

A large group of soldiers in camouflage uniforms standing in formation, filling the entire background of the cover.

Military Review

THE PROFESSIONAL JOURNAL OF THE U.S. ARMY

November-December 2015

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COMBINED ARMS CENTER, FORT LEAVENWORTH, KANSAS



I am proud to present *Military Review's* first issue published as a member of the Army Press! Our prestigious journal has finally joined ranks with the Combat Studies Institute to form an enhanced organization that will help aspiring authors publish their articles, books, and monographs. The Army Press website is still a work in progress, but we anticipate it coming online soon to provide us with an additional publication and discussion forum. And, we are not stopping there. We look forward to adding the *NCO Journal* to the Army Press family in 2016.

This year's General William E. DePuy Combined Arms Center Writing Competition was a tremendous success; the quality and quantity of the submissions far exceeded that of previous years, and picking the winner proved very challenging for the selection committee. Thanks to all the authors who contributed. After an exhaustive review of the thirty-two contest submissions, I'm pleased to publically congratulate Lt. Col. Erik Claessen of the Belgian Army for winning the 2015 DePuy competition. His article, "The Urban Individual: Unassailable Source of Power in Twenty-First Century Armed Conflicts," is featured in this month's edition. It adds significantly to the growing body of work regarding megaurban conflict and the human dimension.

This edition of *Military Review* also provides articles on a wide variety of other topics. Three authors, Col. Donald Shaw, Thomas Terry, and Milad Minoorie, contribute valuable insights on effective communication strategies for Army leaders; historian John McGrath uses World War I's First Battle of the Marne as a vehicle for an analysis of mission command; and Air Force Lt. Col. Jason Earley discusses how changes in the Army will affect the Air Force.

Two junior officers also weigh in with recommendations for changes to Army structure and doctrine. Capt. Vincent Wiggins Jr. advocates changes to how the Army defends against air and missile threats, and 1st Lt. Matthew McGoffin discusses ideas for future adaptation of the cavalry.

Finally, the *Military Review* staff bids farewell to one of our editors, retired Sgt. Maj. Eric Lobsinger. Eric has taken a new job to be closer to his family. He was instrumental in improving the layout and appearance of our journal, and we will miss him very much.

As 2015 draws to a close, I'd like to thank all our readers and contributors; it is you who have made *Military Review* the Army's professional journal for more than ninety-three years. Please continue to share our journal with friends, colleagues, and other organizations. You can find it online at <http://usacac.army.mil/CAC2/MilitaryReview/>. Send us your feedback in a letter, an email, or on Facebook at <https://www.facebook.com/#!/OfficialMilitaryReview>. ■



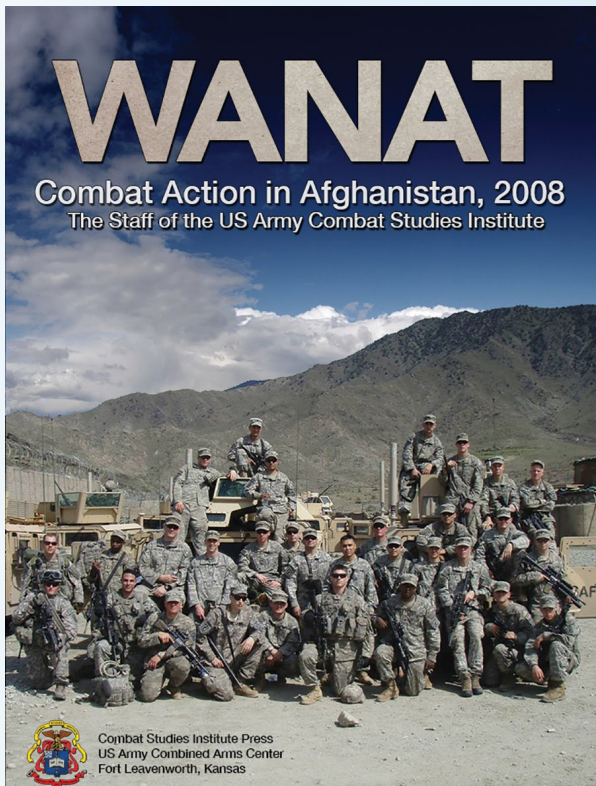
Senior enlisted paratroopers of 1st Brigade, 82nd Airborne Division, run past a palm grove 25 February 2010 at Camp Ramadi, Iraq, during an early morning, four-mile run. The "advise-and-assist brigade" was assigned the mission of security force assistance.

(Photo by Spc. Michael J. MacLeod, 82nd Airborne Division)

Wanat

Combat Action in Afghanistan, 2009

Combat Studies Institute (CSI)

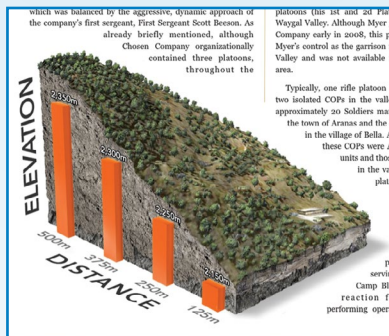


CSI Press announces the release of the Wanat iBook. This work is an enhanced version of the well-known study of the battle that took place in Afghanistan in 2008. 3D terrain views, video from both U.S. forces' and insurgents' perspectives (see example below), infographics, and other multimedia elements embedded in the text make the story of the battle more understandable and poignant.

To view this book, you must have an iPad with iBooks 2 or later and iOS 5 or later, or an iPhone with iOS 8.4 or later, or a Mac with OS X 10.9 or later. This book was designed for iOS and some features may not work as intended with a mouse or trackpad.

To access your free download of this book for iPad, go to: <https://itunes.apple.com/us/book/wanat/id1031728372?ls=1&mt=11>

Examples of audiovisual features: A virtual terrain walk through Combat Outpost Kahler can be accessed to enhance understanding of how the battle developed as described in the text.



Themes for Future Editions

with Suggested Topics

The Future of War

January-February 2016

- ◆ Megacities—What will the United States look like in the next century? What effect will the future status of the United States have on the military?
- ◆ Climate change and its threat to security (water rights)
- ◆ Impact of regionally aligned forces—present and future
- ◆ Future of nonstate entities and the military's role in conflicts with them
- ◆ Evolving or eroding the Posse Comitatus Act?

Global Insurgencies

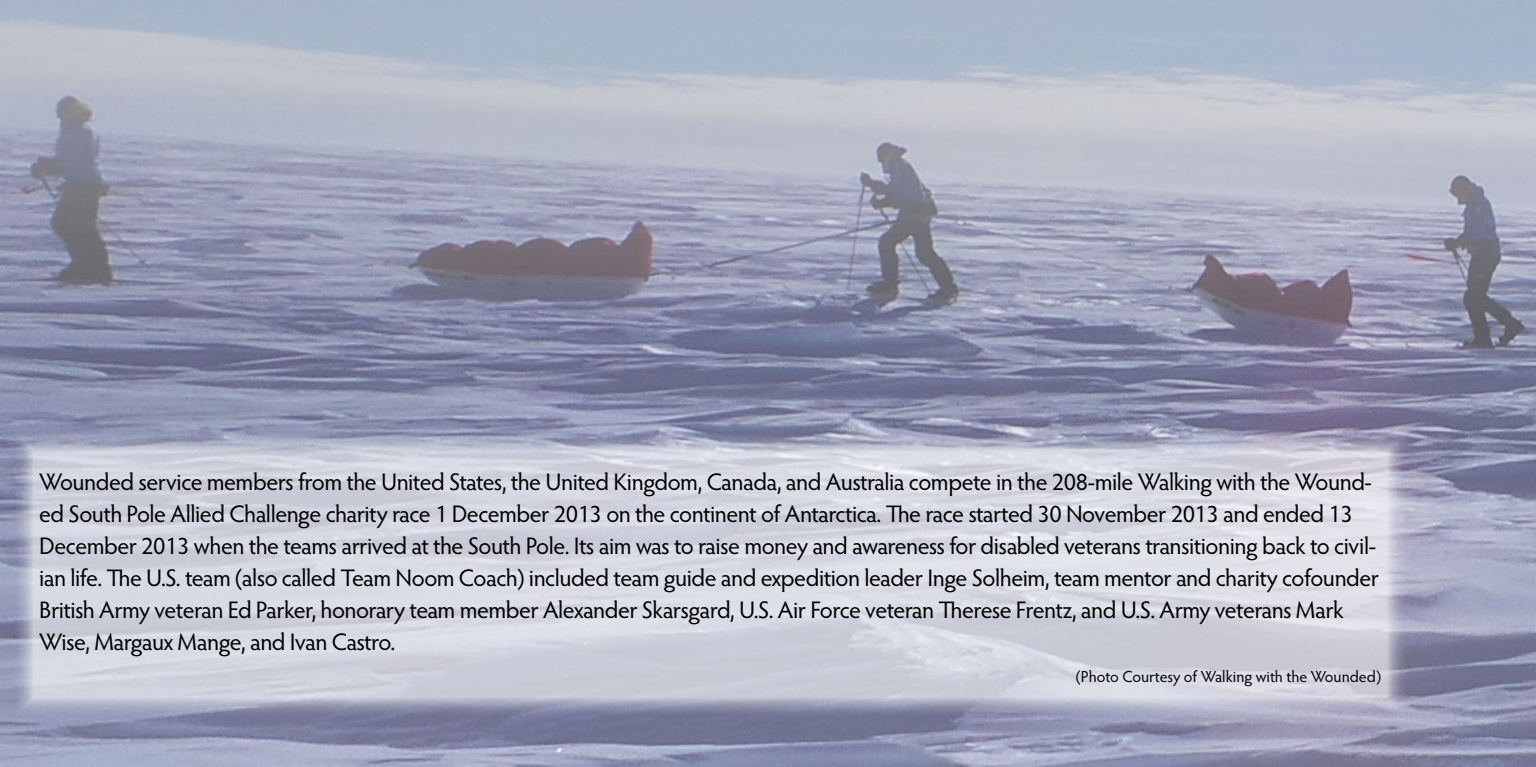
March-April 2016

- ◆ Quranic concept of war
- ◆ Updates on regional conflicts
- ◆ Regionally aligned forces reports from the field

Army Firsts

May-June 2016

- ◆ The importance of land power and its part in national security (including national defense and foreign relations): a hundred years ago, today, and a hundred years in the future
- ◆ Past wars—What worked/what did not work; what is and is not working now
- ◆ Weapon systems, an operational approach, right/wrong implementation
- ◆ Females in combat military occupational specialties
- ◆ Status of openly gay and lesbian servicemember acceptance
- ◆ A comparison of male and female posttraumatic stress disorder



Wounded service members from the United States, the United Kingdom, Canada, and Australia compete in the 208-mile Walking with the Wounded South Pole Allied Challenge charity race 1 December 2013 on the continent of Antarctica. The race started 30 November 2013 and ended 13 December 2013 when the teams arrived at the South Pole. Its aim was to raise money and awareness for disabled veterans transitioning back to civilian life. The U.S. team (also called Team Noom Coach) included team guide and expedition leader Inge Solheim, team mentor and charity cofounder British Army veteran Ed Parker, honorary team member Alexander Skarsgard, U.S. Air Force veteran Therese Frentz, and U.S. Army veterans Mark Wise, Margaux Mange, and Ivan Castro.

(Photo Courtesy of Walking with the Wounded)

The Future of Innovation in the Army

July-August 2016

- ◆ How much innovation is just right? Can you have too much?
- ◆ Historical examples of institutionally fostered innovation
- ◆ Institutional and cultural obstacles to innovation in the U.S. Army of the twenty-first century

Dealing with a Shrinking Army

September-October 2016

- ◆ Lessons from post-Civil War, post-World War I, post-World War II, post-Vietnam, and post-Cold War
- ◆ Training to standard with limited resources
- ◆ Quality retention during forced drawdowns
- ◆ The good, bad, and ugly of distance learning

Tides of History: How they Shape the Security Environment

November-December 2016

- ◆ Mao's three stages of revolutionary warfare and the rise of ISIL and Boko Haram; winning by outgoverning
- ◆ Collisions of culture: The struggle for cultural hegemony in stability operations. Can a nation survive without a common national narrative?
- ◆ Case studies: Histories of illegal immigration and how such have shaped national development in various countries
- ◆ Does the military have a role in saving democracy from itself? Compare and contrast the military's role in the life of the Weimar Republic and Mohamed Morsi's Muslim Brotherhood rule of Egypt



8 The Urban Individual

Unassailable Source of Power in Twenty-First Century Armed Conflicts

**Lt. Col. Erik A. Claessen,
Belgian Army**

Winner of the 2015 Gen. William E. DePuy Combined Arms Center writing competition. The author shows that popular support may be a greater source of power than military might in urban conflicts.

16 Military Communication Strategies Based on How Audiences Meld Media and Agendas

**Col. Donald L. Shaw, PhD,
U.S. Army, Retired**

**Thomas C. Terry, PhD
Milad Minooie, MA**

Army leaders risk failing to lead their organizations if they do not adapt their communication strategies to the media their intended audiences use and to the issues those audiences care about. This article provides five recommendations that can help Army leaders use traditional and new media to communicate more effectively.



About the Cover: Arizona National Guard soldiers from the 158th Maneuver Enhancement Brigade stand in a mass formation 7 December 2014 on the field at Arizona State University's Sun Devil Stadium in Tempe, Arizona, during the Arizona National Guard Muster and Community Expo.

(National Guard photo by Staff Sgt. Brian A. Barbour)

29 Six Weeks in 1914

Campaign Execution and the Fog of War—Historical Lessons for the Military Professional

John J. McGrath

The author analyzes the First Battle of the Marne as an example of the ineffective application of mission command. He draws parallels between aspects of mission command as used by the Germans in World War I and those used by armies in the modern era.

43 Comments on "Cavalry Tanks"

**Maj. George S. Patton, Jr.,
U.S. Army**

The republishing of George Patton's 1921 commentary from The Cavalry Journal demonstrates that internal discussion and debate among junior and field grade officers on issues of contemporary military concern are not new to the Army.

45 The Lights and the Heavies

Adapting Cavalry Branch to the Demands of Force 2025 and Beyond

**1st Lt. Matthew McGoffin,
U.S. Army**

A junior officer examines the role of cavalry in future unified land operations and offers recommendations on how to change the structure and employment of cavalry units to meet future challenges.

55 Balancing Air and Missile Defense to Better Support Maneuver

**Capt. Vincent R. Wiggins Jr.,
U.S. Army**

The Army prioritizes static-engagement-air-and-missile-defense assets at the expense of aggressive maneuver tempo, according to this analysis. The author makes a case for incorporating nonstatic-engagement-air-and-missile-defense assets such as modernized Avengers at the brigade combat team level.

64 Countering the Unmanned Aircraft Systems Threat

**Col. Matthew T. Tedesco,
U.S. Army**

The joint force needs a systematic approach to counter unmanned aircraft systems. How can it ensure the services are adequately trained, equipped, and organized to defend against this increasing threat? Recommendations are provided.

70 Drones, Honor, and War

Cora Sol Goldstein, PhD

Violence in war is often deemed acceptable, and even honorable, when direct confrontation is involved, and when opposing forces are assumed to share equivalent risks. Accordingly, some consider the use of drones in warfare as dishonorable and cowardly.

77 Air Force Leaders Take Note

The Army is Changing

Lt. Col. Jason Earley, U.S. Air Force

An Air Force officer discusses how planned changes in Army structure, size, and doctrine will effect the Air Force and its leaders.

85 The United States Army's Secret to Success

Capitalizing on the Human Dimension to Enhance Its Combat Capabilities

Maj. Jonathan Bissell, U.S. Army

**Command Sgt. Maj. Carlos Olvera,
U.S. Army**

Much of the success of the U.S. Army is attributable to effective employment of its career noncommissioned officers. Encouraging foreign nations to adopt U.S. Army techniques for developing and using an NCO corps may be an essential component for their militaries' success.

