambiguity is a lot more important than trying to create deception."[35] Creating ambiguity does not imply not planning but rather means avoiding patterns and keeping every option available for the longest possible time. In practical terms, this manifests as the use of decision-point tactics. Decision-point tactics respect Helmuth von Moltke's dictum that "one does well to order no more than is absolutely necessary" while putting to good use the planning capacity of the staff.[36]

Concluding Thoughts: Peace with Uncertainty

Martin van Creveld's study *Command in War* delves into the nature of the operations process and finds the American "pathology of information" during the Vietnam War nearly enough to "make one despair of human reason."[37] His critique stings but rings true. Then and now, technological capabilities seduce us into dependency on a fickle mistress. The "quest for certainty," he assures us, is an errant one, and the weight of evidence supports his claim.[38]

Our decision-making processes must prostrate themselves to uncertainty rather than attempt to abolish it. The pursuit of ambiguity and confusion forms the logic of our adversaries' military response to U.S. superiority in traditional warfighting. The Chinese and Russian operating concepts put cross-domain operations at their core and scale from the strategic to the tactical. Cybercombat figures largely into their all-encompassing vision of warfare, and the capability to penetrate military networks already exists. The cognitive aspect of the operations process need not change, but we must prepare for the likelihood that our digital couriers may be intercepted or worse. Columnist Sebastian Bae captures the essence of our times, asserting that victory will go to "those who effectively leverage information to confuse, deceive, and control the adversary."[39] The discovery of Special Order 191 may or may not have changed the course of

the American Civil War, but the potential seems clear even to amateur historians. We would do well to heed the spirit of our own times and prepare our staffs and commanders for a contested information environment where even our decision-making process may not remain hidden from the enemy. ■

Notes

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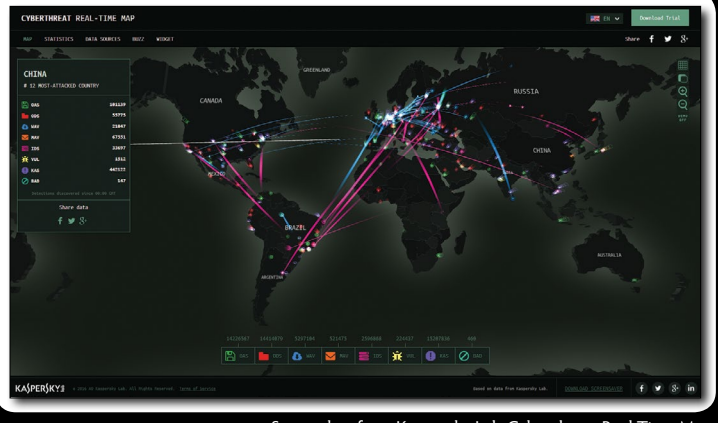
Military Review

CHECK THIS OUT



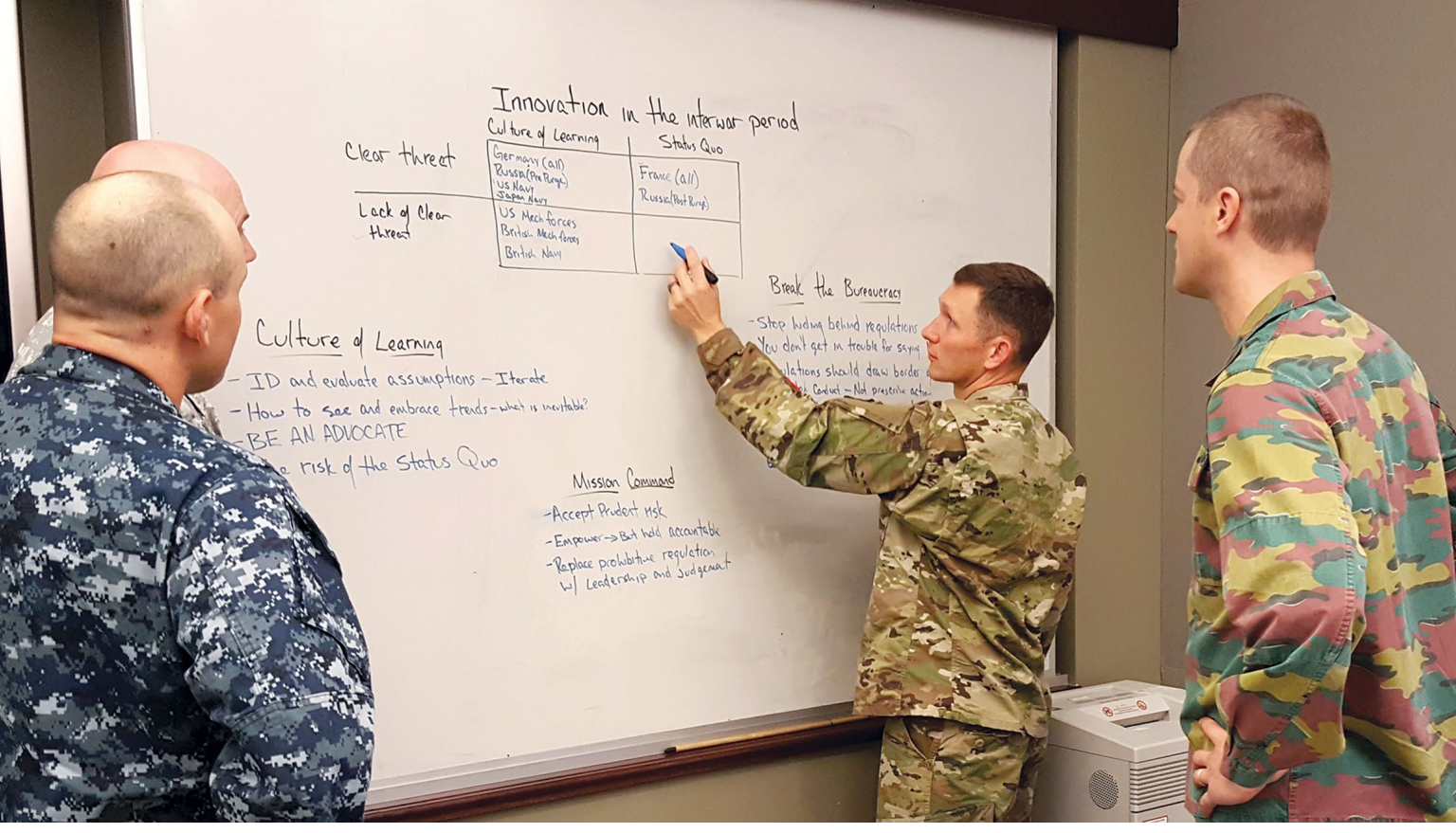
Screenshot from Kaspersky Lab Cyberthreat Real-Time Map

Screenshot from Norse Corp Live Cyber-Attack Map

For real-time visibility into global cyberattacks and cyberthreats, check out these sources.

Kaspersky Lab's interactive cyberthreat real-time map at:
https://cybermap.kaspersky.com/#

Norse Corp's Live, global cyberattack map at:
http://map.norsecorp.com/#/



Maj. Andrew Miller (*center*) works with fellow U.S. Army Command and General Staff College students Maj. Brent Adams, U.S. Army; Lt. Cmdr. J. J. Murawski, U.S. Navy; and Senior Capt. Rik Van Hoecke, Belgian army, 26 September 2015 to identify conditions necessary for innovation. (Photo by Maj. Karen Daigle, U.S. Army)

Treading the Way of Ignorance

Officer Education and Critical Thought

1st Lt. James Tollefson, Alaska Army National Guard

In order to arrive at what you do not know
You must go by a way which is the way of ignorance.
—"East Coker," T. S. Eliot

On 25 November 1950, a Chinese army numbering in the hundreds of thousands unexpectedly emerged from the forbidding mountains of North Korea and crashed into the U.S. Eighth Army. Chinese soldiery, fired by revolutionary zeal and hardened by twenty years of constant conflict, flowed around U.S. units in the broken terrain like a human tide.[1] U.S. forces, strung out "from hell to breakfast," as one corps commander put it, found themselves isolated in individual companies and battered until they broke and fled south.[2] In ensuing days, the U.S. 2nd Infantry Division was beaten, broken, and forced to retreat down a six-mile corridor of fire and death that earned the sobering appellation "the Gauntlet."

As U.S. forces retrograded toward Seoul, strident voices in the United States demanded to know what had happened. How had the mighty U.S. Army, that muscular organization that had crushed two aspiring world empires within the last decade, taken such a blow from a rabble of lightly armed peasant soldiers? How could an army three hundred thousand strong mass against U.S. forces *and achieve complete surprise*?

The answer, as it turned out, was that the political and military logics of the war were in conflict. The Truman administration wished to keep the war limited and, accordingly, desired to avoid Chinese involvement. Meanwhile, Gen. Douglas MacArthur insisted that the Chinese would not dare intervene, and that, if they did, massive U.S. airpower would crush them.[3] He was less forthcoming about the intelligence coming from his front-line units, which increasingly indicated a massive Chinese presence in North Korea.[4] MacArthur seems to have even welcomed the prospect of all-out war against Communist China.[5] Whether the Chinese intervened or not was almost beside the point—if they did, their regime could be toppled; if they did not, Korea would be unified. Either outcome was a U.S.—and for MacArthur, a personal—victory.[6]

Despite this difference of perspective, Truman initially chose to allow MacArthur to act as he wished. Consequently, MacArthur moved north, his lead elements advancing all the way to the Chinese border. The Chinese responded with overwhelming force. Ultimately, the government allowed MacArthur "to bring purely military thinking into matters that remained in essence political" and thereby invited disaster.[7]

In Vietnam, American commanders again brought military decision-making logic to bear against a foe that focused on, and won, the decisive political conflict.[8] Today, as we survey the results of fifteen years of fruitless conflict—a resurgent Taliban, a divided Iraq, a triumphalist Islamic State, brutal sectarian violence, and terrorism—we must ask ourselves if perhaps we have once again inappropriately applied military thinking to political problems.

The challenges we face today clearly do not bend to military logic alone. Today's challenges are inherently multilogical, demanding a nuanced understanding of many competing viewpoints. They can only be addressed by leaders willing to discard worn-out solutions and freely engage with the world as they find it, as it really is. Yet from the earliest days of military service, we train our young leaders to think monologically—in a simple, linear fashion. We train them to win decisively as lieutenants and captains while preparing them to flounder as generals. We focus on tactical victory while fatalistically hoping for strategic success.

Weak-Sense Critical Thought, Military Training, and Tactical Victory

We can define monological or "weak-sense" critical thinking as what we learn to do to solve specific problems. It is technical reason that solves problems systematically by understanding the workings of a discrete and bounded system, such as a car engine. Such are vocational thinking skills, necessary to accomplish specific tasks with excellence. Where problems are well structured or well understood, they can be fruitfully addressed by monological thinking.

At present, the training young officers receive teaches and rewards monological thought. This is entirely appropriate. It is time to act when the shooting starts, after all, and to do so decisively. Therefore, young leaders are conditioned to kill, react to contact, maneuver their units, cross-level supplies and ammunition, evacuate their casualties, report to higher headquarters, plan for the offense and defense, and control direct and indirect fires. Critical thought is required in the planning of raids, ambushes, defenses, logistical resupplies, air movements, and patrols, but the standards of success and failure are clearly defined. One considers the opponent's point of view from within the context of one's own: "If I was the enemy, with the materiel that the enemy is templated to possess, what would I do and how would I do it?" Then the young leader drafts a plan to meet his or her opponent's imagined courses of action. Always the bias is to act, and the tools to enable this action are simple, decisive, monological tactics.

Leaving platoon leadership, young officers receive their first thorough exposure to doctrine at the career course.