92 An All-Volunteer Force for Long-Term Success

Col. Michael Runey, U.S. Army

**Col. Charles Allen,
U.S. Army, Retired**

Diverging military, societal, and political forces make the all-volunteer force's viability untenable without fundamental change. The authors use an operational design approach to frame the environment, define the strategic problem, and outline solutions to issues of enlisted recruitment and retention.

First Lt. Jeremy A. Woodard, 1st Squadron, 61st Cavalry Regiment, 4th Brigade Combat Team, 101st Airborne Division (Air Assault), performs a cavalry charge 11 October 2013 to conclude a combat spur ceremony at Camp Clark, Afghanistan.

(Photo by Sgt. Justin Moeller, 4th Brigade Combat Team, 101st Airborne Division PAO)

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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

101 Leading Soldiers with— Not Primarily through— Communication Technology

Maj. Andrew B. Stipp, U.S. Army

Interpersonal relationships should be enhanced by the use of technology, but technology must never be allowed to supplant those relationships. Face-to-face communication, or other active communication techniques, should be the preferred means for leaders to understand their soldiers' values, principles, and emotions.

108 A Way to Teach Critical Thinking Skills so Learners Will Continue Using Them in Operations

Marcus Griffin, PhD

Lt. Col. Rob B. McClary, PhD,
U.S. Marine Corps, Retired

Even the most popular critical thinking classes do not necessarily lead to critical thinking on the job. Former Human Terrain System trainers describe an integrative model for ensuring learners continue to apply critical thinking in complex situations.

Paratroopers from 173rd Infantry Brigade Combat Team (Airborne), U.S. Army Europe, conduct joint training with Estonian army partners during Exercise Steadfast Jazz, 6 November 2013, Drawasko Pomoskie training area, Poland.

(Photo by Alexander Heie Jansen, 173rd Airborne Brigade PAO)

119 **A Good Death**

Mortality and Narrative in Army Leadership

Maj. Dan Leard, U.S. Army

Leaders should understand the consequences and shortcomings of using immortality narratives to manage their soldiers' fear of death during combat. The author examines the flaws in four narratives and provides another—professionalism—as the most effective mechanism to foster courage, resolve, and resilience.

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125 **Order in Chaos**

The Memoirs of General of Panzer Troops Hermann Balck and

Fighting the Cold War

A Soldier's Memoir

Frederick A. Baillergeon

Two memoirs highlight the significant achievements of officers who are sometimes overlooked by historians. This essay reviews Hermann Balck's Order in Chaos: The Memoirs of General of Panzer Troops Hermann Balck and John Galvin's Fighting the Cold War: A Soldier's Memoir.

Book Reviews

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

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(Photo by Alexander Zemlianichenko, Associated Press)

Ukraine's opposition leader, Viktor Yushchenko, addresses a crowd of more than ten thousand people 22 November 2004 in Kiev's Independence Square, accusing government officials of falsifying election results. Yushchenko's followers adopted the color orange as a symbol of the mass movement opposing the legitimacy of the elected government. The use of bright colors as a symbol of rebellion by other popular movements employing civil disobedience as a principal tactic gave rise to the term "color revolution."

The Urban Individual Unassailable Source of Power in Twenty-First Century Armed Conflicts

1st Place, 2015 DePuy Contest Winner

Lt. Col. Erik A. Claessen, Belgian Army

After the battle of Borodino in September 1812, Napoleon marched on Moscow. In this time of crisis, most generals urged Field Marshal Mikhail Kutuzov to defend the city at all cost. Kutuzov refused because "the very act of giving up Moscow will prepare us to defeat our enemy. As long as the army exists and is capable of resisting the enemy, we are safe in

the hope that the war will conclude happily; but when the army is destroyed, Moscow and Russia will perish. I order the retreat!"¹ Upon that command, the citizens evacuated the city and set it on fire.

War is an act of violence to compel the enemy to do our will by rendering the enemy powerless.² Therefore, the sources of power are of the utmost importance. Every

belligerent protects his own while seizing the initiative to attack his opponent's. Because he saw the army as the real source of Russian power, Kutuzov made the hard choice to preserve his forces rather than protect the capital.

At that time, Moscow counted 270,000 inhabitants. Now, the inhabitants number twelve million. In 1800, 3 percent of the world population lived in cities. That ratio now stands at 50 percent, and trends indicate it will grow to 60 percent by 2030. Taking into account the growth of the world population from one to eight billion in the same period, this means that the number of city dwellers will increase more than one hundred fifty-fold in just over two centuries.³ The scope of this evolution raises the question as to whether the relative importance of armed forces and cities as sources of power has remained unchanged. One way to answer that question is to analyze what the incumbent Russian rulers consider the most dangerous threat to their country and regime at this moment.

Two centuries after Borodino, the Kremlin states that Moscow is once again under threat of an imminent attack. In May 2014, Russian authorities organized an international security conference entirely devoted to *color revolutions*.⁴ During the conference, Gen. Valeriy Gerasimov—chief of staff of the General Staff of the Armed Forces of the Russian Federation—explained his view on the ousting of Ukrainian President Viktor Yanukovich earlier that year: “Color Revolutions have become the main lever for the realization of political ideas. ... They are based on political strategies involving the external *manipulation of the protest potential of the population*, coupled with political, economic, humanitarian and other non-military measures.”⁵ In an earlier publication, he wrote that “the rules of war changed substantially. The role of nonmilitary methods to achieve political and strategic objectives increased, and their effectiveness, in some cases, exceeded that of armed force.”⁶ In the eyes of the Kremlin, this type of regime change can happen at any time in Moscow. Mass demonstrations in Moscow could be as threatening to Putin as they proved to be to Yanukovich in Kiev. President Putin therefore firmly stated, “We see that the wave of so-called ‘color revolutions’ led to such tragic consequences. ... For us, this is a lesson and a warning, and we must do everything necessary to prevent something like this from happening in Russia”⁷

Although the Kremlin's interpretation of recent events indicates it refuses to differentiate between spontaneous protests and orchestrated subversion, it

also shows the Kremlin considers urban mobilization a power equivalent or superior to conventional military force. Gerasimov's estimate of the relative importance of armies and cities clearly is the complete opposite of Kutuzov's. Other events corroborate this estimate. In megacities like Cairo, Baghdad, and Gaza, military force proved inadequate to contain popular mobilization. As urbanization continues, this trend will only exacerbate.

However, the increased role of cities in armed conflicts is not due to the cities themselves but to the way their numerous inhabitants interact. This article holds that the source of power in future armed conflicts is the protest potential of urban individuals. Therefore, rendering the enemy powerless requires its isolation from urban constituencies at the outset of operations. This calls for a renewed understanding of the first foundation of unified land operations: initiative.⁸

To substantiate this thesis, the article first explains the process of urbanization in the context of conflicts and war. Next, it describes how urban-based belligerents use megacities as strategic power sources rather than advantageous tactical battlegrounds. It further analyzes why gaining overwhelming popular support is the decisive action in megaurban conflict. Finally, it derives the military implications from that analysis.

Urbanization

Twenty-first century megacities counting several million inhabitants are not simply enlarged versions of early nineteenth century cities with less than one hundred thousand residents. Urbanization does not merely mean that cities expand but that the urban character of the environment becomes the defining parameter of life itself.

In 1800, cities were small but densely populated areas governed by a rudimentary administration and protected by a fortified perimeter. The defense of a city relied completely on the value of the perimeter as an obstacle. Once breached, the city was lost. Protracted resistance inside the perimeter was impossible. As the effectiveness of firepower against fortifications increased, the importance of cities in wars dwindled.

By contrast, contemporary megacities are large areas with a high population density where life depends on administration. Perimeters in the shape of beltways enhance rather than impede access to the center. However, this does not mean that these cities are defenseless. On the contrary, the defensive value of a megacity stems from the



(Photo by Shakh Aivazov, Associated Press)

View of Leninsky Prospect in the Chechen Republic capital city of Grozny, Russia, 13 April 1995. Shelling and aerial bombardment by Russian forces during the previous January made it one of the most dangerous streets in the world.

size of the force needed to control the citizens living there. Quinlivan demonstrated that two parameters determine force requirements to hold a city: population size and contention level.⁹ Comparing peaceful and conflict areas around the world, he shows that—depending on the level of contention—force requirements per thousand of population range from two lightly armed police officers in a patrol car to twenty heavily equipped and adequately supported members of the armed forces. In megacities, this rule completely changes the character of urban warfare. That force requirements for urban combat are proportionate to population size rather than enemy fighter strength puts the urban individual in the center of strategy development. Because of the sheer size of the population, an urban-based belligerent inflicts higher costs on enemies by mobilizing city dwellers against enemy forces than by directly fighting them.¹⁰ Therefore, the strength of urban-based belligerents resides in their ability to tune the level of contention to an optimum level.

Low levels of contention do not bother the opponent, but extremely high levels of violence do not threaten the enemy either. Above a certain level, acts of violence yield diminishing returns. Even though extreme violence increases the opponent's force requirements for combat, it lowers force requirements for population control measures. Extreme violence leads to rampant insecurity and

the breakdown of administrative services, causing citizens to flee the city. The resulting decrease of the urban population diminishes the number of soldiers necessary to control the population. Moreover, as the number of citizens goes down, the effectiveness of standoff weapon systems goes up, allowing the opponent to replace soldiers with technology. Successful urban-based belligerents swamp the opposing force inside the city without scaring the citizens out.

Weapon System or Power Source

The August 1996 and January 2000 battles of Grozny illustrate that cities offer the urban-based belligerent many opportunities to escalate the level of violence against a militarily superior opponent.¹¹ However, they also reveal the

limitations of such an approach. Grozny's concrete structures provided cover and concealment. Chechen fighters used sewers to move around the city swiftly without exposing themselves to enemy fire. Defensive positions on the upper floors of high-rise buildings denied the Russians the advantages offered by tanks because of the limited elevation of their guns. Moreover, narrow streets limited the Russian ability to maneuver and strongly reduced observation and fields of fire. This allowed the Chechens to fight at such close quarters that the Russians could not call in indirect fire support because of the prohibitive risk of fratricide.

In fact, Chechen fighters transformed Grozny's urban infrastructure into one huge weapon system designed to deny the Russians the advantages they derived from their numerical and technological superiority. In 1996, Chechen fighters succeeded in this. However, the principal disadvantage of such a high level of violence is that it depopulates the city. In the case of Grozny, the population shrank from three hundred thousand at the outset of hostilities to less than twenty thousand at the end. As more and more civilians left the capital, Chechen fighters offered the Russians clearly defined geographic locations they could focus on. Drawing on the 1996 lessons learned, Russian armored and infantry troops no longer entered the city but sealed it off. They sent in small reconnaissance

units to locate Chechen urban fighting positions and destroyed them from safe distances using fighter aircraft, artillery, and thermobaric rounds. Lacking a recruitment pool to replace losses, attrition ultimately led to the collapse of the Chechen defense of their capital.

Although the Chechen concept of operations was innovative, it nevertheless reflected a vision that sees combat as “the only effective force in war.”¹² This vision remains rooted in nineteenth century military theory that holds that “it is evident that destruction of the enemy forces is always the superior, more effective means, with which others cannot compete.”¹³ In this line of thinking, using the urban infrastructure as a battleground is merely another way to gain a position of advantage over the enemy.

Conversely, the 2005 Israeli withdrawal from Gaza shows that—above a certain size—cities offer fundamentally different options to the urban-based belligerent. In unruly megacities, force requirements for population control measures approach those needed for decisive battle. In 1967, the Israel Defense Forces needed eleven brigades to defeat the Egyptian army and conquer the Sinai Desert—including Gaza.¹⁴ In the aftermath of the Six-Day War, it took the Israel Defense Forces just a few battalions to police the 350,000 demoralized Palestinians living there.¹⁵ However, the population quickly grew and radicalized. In one generation, Gaza transformed from a conglomerate of villages into an extended urban area.

Activist movements such as Hamas continually mobilized the 1.3 million Gazans in frequent and violent protests, supplemented with occasional terrorist attacks. As a result of rapid urbanization and increased contention, Israeli force requirements for population control rose to nine brigades.¹⁶ To contain Hamas, Israel had to field ever more soldiers. In 2004, the Israel Defense Forces were fighting almost the equivalent of the Six-Day War, week after week with no end in sight. This situation proved unsustainable. In an unprecedented decision, the Israeli government designed a disengagement plan and asked parliament to approve it. On 16 February 2005, the Knesset voted the dismantlement of Israeli settlements in Gaza and the unilateral withdrawal from the area.¹⁷

During the events that led to the takeover of Gaza by Hamas, combat never was the effective force in war. Likewise, belligerents who use the urban population as a power source rather than the urban infrastructure as a weapon system apply a fundamentally different form of warfare than that described by classic military theory. The mechanism urban-based belligerents use to win is not combat—it is conflictual coexistence.

Conflictual Coexistence

In conflictual coexistence, gaining the support of the megaurban population is the decisive operation. The actual campaign of violence and contention is but a way to



(Photo by Ariel Schalit, Associated Press)

Thousands of Israeli protesters demonstrate 15 May 2004 in Rabin Square, Tel Aviv, Israel, rallying for a pullout from the Gaza Strip.

transform that advantage into a favorable lasting outcome. Conflictual coexistence hinges on the ability to be a continuous, amorphous, and regenerative nuisance to the opponent. Popular support is the source of that ability because it provides access to the protest potential of the population.

Actually, violence in urban conflict remains crude and primitive. However, its effectiveness does not result from the casualties and damage it engenders but from the cost of the measures to contain it. Improvised explosive devices and ambushes are effective not because they kill the opponent's soldiers but because they force that opponent to carry out patrols with a combat package of armored fighting vehicles, unmanned aerial vehicle surveillance, artillery, and close-air support rather than with a couple of soft-skinned police cars. On the other hand, instruments of urban contention, such as mass demonstrations, strikes, barricades, and terrorist attacks, remain adequate and hardly evolve at all. A French revolutionary leader of 1789 if somehow teleported from Paris to Cairo amidst the masses on Tahrir Square in 2011 would have recognized and understood everything that was going on there instantly. However, he or she would have been totally unfamiliar with the methods used to get those masses there in the first place.

Field Manual 3-24, *Counterinsurgency* (2006), explained that "people support the source that meets their needs."¹⁸ For rural people, that source may be their land, their own skills, the produce and fire wood in their barns, and the friends, relatives, and clan members they can rely on in times of hardship. Politics and administration hardly matter to their daily lives. None of this applies to present-day urban citizens. In megacities, basic necessities such as security, shelter, water, food, and energy depend on administrative structures such as first responders, utility providers, public works, and social assistance organizations. Urbanization creates an insatiable demand for administration. Electricity, running water, and telecommunications were nonexistent in 1800 but are considered essential in 2015. And, the skills of urban individuals are only meaningful within the context of employment and trade in the socioeconomic space shaped by city governance. Therefore, urban dwellers are very susceptible to signs of political and administrative improvement—however biased the source that delivers them.

The urban mood is malleable. Organizations that bring the comforts of urban necessities such as running water,

electricity, or trash collection to shanty towns are almost certain to gain the support of people living there. Likewise, civil society activists who campaign against corruption stand a good chance of mobilizing the skilled urban youth that demand access to upward social mobility based on merit rather than favoritism. To take advantage of the urban susceptibility to political and administrative improvement, urban-based belligerents mobilize city dwellers by providing them with comfort, hope, and anger. Their ability to do so has increased exponentially in the last four decades because of two important developments: global fundraising and unlimited communication.

Global fundraising allows urban-based belligerents to be an asset rather than a burden to the population. Several modern activist movements organize administrative structures for urban services and social assistance parallel to those of the government. They finance these structures by raising money abroad.¹⁹ The increasing numbers of migrants and the development of accessible international money transfer systems will only accelerate this trend.

Unlimited communication is a recent but quickly progressing development. Inhibitors such as cost, range, bandwidth, and censorship used to limit the communication capabilities of nonstate actors. Up until the 1980s, rulers could restrict their people's media diet to state-owned radio stations, television channels, and newspapers. Those times are over. The ever-increasing performance of privately owned information and communication systems has resulted in a situation wherein even the smallest organization can address an audience of millions. The Iranian Revolution of 1979 provides an early illustration of this evolution. Revolutionary rhetoric on audiocassettes played a critical role in the overthrow of the Shah.²⁰ The Arab Spring and the color revolutions proved that activist organizations are able to mobilize millions of people, provided they come up with messages and images that resonate with the target audience's hope and anger.

In conjunction, violence remains an essential part of conflictual coexistence, but successful urban-based belligerents keep its use low and simple. Intense and sophisticated violence requires skilled fighters and real-time command and control. Both are difficult to come by and—as rare and valuable assets—are vulnerable to surveillance, target acquisition, and precision strikes. Moreover, high-intensity combat depopulates urban areas, as happened in Grozny. By contrast, low

and unsophisticated violence does not scare citizens out, is within reach of unskilled and readily available fighters, and merely requires anonymous general guidance, not traceable real-time command and control. To paraphrase Army Doctrine Publication (ADP) 3-0, *Unified Land Operations*, this type of belligerent lacks a clearly defined organization on which his opponent can focus.²¹ An urban-based belligerent has no need to prevail in combat when megaurban contention is sufficient to force the opponent out.

Military Implications

The importance of popular support to conflictual coexistence gives new meaning to the concept of initiative in unified land operations. According to ADP 3-0—

To seize the initiative (setting and dictating the terms of action), Army forces degrade the enemy's ability to function as a coherent force. ... Leaders continue to exploit the initiative until they place the enemy in a position that disables any ability to coherently employ military capability. This continued resistance can only lead to the physical destruction of the enemy military potential and *the exposure of the*

enemy's sources of power to imminent destruction or capture [italics added]. These are typically the military conditions required for the termination of a conflict on favorable terms.²²

This understanding of initiative focuses on enemy forces. The underlying assumption is that the degradation of the enemy's military capabilities exposes his power sources to destruction or capture. This assumption holds true for all sources of power, except for the one that matters in megacities: the protest potential of the population.

Therefore, urban-based belligerents have a different view on initiative. They focus on people. The fall of Baghdad in 2003 clearly illustrates the different views on the problem of seizing and holding cities in an urbanized world. Upon entering the Iraqi capital, American forces destroyed enemy capabilities, seized decisive terrain, and secured critical infrastructure. By contrast, Moqtada al-Sadr organized a pilgrimage to Karbala and took control of Baghdad's religious and social assistance centers.²³ Events after 2003 showed that al-Sadr's initiatives resulted in tighter control over large swaths of Baghdad than the control exercised by the U.S.-led coalition.

The value of initiatives to gain control over the protest potential of the population is limited not only



(Photo by Tara Todras-Whitehill, Associated Press)

Egyptians celebrate the news of the resignation of President Hosni Mubarak 11 February 2011 in Tahrir Square, Cairo, Egypt. "Arab Spring" antigovernment demonstrations swept through the Middle East in 2011, leading to the successful removal of several dictators in the region.

to insurgencies and revolutions. The Russian operations that led to the annexation of the Crimea prove their applicability in state-on-state conflict.

The Crimean campaign was above all an effort in strategic communication followed up by a minimal but decisive military operation.²⁴ The ousting of the Ukrainian President Yanukovich on 22 February 2014 sparked violent mass demonstrations in the Crimean capital Sebastopol. The Russian media capitalized on popular unrest and depicted the new government in Kiev as a fascist regime. Promises of economic development and social benefits supplemented propaganda promoting adhesion to the Russian Federation. One week later, the Russian parliament discussed a bill granting Russian citizenship to “Russian-speaking citizens of the former USSR [Union of Soviet Socialist Republic], irrespective of their nationality, faced with the real threat of discrimination based on ethnic and cultural, political or professional affiliation.”²⁵ By offering passports to the Crimean people, the Kremlin not only gave them the opportunity to express their affiliation to Moscow in the clearest of ways but also it created a Russian minority on Ukrainian soil—a minority the Kremlin could claim to have the right and duty to protect. Increasing numbers of “little green men”—believed, but not proven, to be Russian soldiers who had removed all insignia from their uniforms and light-armored vehicles—appeared in Sebastopol’s streets. They mingled with civilian protesters and armed “self-defense” militias surrounding key infrastructures and Ukrainian military bases.

These militias were not of great military value but provided the Kremlin with the deniability it needed to claim that the little green men were not Russian troops. Unable to enter or leave their barracks, Ukrainian units

surrendered one after the other. In less than one month and almost without firing a shot, an estimated ten thousand Russian soldiers forced sixteen thousand Ukrainian troops to leave the Crimea, abandoning 189 military bases, all weapons, and the entire Ukrainian fleet. The annexation of the Crimea proves how initiatives to mobilize the protest potential of the urban population can greatly enhance the ability of land forces to create favorable and lasting outcomes to armed conflicts.

Conclusion

As a result of urbanization, belligerents now have the option to tap into an unassailable source of power: the protest potential of the population. In the ever more numerous megacities of the twenty-first century, this potential allows urban-based belligerents to raise force requirements for population control measures to prohibitive levels. The defeat mechanism in this type of warfare is not decisive battle, but conflictual coexistence. It is applicable in revolutions and insurgencies as well as to state-on-state conflict. As urbanization continues, its occurrence will only increase. To cope with this evolution, land forces need to adjust their understanding of initiative. Because popular support—as a source of power—is not exposed to destruction or capture, the only way to deny it to the enemy is to acquire it for oneself. Therefore, initiatives in land operations have to focus on the comfort, hope, and anger of the megaurban population. This calls for capability development in the fields of understanding, inform and influence activities, humanitarian assistance, and the provision of urban essential services. In an urbanized world, gaining popular support is not a mechanism to consolidate the outcome of decisive military operations but a prerequisite to start them. ■

Lt. Col. Erik A. Claessen, Belgian Army, is the commanding officer of the Belgian Defense Distribution and Transit Center for Material Resources. Between July 2010 and October 2014 he served in the Strategy Department of the Belgian Joint Staff as the officer in charge of the land capabilities desk. He earned an MMAS from the U.S. Army Command and General Staff College, Fort Leavenworth, Kansas.

Notes

1. Albert Sidney Britt, *The Wars of Napoleon* (Garden City Park, NY: Square One Publishers, 2003), 117.

2. Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, N.J.: Princeton University Press, 1976), 75.

3. United Nations, Department of Economic and Social Affairs, Population Division, *World Urbanization Prospects: The 2014 Revision, Highlights* (ST/ESA/SER.A/352), 2014, accessed 1 September 2015, <http://esa.un.org/unpd/wup/Highlights/WUP2014-Highlights.pdf>. This source provides data regarding world demography and urbanization.
4. "Color revolution" refers to mass demonstrations that led to regime change in the former states of the Soviet Union and the Balkans. Examples include the 2003 Rose Revolution in Georgia, the Ukrainian Orange Revolution of 2004, the Tulip Revolution in Kyrgyzstan in 2005, and the 2014 Euromaidan Revolution in Ukraine.
5. Valeriy Gerasimov, "On the Role of Military Force in Modern Conflicts," *Report of the Third Moscow Conference on International Security, Conference Materials*, ed. A.I. Antonov, (Moscow: The Ministry of Defence of the Russian Federation, 2014), 15, accessed 13 June 2015, http://mil.ru/files/morf/MCIS_report_catalogue_final_RUS_21_10_preview.pdf. Original text: "Основным средством реализации политических замыслов становятся «цветные революции». ... В их основе лежат политтехнологии, предусматривающие манипуляцию извне протестным потенциалом населения в сочетании с политическими, экономическими, гуманитарными и другими невоенными мерами." Translated by E. Claessen.
6. Russian Army Gen. Valeriy Gerasimov "New Challenges Require Rethinking the Forms and Methods of Warfare," *Военно-Промышленная курьер* 8(476), 27 February 2013, accessed 13 June 2015, <http://www.vpk-news.ru/articles/14632>. Original text: "И сами «правила войны» существенно изменились. Возросла роль невоенных способов в достижении политических и стратегических целей, которые в ряде случаев по своей эффективности значительно превосходили силу оружия." Translated by E. Claessen.
7. Vladimir Putin, Transcript of the Meeting of the Security Council on 20 November 2014, accessed 13 June 2015, <http://kremlin.ru/events/president/news/47045>. Original text: "Мы видим, к каким трагическим последствиям привела волна так называемых «цветных революций» ... Для нас это урок и предупреждение, и мы обязаны сделать всё необходимое, чтобы подобное никогда не случилось в России." Translated by E. Claessen.
8. Army Doctrine Publication (ADP) 3-0, *Unified Land Operations* (Washington, DC: U.S. Government Printing Office [GPO], 10 October 2011), 5.
9. James T. Quinlivan, "Force Requirements in Stability Operations," *Parameters* (Winter 1995): 59–69.
10. *Ibid.*, 69. Quinlivan concisely explains what this means in practice: "The combination of force ratios, current populations, the size of existing infantry forces, and the implications for rotation can be astounding. Force ratios larger than ten members of the security forces for every thousand of population are not uncommon in current operations (Northern Ireland, or even Mogadishu). Sustaining a stabilization force at such a force ratio for a city as large as one million ... could require a deployment of about a quarter of all regular infantry battalions in the U.S. Army."
11. Olga Olikier, *Russia's Chechen Wars 1994-2000: Lessons from Urban Combat* (Santa Monica, CA: RAND Corporation, 2001). The analysis of the battles of Grozny draws on the study found in this book.
12. Carl von Clausewitz, *On War*, 97.
13. *Ibid.*
14. Martin van Creveld, *Defending Israel: a Controversial Plan toward Peace* (New York: Thomas Dunne Books, 2004), 148.
15. *Ibid.*, 26. "For many years after 1967 the forces needed to keep down the Territories were negligible, consisting of just a few battalions."
16. *Ibid.*, 148.
17. On 16 February 2005, the Implementation of the Disengagement Plan Law (Compensation for Evacuees) was passed with fifty-nine members of the Knesset in favor, forty against, and five abstaining, accessed 13 June 2015, <http://www.knesset.gov.il/review/YearPage.aspx?yr=2005&lng=3>.
18. Field Manual (FM) 3-24, *Counterinsurgency* (Washington, DC: U.S. GPO, 15 December 2006), 3–11, now obsolete, superseded by FM 3-24, *Insurgencies and Countering Insurgencies*, (Washington, DC: U.S. GPO, 13 May 2014), see pages 2-6 to 2-7 for a discussion of the effects of economic variables.
19. U.S. State Department, *Country Reports on Terrorism 2009*, August 2010, 251, accessed 14 August 2015, <http://www.state.gov/documents/organization/141114.pdf>. Hamas provides an example of global fundraising: "HAMAS receives some funding, weapons, and training from Iran. In addition, fundraising takes place in the Persian Gulf countries, but the group also receives donations from Palestinian expatriates around the world. Some fundraising and propaganda activity takes place in Western Europe and North America."
20. Annabelle Sreberny-Mohammadi and Ali Mohammadi, *Small Media, Big Revolution: Communication, Culture and the Iranian Revolution* (Minneapolis: University of Minnesota, 1994). This source provides information on the role of audiocassettes in the Iranian Revolution. The Iranian Ayatollah Khomeini was a pioneer in the use of novel communications that escaped regime control. He recorded political sermons on audiocassettes and distributed them among Shi'ite pilgrims who visited his city of exile, Najaf in Iraq. The widespread use of cheap Japanese cassette players during the seventies was a prelude to social media. Instead of tuning into state-controlled media, Iranians listened to Khomeini's stirring speeches, copied the cassettes, and passed them on to friends and relatives. For the first time in history, individuals were able to select, copy, and share voice-recorded information. This ability played an important role in the urban mass mobilization that led to the downfall of Mohammad Reza Shah Pahlavi ("the Shah") and the emergence of the Islamic Republic.
21. ADP 3-0, *Unified Land Operations*, 4.
22. *Ibid.*, 5.
23. Crisis Group Middle East Report No. 55, "Iraq's Muqtada's al-Sadr: Spoiler or Stabiliser," International Crisis Group website, 11 July 2006, 7 and 9, accessed 14 August 2015, http://www.crisisgroup.org/~media/Files/Middle%20East%20North%20Africa/Iraq%20Syria%20Lebanon/Iraq/55_iraq_s_muqtada_al_sadr_spoiler_or_stabiliser.pdf. "Muqtada demonstrated his ability to reflect and channel inchoate popular feelings as early as his first Friday prayer (al-Khutba), delivered in Kufa on 11 April 2003. He asked Shiites to express their piety by undertaking a pilgrimage to Karbala on foot. ... Coming on the heels of the regime's fall, the massive celebrations offered Shiites a first opportunity to see and measure their new, colossal force."
24. Anton Bebler, "Crimea and the Russian-Ukrainian Conflict," *Romanian Journal of European Affairs* Vol. 15(1) (March 2015). This source provides an analysis of events leading to the annexation of the Crimea.
25. "Procedure for Obtaining Russian Citizenship will be Simplified for Residents of the CIS" *Interfax*, 27 February 2014, accessed 13 June 2015, <http://www.interfax.ru/russia/361446>. Original text: "русскоязычным гражданам бывшего СССР вне зависимости от их национальности, столкнувшимся с реальной угрозой дискриминации по этнокультурной, политической или профессиональной принадлежности." Translated by E. Claessen.



(Photo by Ronald Williford, The Army Press)

Military Communication Strategies Based on How Audiences Meld Media and Agendas

Col. Donald L. Shaw, PhD, U.S. Army, Retired

Thomas C. Terry, PhD

Milad Minooie, MA

In 1422, Charles VI of France died, and Charles VII ascended the throne moments later as, according to tradition, the Duke of Uzès announced, “The King is dead, long live the King!” (translated from French).¹ Just as old kings die and are replaced by new kings, institutions and social perspectives gain and lose favor over time, and sometimes overnight. Traditional military tactical guidelines and operational principles also evolve. Without change, institutions weaken and atrophy.

In the U.S. Army, changes are necessary and inevitable. Changes to institutional policies and principles have to be communicated to soldiers in a way that effectively alters their attitudes and behavior. Institutional changes have to be communicated to the general public as well. Therefore, to positively influence change, Army leaders must ensure their messages are reaching their intended audiences while considering how messages from competing sources influence those audiences.

One effective way to analyze the influence of organizational messages is by applying the concepts of *agenda setting*, *media melding*, and *agendamelding*. Communication research into these concepts suggests leaders can monitor organizational performance and adjust communication approaches to responsibly influence institutional change.

Agenda Setting

What is agenda setting? Political scientist Bernard Cohen in the early 1960s discovered that what people knew about foreign affairs was closely related to the editorial selection of items covered in the news media they followed (i.e., media connect people and set a news agenda). This correlation was relatively simple to establish in Cohen’s time because the dominant news media comprised few television networks, radio stations, print newspapers, and magazines. The topics featured in the news among the handful of powerful media of the time could be compared rather easily to surveys of public awareness of issues.

Cohen’s research led him to argue that the press was not especially effective in telling people what to think but was exceptionally powerful in telling people what to think—and talk—*about*.² This, in a phrase, is *agenda setting*: media frame and focus community interest on a discrete set of issues by means of regular news coverage.

Since then, hundreds of media studies have confirmed the observation that news media influence which issues and topics people consider most important and are worthy of thinking and talking about, to the exclusion of other important issues and topics of possible interest available.³ Therefore, in general, though the media usually do not change people’s values and attitudes by themselves, they do frame a picture of the world at large for their audiences. This limits the array of issues and topics about which public attitudes and values are subsequently formed. Thus, the agenda-setting function of the media has an immensely powerful indirect influence on public attitudes and values.