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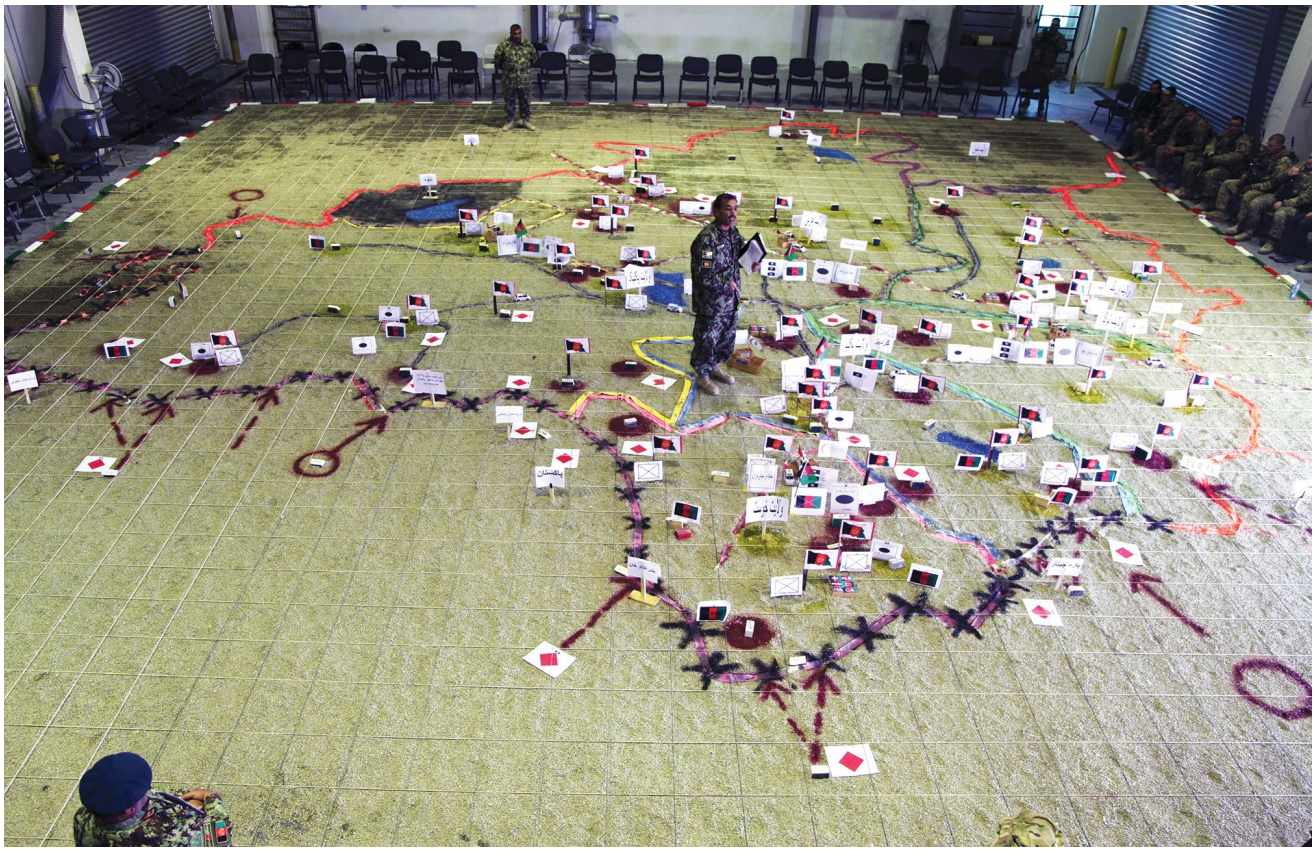
1st Lt. Elyse Ping Medvigy calls for fire 22 August 2014 during an artillery shoot south of Kandahar Airfield, Afghanistan. Medvigy, a fire support officer assigned to the 4th Infantry Division's Company D, 1st Battalion, 12th Infantry Regiment, 4th Infantry Brigade Combat Team, is the first female company fire support officer to serve in an infantry brigade combat team supporting Operation Enduring Freedom. (Photo by Staff Sgt. Whitney Houston, U.S. Army)

Here they receive the U.S. Army's accumulated wisdom on offense, defense, stability operations, and defense support to civil authorities. They learn to create detailed plans that strictly accord with this doctrine. No one claims that this doctrine is inerrant. Yet adherence to it provides valuable consistency "on which decision makers higher in the chain can depend."[9] In the messy reality of war, doctrine saves time, allowing leaders to make decisions in advance of events. Good doctrine "simply overwhelms minor variations and unexpected reactions."[10] It may sometimes fail, but in aggregate it enables tactical units to communicate their plans to one another, synchronize their efforts, and achieve crushing victories against their adversaries. Though many company grade officers chafe against it, most act within it. Doctrine provides context for tactics. It is the frame that informs our professional responsibilities.

Doctrine demands that we accept our lessons in warfare on the authority of others. We can partake vicariously in the wartime experiences of our predecessors through documentaries and books, but without actual combat experience, we cannot personally verify the truth of what we are taught. To the extent that we do have such opportunities during deployments or training events, we often see only enough to convince us of the overall validity of our training without putting most of it to the test. We are like J. B. Bury's primitive man who learned from his elders that the neighboring hills held both bears and evil spirits and who, upon seeing a bear, concluded that evil spirits must also be real.[11] Likewise, we are taught both ambushes and counterinsurgency doctrine; receiving a "Go" on an ambush training lane, we assume the efficacy of counterinsurgency doctrine. Coming from the same source, we assume each equally valid. Young officers have little ability to weigh and validate the relative merits of the many things they must learn. So they simply learn the lessons well and accept their value on the authority of the instructors. Newly minted experts at ambushes, young officers assume the efficacy of counterinsurgency to win the hearts and minds of the Afghan people, a people they



An Afghan soldier briefs a combined force at a sand table representing East Afghanistan during a combined arms rehearsal 3 March 2014 at Forward Operating Base Thunder, Paktia Province, Afghanistan. (Photo by Pfc. Nikayla Shodeen, U.S. Army)

do not understand. Like new lieutenants, we all come to accept our doctrine by faith supported by a paucity of (often irrelevant) experiences.

We receive our young officers from a school and university system that consistently produces poor reasoners, and then attempt to make them experts in a very specific monological discipline of tactical problem solving. We give them all the "right" answers and launch them into the fray.[12] One result is that we set lifetime habits of thought and reinforce them at each level of the Officer Education System. Each program teaches adherence to doctrine, conformity in terminology and language, and a specific interpretation of world events and their significance to the United States. Although opportunities abound at the higher levels of the Officer Education System for officers to learn the reflective disciplines of multilogical "strong-sense" critical thought, most fail to make the transition.[13] Perhaps this is because Army promotions actively penalize officers that demonstrate conceptual ability.[14] Perhaps it is the inevitable outcome of a military culture that shuns quality writing in favor of PowerPoint slides and e-mail.[15] Perhaps many officers simply fail to realize that such a transition is necessary. Whatever the reason, we produce legions of doctrinal technicians but very few independent thinkers.

Strong-Sense Critical Thought, Intellectual Freedom, and the Way of Ignorance

Multilogical, "strong-sense" critical thought is "the ability to think accurately and fairmindedly within opposing points of view and contradictory frames of reference."[16] Multilogical problems are those that can be approached from many different perspectives and understood by means of widely divergent ideologies. To truly understand them requires a suspension of inborn ethno- and ego-centricity and a willingness to reason from within others' understanding of the world. It requires us to calmly consider that our terrorists are another's freedom fighters; that what we perceive as naked aggression may to another be the fulfillment of national destiny; that our liberty may be

another's godless hedonism. It requires us to commit the ultimate ideological heresy—to admit that our national self-interest and cultural values are no more intrinsically worthwhile than anyone else's. Yet in the midst of this apostasy, we must remain capable of fighting faithfully for those same national interests and values.

The difficulties inherent in this are immense. To enjoy such intellectual freedom means quietly discarding the philosophy underpinning the *National Security Strategy*, which loudly proclaims that "American values are reflective of the universal values we champion all around the world," thereby declaring our country the world's arbiter of moral justice and freedom.[17] This egocentric commitment to value projection "defies rational explanation beyond an excessive belief in the universality of our own model of democracy."[18] More importantly, it blinds us to reality as much of the world's population currently experiences it. Yet, as leaders of our nation's Army, we have an obligation to implement this very policy.

And so, we find ourselves faced with the central dilemma of intellectual freedom in the military. To be truly free is to unfetter the mind and seek truth for its own sake. Yet, we serve a profession that requires significant ideological commitment. We are trained from commissioning to stand, rifle in hand, on behalf of the national interest. Our first loyalty is to the Constitution, the flag, the people from whom we come and to whom we will return. We cannot abandon this commitment—and cannot even responsibly question it. It is a fundamental prerequisite of our profession that we be willing to fight and kill for our nation, and in so doing violently impose our national will and national values on other peoples around the world. Yet the intellectual freedom we require to engage the world today demands that we reason from the perspective of our opponents *as though we shared their beliefs*. Even in the absence of the strong monological tendencies of military training, this would pose a significant obstacle to developing truly independent, multilogical thinkers in our ranks.

Somehow we must learn how to hold these opposing ideas in our minds, navigating fluently the inherent tension between them, and enter into true multilogical freedom of thought. Then, having attained a sort of professional enlightenment, we must discover how to teach this insight to generations of young officers to come. It is no mistake if this sounds vaguely spiritual in nature. This is not a battle for behavioral scientists, statisticians, or psychologists. It is a challenge instead for the reflective, experienced, senior military leaders within our ranks. This is a job for soldier-philosophers with the courage to challenge the assumptions upon which they have built decades-long careers.

Of course, not all the demands of succeeding in our current operating environment require such deep introspective challenges to the nature of our profession. Often, we need only step back from a situation where our training and experience are demonstrably ineffective and have the courage to try a novel, nondoctrinal, creative solution. Yet the basic challenge is the same. The uncritical self-assurance that informs our *National Security Strategy* and our oath of commissioning also pervades our battle drills and doctrine. It is the assumption that we already have all, or most, of the right answers, and success is merely a matter of effective implementation. It is only when we consciously affirm that we do not know everything and when we assume an attitude of intellectual humility, that we begin to attain true critical thought—even wisdom.

Essayist Wendell Berry, writing of the verse that forms the epigraph to this paper, describes this humility as the "way of ignorance."[19] It is living in the constant conscious affirmation of our unknowing, our inability to know everything that we ought to know. It is the mindset of the person who does not lightly accept harm, who does not casually "destroy a village in order to save it, ... destroy freedom in order to save it, ... destroy the world in order to live in it."[20] It is understanding the limits of our own experience and training. For, as T. S. Eliot writes,

> *There is, it seems to us,*
> *At best, only a limited value*
> *In the knowledge derived from experience.*
> *The knowledge imposes a pattern, and falsifies,*
> *For the pattern is new in every moment*
> *And every moment is a new and shocking*
> *Valuation of all we have been.*[21]

It is all very well, of course, to espouse the virtues of some lofty philosophy of critical thought. These words reach out as vague accusations of our current system's failures. The burden of proof is immediately on the reader either to affirm or refute these allegations. Intuitively, we know that there is much to cherish in our military institutions, regardless of their inevitable shortcomings or defects. So, the vignette that follows is offered as compelling evidence that the attributes of intellectual humility and critical thinking here endorsed are already present

in today's Army. What we need is perhaps not so much a revolutionary reappraisal of our training and officer education system as a frank discussion of the need for intellectual humility and candor throughout our ranks. As that discussion occurs, it behooves us to teach our young leaders the intellectual humility and open-minded critical thinking skills that will allow them to win on the battlefields of tomorrow.

Strong-Sense Critical Thought in Action: Defeating the RKG-3 in Iraq, 2008 to 2009

Lt. Col. John Richardson commanded a cavalry squadron in Iraq in 2008 to 2009. Prior to deployment, his unit mastered the Army's extant counter-improvised explosive device (IED) tactics. In theater they quickly discovered that the local insurgent forces had exchanged IEDs for the RKG-3, a Soviet-era antitank hand grenade. Counter-IED tactics were of no avail against this new threat. RKG-3 casualties began to mount. Richardson, who "had trained for seventeen years to prepare himself to be a leader in this situation, to use good judgment and make decisive, ethical, and tactically sound decisions in a time of crisis," immediately directed a number of "technical solutions based on previous personal combat actions and years of experience."[22] Reasoning from within his own personal experience and extensive tactical training, he took decisive action to defeat a threat he did not understand. Nevertheless, his unit continued to take casualties from RKG-3 attacks. His monological response to the threat failed.