Statistical Correlations between the Media and Public Agendas

To explore the influence of media news agendas on the public, researchers have employed sophisticated research models based on statistical analysis. Statistical correlation is one such analytical tool that has been used to demonstrate the power of agenda setting by determining the level of media-audience agenda agreement on public-interest issues. Correlations between factors defined as variables can help with understanding relationships even if they cannot directly identify and prove cause and effect. For media research on agenda setting, the scale of correlation ranges from 1.00 (perfect agreement) to 0.00 (no agreement at all). In other words, among a sample group from a designated audience, a correlation of +1.00 would mean that the media and members of the sample group agreed completely on the importance of all topics mentioned in the news, from most to least emphasized. Conversely, a correlation of zero would mean there was no media and sample group agreement whatsoever on the importance of those topics. (There can even be a –1.00 correlation, which means the public completely rejects the media emphasis, not a realistic situation normally.)

Using statistical correlation as a metric for analysis, studies of media influence have consistently demonstrated that there is a strong relationship between topics selected by the media as newsworthy and topics perceived by the public as important to the community (defined as, say, a correlation of .65 or higher). Such findings consistently demonstrate the significant agenda-setting power of the news media.

Evolving Roles of Traditional and Social Media as Agenda Setters

Just as the rise of unmanned drones has caused a need for the military to alter battlefield strategies, so too has the emergence of social media resulted in a need for the military to change communication strategies that previously relied on traditional media. For example, Army leaders now use tweets as well as the *New York Times* as part of their public communications planning (or they should).

To help Army leaders develop effective communication strategies in a changing media environment, this article briefly discusses the types of media audiences use, the ways audiences combine (meld) them, and the ways those media influence audiences to select

issues they regard as being important. Additionally, it concludes with five recommendations to help Army leaders communicate with and influence their organizations and the public.

Challenges to Effective Communication Strategies

Because it takes many years to climb the leadership ladder, senior leaders of any organization are usually older, and often are somewhat established in their leadership styles—to include the ways they communicate with subordinate members of their organizations and external audiences they deem essential. One common characteristic is that many such senior leaders prefer one-way traditional media (such as newspapers or magazines) together with other vertical (top-down) communication strategies, thinking they can set institutional agendas for their subordinates once and for all.

Such traditional communications mainly go in one direction: from source to audience, from leader to subordinates, from one to many. These traditional media, like daily newspapers and television news, strive to reach a large, diverse audience but attempt to do so

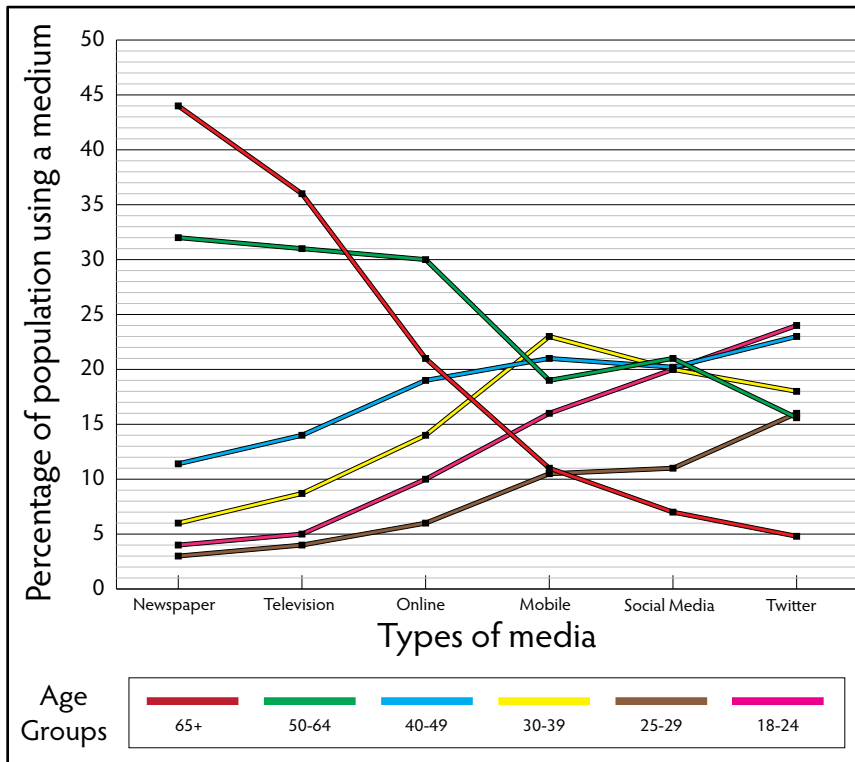


Figure 1. Media Use by Age

Agenda Setting with Regard to Specific News Topic Levels

Scholars studying agenda setting have established that the media, in addition to focusing community interest on broad issues in news coverage, also effectively highlight *specific* aspects of those issues.⁴ For example, if there was a front-page news story about Iran that focused on an Iranian effort to build a nuclear weapon and also mentioned the effects of trade restrictions on Iran, then audiences probably would say, when asked, that Iran was an important topic in the news. If pressed why, they likely would go on to cite the Iranian nuclear program and the effects of trade restrictions, since both were mentioned prominently in the news story. This illustrates what some scholars call the exchange with audiences of general or main topics as *agenda setting level 1*. The exchange with audiences of story details is an example of *agenda setting level 2*. (Research into these areas has also produced some evidence suggesting that the media do influence *how audiences think about* the subtopics and subissues they present.)

Consequently, a list of the major issues covered by newspapers, television, and other major media—now including social media—likely would be highly correlated with issues listed by their audiences.

as if shouting from the top of a pyramid to the masses of people at its base.⁵ This article labels such media *vertical*.

Senior leaders who rely exclusively on such traditional vertical media to get their message across may not appreciate how younger people at lower levels of their organizations readily gain information and form social connections in virtual communities, influencing one another through social media relatively unaffected by vertical media intrusion. In contrast to traditional vertical media, social media provide users with an individualized flow of information that does not pass through an editorial gatekeeper. It is as if people were effectively communicating horizontally across the face of the previously mentioned pyramid at some level below the top. Hence, this article labels these *horizontal media*. Audiences construct their picture of the world and the organizations in which they work from both vertical and horizontal media.

Some senior leaders may be at a disadvantage because they do not recognize the enormous influence (and challenge to their reputation or moral authority) of social communities that form around social media such as Facebook, Twitter, Instagram, and YouTube. Such social media provide platforms for audiences to connect to one another and to form virtual communities in cyberspace centered on shared interests and tastes without an editorial authority dictating, or even being invited into, the virtual community's agenda-setting process. The audience can choose.

Thus, senior military leaders would be well advised to recognize that social media provide for more horizontal and individualized flow of information. It is as if people were communicating face-to-face on one of the levels of the aforementioned pyramid.

Social Media Individualize Messages

Service members have freedom to select and meld what they learn from traditional, vertical media

with what they learn from social, horizontal media. In this way, they create a highly personalized picture of the world, including determining the purpose and value of their work (as well as the fitness or ability of their leadership).

As vertical media, such as newspapers and local television, attempt to inform the civilian population about the communities in which they live and work, likewise official military media strive to do the same thing for military personnel. Figure 1 demonstrates the general shift by age in recent use of vertical media such as newspapers, network television news, cable television news, and a selection of social media.⁶

Notably, people who came of age before the Internet tend to prefer traditional, vertical media. In contrast, digital natives—people who grew up with computers and the Internet—are more likely to meld information sources without showing dominant vertical preferences. This principle applies equally to people within traditional organizations such as the U.S. Army as well as the general public.

Figure 2 shows the age spread by rank within U.S. military forces.⁷ These age groups have been socialized

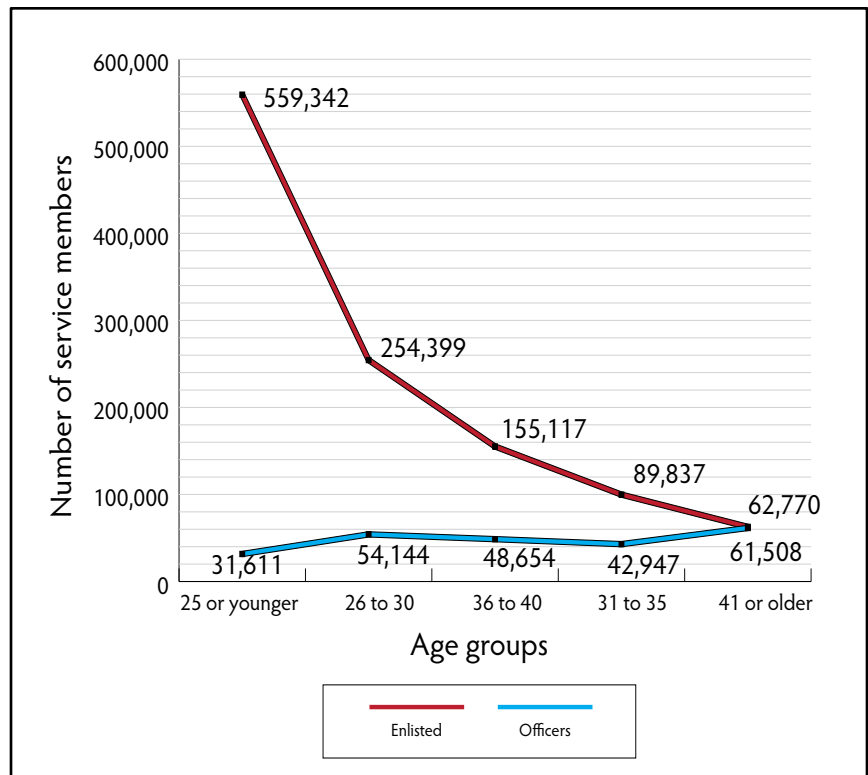


Figure 2. Distribution of Military Service Officers and Enlisted Members by Age

to media differently. Older officers and enlisted service members grew up in an environment still dominated by traditional media. Younger officers and enlisted service members have been socialized in a world of more personal social media.

Social Media and “Democratization” of the News

Everyone is a consumer of information. But today, due to social media, everyone is also a potential news journalist and information creator. For example, a web-based platform called Newzulu allows its more than one hundred thousand “citizen-journalists” to syndicate and share their videos, photos, and packages with over seven thousand news outlets around the world.⁸ Videos posted on Newzulu often attract the interest of, and then appear in, traditional, vertical news media—especially footage from places where professional journalists have little access.

Recognizing the public relations value of such expanded access by popular social media, the White House, which historically has preferred formal and traditional top-down media like television and newspapers, is diversifying its media access by selectively allowing social media organizations, such as BuzzFeed and the Daily Beast, into its press briefing room.⁹ BuzzFeed? The Daily Beast? Who would have predicted such a development in media just ten years ago?

Notwithstanding, as the rise of social media and decline in traditional media show, the ongoing dominant status of a medium is unpredictable; all media rise ... and fall.¹⁰ But in whatever form, social media are here now and wield great social influence, and more are coming.

Agendamelding

Irrespective of the type of media, media audiences are not passive. Like vertical media, social media also set agendas for those who use them. Facebook, Twitter, and other social media platforms convey a set of broad issues with details that frame what social media users then collectively think about.

From this point of view, an expanded revision of the agenda-setting concept that takes into consideration social media helps explain the relationship between modern day news media and society as a whole. This expanded concept can also clarify the relationship the leadership of such institutions as the U.S. Army or General Motors now have with media that

communicate messages through official, unofficial, and social media channels to their soldiers, employees, affiliated supporters, and others. What makes the agenda-setting process different today is that all these audiences now have instant access to a profusion of other media as well as the opinions of other people collected on a single handheld device. For many this is their most important source of information and opinion, with a significant impact on shaping their attitudes and values.

As discussed earlier, a high correlation between the media and the audience generally indicates their agreement on the importance of the topics mentioned in traditional news reports. However, if there is not such a high correlational agreement, it is highly probable that audiences are turning to social media and personal witness from other people to fill out missing information or assumptions to frame their worldview. Thus, some audiences now use what the authors of this article have labeled *agendamelding*—the modern day process of expanding the selection of topics and issues from a variety of media and combining them to individually tailor a personally framed world view.

One consequence observed is that the less the agreement between official, traditional media messages and alternate sources of information on topics and issues, the more attention audiences will give to searching other kinds of media as a check on information from traditional sources. Additionally, audiences draw on their own experiences to fill in the gaps between traditional and social media information. Thus, audiences now increasingly use a combination of vertical and horizontal media news, opinions expressed by individuals (much of which is derived from social media), and personal experiences to create a personally tailored picture of the political, social, and working worlds in which they function. Figure 3 illustrates this process.

How do audiences meld these vertical and horizontal media agendas? It sometimes may be a relatively subconscious cognitive process that results from the plethora of media to which individuals are now exposed. Two of the main author’s recent studies of elections suggest that communications in vertical and horizontal media platforms influence agendas for their users, but *in different ways* and *to different degrees*.¹¹ Audiences in this example, voters, used traditional media as a major source of information, but they also

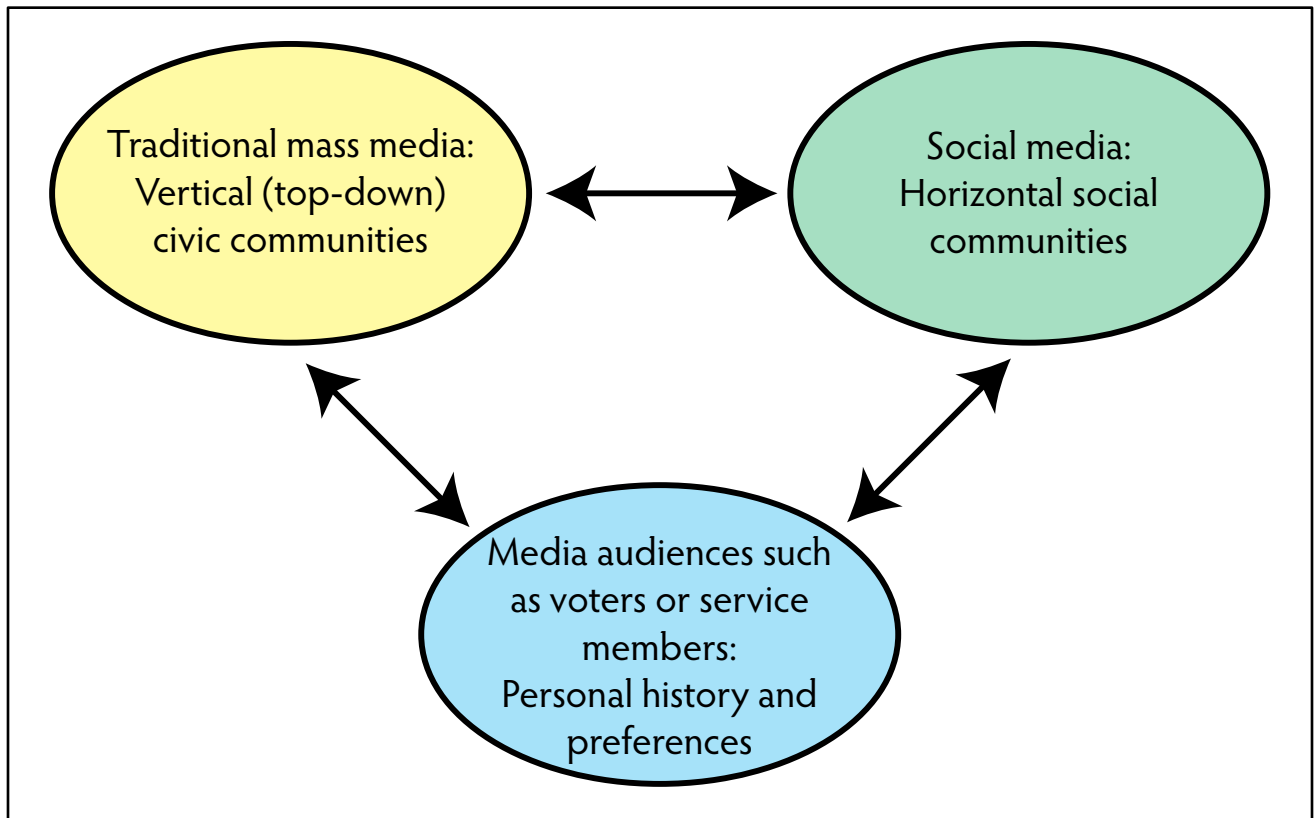


Figure 3. Agendamelding during Election Campaigns and Other Decision-Making Events

relied heavily on social media or the opinions of other people they knew and valued to make decisions about whom they would vote for. That is, people melded agendas from vertical and horizontal media as well as from their own experiences and those of others, as indicated in figure 3.¹²

As figure 3 shows, there are three general sources of information about social and working communities. Information comes from traditional media, from social interactions with other people and social media, and from personal experiences. In other words, the sum of these three agendas constitutes 100 percent of people's information sources.

Example of Agendamelding in Evolution of Voting Patterns

While measuring the personal experience of voters is difficult, agenda-setting studies have shown that the correlational value of traditional, vertical media agendas can be measured somewhat accurately for voters and media. This article proposes a useful formula to follow

this process, which is similar among people in a military organization, a commercial company, or a nation.

For the purposes of this formula, together the total value of all important issues is 1.00. Knowing the correlational value of the vertical media, users can estimate what people learn from horizontal media or personal experience, using this *agenda community attraction* (ACA) formula.¹³

$$\text{ACA} = 1 - [(\text{Vertical media correlation})^2 + (1 - \text{Vertical media correlation})^2]$$

The formula argues that an audience's picture of the changing workplace, or even the world at large—irrespective of the recent and dramatic impact of social media into society—still begins with vertical media. Next, what people do not learn from vertical sources, they learn from horizontal media and from other people.

For example, if a person sees a candidate's television advertisement in vertical media, and then sees a friend's post on Facebook, that individual may evaluate

his or her views about the candidate's political party from personal experience and knowledge. That is, if individuals do not complete their information pictures from vertical sources, they *must* get information from other sources, namely personal interactions with others, to paint a complete personal picture.

The information from all three sources accounts for 100 percent of what individuals know, or 1.00 in the ACA formula.

To estimate the relative power of vertical media, horizontal media, and personal experiences and perspectives, the vertical media correlation is subtracted from the value of 1.00 (which, by definition, accounts for everything individuals know) to get the horizontal media and personal portion of agendas. This figure is then squared to account for variance. The act of squaring allows formula users to weigh them proportionally. The square is then added to the vertical media correlation squared and the results subtracted from 1.00. The resulting number is the ACA. Three examples follow that illustrate how the formula works.

In the first example (see figure 4), if a public opinion poll indicated a high correlational agreement between the vertical media and general public at .80, that would mean up to .20 of media influence came from

elsewhere, probably from horizontal media, other people, or personal experience. *These are assumptions of the formula that attempt to account for all informational and experiential knowledge.* Thus, the ACA formula for the group represented by the .80 correlational poll would look like this equation:

$$ACA = 1 - [(.80)^2 + (1 - .80, \text{ or } .20)^2]$$

$$ACA = 1 - (.64 + .04)$$

$$ACA = .32$$

Even with this relatively high hypothetical correlation ($\rho = .80$), there is evidence that horizontal media and personal experience play a role. If, for example, the correlation between traditional media and audiences were a perfect 1.00, then the traditional media's agenda would determine the issues their audiences think about. The ACA formula would result in zero. That would mean that if audiences knew what traditional media were saying, analysts could predict what audiences would regard as important. In fact, that would seldom happen. This is not North Korea. It is not 1984.¹⁴

In the second hypothetical example (see figure 4), let us imagine the agreement is .50. In this case,

$$ACA = 1 - [(.50)^2 + (1 - .50, \text{ or } .50)^2]$$

$$ACA = 1 - (.25 + .25)$$

$$ACA = .50$$

Finally, in the third example (see figure 4), if the traditional correlational agreement was low, at .20, then,

$$ACA = 1 - [(.20)^2 + (1 - .20, \text{ or } .80)^2]$$

$$ACA = 1 - (.04 + .64)$$

$$ACA = .32$$

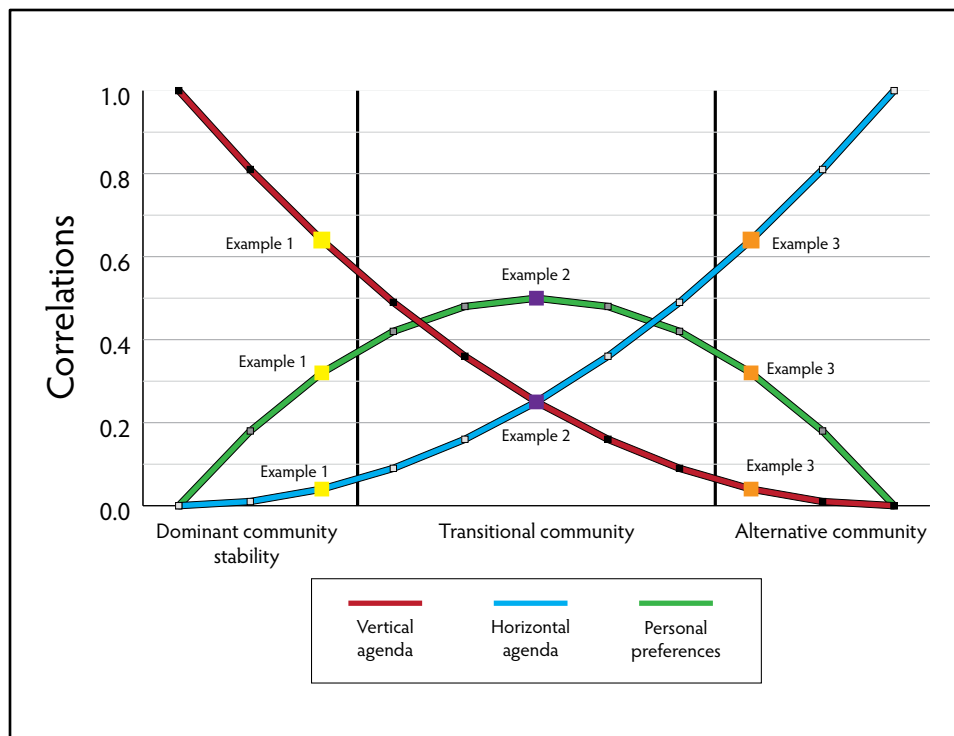


Figure 4. Dynamics of Agendamelding and Civic Balance

In the third example, the power of vertical media is, in effect, being replaced by a rising, alternative community agenda. This has implications for social organizations from communities to entire nations. If the correlational agreement between vertical media and audiences declines, then leadership confronts challenges in maintaining influence. Otherwise, as figure 4 indicates, the organizational values may be in a potentially transitional drift (as with a correlation of .50).

Figure 4 shows a range of hypothetical correlations from 1.00 to 0. (Correlations can also be negative—not considered here.) Figure 4 also illustrates the evolution of a social system from dominant vertical media agendas to dominant horizontal media agendas. Leaders can use this method to estimate where their own organizations fit in the dynamics of agendamelding and civic balance. Surveys might show a high correlation between leaders' and subordinates' views about the importance of organizational issues and goals (similar to the first example in figure 4). However, if the correlations drop sharply from generals to field grade officers and senior enlisted, and then to junior officers and enlisted, that might indicate that efforts to influence subordinates are not effective. In this case, everyone would be in the Army but not everyone would, in a sense, be living in the same agenda community—a significant difference with potentially far-reaching repercussions for all levels of command.

The United States and Iran: Examples of Agenda Community Attraction

The ACA formula illustrates how audiences meld vertical and horizontal agendas differently and how social systems evolve as a result. Leaders seeking to influence their organizations need to understand how people use media differently, not just by age but also by political beliefs and cultural identity. Otherwise, leaders might risk far more than failing to influence. This section illustrates the operation of the ACA formula first, by analyzing three U.S. presidential elections. Then, it describes a historical case study from Iran about a leader who lost power when he disregarded how the people he sought to influence shared information and melded their own views.

Studies of U.S. voters. In the original agenda-setting study in Chapel Hill, during the 1968 presidential

election between Hubert Humphrey and Richard Nixon, university professors and researchers Maxwell E. McCombs and Donald L. Shaw found a correlation between local media and voters in the ranking of important issues of .97.¹⁵

Shaw and others replicated the Chapel Hill study forty years later in the campaign season leading up to the 2008 presidential election between Barack Obama and John McCain. A content analysis of local media and personal interviews was conducted with a stratified sample of seventy Chapel Hill voters to determine the correlation between issues deemed important by the media and by voters. The correlational agreement stood at .87.

The lead author of this study, with Chris Vargo of the University of Alabama and other scholars, ran another test in a 2012 presidential election study of social media using Twitter. They used a large sample of 13,116,850 tweets to calculate the correlations between the issues tweeted by vertical media (expressing the messages of traditional, top-down news media), horizontal media (expressing the collective messages of social media communities), and issues tweeted by individuals (expressing individuals' personal perspectives). The correlation for Twitter users with vertical media tweets in the week preceding the election stood at .98.

Using the ACA formula, figure 5 shows the relative contribution of traditional media sources, collective social media community sources, and personal, individual views across these three elections.¹⁶ Traditional media remained powerful even with the rise of social media.

However, Democratic, Republican, and independent voters used traditional and social media *differently* in 2008, as did Democrats and Republicans in 2012. (The researchers did not study independent voters in 2012 and did not study social media in 1968.) This is depicted in figure 6.¹⁷

The broad conclusion is that traditional media remain powerful, but their audiences are not passive; voters meld agenda communities from traditional and social media sources that fit their personal preferences. Additionally, most likely, everyone mixes traditional and social media messages in making important decisions—soldiers as well as voters.

Study in Agenda Setting from Iran. In the 1970s, the Iranian mass media—newspapers, magazines, radio,

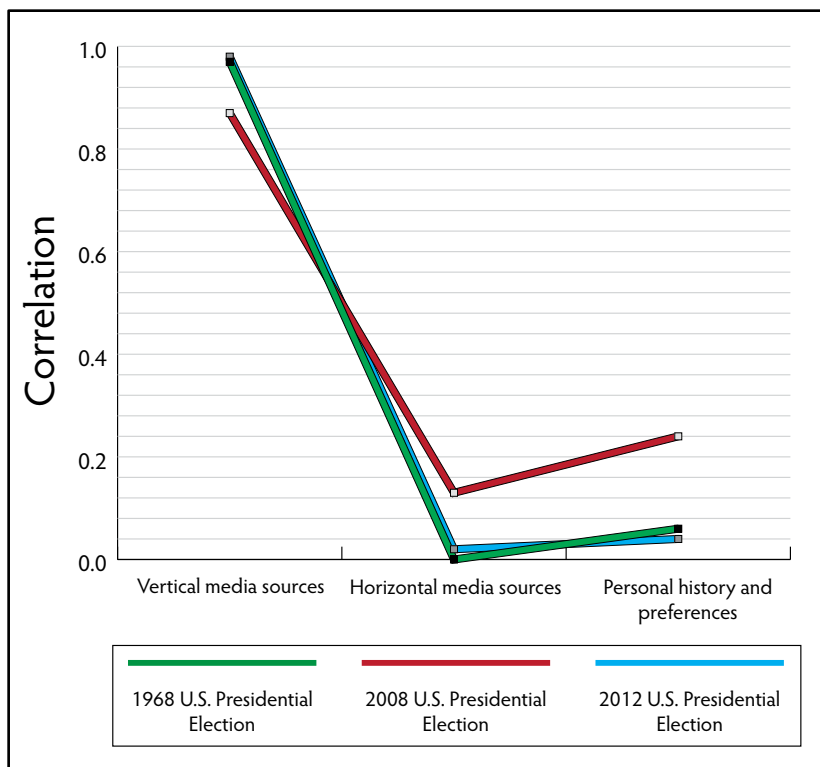


Figure 5. Agenda Community Attraction Scores for All Voters in Three Elections

and television—were under the control of the monarch, Shah Mohammad Reza Pahlavi of Iran, who used them to orchestrate development of the “great civilization” under the direction of government policy.¹⁸ The shah’s great civilization policy—sometimes called the Westernization of Iran—was a series of reforms, initiated by his father Reza Shah Pahlavi, aimed at modernizing and secularizing the Iranian society. To enforce social change, the shah attempted to use mass media—which he controlled—to stigmatize as backward the traditional values and ways of Iranian communities in contrast to the supposedly forward-looking and progressive values of the West. One of the unintended effects was to create a sense of frustration and inferiority among many Iranian citizens, especially among the Iranian intelligentsia as well as the clerical class, which in turn created a well-spring of bitter resentment against both the shah and the West in general.¹⁹

Although the demand for newspapers was growing during this time period as a result of an increasingly better-educated population, the circulation of daily newspapers was not. Instead, the public dissent

and the emergence of private media were suppressed, which left many Iranian journalists and writers no venue to publish their work.²⁰ Of note, at the time, the state-run radio and television system was the second-largest broadcaster in all of Asia. Every household had a radio, and 70 percent had a television set.²¹

The lack of venues for public discourse led all sectors of Iranian society to seek alternatives. One consequence was that the mosques in every neighborhood became social platforms for exchanging ideas, somewhat similar to how social media connect people today. The expanded significance of the mosque as a place of discourse, exchange of ideas, and debate enabled communities to set their own agendas horizontally, among friends, neighbors, relatives, and peers. Most often, these agendas ran counter to the top-down disseminated agenda of the

shah. As a result, dissatisfied communities began to form and organize around agendas of shared views over issues resulting in the beginnings of organized opposition to the government. It was tinder waiting for a spark. As depicted in figure 4, Iran was sliding down the vertical media agenda from dominant stability toward what, it turned out, was a transitional period, and then a revolution.

Example of using a “New” Medium to Foment Revolt

The exiled dissident Ayatollah Ruhollah Khomeini, who later became the leader of the Iranian Revolution, used one of the new and most advanced transportable technologies available to the public at the time—audiocassette tapes—to disseminate his revolutionary messages among the increasingly discontented Persian population.²² Most of Khomeini’s messages sent from exile (in Iraq from 1963 to 1978 and in France from 1978 to 1979) came recorded on audiocassette tapes smuggled into Iran and then reproduced or transcribed and copied for

wide distribution through mosques and then to the universities.²³

In the winter of 1978, the shah ordered the editors of the major Iranian newspapers to publish editorials accusing the now-popular Khomeini of slander and of being a colonialist.²⁴ Instead of tarnishing Khomeini in the eyes of the public, these editorials had the opposite effect by burnishing his reputation and advancing his message, while angering the population and prompting a massive protest by theology students in the holy city of Qom on 9 January 1978, which was met by police brutality. At least six people were killed and forty-five injured.²⁵

In the meantime, Iranian journalists went on strike, demanding freedom of expression.²⁶ The walkout shut down news production, leaving telephone service as a primary way to obtain news from outside Iran. Eventually, several foreign radio stations began to relay opposition messages into Iran. One popular radio station was the

Persian Language British Broadcasting Corporation World Service (currently known as BBC Persian).²⁷

By 1979, the shah’s formerly dominant agenda had reached the nadir of its influence; it gave way to an alternative agenda, that of Khomeini. As the shah’s power declined, Khomeini’s rose.

If researchers could have measured the correlational agreement between the messages of shah’s government and the views of the general public, they probably would have seen data similar to these: prior to 1978, the agreement would have been about .80; in 1978, it would have been about .50; and in early 1979, it would have plummeted to about .20 (see examples 1 through 3 in figure 4).

In principle, what happened in Iran could happen anywhere, when the influence of the media preferred by leaders declines, and the influence of the media preferred by audiences increases. At the same time, leaders lose their influence partly because of their ineffective media strategies. New leaders who adapt to the media habits of

their followers arise—and the cycle of change starts over.