The RKG (*Ruchnaya Kumulyativnaya Granata*) is a Russian-made handheld shaped-charge grenade developed in the 1950s to defeat armor plating. One version of the RKG features a small, spring-loaded parachute that enables the RKG to attack the top of armored vehicles where armor is often thinnest. This parachute stabilizes the grenade in descent to ensure that the charge makes contact with the armor at a 90-degree angle. Other versions of the RKG do not have a parachute and are simply thrown against the sides of passing vehicles. It became a favored weapon of Iraqi insurgents operating in urban environments because individuals could throw them then quickly disappear among the civilian population. (Photo courtesy of Wikimedia Commons)

Fortunately, Richardson, instead of accepting RKG-3 casualties as the inevitable cost of doing business, decided to try another approach. He assembled a small group of soldiers who he believed had "developed innovative training in the past, ... showed a propensity for taking prudent risk, ... invented new tactics or new equipment configurations, ... and ... demonstrated an ability to transfer knowledge," and he tasked them to provide him with a solution.[23] This they did. By the end of the deployment, Richardson's unit had eliminated the RKG-3 threat and destroyed the insurgent network behind it. Richardson realized, and acted to overcome, the deficiencies of his training and experience. He demonstrated intellectual humility and enabled multilogical, strong-sense critical thought in his subordinates. In so doing, he defeated the main threat in his area of operations, doubtless saved some of his soldiers' lives, and proved that even a hardened career combat arms officer can walk the "way of ignorance."

Ultimately we can each say with assurance that all we know of the future is that it is coming. What it will look like, and what demands it will place upon us, is impossible to foresee. We cannot train for a threat we have not imagined any more than we can speak a language we have not heard. We cannot know what we do not know. But we can certainly inculcate the habits of humble, multilogical critical thought that will enable today's platoon leaders to be tomorrow's adaptive battalion commanders. For in combat as in life,

The only wisdom we can hope to acquire
Is the wisdom of humility: humility is endless.[24] ■

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How to Hinder Unit Readiness

Lt. Col. James Morgan, U.S. Army

Lt. Col. Soo Kim-Delio, U.S. Army, MD

The Army's top priority is readiness, but maintaining a force that is ready to deploy units at any time—while taking care of soldiers physically, mentally, and in their careers—is a precarious balance. Human resource and medical fitness practices make units' deployment preparation unnecessarily difficult, as those practices did for the 13th Expeditionary Sustainment Command (13th ESC) in 2014 when it prepared to deploy to Kuwait. After receiving orders in January 2014, the 13th ESC managed to deploy in December at just 71 percent of mandated strength. The unit struggled to overcome issues common to the Army's personnel and medical systems practices that hinder operating units' readiness. To help units overcome these challenges, the institutional Army, sometimes called the generating force, needs to think like the operating force. The institution must focus on how to help each operational unit prepare as a whole for deployment.

13th Sustainment Command (Expeditionary) unit shoulder patch

The 13th ESC's analysis of its deployment preparation showed how certain systemic medical and personnel practices beyond the unit's control impeded its preparation. It found deficiencies in medical and personnel practices that the Army could remedy to more efficiently provide deployable soldiers to units. This article encapsulates those challenges and highlights medical and personnel aspects that play a pivotal role in a soldier's deployment availability. This article also offers solutions—where possible. It aims to help units conduct predeployment strength management and to help the Army improve strength management practices.

Policy recommendations include that the Army Human Resources Command (HRC) open the Distribution Conference (where unit vacancies are validated and prioritized for filling) to higher headquarters at the general officer level, to fully coordinate current and future deployments with the operating force. This collaboration could help human resource administrators to think like

Staff Sgt. Adrian Haley, 13th Sustainment Command (Expeditionary) Support Operations, discusses a training objective with a Kuwaiti army officer and others during a logistics tabletop training exercise 12 April 2015 at the Kuwait Ministry of Defense Logistic Operations Command Center. After overcoming significant readiness challenges during its predeployment period, the unit successfully conducted Kazma II, the first logistics and sustainment training exercise between the two partner militaries. (Photo by Staff Sgt. Jason Thompson, U.S. Army)

operators. The Army should ensure medical support personnel with experience in operational medicine are available to truly assess soldiers' deployable status prior to assigning them to deploying units. Human resource professionals should improve coordination at the unit, installation, and HRC levels to fine-tune and support deployment needs. In addition, it is time to make the Army's medical fitness standards established in Army Regulation (AR) 40-501, *Standards of Medical Fitness*, align with its deployment standards.[1] Moreover, units need help with processes for the Integrated Disability Evaluation System (IDES) and the Warrior Care and Transition Unit.[2]

13th Expeditionary Sustainment Command Deployment Preparation

In January 2014, the 13th ESC, based at Fort Hood, Texas, received its deployment orders for a nine-month temporary change-of-station mission to Kuwait at full modified-table-of-organization-and-equipment (MTOE) strength of 262 personnel. The unit's mission was to serve as the operational command post of the 1st Sustainment Command (Theater), providing mission command for sustainment to all U.S. and coalition forces serving in the United States Central Command (USCENTCOM) area of responsibility.

The 1st Sustainment Command (Theater) main command post is based at Fort Knox, Kentucky (formerly at Fort Bragg, North Carolina). The command sources its operational command post in Kuwait with an ESC to conduct logistics operations in theater. During its deployment, the 13th ESC provided 80 percent of the personnel needed for 1st Sustainment Command's operational command post in Kuwait, and 20 percent came from the 1st Sustainment Command's headquarters.

As the 13th ESC began its deployment preparation, numerous events hindered its ability to deploy at required strength:

- an officer separation board;
- an enhanced selective early retirement board;
- a Qualitative Service Program board;
- a Qualitative Management Program board;
- Fort Hood's deployment of forces in support of United States Africa Command, and to Korea, and to Ukraine;
- the October 2014 redeployment of the Multinational Forces and Observers Provisional Battalion headquarters, internally sourced several months earlier by the 13th ESC;
- the 13th ESC's deployment of the headquarters and three battalion headquarters from 4th Sustainment Brigade, 4th Infantry Division, in support of Operation Resolute Support;
- the reestablishment of logistical support to the Combined Joint Forces Land Component Command–Iraq and the Combined Joint Task Force–Operation Inherent Resolve; and
- the Afghanistan theater transition from Operation Resolute Support to Operation Freedom's Sentinel.

Deployment personnel strength management is a complicated, multifaceted moving target that often reflects the greater needs of the Army above the requirements of a single unit. There is a certain amount of flexibility built into the system to allow for the expansion and retraction of total strength to prepare a unit to deploy. Despite this flexibility, however, the ESC would have needed HRC to adopt a unit-focused approach to provide quality replacements as well as a much needed revision to the USCENTCOM deployment policy medical fitness standards specified in the document known as Modification Twelve, or MOD 12.[3] These changes probably could have helped the unit to acquire the soldiers it needed for deployment despite hindrances from the Army's medical and personnel systems.

The 13th ESC personnel readiness goal before deployment was to set the 13th ESC team and achieve a 90 percent deployable personnel strength ninety days prior to the latest arrival date. The unit was expected to receive gains during its deployment, with the final goal of attaining a greater than 95 percent deployable strength by the latest arrival date. The 13th ESC identified the required backfills on the unit's "mission-essential requirements list" and provided them to HRC in March 2014. The organization conducted video teleconferences with officers attending the intermediate-level education course at the U.S. Army Command and General Staff College and followed up with by-name requests. It continually tried to get as many soldiers deployable as possible and to move nondeployable soldiers to other assignments so the organization could receive qualified replacements.

The 13th ESC coordinated with the 1st Sustainment Command (Theater) on the deployment unit-manning roster in April 2014. Coordination was ongoing through mission command training and then through the 2014 predeployment site survey (see figure, page 99). The 13th ESC also conducted a pre–soldier readiness processing (pre–SRP) event from 9 to 11 September 2014, before final SRP in October, to identify remaining medical or administrative issues. Shortages and concerns were reported to 1st Sustainment Command (Theater), to III Corps, and to HRC through the monthly Unit Status Reports. Even with these efforts, the unit could only muster a 71 percent deployable rate by December 2014.

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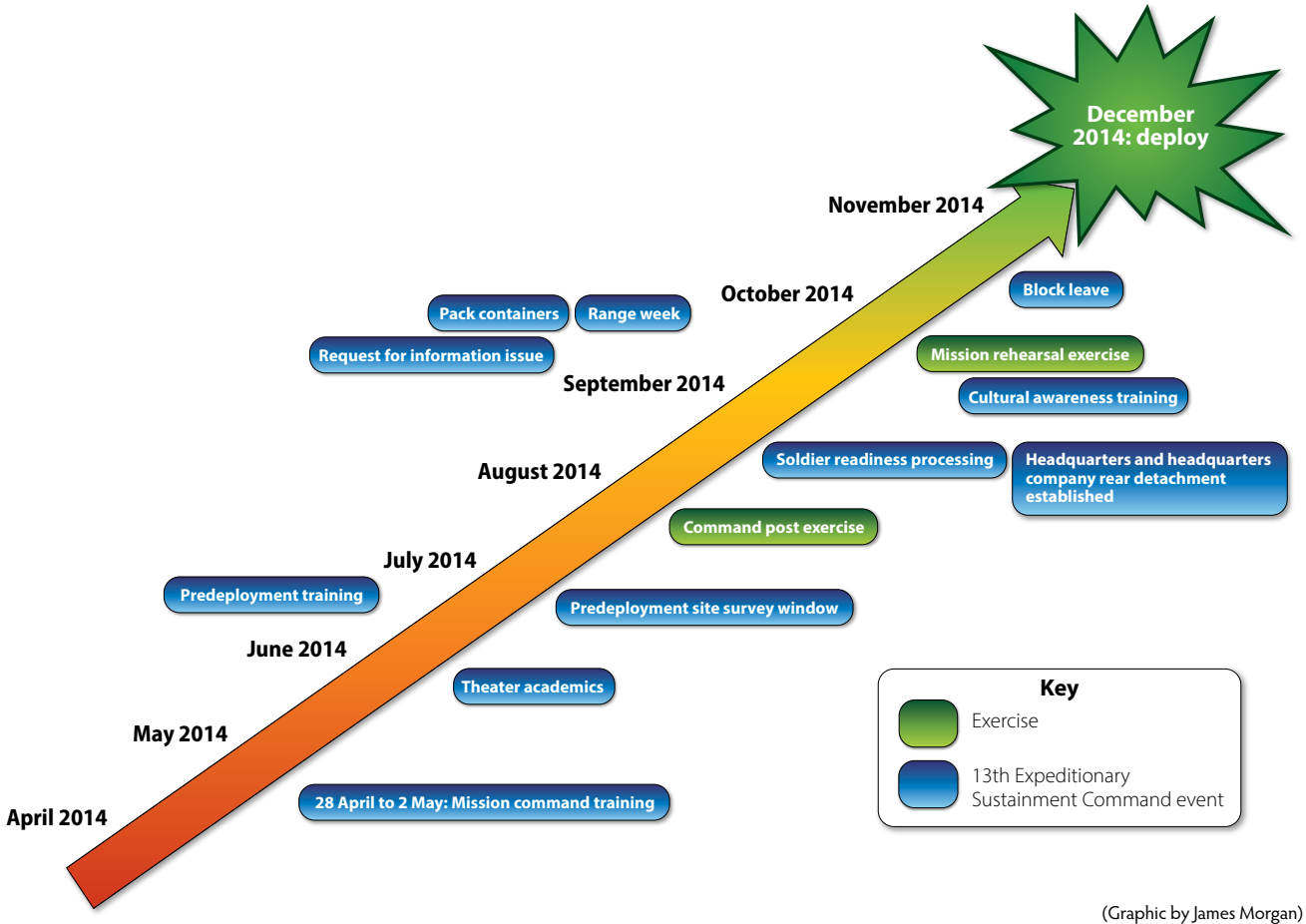

(Graphic by James Morgan)

Figure. Road to War

The many factors that directly affected the unit's numbers throughout the deployment included availability of quality (deployable) inbounds, retirements, resignations, individual medical needs, soldiers twice not selected for promotion, separation board results, and Fort Hood logistical responsibilities. The quality-of-fills data in table 1 (page 100) highlight nondeployable rate and status categories the organization contended with from April 2013 to November 2014 as it tried to fill the ranks for deployment.[4]

For the 13th ESC, from April 2013 to November 2014, the percentage of nondeployable inbounds for staff sergeant (E–6) to colonel (O–6) was nearly 20 percent. Thirty-one of 417 inbounds (about 7 percent) of the ESC's inbounds received medical profiles within the first sixty days of assignment to the ESC. Nineteen received medical profiles that required less than thirty days to recover, while seven received medical profiles that would require thirty days or more recovery time. Five soldiers arrived while on a medical profile from their previous units—three on medical profiles requiring thirty days or more to recover and two on medical profiles that require thirty days or less to recover. Ten had a history of profiles that ended just before their permanent change of station (PCS), which could be an indicator that they may have a more permanent medical condition. Subsequently, twelve were referred to medical evaluation boards (MEBs) for separation. In addition to medical nonavailabilities, the unit continued to receive soldiers with dwell time (mandated recovery time) built up from a previous deployment, which made them nondeployable. The return of the Task Force Sinai support battalion in December 2014—sourced from 13th ESC nine months prior—created a situation where the 13th ESC had a significant dwell population of fifty-four soldiers who would require nine months at home station before being deployed again.