Ironically, in more recent times, to attract military recruits, Iranian marines have recently sponsored and participated in a music video made by a once-underground musician. When asked what the rationale was for using formerly banned musicians as a recruitment tool, a high-ranking officer in the Iranian Revolutionary Guard said, “We have to learn to speak the language of youth and use their codes.”²⁸

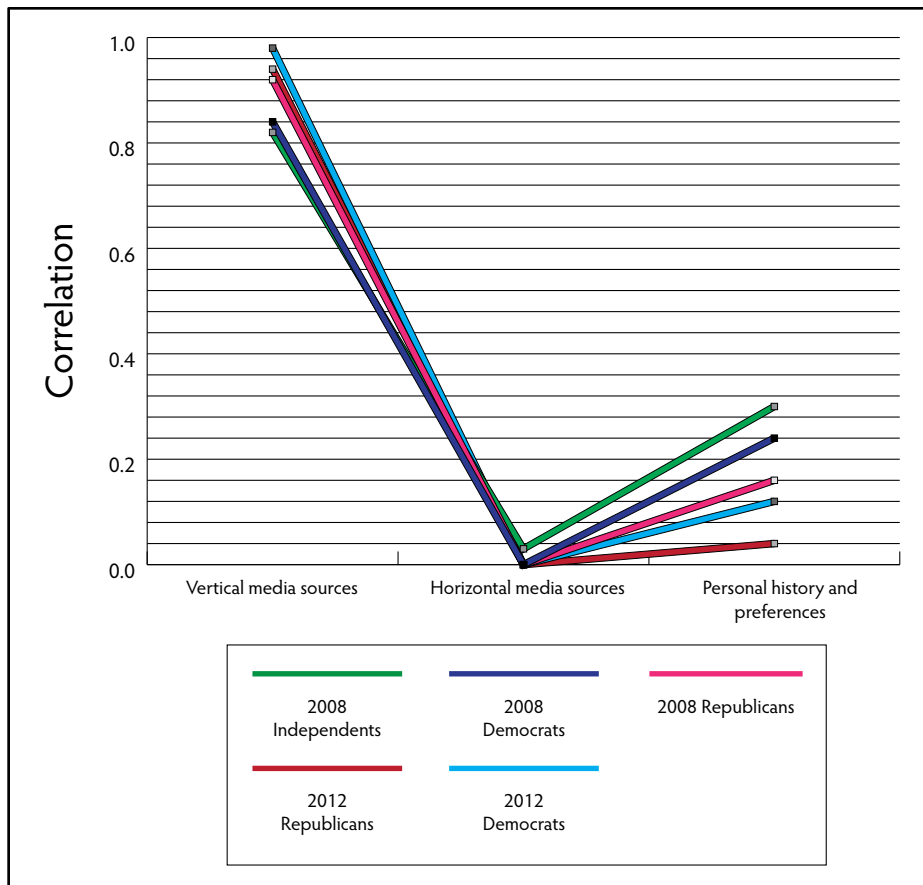


Figure 6. Agenda Community Attraction Scores for Party Voters in Two Elections

Recommendations for Army Leaders

Responsible leaders prefer evolution to revolution—military leaders included. In a way, the correlational agreement among traditional, vertical media, and agenda-setting input from other sources

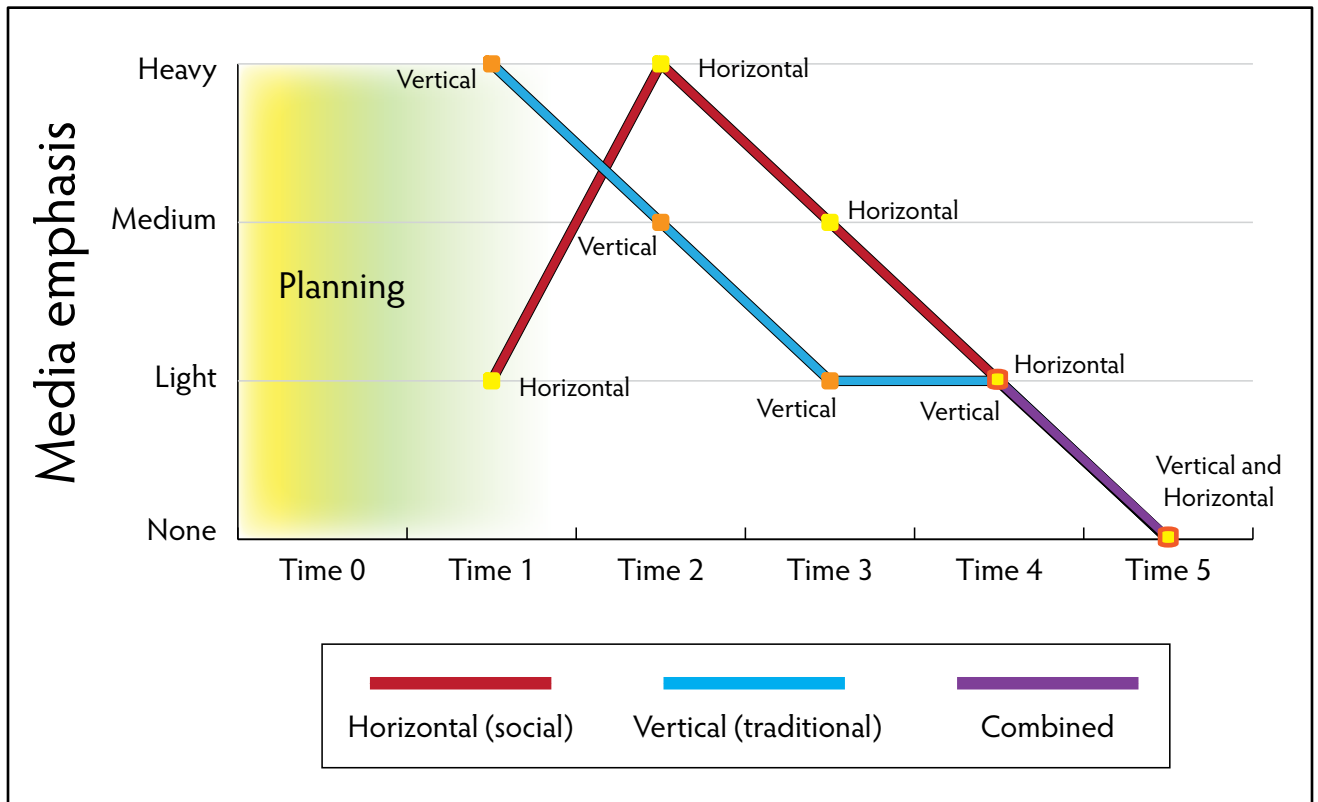


Figure 7. Sample Communication Strategy Lines of Effort over Time

represents a sort of social thermometer. The leader’s goal would be a comfortable “temperature” (correlational agreement on issues across military ranks) of about .68 to .72. This would indicate stable support of the institution by the audience but would also allow for innovation *and* diversity of topics over time.

To achieve a comfortable agendamelding temperature among the troop formations, their dependents, and Army supporters, Army leaders might consider these five broad recommendations:

Recommendation 1. Use media platforms that target audience use *in ways individuals and their social communities do*. Social media have become important to all members of the Army, but especially to the younger members. Even on battlefields, soldiers often stay in touch (when possible) with their families and friends via e-mail, cellphone, or other social media. Arthur Sulzberger, chairman of the *New York Times*, is well known for saying that the *Times* is “platform agnostic” in terms of the way he prefers his publication to be delivered to the paying audience—just as long as it is delivered.²⁹ This is a realistic perspective.

Recommendation 2. Devote significant resources to ongoing monitoring of the social media usage of members of the organization, including all levels and demographics (this would be a good staff job). Those who send organizational messages should understand their members’ use of social media. Should the message be sent by social in addition to traditional media? Or perhaps the message should be sent by social media only.

Recommendation 3. Include traditional news media and social media platforms in *strategic thinking*. Technology is constantly changing. Businesses are using different media to target audiences.³⁰ Businesses are, essentially, platform agnostic, motivated by profits and market share. The military, of course, has public service motivations and is scarcely agnostic in core commitments or beliefs. Nevertheless, the military can be as flexible in communication approaches as it is in combat operational planning.

Recommendation 4. Do not rely only on a select few media platforms for all messages. When in doubt, reach for appropriate platforms, traditional and social. Be flexible in the selection of platforms from topic

to topic *over time*. As media evolve, communication routes should evolve via traditional and social media.

Recommendation 5. Integrate traditional and social media strategies, varying the efforts devoted to each according to a strategic time line. Leaders can blend traditional and social media when they are trying to introduce significant change to their organizations, such as a change in combat brigade tactics or a new practice involving battlefield artillery systems. Such change is challenging, but it has to be done from time to time.

Figure 7 illustrates a way to blend official messages via traditional media and supporting messages by way of social media. A communication strategy might vary the amount of effort devoted to traditional, top-down media messages and to social media messages according to five hypothetical time segments.

A key guideline is this: first, use traditional media to establish a clear message; later, use social media to explain and support traditional media message. If the intended audience is young, make use of “their” social media as applicable.

At Time 1, emphasize traditional, top-down media for official messages about changes in combat brigade tactics or battlefield artillery practices, but with some emphasis on social media and personal contact. Social media tend to be more persuasive than are traditional media because they are perceived to be less shaped by censoring authority. Additionally, individuals communicating online and in person appear to be the most persuasive of all.

At Time 2, devote more effort to engaging audiences in discussions via social media or in person, while making the traditional media emphasis more moderate.

From Time 3 through Time 4, reduce both traditional and social media messages as individuals or units absorb the changes. Investigate appropriately to make sure the changes *are* made.

At Time 5, all communications on these topics might end. If the communication strategy successfully brings about changes in understanding and behavior related to the combat brigade tactics or battlefield artillery systems, perhaps leaders could turn to new communication challenges. Maybe leaders need to maintain a low level of attention for a while. Monitoring communications is, as we know, a command responsibility.

Summary

Traditional media are not dead, but their declining use by younger audiences suggests that military leaders need to adapt their methods to reach their internal and external audiences in strategic ways, as do other organizations that serve society. To such an end, it may be prudent to tap younger members of the military who are in a position to provide real insights to more experienced leadership on how best to communicate in an age increasingly influenced by social media so they can remain flexible in their information strategies. In this area, leaders need to learn from others all the time, just as did the best kings in ancient times. The most effective leaders still do. ■

Col. Donald L. Shaw, U.S. Army, retired, is Kenan Professor Emeritus in the School of Media and Journalism at the University of North Carolina at Chapel Hill. He earned his PhD in journalism from the University of Wisconsin, Madison. He is credited, along with colleague Maxwell McCombs of the University of Texas at Austin, with developing agenda-setting theory. Shaw is the author of numerous journal articles and books.

Thomas C. Terry is professor of journalism at Utah State University, Logan. He spent a year on a Department of Defense intelligence community post-doctoral grant studying the emerging horizontal media world. Terry owned and edited a small group of newspapers in Illinois. He is a past president of the Illinois Press Association and the author of numerous scholarly publications.

Milad Minoie is a doctoral student in the School of Media and Journalism at the University of North Carolina at Chapel Hill. He earned his master's degree in communications from the University of Texas at Arlington in 2013. He spent five years as a political journalist and editor in Iran. He is the co-author, with Donald Shaw, of several scholarly papers.

Notes

1. "The king is dead, long live the king!" MedLibrary.org website, accessed 24 September 2015, http://medlibrary.org/medwiki/The_king_is_dead,_long_live_the_king!
2. Bernard Cecil Cohen, *The Press and Foreign Policy* (Princeton, NJ: Princeton University Press, 1963), 13.
3. Maxwell E. McCombs and Donald L. Shaw, "The Agenda-Setting Function of Mass Media," *Public Opinion Quarterly* 36(2) (1972): 174, doi:10.1086/267990, provides the first instance of such studies; for more examples see Maxwell E. McCombs, *Setting the Agenda: The Mass Media and Public Opinion*, 2nd ed. (Malden, MA: Polity, 2014).
4. Maxwell McCombs, Juan Pablo Llamas, Esteban Lopez-Escobar, and Federico Rey, "Candidate Images in Spanish Elections: Second-Level Agenda-Setting Effects," *Journalism & Mass Communication Quarterly* 74(4) (1997): 703-717.
5. Donald L. Shaw, Bradley J. Hamm, and Thomas Terry, "Vertical vs. Horizontal Media: Using Agenda-Setting and Audience Agenda-Melding to Create Public Information Strategies in the Emerging Papyrus Society," *Military Review* 86(6) (2006): 13-25.
6. The Pew Research Center, *Trends in News Consumption: 1991-2012: In Changing News Landscape, Even Television Is Vulnerable*, 27 September 2012, accessed 8 September 2015, <http://www.people-press.org/files/legacy-pdf/2012%20News%20Consumption%20Report.pdf>.
7. Office of the Deputy Assistant Secretary of Defense (Military Community and Family Policy), *2013 Demographics Profile of the Military Community*, 2014, accessed 8 September 2015, <http://download.militaryonesource.mil/12038/MOS/Reports/2013-Demographics-Report.pdf>.
8. Newzulu, "About Us," news website, accessed 8 September 2015, <http://www.newzulu.com/en/about-us.html>.
9. Chris Cillizza, "How the Seating Chart of the White House Press Room Has Changed, in 1 Cool Graphic," *The Fix*, *Washington Post* blog, 25 March 2015, accessed 8 September 2015, <http://www.washingtonpost.com/blogs/the-fix/wp/2015/03/25/how-the-seating-chart-of-the-white-house-press-room-has-changed-in-1-cool-graphic/>.
10. Donald L. Shaw, *The Rise and Fall of American Mass Media: Roles of Technology and Leadership 2* (Bloomington, IN: Roy W. Howard Project, School of Journalism, Indiana University, 1991).
11. Thomas C. Terry, Donald L. Shaw, Brooke Ericson, and Sherine El-Toukhy, "Still Haunts Our Apprehensions—A Fourth, Micro Level of Agenda Setting: Nouns, Adjectives, Affect Residues, and Agenda Triggers through Newspaper Descriptions of Dale Earnhardt, Sr." (unpublished manuscript).
12. Figure 3 adapted from Maxwell E. McCombs, Donald L. Shaw, and David H. Weaver, "New Directions in Agenda-Setting Theory and Research," *Mass Communication and Society* 17(6) (2 November 2014): 781-802, doi:10.1080/15205436.2014.964871.
13. Ibid.
14. George Orwell, *Nineteen Eighty-Four* (London: Secker and Warburg, 1949).
15. McCombs and Shaw, "The Agenda-Setting Function of Mass Media."
16. Ibid., and McCombs, *Setting the Agenda: Mass Media and Public Opinion*.
17. McCombs and Shaw, "The Agenda-Setting Function of Mass Media," and McCombs, *Setting the Agenda: Mass Media and Public Opinion*.
18. Hamid Mowlana, "Technology versus Tradition: Communication in the Iranian Revolution," *Journal of Communication* 29(3) (September 1979): 107-12, doi:10.1111/j.1460-2466.1979.tb01718.x.
19. Annabelle Sreberny-Mohammadi, "Small Media for a Big Revolution: Iran," *International Journal of Politics, Culture and Society* 3(3) (March 1990): 344, doi:10.1007/BF01384966.
20. Mowlana, "Technology versus Tradition."
21. Bigan Kimiachi, "History and Development of Broadcasting in Iran," (unpublished PhD dissertation, Bowling Green State University).
22. Daniel P. Ritter and Alexander H. Trechsel, "Revolutionary Cells: On the Role of Texts, Tweets, and Status Updates in Nonviolent Revolutions," paper presented at the conference on Internet, Voting, and Democracy, Laguna Beach, CA, 2011, accessed 8 September 2015, http://www.democracy.uci.edu/files/docs/conferences/2011/Ritter_Trechsel_Laguna_Beach_2011_final.pdf.
23. Majid Tehranian, "Communication and Revolution in Iran: The Passing of a Paradigm," *Iranian Studies* 13(1-4) (January 1980): 21, doi:10.1080/00210868008701563.
24. Ahmad Ashraf and Ali Banuazizi, "The State, Classes and Modes of Mobilization in the Iranian Revolution," *State, Culture, and Society* 1(3) (1985): 7.
25. "Reaction to Iran Deaths," *Washington Post*, 13 January 1978.
26. Jonathan Randal, "Iranian Protesters Shout 'Death to Shah'; Demonstrators Again Disobey Curfew in Iran," *Washington Post*, 8 December 1978, <http://www.lexisnexis.com/lncui2api/api/version1/getDocCui?oc=00240&hnsd=f&hg=t&lmi=3S8G-C2R0-0009-N41W&hns=t&perma=true&hv=t&hl=t&csi=270944%2C270077%2C11059%2C8411&secondRedirectIndicator=true> (access requires subscription to LexisNexis).
27. Tehranian, "Communication and Revolution in Iran," 22.
28. Narges Bajoghli, "How Iran Is Trying to Win Back the Youth," *The Guardian* website, 20 July 2015, Iran section, accessed 8 September 2015, <http://www.theguardian.com/world/iran-blog/2015/jul/20/iran-military-goes-hip-hop-for-youth-appeal-amir-tataloo>.
29. Seth Mnookin, *Hard News: Twenty-One Brutal Months at The New York Times and How They Changed the American Media* (New York: Random House Trade Paperbacks, 2005), 22.
30. Dave Evans, *Social Media Marketing: An Hour a Day*, 2nd ed. (Indianapolis: Wiley, 2012); Dan Zarrella, *The Social Media Marketing Book* (Sebastopol, CA: O'Reilly, 2010); Pierre R. Berthon et al., "Marketing Meets Web 2.0, Social Media, and Creative Consumers: Implications for International Marketing Strategy," *Business Horizons* 55(3) (May 2012): 261-71.



(Photo courtesy of the Library of Congress)

Imperial German Army Col. Gen. Alexander von Kluck (fifth from the left) and his First Army staff, autumn 1914

Six Weeks in 1914

Campaign Execution and the Fog of War—Historical Lessons for the Military Professional

John J. McGrath

World War I in general and the so-called First Battle of the Marne in particular are still relevant to military operations today. There are many lessons that the modern military professional can draw from the first six weeks of the war, which was fought mainly between German forces and those of the allied French and British. Among the most important of these is that even if an army

espouses mission command in its culture and doctrine, it can execute it poorly or in a manner that could make the methodology not only ineffective, but also counterproductive.

The first Marne campaign was unique and paradoxical since it was a strategic loss for Germany in a situation where German forces won almost every tactical engagement. Analyzing how this happened offers

key insights that are relevant to our armed forces today, particularly as they may apply to analysis and employment of the *mission command* concept.

Background of the Campaign

The designation “First Battle of the Marne” is in fact a misnomer; there was no decisive battle. It was rather a series of numerous skirmishes and several separate battles fought between Imperial German Army and Anglo-French forces along the Ourcq, Petit Morin, Grand Morin, and Aisne Rivers in northwestern France (see figure 1).

To avoid the German High Command’s worst nightmare scenario of a two-front war, the key initial objective for the opening German operation was to knock France out of the conflict as quickly as possible so Germany could then turn its attention toward Russia in the east. As a result, at the outset of the war

in early August, the Germans deployed rapidly, advancing through neutral Belgium in an effort to envelop the French and British forces preparing to advance against the Germans. As part of this operation, the German army had assembled a force of heavy artillery guns to quickly reduce the Belgian and French fortresses in the path of their advance.

In contrast, the French plan at the start of the war was basically to attack wherever their forces could destroy German forces, depending for success on *élan* and their belief in the natural superiority of the French soldier.

The German Offensive

The German invasion started 2 August 1914 and extended to early September. In the beginning, most things went right for the Germans and most went wrong for the French. After reducing the fortress of

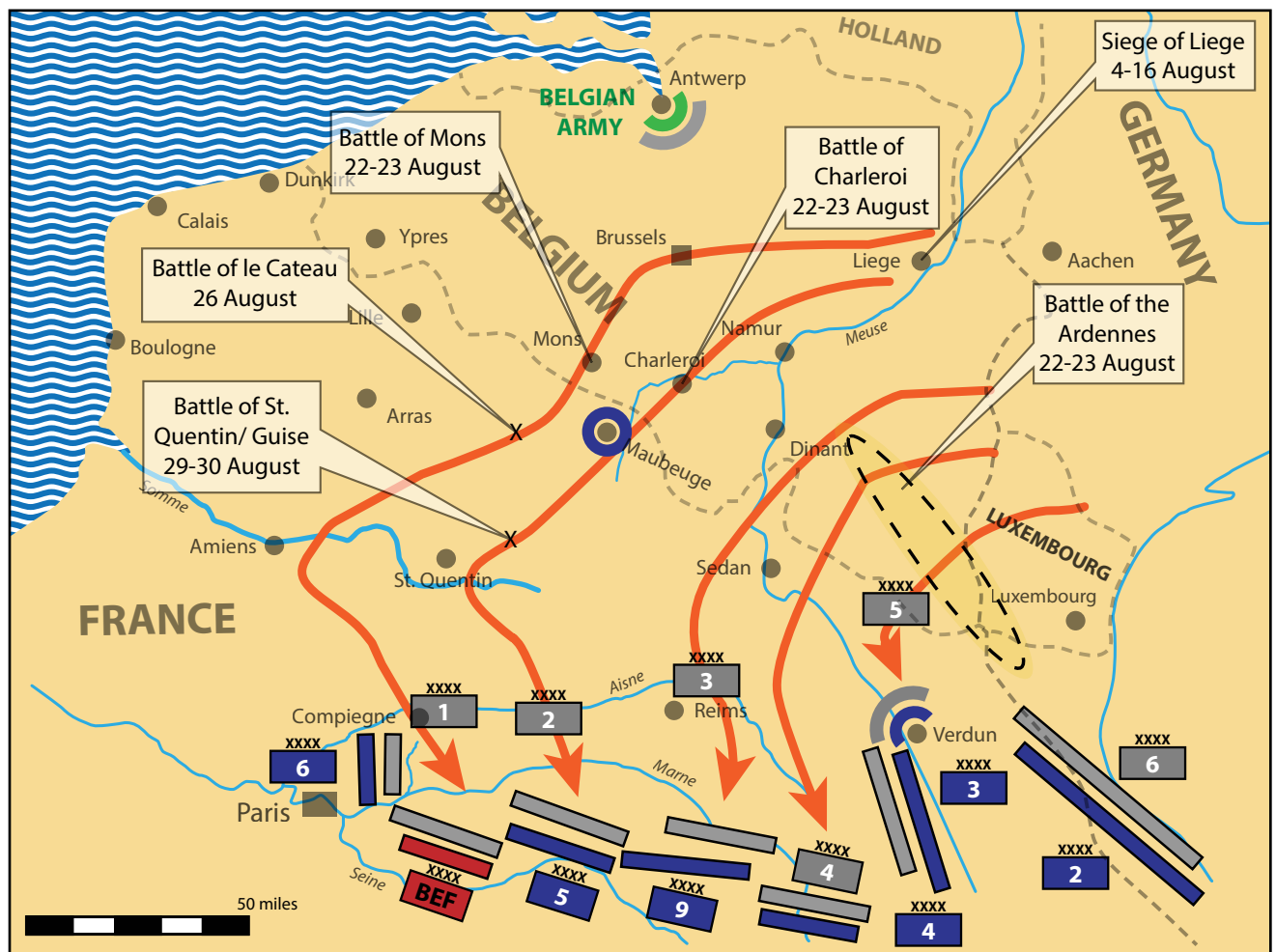


Figure 1. The First Marne Campaign

Liege on 16 August, the German forces successfully began their sweeping advance through Belgium, aiming for the French left flank and the vicinity of Paris. In contrast, the French, led by Gen. Joseph Joffre, though they had brief initial offensive success in Lorraine on the common border with Germany, were soon repulsed by the extensive German border fortifications.

Additionally, upon discovering the German sweeping maneuver on his left flank in mid-August, Joffre assumed the enemy center had to be weak, and he attacked there in the Ardennes forest with two field armies on 22 and 23 August, intending to outflank the German forces in central Belgium. However, it was a bad assumption. The Germans were not weak there; they had deployed more troops to the western front than Joffre estimated. As a result, the French forces were badly defeated and forced to retreat.

At the same time, in central Belgium one French field army and more than four divisions of the recently arrived British Expeditionary Force (BEF) moved forward to strike at the advancing German main effort. However, simultaneously with the battles in the Ardennes, the Germans struck first at Mons and Charleroi along the Sambre River, forcing the Allied forces to retreat—a withdrawal that ultimately continued south of the Marne River over the next twenty days. The Germans also defeated both a British rear guard at Le Cateau on 26 August and a French counterattack at Guise on 29 and 30 August, and so the Germans continued to advance.

Despite the successes, there were fissures in German operational-level planning and execution that quickly became debilitating cracks. In the spirit of independence fostered among units in the prewar Imperial German Army, the German field army commanders seemingly thought of themselves and their units as, essentially, fighting their own individual battles. As a result, they conducted operations without effective synchronization with the other army commanders to establish coherence of action relative to the larger strategic plan. This tendency was particularly pronounced with the two commanders on the German right wing (fighting the Allied left): Col. Gen. Alexander von Kluck (First Army) and Col. Gen. Karl von Bülow (Second Army). As a result, overall German commander Col. Gen. Helmut Count von Moltke (the Younger), with a weak communications system and a personal unwillingness to leave his headquarters that was located far

from the front, soon lost control of the right wing forces, effectively ceding to his subordinates authority to direct operations independently.

Consequently, a perilous lack of synchronization and coherence between the armies soon emerged due largely to a significant difference in the personalities of the commanders involved. Kluck, on the extreme right, was very aggressive and read directives from Moltke in that light. However, Bülow, to Kluck's left, was much more cautious—particularly after having to repulse an unexpectedly costly French counterattack at Guise. Therefore, in the absence of clear and timely revised instructions from Moltke, the German field commanders—particularly Kluck—began to adjust the pace of their operations according to their own individual temperaments, resulting in overall loss of unified action between their armies.

In addition, German miscalculation and command impetuosity were fueled, in part, by overly optimistic estimates of the damage caused by the success of the early German attacks. The reality was that despite the rapid progress of the initial German advance and the heavy casualties they inflicted on the Allied forces, the Germans were not really destroying the Allies as much as they were pushing them away. This left Allied forces largely intact; though in disarray, they were fully capable of reorganizing for counterattack if given the time.

Kluck saw this and tried to take advantage of it by independently changing his route of advance in order to envelop the French forces facing Bülow (see figure 2). His intent was to smash the French before they had a chance to reorganize. However, this maneuver turned his own right flank opposite Paris and created a gap between his troops and those of Bülow—while failing to catch the French. The gap handed the French an unexpected opportunity to split the German forces, which Joffre seized.

On 8 September, when Moltke found out about the gap that had opened on his lines, he became very pessimistic about the situation. Kluck, however, remained very optimistic, even after he discovered several days earlier (5 September) that the French were massing forces on his right. Willing to take what he viewed as a calculated risk, over the next few days Kluck stripped forces from his front on the Marne in phases to reinforce his right flank across the Ourcq River. He did this in the belief that he could beat the French there and then turn

back to the Marne front, where the British had retreated out of contact, before the Anglo-French force could organize for an attack against his weakened front.

While a series of piecemeal attacks and counterattacks were conducted on the Ourcq front as both sides gradually reinforced, Kluck's movements increased the gap between his forces and Bülow's Second Army, which was covered only by weak cavalry forces.

The French Response to the German Offensive

Meanwhile, after recovering from the opening shock of finding German forces to his left, Joffre responded with effective improvisations. First, he transferred troops from the stalemated front on his right to the threatened left, beginning as soon as the threat there was identified (after Mons-Charleroi). The assembly of French forces on Kluck's flank showed

Joffre's flexibility, and Joffre's subsequent orders showed his penchant for seizing the initiative.

Believing firmly in the superiority of offensive operations even during the French retreat, Joffre had urged his subordinates to conduct frequent counterattacks—the primary one being at Guise. Though able to use the French civilian communications network, he also personally made frequent visits to his subordinates to make sure they both knew his intentions and followed his orders.

Although centralized control of military operations often has proven to be disastrous in many cases of modern warfare, in this case, the Germans proved too decentralized and disjointed in action, giving Joffre's system of centralized control the advantage. He exercised this control through numerous on-the-spot dismissals of commanders and frequent visits to subordinate headquarters. This ensured that Joffre's overall intent for the actions of the French units was