The quality of fills due to separation and promotion boards played a role. During 2014, the 13th ESC experienced both a high separation board rate and a low promotion selection rate when compared to Army-wide statistics. Of course, unit fills typically consist of a range of quality; however, there generally should be a balance within a few percentage points of the Army-wide promotion selection averages. The 13th ESC board data are shown in table 2 (page 101).

The 13th ESC became, in effect, a quasi-holding unit for officer transitions, which counted against its deployable numbers and overall personnel readiness plan. The unit received a majority of officers who were selected for separation with a limited number of officers promoted. Some were already in the unit and some were on PCS orders to the unit, while others were III Corps–directed intrapost transfers from other units as those units were deploying.

Table 1. Nondeployable Rate of Inbound Personnel for the 13th ESC and the 4th Sustainment Brigade, April 2013 to November 2014

Types of nondeployable status	Nondeployable rate of 417 inbound personnel as a percentage*	Numbers of nondeployable inbound personnel
Scheduled for retirement or resignation	3%	14
Arrived with dwell time	2%	9
Referred to medical evaluation board	3%	12
Received long-term 3B** profiles first year assigned	11%	46
Total inbounds nondeployable	**19%**	**81**

*** Includes E-6 (staff sergeant) to O-6 (colonel). Percentages are approximate.**

**** Individual medical readiness category for a medical condition that cannot be resolved within 30 days.**

(Table by James Morgan)

An additional contributing factor was the need to source a sustainment brigade headquarters and three sustainment battalions to deploy to Kuwait. The 4th Sustainment Brigade lost three majors and five captains projected to deploy due to the fiscal year 2014 Officer Separation Board. The unit mitigated shortfalls through internal reorganization efforts. The 13th ESC headquarters moved two majors needed for the deployment down to fill the 4th Sustainment Brigade, thus increasing deployment manning concerns. Of the thirteen 90A (logistics) major positions, four would be filled by 90A captains.

During the 13th ESC's July 2014 predeployment site survey, the 13th ESC conducted a video teleconference with the HRC Office of Personnel Management Division, the 13th ESC account manager, and the III Corps G-1 (assistant chief of staff, personnel) to discuss possible solutions, including potential ways to reach 90 percent deployable strength for the 13th ESC Headquarters and the 4th Sustainment Brigade. To achieve this, one brigade and three battalion headquarters needed to be filled at rates of 119 percent to 148 percent over strength. Even with this effort, due to low-quality inbounds, separation boards, and medical issues, the 13th ESC deployed at 71 percent of the required deployment strength instead of 90 percent, with 45 percent of its total population nondeployable (see table 3, page 102).[5]

The Effect of Medical Factors on Deployable Status

Why did the 13th ESC need to get filled to such a high rate in order to deploy at 71 percent versus the 90 percent it was trying to achieve? The main contributing factors were the unit's lack of medical assets to examine soldiers early, the medical readiness of soldiers in general, and the various medical processes

Table 2. Boards in 2014 as Quality-of-Fill Indicators

Board	Quantity	13th Expeditionary Sustainment Command Army board selection rates	Overall Army board selection rates
Identified as high risk for separation	10 majors and 8 captains	N/A	N/A
Separation board for major	6 majors	17%	6.5%
Separation board for captain	9 captains	20%	11.7%
Centralized selection list command/key billet for lieutenant colonel	1 selected, 2 alternates, 3 not selected	N/A	N/A
Promotion to lieutenant colonel	1 selected	33% (3 not selected twice and 2 not selected once)	63%
Promotion to major	3 selected	38% (2 not selected twice and 5 not selected once)	65%
Promotion to chief warrant officer 5	0 Selected	0% (2 not selected twice and 3 not selected once)	18%
Promotion to chief warrant officer 4	0 Selected	0% (1 not selected)	65%
Promotion to chief warrant officer 3	3 Selected	50% (4 not selected twice and 3 not selected once)	68%

Note: Figures are rounded.

(Table by James Morgan)

and procedures that inadvertently limited the number of deployable soldiers in a unit.

One issue facing the 13th ESC concerning personnel medical readiness was not having the expertise on hand to examine medical readiness issues and advise the commander early on. A typical ESC's surgeon cell is staffed by a 68W noncommissioned officer (combat medic, sergeant first class, E–7) and a 70B Medical Service Corps officer (health services administration) but no medical providers. The noncommissioned officer and Medical Service Corps officer work in an administrative capacity and do not provide clinical decision making. The 13th ESC was authorized a medical provider, and one arrived in July 2014, approximately four months before deployment. It had been four years since the organization had a permanently assigned surgeon. The position normally was staffed by an Army Professional Filler System (PROFIS) assignment and only during deployments. The 13th ESC's only other medical providers before June 2014 were those assigned to the 4th Sustainment Brigade—a physician, a physician assistant, and seven medics. With the 4th Sustainment Brigade deploying four months before the ESC, few medical resources remained.

To exacerbate the situation further, the recent realignment of sustainment brigades to divisions has extremely limited an ESC's ability to influence medical readiness; any logistics battalions assigned to an ESC have no medical assets. Typical maneuver battalions, on the other hand, have an assigned active-duty physician or physician assistant and medics.

Like many providers filling 60A surgeon positions (operational medicine), the ESC surgeon was a subspecialist in pediatric allergy with only prior PROFIS assignments and no experience as a staff officer. During the initial two months, the surgeon attended required training, including the Brigade Surgeon Course and the Tactical Combat Casualty Care Course. During the two-week Brigade Surgeon Course, the unit surgeon received only one hour of instruction each on eProfile, IDES, and the medical protection system; all these systems play an integral role in the medical readiness of soldiers. Many health professionals have limited experience with these programs or others, such as Periodic Health Assessments and Post-Deployment Health Risk Assessment programs, which all influence the medical readiness of soldiers. Health professionals need familiarity with them.

With limited medical assets before deployment, the 13th ESC relied on the only system available for medical readiness—the troop medical clinic, where soldiers assigned to the unit, including the battalions, see civilian providers. These providers may have many years of civilian experience but often do not have military experience. In addition, they have no formal

Table 3. Comparison of Soldiers Assigned with Soldiers Deployable from May to December 2014

13th Expeditionary Sustainment Command (ESC)

Month	Number authorized	Number assigned	Percentage assigned	Number available to deploy	Percentage available to deploy	Number not deployable	Percentage not deployable	MTOE* deployable
August	262	288	110%	178	62%	110	38%	178/68%
September	262	290	111%	211	73%	79	27%	211/80%
October	262	311	119%	205	66%	106	34%	205/78%
November	262	314	120%	202	64%	102	36%	202/77%
December	262	339	129%	185	55%	154	45%	185/71%

4th Sustainment Brigade (SB)/Special Troop Battalion (STB)

Month	Number authorized	Number assigned	Percentage assigned	Number available to deploy	Percentage available to deploy	Number not deployable	Percentage not deployable	Actual deployed
July	262	318	121%	235	74%	83	26%	-
August	262	354	135%	283	80%	71	20%	-
September	262	387	148%	289	75%	98	25%	186/92%

553rd Combat Sustainment Support Battalion (CSSB)

Month	Number authorized	Number assigned	Percentage assigned	Number available to deploy	Percentage available to deploy	Number not deployable	Percentage not deployable	Actual deployed
May	69	61	84%	58	95%	3	5%	-
June	69	70	99%	68	97%	2	3%	-
July	69	144	141%	97	67%	47	33%	67/97%

49th Movement Control Battalion (MCB)

Month	Number authorized	Number assigned	Percentage assigned	Number available to deploy	Percentage available to deploy	Number not deployable	Percentage not deployable	Actual deployed
May	54	83	106%	57	69%	26	31%	-
June	54	83	124%	67	81%	16	19%	-
July	54	80	119%	64	80%	16	20%	54/100%

Units were filled at 119% to 148% strength to deploy at 92% or greater:
· 4th SB headquarters/4th STB authorized 262, assigned 387, assigned 148%, deployed 186 (92% of force tracking number [FTN]), nondeployable 25%
· 553rd CSSB authorized 69, assigned 144, assigned 141%, deployed 67 (97% of FTN), nondeployable 33%
· 49th MCB authorized 54, assigned 80, assigned 119%, deployed 54, (100%), nondeployable 20%
***Modified table of organization and equipment**

(Table by James Morgan)

connection to the units and the command. There are no opportunities for the providers to review their practice—such as by conducting profile review boards or unit readiness reviews—in light of the effect on the individual soldiers or the units. For example, a soldier who was on a temporary profile was seen for knee pain, and the provider gave a P2 (walking) profile after only four visits over several months. The soldier or the provider might not realize that the soldier's ability to attend schools or be promoted could be affected.

Some would say that it is not the provider's place to counsel a soldier on his or her promotion potential, and that medical professionals should treat disease regardless of rank. However, military providers provide options that take into consideration future implications in a soldier's career. Often, civilian medical providers make decisions that inadvertently result in a nondeployable soldier. Essentially, they take away a commander's ability to decide if a soldier should deploy. This occurs for many reasons even as providers are

trying to do the best job they can for patient care, but the situation often hampers the readiness of units.

One reason this occurs is due to how hospitals and clinics are evaluated and funded. Patient comments—positive or negative—often determine how a provider is evaluated. A hospital receives a portion of its funding based on the results of surveys (the Joint Outpatient Experience Survey replaced the Army Provider Level Satisfaction Survey in 2016). If survey results were negative, the hospital could potentially not receive additional funding. This might lead providers to cater to patient requests to gain positive survey results. It also could lead providers to liberally provide multiday restriction-to-quarters slips or profiles with strict duty restrictions, which would hurt a unit's morale and discipline, as physical training is an integral part of *esprit de corps*. Of particular concern is what are commonly referred to as "0900 work call" profiles (profiles that specify the start of the duty day) or those that specify an eight-hour duty day, usually due to health professionals prescribing psychiatric medication or other potentially debilitating drugs.

The Office of the Surgeon General addresses profiles and duty-hour restrictions in the "Behavioral Health Profiling Standardization Policy," which acknowledges, "Significant variability exists throughout the Army when medical providers communicate duty hour limitations."[6] Profiles prevent soldiers who could be considered fit for duty from deploying, so other soldiers have to perform their tasks because the formation does not receive replacements.

Soldier Readiness Processing Challenges

The 13th ESC conducted pre–SRP in September 2014, but due to the short period from the surgeon's arrival, mandatory training, and the deployment of the 4th Sustainment Brigade in October 2014, the medical providers had little opportunity to screen medical records. In fact, the previous SRP had been conducted nearly four years earlier, in December 2012, but the SRP for the pending deployment could not be scheduled before orders arrived. The headquarters company commander was told by the operations advisor during SRP that the unit could not go through processing without orders, even with the deployment pending.

The three months before deployment was a time of high operational tempo and not ideal for initial medical readiness processing. The result was delays in determining the deployment medical readiness of personnel due to required evaluations that then necessitated additional time-consuming tests and examinations. The local medical treatment facilities were cooperative and generally able to schedule initial appointments within seventy-two hours, but processing radiologic studies, labs, and off-post consultations often could not be accelerated. At the time of the initial SRP, Automated Neuropsychological Assessment Metrics testing and behavioral health reevaluation from the 2 April 2014 Fort Hood shooting were also scheduled.[7] These were in addition to a validation exercise, transfer of authority with a replacement unit coming to manage sustainment on Fort Hood, ranges, family time, and block leave.

Preferably, SRP should be scheduled no more than 120 days before the expected deployment date, which the 13th ESC accomplished in the September 2014 pre–SRP. The intent of the initial SRP is to help soldiers address medical concerns not previously addressed by their primary care manager so units can resolve issues or find replacements. However, 120 days may not give units enough time to obtain deployable replacements.

Several factors contribute to a growing medical class of personnel within the Army who are nondeployable. They take up valid and critical slots but cannot deploy, leaving units no recourse to gain deployable personnel. Troop medical clinic providers not well versed in deployment criteria may be treating soldiers to the standard of care, but they may not address stricter requirements to deploy, such as medical subspecialist clearances. Conducting SRP can assist—an example is a soldier with a small asymptomatic hernia who declined surgery. Based on MOD 12 guidelines, at a minimum, a soldier could not deploy without a USCENTCOM waiver, which would be determined by a surgical consultation, evaluation, and clearance—all which can take months to achieve.[8] In the meantime, a soldier's deployment status would be questionable and perhaps denied, resulting in the need for a replacement.

Another issue facing the 13th ESC's readiness came from conflicting regulatory guidance. Soldiers are screened for deployment eligibility based on multiple criteria, including AR 40-501 and MOD 12, as well as various U.S. Medical Command (USMEDCOM) requirements. These requirements are not always complementary. For example, a soldier can meet retention

criteria based on AR 40-501 but not meet MOD 12 deployment criteria. In addition, a soldier can meet both retention and MOD 12 criteria but not be deployable based on a USMEDCOM directive. For instance, the 13th ESC had a soldier with a history of systemic reactions to a bee sting whose allergy was confirmed by testing. He met retention criteria and in principle could deploy with a waiver for an EpiPen, but based on venom immunotherapy recommendations from the Office of the Surgeon General, the soldier needed allergy shots for three years.[9] Immunotherapy is not approved in deployed situations and is denied at the local combat support hospital, so the soldier would be nondeployable for three years. This soldier otherwise met retention standards and did not qualify for an MEB. The unit needed a replacement.

Seeing the increase of nondeployable soldiers within the 13th ESC, III Corps tried reorganizing personnel in a short amount of time to assist the unit, but due to other deployments and required specialties, the capability was minimal. HRC would need four to six months to reassign a replacement from across the Army. By 23 October 2014, 21 percent of the 224 soldiers scheduled to deploy had delays in their SRP due to medical clearance issues. By 4 December 2014, eleven of the fifteen late deployers were due to medical delays, including needs for medical stabilization for ninety days, CPAP (continuance positive airway pressure) therapy compliance downloads, and follow-up evaluations. Of the 339 soldiers assigned to the 13th ESC by December, 185 deployed, putting the unit at 71 percent of MTOE strength.[10]

To increase the number of deployable soldiers, the 13th ESC conducted monthly reviews of the status and treatment of soldiers who did not deploy. The reviews included examining the status of USCENTCOM waiver approvals; new profiles; changes to medical conditions, including if soldiers met their medical retention decision point (MRDP); and IDES criteria. The monthly meetings were attended by the 13th ESC commanding general, headquarters commander, rear detachment commander, G-1 (both forward and rear), surgeon (both forward and rear), and rear detachment chief of staff. With follow-up from the rear detachment command surgeon, by 15 January 2015, the 13th ESC had twenty-three soldiers in the IDES process versus twelve before the September 2014 SRP.

At least one soldier, who claimed he was deployable and was released from the MEB process, was then put on another temporary nondeployable profile within a week for another medical issue that did not allow him to clear SRP. Even though he continued to be nondeployable by MOD 12 standards, he was not eligible for the MEB. When the MEB states a service member is fit for duty, and the unit does not want to change the nondeployable soldier's duty station, the soldier provides little value to the unit during its deployment. Also, of similar concern are soldiers who undergo IDES and are found fit for duty but with limitations in deployment. This includes soldiers with medical conditions requiring frequent lab follow-up, those on medications that cannot be used in austere environments, or those who cannot tolerate long periods on combat rations. These soldiers then carry a "V" code on their profile that continues to count against the command as a 3B profile, in addition to holding a position in a deploying unit that must now be accounted for by others.

One of the most difficult situations that was noted during monthly reviews was soldiers with behavioral health issues. Several soldiers said they felt they were being punished for seeking care and being on behavioral health or sleep medication, which required a waiver that was subsequently denied. With so many senior soldiers with numerous deployments and combat experience, it is not uncommon that they have a diagnosis of posttraumatic stress disorder (PTSD) and receive medications. In December 2012, the U.S. Department of Veterans Affairs reported that nearly 30 percent of veterans of the wars in Iraq and Afghanistan whom it treated had PTSD.[11]

As a command, the 13th ESC strongly encourages its soldiers to seek appropriate behavioral health care. The command does not want to foster the impression that doing so negatively impacts the careers of otherwise functional soldiers. If soldiers felt ready to deploy, we, as medical providers and human resource administrators, advocated strongly for approval of waivers that would allow them to deploy. We, of course, understand the risks associated with these issues and the safety and care that must be balanced with such risks. We accepted waiver results but supported those soldiers who wanted waivers for their conditions and said they felt capable of deploying despite continued treatment. During the deployment, of soldiers who returned due to medical issues (including MOD 12 failure and medical evacuation) from December 2014 to April 2015, four were for, or included, behavioral health issues; this was about 36 percent of those medically released from theater. Of

those, only one had a MOD 12 behavioral health waiver before arrival. Therefore, most issues arose for the first time during the 13th ESC's deployment.

A waiver decision should be made with input from the command and consideration of a unit's deployment location and assets. As in our experience, with treatment received in theater, fewer soldiers returned due to behavioral health conditions than for orthopedic issues.

Another concern regarding behavioral health waivers is that soldiers would follow up with their off-post behavioral-health provider about the inability to deploy due to their medications. Civilian providers who have a limited understanding of deployment medical requirements would then—at a soldier's misinformed request—discontinue or modify medications if symptoms allowed, thinking the soldier could deploy. Based on MOD 12, a soldier then would become nondeployable for up to ninety days from that medication change. If the circumstance was noted at the soldier's revalidation SRP, then the best-case scenario would be deployment up to three months after the rest of the unit.

Sleep apnea also proved to be a confusing diagnosis during SRP. Some soldiers with mild obstructive sleep apnea who did not need a sleep study by the MOD 12 guidelines were referred to the sleep clinic for such and had waivers sent. The MOD 12 guidelines were not entirely clear, as a waiver was not required for mild obstructive sleep apnea, but soldiers using CPAP therapy still would need a compliance download. If soldiers did not meet the minimum criteria on their thirty-day download and settings were adjusted, they would need another thirty-day compliance download and so on until they were stabilized.

Orthopedic issues and their associated pain conditions are another common medical condition found in soldiers of all career lengths. These caused issues both before and during the 13th ESC's deployment. The most commonly found conditions were back and knee issues. Soldiers given narcotic pain medications for chronic pain required a MOD 12 waiver, which was generally disapproved if they were on narcotic pain medications in the prior six months. Soldiers may have chronic orthopedic conditions that flare and require an increase in pain medications. They can continue to take and pass their Army physical fitness tests and do not carry a nondeployable profile, making them retainable, but they are not deployable.

In addition, treatment plans and available resources while deployed can be confusing for both soldiers and providers. In theater, injections are routinely performed for joints but not for spine. Injections are only intermittently available if the medical support unit happens to receive a provider credentialed to provide this procedure.

Two soldiers with chronic back pain were sent home after only six weeks due to back pain not treatable in theater at the time. About three months after they departed, an anesthesia provider credentialed in pain management who could provide spinal injections arrived. While receiving treatment of injections every three to six months, soldiers are able to participate in physical training and do not have any deployment-limiting restrictions on their profile, but they cannot deploy.

Issues faced by the 13th ESC in trying to get personnel medically fit to deploy were the result of several factors, including health professionals not fully understanding the ramification of their treatment or of Army medical systems and procedures, patient-provided information, and conflicting medical regulations. For the latter, a holistic, integrated review and alignment of combatant-command-specific deployment criteria and AR 40-501 would best serve both soldiers and units. This is certainly an area that needs clarification as it affects a soldier's career and should not be left to interpretation.

There are too many cases when soldiers cannot deploy due to a declined waiver but do not require a profile, or their profiles do not qualify them for an MEB based on AR 40-501. When soldiers are found nondeployable due to a declined waiver and are then allowed a PCS, the process begins again with the following unit. As requirements are different for those on PCS versus deploying to the USCENTCOM area of responsibility, the inconsistencies in MOD 12 entry criteria should be addressed. To illustrate, a soldier just returned from a twelve-month tour to Bahrain, Dubai, or Kuwait could be declined a waiver months later without any changes to the individual's medical conditions during a nine-month rotation.

As for those who cannot deploy, the MRDP to enter an MEB is not a well-known published system for those outside of operational medicine; it is neither uniform nor consistent. This creates confusion for

providers with different interpretations or thresholds for MRDP, or confusion between the MEB clinic and the primary care manager. In some situations, readiness and retention depend on the soldier's length of service. This is apparent in our junior soldiers with few years in service. A young lieutenant with only three years of service is unlikely to complete a full twenty years if the lieutenant has already been on profile for greater than 180 days for foot, knee, or back pain without a clearly delineated cause that can be resolved.

While changes to eProfile pending at the time this article was written were aimed at improving command visibility of profiles and medical issues, and at continuing to allow overrides for some, getting soldiers on profile who cannot deploy into an MEB or the Warrior Care and Transition Unit continues to be challenging. The changes in readiness processes, as reported thus far, appear aimed at visibility and tracking, and not at resolving the disposition of soldiers with chronic medical conditions who are not deployable but do not meet MRDP.

Conclusion

In summary, soldier medical readiness continues to be of concern. For the shift to a smaller and more agile force, it is imperative that adjustments be made in how units manage assets and in how the Army manages its personnel.

Some of the circumstances we encountered were unique to the 13th Expeditionary Sustainment Command, but sustainment units throughout the Army have shared similar challenges. The Army is at a critical point, with the decrease in total strength after over a decade at war and the unpredictability of the force's part in global security efforts. Therefore, taking care of soldiers physically, mentally, and professionally while keeping units prepared for deployment is a precarious balance. The 13th ESC successfully deployed and completed its missions and tasks. The concerns and recommendations offered here are intended as a starting point for meaningful discussion and dialogue as the Army leans forward and remains ready. ■

Notes

1. At the time of the 13th Expeditionary Sustainment Command's preparation for deployment, medical fitness standards were governed by Army Regulation (AR) 40-501, *Standards of Medical Fitness*, (Washington, DC: U.S. Government Publishing Office [GPO], 14 December 2007, with Rapid Action Revision 2011), now obsolete. A revision was published 22 December 2016 although it did not address the issues discussed in this paper.

2. Refer to the Warrior Care and Transition Unit website for more information about the unit and the Integrated Disability Evaluation System (IDES), accessed 23 January 2017, http://wct.army.mil/.

3. United States Central Command (USCENTCOM), "Amplification of the Minimal Standards of Fitness for Deployment to the USCENTCOM AOR [Area of Responsibility] to Accompany MOD [Modification] Twelve to USCENTCOM Individual Protection and Individual–Unit Deployment Policy," December 2013, PPG-Tab A, p. 7, accessed 30 January 2017, https://www.cpms.osd.mil/.

4. James Morgan, table 1, comparison of arrival dates with medical history and administrative coding in Army human resource systems data queried from the Electronic Military Personnel Office (also known as Datastore) 4 December 2014 and compared with December 2014 Medical Protection System (MEDPROS).

5. James Morgan, table 3, data pulled on the first working day of the month May 2014 through December 2014 from the Electronic Military Personnel Office (eMILPO), MEDPROS, and the Total Officer Personnel Management Information System II (TOPMIS II). Information was compiled and submitted the 15th of each month May 2014 to December 2014 as part of the Unit Status Report.

6. Office of the Surgeon General/U.S. Medical Command (OTSG/USMEDCOM), Policy Memo 15-045, "Behavioral Health Profiling Standardization Policy," 6 August 2015, 2.

7. Eyder Peralta, "Shooting at Fort Hood Leaves 4 Dead, 16 Injured," NPR [National Public Radio] online, 2 April 2014, accessed 25 January 2017, http://www.npr.org/sections/thetwo-way/2014/04/02/298401578/fort-hood-goes-on-lockdown-after-reports-of-shooting.

8. USCENTCOM, "Amplification of the Minimal Standards of Fitness for Deployment to the USCENTCOM AOR; to Accompany MOD Twelve to USCENTCOM Individual Protection and Individual–Unit Deployment Policy," 2013, accessed 30 January 2017, https://www.cpms.osd.mil/.

9. OTSG/USMEDCOM, Policy Memo 13-008, "Stinging Insect Allergy Induction, Retention, and Readiness Policy."

10. Morgan, compiled 4 December 2014 as part of the Unit Status Report using data pulled on 1 December 2014 from eMILPO, MEDPROS, and TOPMIS II.

11. Epidemiology Program, Post-Deployment Health Group, Office of Public Health, Veteran's Health Administration, Department of Veterans Affairs, *Report on VA Facility Specific Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) Veterans Coded with Potential PTSD [Posttraumatic Stress Disorder]—Revised: Cumulative from 1st Qtr 2002 through 3rd Qtr FY 2012 (October 1, 2001–June 30, 2012)*, (Washington, DC: Department of Veterans Affairs, December 2012), accessed 25 January 2017, http://www.publichealth.va.gov/docs/epidemiology/ptsd-report-fy2012-qtr3.pdf.

Sgt. Maj. of the Army Daniel A. Dailey jokes with 2nd Cavalry Regiment soldiers 9 September 2015 as he presents them with command excellence coins during a visit to Rose Barracks in Vilseck, Germany. Dailey remains popular with troops because he listens to their concerns and acts to resolve them. (Photo by Staff Sgt. Jennifer Bunn, U.S. Army)

The Essence of Leadership
Trustworthiness

Sara VanderClute

I have never been a military officer, but like many military family members, I have been aware of and influenced by several leaders during and since my husband's decades of Army service. He retired in 1988, so it is as civilians, living near Fort Bragg, North Carolina, that we have been observing military leaders over the past few decades. Some have become famous, some infamous. Each has reinforced my belief that among leadership's many facets—enthusiasm, fairness, competence, selflessness—the essence of leadership is trustworthiness based on integrity.

The Army leaders at Fort Bragg are well integrated into the civilian community, whether they reside on post or off. The local chamber of commerce

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includes a military affairs committee, and military leaders socialize within the civilian community. They keep local political leaders informed of developments in the Department of Defense that might affect local municipalities. These military leaders are the neighbors, officer corps and enlisted ranks, have achieved notable careers in business or politics after leaving military service. Enthusiasm, fairness, competence, and selflessness continue to exist in people who take their leadership into civilian careers and communities—

> You know you're a good leader when people follow you [even if only] out of curiosity.
>
> -Gen. Colin Powell, U.S. Army, retired

the customers, the fellow churchgoers, and the friends of local residents. They are esteemed as being the very best of our nation's military forces, and they are greatly admired for their personal accomplishments and sacrifices in serving our country. Most of all, local residents can trust them to be honest and straightforward.

There is no single template for the personality of a leader. While my husband served, we knew some Army leaders who were quiet, wryly humorous, and intellectual, and others who were dynamic, volatile, and endowed with a colorful vocabulary. Some were crusty, old-style, old-school soldiers. Others were lightyears ahead of their contemporaries in perceiving how the future would develop. In the era during which my husband served, transitions were taking place that included more opportunities for female soldiers and more overt considerations of military families' needs. Some leaders embraced these changes; others held the belief that if the Army wanted you to have a family, it would have issued you one.

I learned during my stint as an active-duty Army wife that excellent Army leadership was not necessarily tied to rank or position, and that lesson has been confirmed in my post-Army life. Sometimes, the most effective leader of a group is not the nominal leader. Moreover, in the Army and the military in general, excellent leaders exist in units as small as a team or a platoon. Some few ascend to serve as chairman of the Joint Chiefs of Staff, where they help lead the Nation by advising the president on matters military. Others serve in cabinet-level leadership positions following their military careers.

The same traits that characterize excellent military leaders apply in civilian life. Many veterans, of both the and so does integrity. Business, politics, the medical and legal professions, and nonprofit agencies across the United States have benefited from the leadership of former service members.

The past two decades have reminded us from time to time that military leaders are human beings. They are vulnerable to the same weaknesses and temptations that have afflicted humanity throughout history. We see the headlines trumpeting the ignominious fall of a respected general officer. In the past twenty years, more than one high-ranking military officer has acknowledged or been convicted of offenses ranging from the vague "conduct unbecoming an officer" to serious crimes of fraud, bribery, sexual assault, bigamy, and adultery (a chargeable offense under the Uniform Code of Military Justice).

In a military community, the failings of even a little-known leader can make it to the front pages of the local newspaper. Occasionally, local news becomes national news. My initial reaction is disappointment that a seemingly proven leader has misplaced his moral compass and lost his way. Then, I find myself sympathizing with that leader's family, who are exposed to as much scrutiny and criticism as the offender. However, since I am far from perfect myself, I avoid being judgmental.

Nonetheless, I realize that grievous errors in a leader's judgment are as corrosive to trust as acid to iron. People will not support a leader they do not trust. They can doubt, disagree with, or strongly disagree with a leader; they can even dislike a leader, but if people trust the leader to do the right thing in any circumstance—even at a high personal price—people will follow.

Retired Gen. Colin Powell addresses leaders from all components at the first Army Profession Annual Symposium 30 July 2014 at the U.S. Military Academy, West Point, New York. (Photo by Staff Sgt. Mikki L. Sprenkle, U.S. Army)

Retired Army Gen. Colin Powell once recounted a lesson he had learned long ago from a sergeant at Fort Benning's Infantry School: "You know you're a good leader when people follow you [even if only] out of curiosity."[1] Powell, who retired from the Army in 1993, is a leader I admire. If he makes a mistake, he acknowledges it. He has effectively displayed integrity through his military career and into government service and the for-profit and nonprofit worlds, so people trust him.

Trustworthiness is valuable not only to peers and subordinates but also to those whom leaders serve; this principle applies to military leaders in particular. Everyone who ranks below, above, or equal to a leader must trust the leader's integrity. For example, any president would want to know that his or her military advisers were "speaking truth to power" instead of merely mouthing perceived political correctness. Any battalion commander or platoon leader would need to trust the integrity of other same-level leaders. Honoring one's oaths matters, whether testifying in a courtroom or leading soldiers onto a battlefield.

I have observed and learned from many military and civilian leaders. In the years since my husband retired, my career in the civilian world has taken me from newsrooms to boardrooms and from management positions to community volunteer posts. I have served on the local school board and as chairperson of the library board of trustees. I say this not to tout my leadership credentials but to frame my perspective. Most leaders I observed did the right thing regardless of personal cost. That is integrity. That is what makes a leader trustworthy.

A few military leaders—or perhaps several—in the past two decades have disappointed their forces, the American public, and their own personal aspirations by committing headline-grabbing transgressions. Their falls from grace provide cautionary tales—for better or worse, they are role models. Some observers merely learn not to get caught doing something wrong. The majority learn a more difficult lesson—not to do something they know is wrong. Those who succumb to flattery, avarice, greed, or lust are regrettable aberrations. Measured against the thousands who have lived up to their various oaths in serving, there is no comparison.

Most military leaders are honorable people who can be trusted to adhere to their oaths, the law, and the standards of ethical conduct. They can be trusted with the lives of soldiers and the defense of freedom. They quietly go about fulfilling their duties in one of the most demanding and dangerous professions in the

Spc. Ryan Grant and Spc. Jeffrey Morrero with the 65th Military Police Company bag toys for Sgt. 1st Class Catherine Reese and Staff Sgt. Jessica Taylor, U.S. Army Civil Affairs and Psychological Operations Command (Airborne), 2 December 2015, at Fort Bragg, North Carolina. The toys were donated for the 18th Annual Randy Oler Memorial Operation Toy Drop at Fort Bragg and were subsequently distributed to children in need throughout the region. Events such as the toy drop keep soldiers and leaders at Fort Bragg well integrated into the surrounding civilian communities. (Photo by Sgt. 1st Class Joseph Bicchieri, U.S. Army)

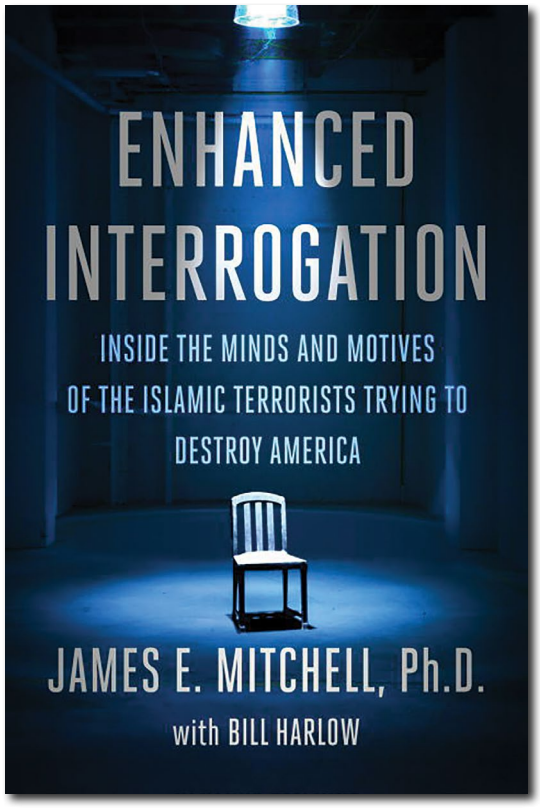
world. They tend to their soldiers, their families, and their own integrity. Their names do not appear often in the headlines, but you will find many of them listed in the currently serving, killed in action, wounded, or retired rolls. Here in North Carolina, many can be found in the pages of the local telephone directory.

As the decades continue to roll by, each era will see service members ascend to leadership. No matter their personality or their personal style, the memorable leaders—the ones who inspire a few service members or an entire nation—will be the ones whose effectiveness rests on their integrity. They will be the leaders who always do the right thing for their soldiers, their families, and their own legacy. ■

Note

1. Colin Powell, "View from the Top" lecture series (speech, Stanford University Black Business Students Association and the Graduate School of Business, Stanford, CA, 16 November 2005).

REVIEW ESSAY



Enhanced Interrogation

Inside the Minds and Motives of the Islamic Terrorists Trying to Destroy America

James E. Mitchell and Bill Harlow, Penguin Random House, New York, 2016, 309 pages

John G. Breen, PhD

By the early 1950s, Americans had learned that we were not the only country capable of inflicting atomic and, later, thermonuclear annihilation on perceived enemies. The United States was, at the time, rightly terrorized by a seemingly implacable adversary, the Soviet Union. At the direction of successive presidents, the newly created Central Intelligence Agency (CIA) responded with decades of covert action, both abroad and at home. Programs included the opening of U.S. mail, the surveillance of American journalists, and the penetration of U.S. college student groups. They included foreign assassination plots (including research, development, and fielding of chemical and biological assassination agents). Human experimentation programs included the testing of LSD (lysergic acid diethylamide) and other drugs on witting and unwitting subjects, all in a poorly conceived and implemented effort to learn how best to interrogate defectors, detainees, and other players in the ongoing Cold War.[1]

One of those players was Yuri Nosenko, a KGB (*Komitet Gosudarstvenno Bezopasnosti*, or Committee for State Security) officer who defected in the early 1960s. When CIA officials became concerned that some of his information did not quite add up, they responded by imprisoning him for nearly four years in a dedicated black site built on a secret base inside the United States.[2] When he did not seemingly respond to traditional interrogation, agency officers, including doctors, set out to try to pressure and eventually break him psychologically.[3] He was subjected to solitary confinement in poor conditions and other "coercive techniques" such as extended interrogations, sensory deprivation, and, possibly, mind-altering drugs—one or more of four drugs administered seventeen times.[4] Nosenko was released in 1969 after the CIA's Office of Security determined he was a legitimate defector after all. The CIA ended up paying Nosenko a sizeable financial settlement and later hiring him as a consultant.

These misguided efforts were revealed only after congressional hearings forced their exposure in 1975, which led to the establishment of dedicated Senate and House committees that still provide key legislative oversight to CIA covert action programs

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and other intelligence activities. After reviewing an in-house damage assessment of the Nosenko incarceration, and after revelations about CIA drug testing on human subjects, Director Stansfield Turner (1977 to 1981) wrote in his memoirs that he "realized how far dedicated but unsupervised people could go wrong in the name of doing good intelligence work."[5]

Fast-forward to the horrific attacks of 11 September 2001. Once again, Americans were terrorized by another ruthless enemy, al-Qaida. As before, the CIA was tasked by the president to utilize covert action to eliminate this potential threat. (Remember that then CIA Director George Tenet reportedly briefed the president on a realistic, albeit short-lived, stream of threat reporting that al-Qaida may have gained access to a nuclear weapon and had smuggled it into the United States.[6]) One aspect of this overarching counterterrorism effort was a presidentially mandated Rendition, Detention, and Interrogation (RDI) covert action program. It was designed to snatch key al-Qaida operatives off the worldwide battlefield, place them into CIA-managed prisons, and potentially allow for collecting imminent threat information as well as vital strategic intelligence and tactically relevant terrorist-personality targeting information.

These efforts are the subject of James Mitchell and Bill Harlow's *Enhanced Interrogation: Inside the Minds and Motives of the Islamic Terrorists Trying to Destroy America*. Mitchell was one of at least two civilian contract psychologists hired by the CIA to adapt their knowledge of the U.S. military's Survival, Evasion, Resistance, and Escape (SERE) program, employing SERE-based techniques to break through al-Qaida detainee resistance to traditional interrogation. Harlow was formerly a spokesperson for the CIA and has subsequently coauthored several books with retired CIA officials previously involved with the RDI program, now wanting to tell their side of the story. Though the subtitle actively suggests the reader will gain some insight into the thinking and motivation of terrorists, there is little in *Enhanced Interrogation* to warrant this enthusiasm.

The book comes across as a self-serving rehash of well-worn arguments about the value of waterboarding and other enhanced interrogation techniques (EITs), as well as lengthy complaints about the unfair scrutiny on Mitchell and his business partner, fellow psychologist John Bruce Jessen. Its publication comes at a propitious time though, as both Jessen and Mitchell face a civil lawsuit from former detainees claiming to have been tortured at their hands; *Enhanced Interrogation* is not likely to bolster their defense. It does, however, make one think long and hard about the national security challenges we face going forward and the missed opportunities of the past.

Many commentators have focused on the effectiveness of EITs, specifically, waterboarding. I have previously written about the ethical and moral challenges associated with the CIA's RDI program.[7] Unfortunately, I do not offer there or here any black-and-white answers; I doubt those exist. Mitchell, for his part, suggests, as have several of his contemporaries, that his actions were for the greater good, that the ends justified the means, and that the worse offense would be to *not* use EITs to protect Americans.[8] The direct challenge to this is that one might claim that almost any action, however cruel, was necessary, as it resulted in or it was anticipated to result in a "good" outcome.

In fairness, perhaps there are moments when a brutal act becomes necessary or even mandatory, for example in an extreme emergency like a loved one put into imminent harm's way. Intelligence that al-Qaida might have smuggled a nuclear weapon into the United States might also reasonably be called an extreme emergency. But after that stream of intelligence quickly dried up, by his own account, Mitchell continued waterboarding Abu Zubaydah, even in the several days after it should have been obvious Zubaydah had no imminent threat information, and many months after he was first captured and interrogated:

> Because of concerns about the next wave of attacks, the early interrogations always started with a focus on attacks inside the United States and for the first few days remained there. But Headquarters started sending intelligence requirements that, though still related to attacks on the U.S. homeland, focused on locational information for al-Qa'ida operatives in general, their leadership structure and their capabilities. … As Abu Zubaydah began to offer up information that the targeters and analysts on-site judged valuable and wanted more of, we asked for permission to stop using EITs, especially the waterboard. To our surprise, however, headquarters ordered us to continue waterboarding him.[9]

According to Mitchell, there were headquarters officers who, despite his objections, insisted that Zubaydah's waterboarding should not only continue, but also extend to a full thirty days.[10] From his retelling, the RDI effort seemed eventually to become much more of a strategic

intelligence-gathering operation, pursuing lead information to target the next layer or generation of al-Qaida operatives. It is here where the once possibly coherent moral arguments about extreme emergency and the use of EITs such as waterboarding appear to fall apart. Mitchell seems to understand this, as he notes that by 2004, "Bruce and I decided that short of extraordinary circumstances (a nearly certain indication of a nuclear device in an American city, for example) and additional assurances from the CIA and the DOJ [Department of Justice] that we wouldn't be embroiled in legal difficulties later, we were not going to waterboard any more detainees."[11]

Perhaps the most troubling aspect of the book is that it seems to reveal a program of human experimentation reminiscent of the CIA's failed Cold War LSD and coercive interrogation efforts. If true, such a program would have required building up an interrogation skill set through relevant experience—and that is, essentially, how the RDI program was rolled out. *Enhanced Interrogation* details a human trial-and-error research methodology spanning several years, employing a menu of EITs against detainees to figure out what worked best.

Mitchell takes great pains to detail for the reader his obviously extensive experience with SERE, the identification of resistance techniques employed by detainees, and the techniques that he suspected, but could not really know, would be most useful for the interrogation of al-Qaida prisoners. He appears to be arguing that his SERE experience gave him a significant interrogation skill set. But critics of this assertion might point out that the service members taking part in SERE do so of their own volition, know it's a training exercise, and can step out at any moment. The intelligence they may or may not possess also may be largely irrelevant, as the techniques they are subjected to seem designed to test and fortify the military student's resistance, not necessarily at all to extract the kind of useful information the CIA needed to defeat al-Qaida. And, as the book details, at some point the RDI effort mutated from extracting information about imminent threats to the collection of the much more culturally complex and nuanced intelligence required for targeting individual terrorists on a battlefield that might range from eastern Pakistan to a metropolitan area in Asia or, for that matter, Western Europe.

The CIA and its interrogators had no empirical evidence on which to base an assessment of the true effectiveness of EITs in obtaining this sort of actionable intelligence. If you remember, some headquarters managers wanted Zubaydah to be waterboarded for thirty days, even though to Mitchell it seemed pointless. Well, according to Mitchell, this misunderstanding was due to an assessment he provided before the RDI program began—that a full thirty days would be needed to ensure a detainee "either didn't have the information or was going to take it to the grave."[12] He claims that this was a misunderstanding due to the later provision of waterboarding as an approved technique, but corporate lack of experience with interrogation appears to have contributed to the prolonged and seemingly pointless waterboarding of Zubaydah.

Before the program commenced, Mitchell and Jessen provided a list of EITs that could be applied.[13] The approved list contained ten techniques—adapting behavioral psychology to interrogate a prisoner—"to condition [detainees] to experience fear and emotional discomfort when they thought about being deceitful."[14] The waterboarding of Zubaydah in 2002 provided Mitchell and the CIA experimental evidence they could use on future detainees to, perhaps, more effectively induce this conditioning. For example, Mitchell found that pouring water for the legally allowed twenty to forty seconds was too long; when this was attempted on Zubaydah, he could not clear the fluid without Mitchell's intervention and Zubaydah's subsequent vomiting, potentially complicating the conditioning process. As he notes, the legally allowed waterboarding parameters could have caused permanent damage to the detainee—"I didn't think it was safe to take full advantage of the length of time Justice Department guidance would have allowed us to pour water on the cloth or to use as much water as was permitted."[15]

In 2006, after President Bush revealed the existence of the RDI program to the public, midlevel CIA officers studying the issue asked interrogators to provide a pared-down list of EITs for future use. Interrogators believed they understood what techniques worked or did not work, and they agreed that only two of the originally approved techniques were needed after all. Those were "walling" (roughly pushing an individual up and against a specially designed wall) and sleep deprivation:

> The others, though occasionally useful, were not critical, and some such as nudity, slaps, facial holds, dietary manipulation, and cramped confinement, Bruce and I now believed were unnecessary. … We had learned over the preceding years that the EITs the midlevel managers intended to retain did not lend themselves to the conditioning process as reliably as walling did.[16]

So, was all of this human-research-based pain and suffering worth it? Were EITs ultimately a useful tool in the global war on terror? By the conclusion of *Enhanced Interrogation,* Mitchell seems to call for the reestablishment of a CIA RDI program for future terrorist detainees, quite specifically now those "with knowledge that could prevent an impending catastrophic terror attack."[17] But, he calls for *not* using EITs in this new program. This is not because he feels the techniques are ineffective, but, predictably, because he feels he and others involved with the RDI program received poor treatment.

The problem is that the mismanaged RDI program may indeed have limited the CIA's future options (at least with regard to interrogation) to effectively thwart even truly imminent, extreme emergency-type threats. A program of amateurish human experimentation with likely legal but certainly barbaric techniques has left few opportunities to extract threat information quickly from resistant detainees. Facing an enemy ruthlessly intent on ending an American way of life, what happens when we really do have a ticking time-bomb scenario?

That takes us to 2017 and a new presidential administration. Could the CIA ever waterboard a detainee again? History suggests that on many levels, this would be a very bad idea. Since its inception in 1947, the CIA has sought ways to manipulate individuals using drugs and various coercive and noncoercive techniques. Drugs and coercion always seem to backfire, with long-lasting and significant unintended consequences that negatively impact the CIA's ability to focus on what it does best—the clandestine recruitment and handling of spies who steal secrets. That is to say, what the CIA does best is to obtain the real intelligence that provides strategic insight into the plans and intentions of our enemies, from terrorists to near-peer adversaries. One cannot know but might reasonably suspect that if the CIA had not been focused on the coercive extraction of supposedly strategic intelligence from detainees, not to mention the subsequent public pillorying, it might have been more effective in training and using clandestine case officers to recruit operatives to penetrate al-Qaida, providing the CIA with the network and locational information it needed without the ethical and moral minefield of EITs.

It turns out there was no nuclear weapon smuggled into the United States after all, and it took the United States almost a decade after the initiation of the RDI program to locate and kill Osama bin Laden. Soon after the Senate Select Committee on Intelligence published its *Committee Study of the Central Intelligence Agency's Detention and Interrogation Program* in 2014, CIA Director John Brennan said, "the Agency takes no position on whether intelligence obtained from detainees who were subjected to enhanced interrogation techniques could have been obtained through other means or from other individuals. The answer to this question is and will forever remain unknowable."[18] ■

Notes

1. John Prados, *The Family Jewels: The CIA, Secrecy, and Presidential Power* (Austin, TX: University of Texas Press, 2014); John Marks, *The Search for the Manchurian Candidate: The CIA and Mind Control: The Secret History of the Behavioral Sciences* (New York: W. W. Norton, 1991).

2. Prados, *The Family Jewels*, 117–18; Stansfield Turner, *Secrecy and Democracy: The CIA in Transition* (Boston: Houghton Mifflin, 1985), 44.

3. Turner, *Secrecy and Democracy*, 44–45.

4. Prados, *The Family Jewels*, 118–19; Turner, *Secrecy and Democracy*, 45.

5. Turner, *Secrecy and Democracy*, 45.

6. George Tenet, "CIA Interrogation of al Qa'ida Terrorists: The Rest of the Story," in *Rebuttal: The CIA Responds to the Senate Intelligence Committee's Study of Its Detention and Interrogation Program,* ed. Bill Harlow (Annapolis, MD: Naval Institute Press, 2015), 2.

7. John Breen, "The Ethics of Espionage and Covert Action: The CIA's Rendition, Detention and Interrogation Program as a Case Study," *InterAgency Journal* 7, no. 2 (Summer 2016): 71–80.

8. James E. Mitchell and Bill Harlow, *Enhanced Interrogation: Inside the Minds and Motives of the Islamic Terrorists Trying to Destroy America* (New York: Penguin Random House), 49.

9. Ibid., 72–73.

10. Ibid., 74.

11. Ibid., 249.

12. Ibid., 74.

13. Ibid., 52.

14. Ibid., 153.

15. Ibid., 69.

16. Ibid., 235.

17. Ibid., 296.

18. John Brennan, Memorandum for the Honorable Diane Feinstein and the Honorable Saxby Chambliss, "CIA Comments on the Senate Select Committee on Intelligence Report on the Rendition, Detention, and Interrogation Program," 8 December 2014, 3, accessed 1 January 2017, https://www.cia.gov/library/reports/CIAs_June2013_Response_to_the_SSCI_Study_on_the_Former_Detention_and_Interrogation_Program.pdf.

Military Review

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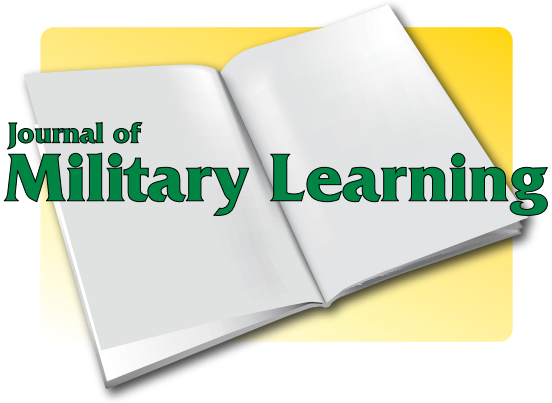

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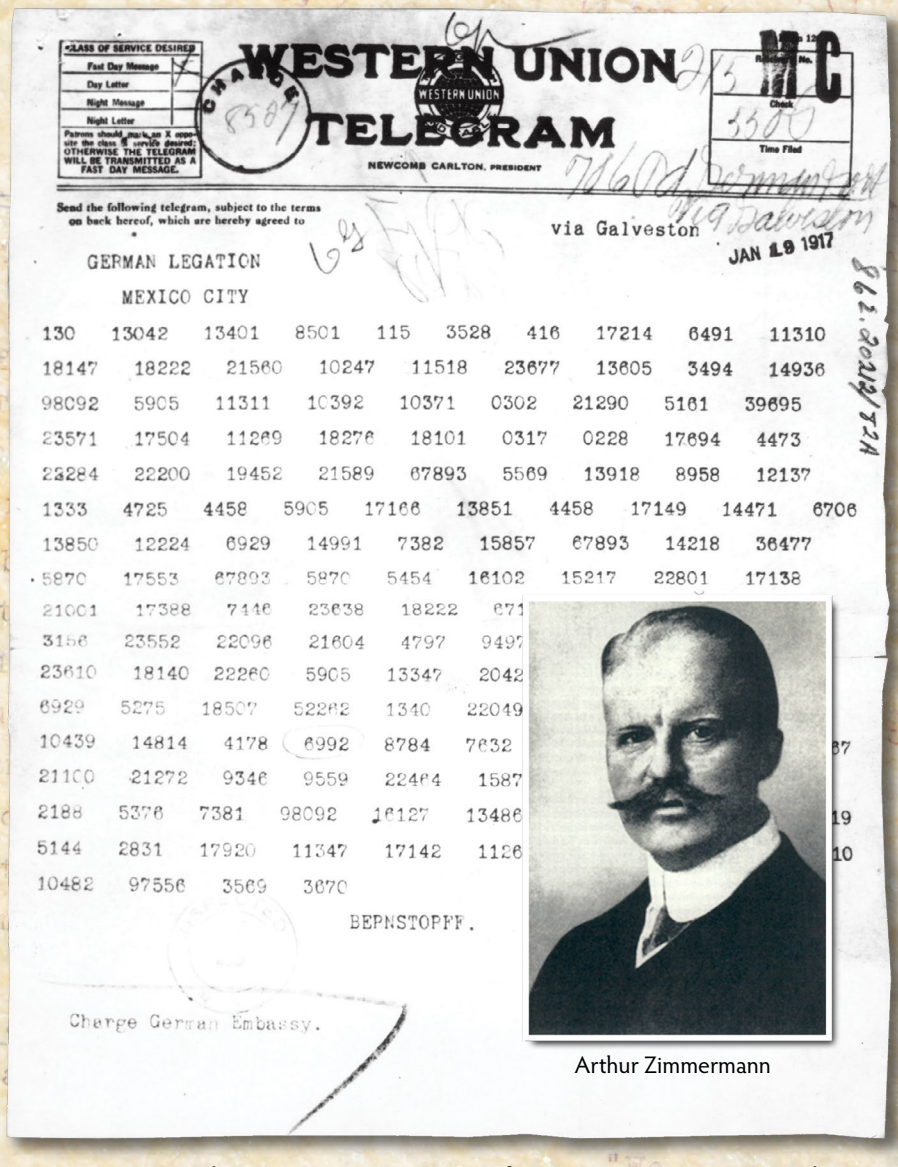
The Zimmermann Telegram



WESTERN UNION TELEGRAM

NEWCOMB CARLTON, PRESIDENT

Send the following telegram, subject to the terms on back hereof, which are hereby agreed to

via Galveston

JAN 19 1917

GERMAN LEGATION

MEXICO CITY

130 13042 13401 8501 115 3528 416 17214 6491 11310
18147 18222 21560 10247 11518 23677 13605 3494 14936
98092 5905 11311 10392 10371 0302 21290 5161 39695
23571 17504 11269 18276 18101 0317 0228 17694 4473
23284 22200 19452 21589 67893 5569 13918 8958 12137
1333 4725 4458 5905 17166 13851 4458 17149 14471 6706
13850 12224 6929 14991 7382 15857 67893 14218 36477
5870 17553 67893 5870 5454 16102 15217 22801 17138
21001 17388 7110 23638 18222 671
3156 23552 22096 21604 4797 9497
23610 18140 22260 5905 13347 2042
6929 5275 18507 52262 1340 22049
10439 14814 4178 6992 8784 7632
21100 21272 9346 9559 22464 1587
2188 5376 7381 98092 16127 13486
5144 2831 17920 11347 17142 1126
10482 97556 3569 3670

BERNSTORFF.

Charge German Embassy.

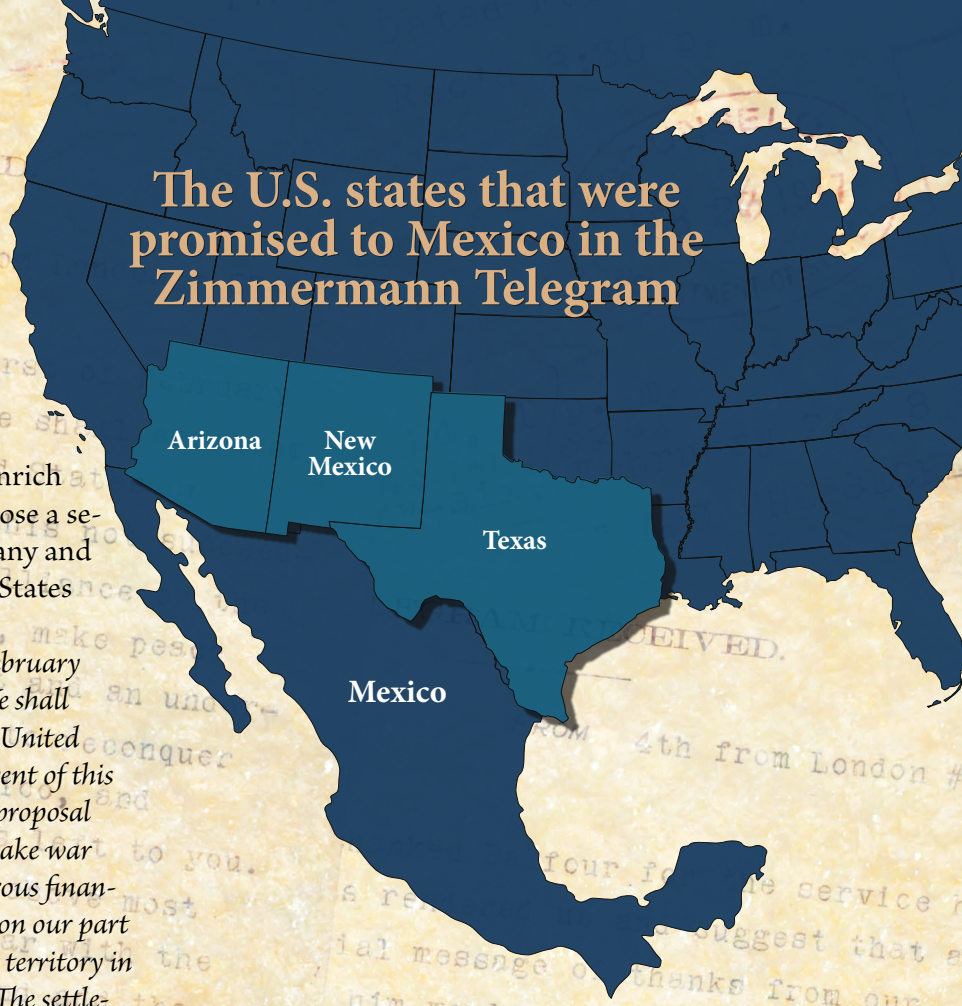
Arthur Zimmermann

The Zimmermann Telegram was sent in January 1917 from German Foreign Minister Arthur Zimmermann to Heinrich von Eckardt, the German ambassador to Mexico. The telegram proposed an offer of three U.S. states to Mexico in exchange for their support of the German war effort. (Photo courtesy of the National Archives)

This year marks the one hundredth anniversary of the United States' entry into World War I. On 6 April 1917, at the behest of President Woodrow Wilson, a special joint session of Congress voted to declare war on Germany.

The United States' entry into the war was precipitated by several events, including the sinking of the British passenger ship *Lusitania* in May 1915. The attack left 128 Americans dead and began to move American sentiments away from neutrality and against Germany. And, in early 1917, the Germans decided to engage in unrestricted submarine warfare against all commercial ships attempting to cross the German blockade of Great Britain. In March of that year, five U.S. ships were sunk by German submarines, pushing the United States even further toward war. However, perhaps the greatest impetus for U.S. entry into World War I may be the discovery of what has become known as the Zimmermann Telegram.

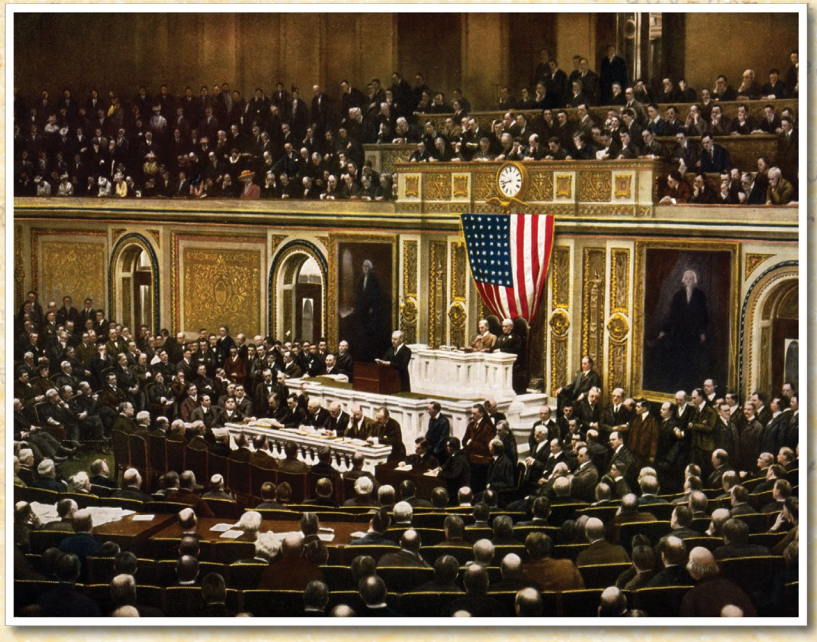
Named for its originator, German Foreign Secretary Arthur Zimmermann, the telegram was intercepted by British intelligence. Decoding revealed a message to the



German ambassador to Mexico, Heinrich von Eckardt, instructing him to propose a secret military alliance between Germany and Mexico in the event that the United States entered the war. The message read,

> *We intend to begin on the first of February unrestricted submarine warfare. We shall endeavor in spite of this to keep the United States of America neutral. In the event of this not succeeding, we make Mexico a proposal of alliance on the following basis: make war together, make peace together, generous financial support and an understanding on our part that Mexico is to reconquer the lost territory in Texas, New Mexico, and Arizona. The settlement in detail is left to you. You will inform the President of the above most secretly as soon as the outbreak of war with the United States of America is certain and add the suggestion that he should, on his own initiative, invite Japan to immediate adherence and at the same time mediate between Japan and ourselves. Please call the President's attention to the fact that the ruthless employment of our submarines now offers the prospect of compelling England in a few months to make peace. Signed, ZIMMERMANN.*

Mexico declined the alliance. However, the revelation of the telegram to the American public, coupled with the damage to U.S. ships from Germany's unrestricted submarine warfare, drove the United States to unite with the Allies and declare war on Germany. ■



President Woodrow Wilson asks Congress to declare war on Germany 2 April 1917, causing the United States to enter World War I. (Photo courtesy of the Library of Congress)