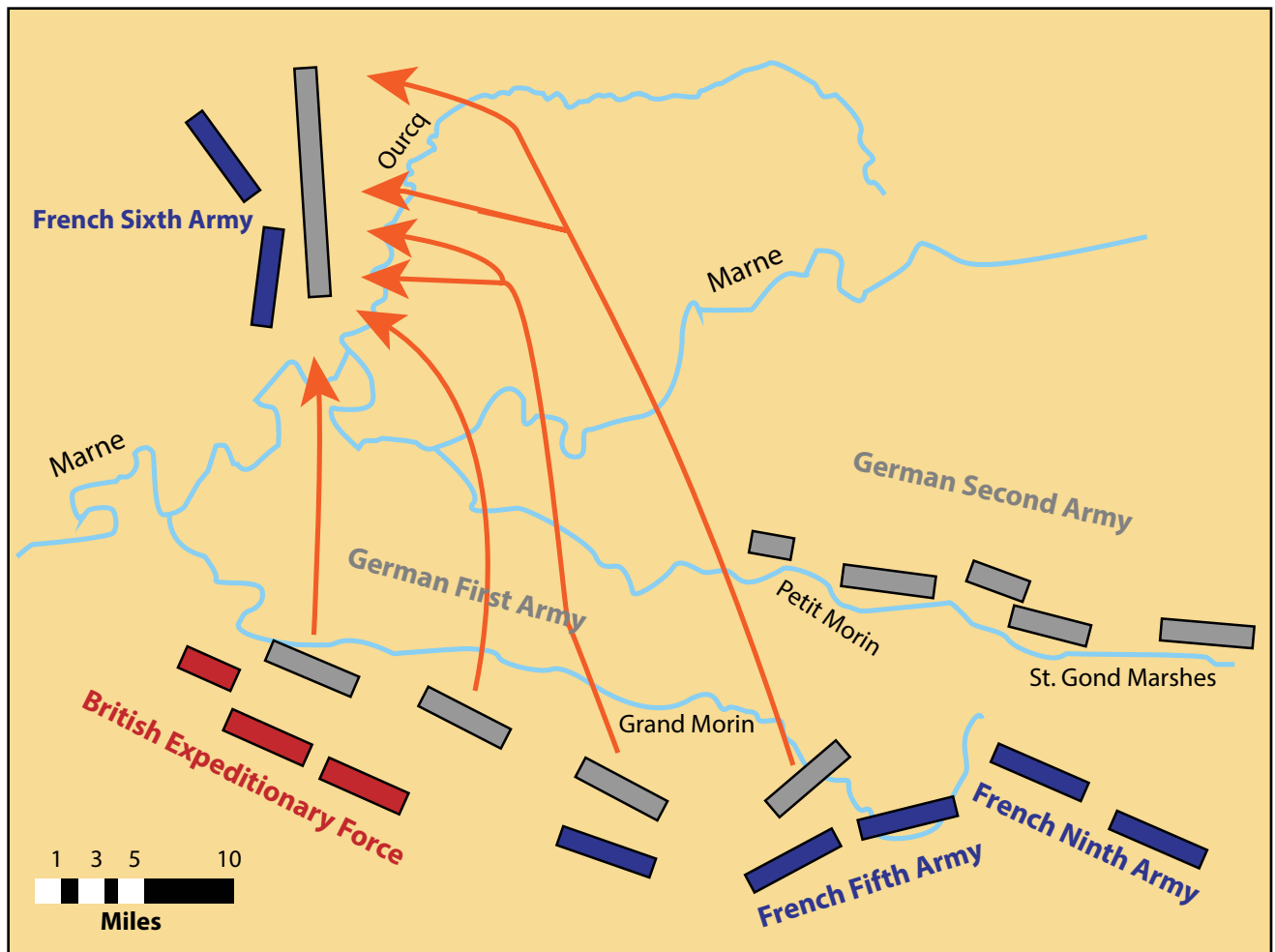


Figure 2. Kluck's Change of Front

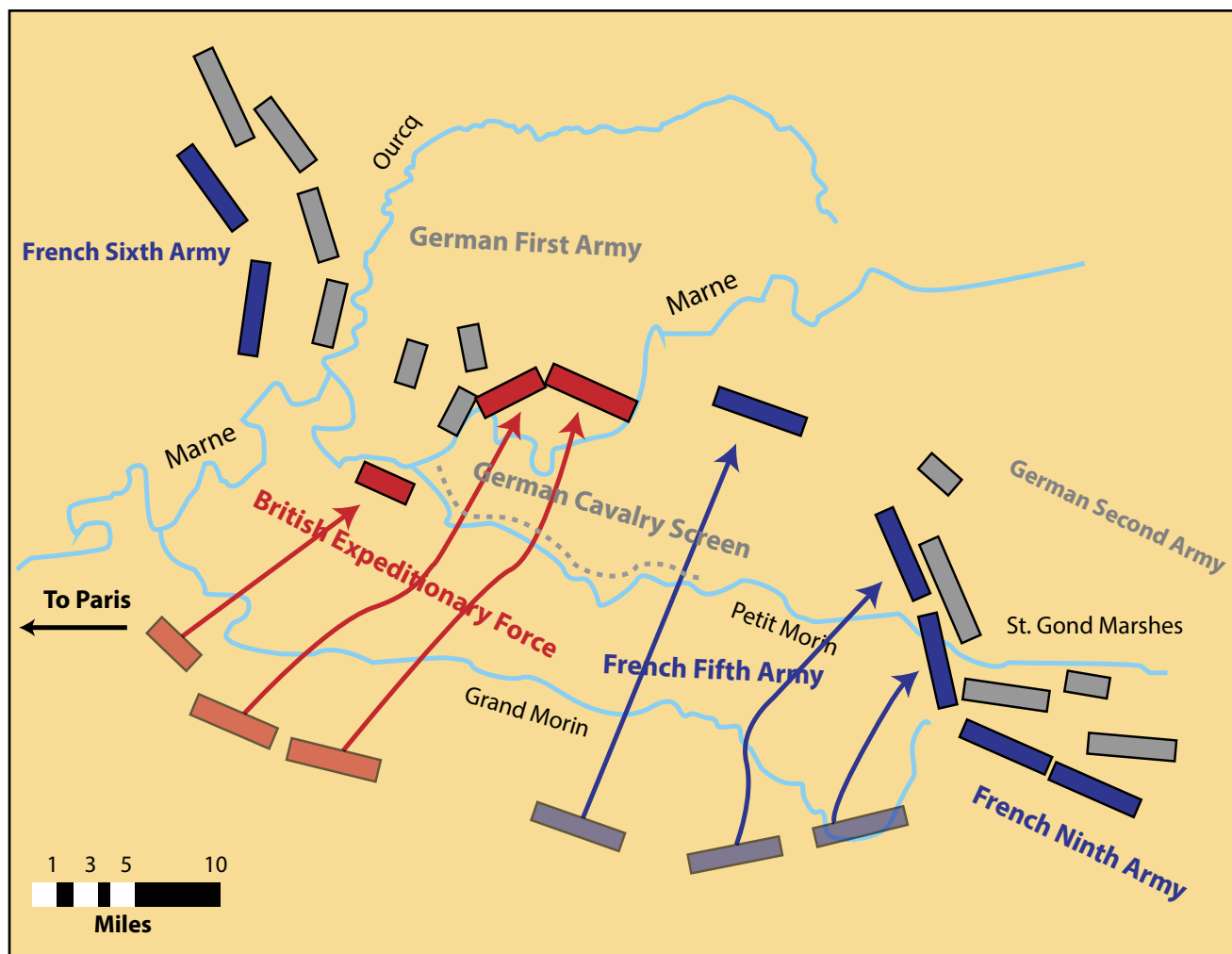


Figure 3. The Allied Advance into the Gap between the German First and Second Armies (as of 9 September 1914)

widely and clearly understood. He also managed to gain the cooperation of the British commander, the truculent Field Marshal Sir John French, who only followed Joffre's general concept because of Joffre's personal power of persuasion.

As German forces began to pull back to defensive positions, Joffre planned to counterattack as soon as he had assembled sufficient troops. The first reinforcements were organized as the new Sixth Army and were deployed in front of Paris. The French forces were a combination of reserve and active-duty forces. These were the troops who attacked Kluck's right flank and caused him to open a gap in German lines by turning his force to face them.

Meanwhile, on the Marne front, Joffre created a new army, the Ninth, out of reinforcements that

he placed to the right of the French Fifth Army (the command that had lost the battles of Charleroi and Guise). Joffre instructed these troops, with the British on their left, to attack into the gap between the German First and Second armies across the Marne (see figure 3). Joffre's concept was for the Sixth Army on the left to attack into the flank of the Germans, which would be frontally assaulted by the BEF and French Fifth Army simultaneously. Joffre hoped to make a swift advance into the German gap, allowing him to isolate and defeat the separate German forces.

However, Kluck reinforced his units before the French attacked. They wore down and defeated the Sixth Army flanking force, while the German cavalry screening forces—particularly the elite light infantry *Jäger*

units attached to the cavalry—slowed the Allied advance enough that the Germans were able to respond.

Having become aware of the gap that had opened in his lines, on 8 September Moltke sent his intelligence officer, General Staff Lt. Col. Richard Hentsch, as an emissary to assess and advise his subordinate army commanders. Cautious and conservative by nature, and with an imperfect picture of the overall situation, Hentsch reacted by persuading the equally cautious Bülow to begin a retreat the next day, an action which would then force Kluck to do so as well.

With conflicting and late orders among German forces as well as battlefield setbacks for both sides, 9 September dawned; it was destined to be an odd

day. The British had reached and were crossing the Marne alongside the French Sixth Army, fighting German cavalry rear guards as well as the right flank of Bülow's Second Army. The Germans were also trying to keep the initiative by attacking. Kluck was attempting to outflank the French Sixth Army, while Bülow, although pulling back his right flank, was still attacking and almost destroying the new French Ninth Army on his left flank. This chaotic dichotomy ended during the afternoon of 9 September when the Germans began a general retreat.

Subsequently, over the next three days the Germans withdrew thirty miles to the northeast to the line of the Aisne River, where ridges north of the river provided ideal defensive terrain. The Germans

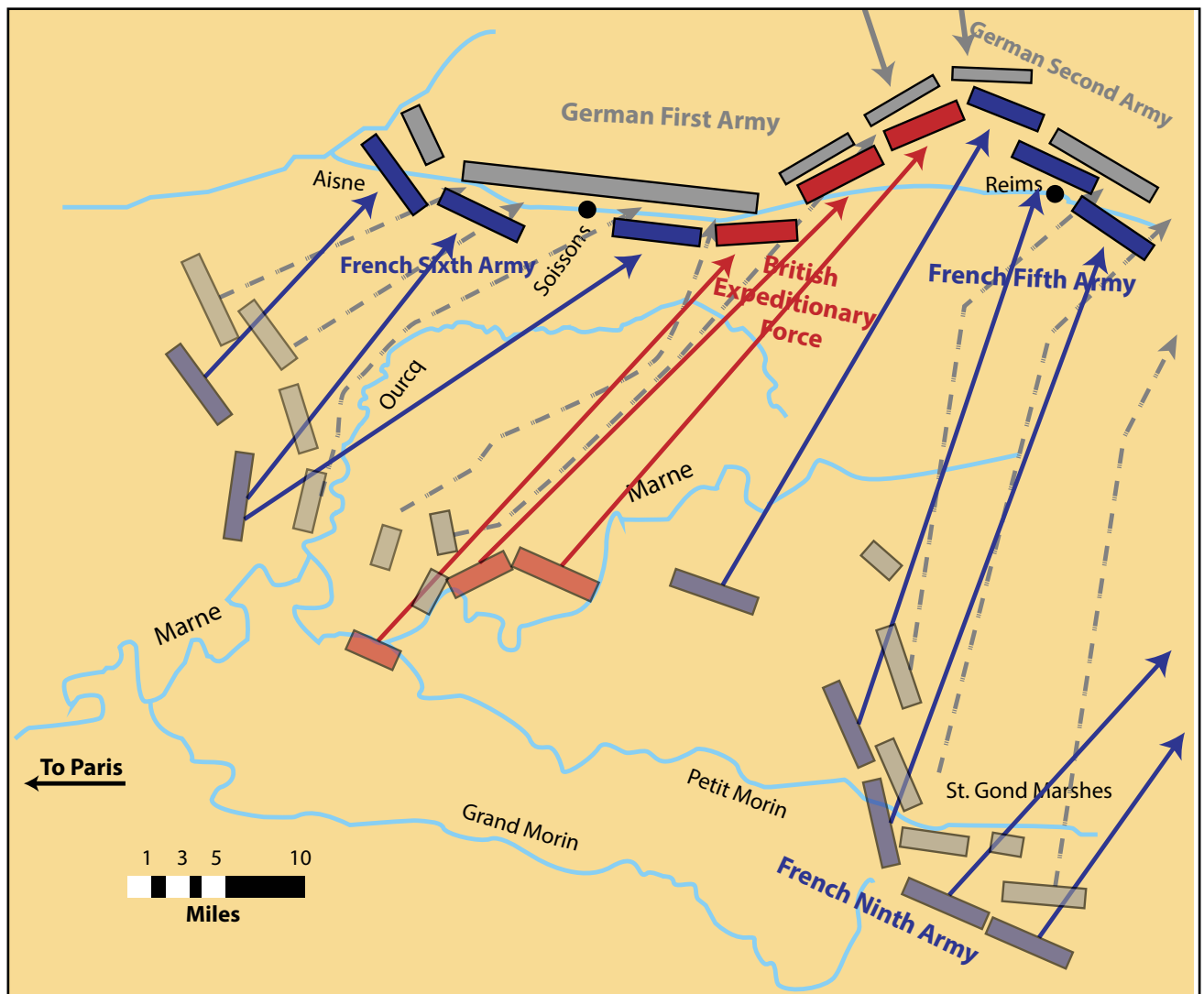


Figure 4. Final Disposition of Forces

were able to retreat in an orderly fashion and set up new positions on high ground overlooking the Aisne River and the city of Reims. When French and British troops caught up to what they expected to be dispirited and broken German soldiers in disarray, they ran into a buzz saw of prepared defensive positions that halted their advance (see figure 4). The defensive positions each side subsequently established facing each other were the harbinger of the coming years.

The practical outcome of this series of engagements was a geographic front between the German and Allied forces that stayed essentially unchanged for the remaining four years of the war, as the conflict evolved into static trench warfare. With a few exceptions, the German and Allied forces maintained the defensive positions they had established at the end of that six-week period until the end of the war in 1918.

Analysis of the Campaign's Mission Command Aspects

Since it is in vogue today to assert that mission command, with its emphasis on individual initiative by commanders at all levels, is, and historically has been, a panacea for succeeding in the chaos of the battlefield, one might conclude that prewar German indoctrination in mission-command-type operations should have guaranteed success. However, since success was not forthcoming, following this line of reasoning leads to the conclusion that German execution of mission command must have been badly flawed. This intriguing hypothesis invites detailed analysis using the six modern principles of mission command espoused by the U.S. Army today:¹

1. Build cohesive teams based on mutual trust.
2. Create shared understanding.
3. Provide a clear commander's intent.
4. Exercise disciplined initiative.
5. Use mission orders.
6. Accept prudent risk.

Build Cohesive Teams Based on Mutual Trust

At the start of the war, by any objective standard, the Germans were well trained and led—despite having not been in a major war for more than forty years. This was clearly evident in the resilience and discipline of the troops who were able to march great distances for

long periods and, upon arriving at their destinations, fight and win consecutive engagements. In conjunction, there existed a high degree of mutual trust and shared understanding of the operational environment among German officers, made conspicuous by the use of mission-type orders as a matter of course. Thus, at both the tactical and operational levels, the Germans surely had built cohesive teams, sharing a high degree of mutual trust between various echelons of command that, together, had confidence in the doctrine developed by their General Staff in the prewar period. Such German operational and tactical doctrine, based on its appreciation of the effect of modern weaponry on warfare—primarily heavy artillery, quick-firing field artillery, and machine guns—proved to be generally appropriate until trench warfare turned the western front into a massive siege.

A high level of mutual trust and cohesion was also evident in the decentralized structure of the prewar German army, where corps commanders usually were free to train their troops as they saw fit. In such training, two schools of tactical thought were present. The first was the newer mission-command style of conducting operations, promoted by Moltke the Elder, that officially extended mission command to the tactical level, directing infantry to attack using advances by bounds and emphasizing “fire and movement.” The second was the “old Prussian” school—similar to the French concept of *élan*—that believed German infantry held an inherent moral superiority that could overcome the effects of modern weaponry by courage and audacity. This latter concept tended to emphasize the use of close formations, where the troops advanced shoulder-to-shoulder, in the belief doing so would enhance control. Therefore, at the tactical level in the campaign, German units sometimes used more open (spread-out) formations and fire-and-movement tactics, and at other times they used more closed formations, although most traditionalists soon turned to the decentralized approach after the older tactics proved to be very costly in terms of casualties when facing modern weapons such as machine guns. Ultimately, the German forces would universally adopt mission-command style at the tactical level, with the espousal of infiltration tactics and the creation of specially trained *Sturmtruppen* (Stormtrooper) units later in World War I. However, in either case, the Germans emphasized close coordination between infantry and field artillery.



(Photo courtesy of the Library of Congress)

Imperial German Army Col. Gen. Alexander von Kluck, 30 March 1915

A combination of excellent organization, training, and staff work was essential in the creation of cohesive units. Those units performed well at the tactical and operational levels in the Marne campaign, as typified by the maneuvers Kluck had his corps and divisions conduct when he changed the facing of his army from south to east and shifted it twenty miles to the northwest while in contact with the enemy. However, the most important factor in this equation was leadership. The mutual trust of leaders at all echelons ensured that Kluck was not asking the impossible—but merely the almost impossible.

Create Shared Understanding

At the operational level, commanders shared an understanding of the expected operational environment and the capabilities of their troops. Col. Gen. Alexander von Kluck, the commander of the First Army, in particular, showed a great understanding of the capabilities of his soldiers, marching them relentlessly during the campaign in the advance, in shifting

to new fronts, and ultimately, in orderly withdrawal. Despite the extreme physical exertion, Kluck's troops never failed to meet his expectations.

However, since this was the first German campaign using such large armies, by the end of the advance, 8-9 September, the mutual understanding required for properly executing mission-command-style control broke down between Moltke's headquarters and the commanders in the field. Differing understandings of the operational situation and the capabilities of the troops showed a rift, which resulted in the ordering of a controversial German retreat that many would later bitterly complain was unnecessary.²

Provide a Clear Commander's Intent

Closely related to this rift in perception of the situation, German commanders failed in the modern mission-command model primarily by failing to effectively provide a clear commander's intent. This failure was due to a combination of the German Army's command climate, the lack of adequate communications technology for an advancing mass army, and the relatively weak and vacillating personality of the senior German commander, Chief of the General Staff Moltke.

Command climate. Moltke was the de facto field commander of the German forces—with the Kaiser as the nominal commander. Moltke's uncle, Field Marshal Helmut von Moltke (the Elder), had led Prussia to victory in the Wars of German Unification (1864-71) and had practically invented the concept of mission command, which he pioneered along with the unique German dual-command system. Under this system, a specially trained General Staff officer (chief of staff) was paired with each senior commander above the brigade level. This officer shared responsibility for command decisions with the commander. Commanders rarely went against the opinion of their General Staff partner. This created a command climate that allowed for the extensive use of mission orders because General Staff officers could be expected to know what needed to be done in familiar situations based on training, experience, and constant participation in contingency planning, which reduced the need for detailed instructions.

The effect of strategy on operations. In the pre-war period, the German General Staff headquarters in Berlin had, mainly, devoted itself to the study of

solutions and contingencies for a specific military problem that politicians had given them—the high probability of a two-front war. Aggressive German foreign policy in the late nineteenth century had alienated several other powers, which had resulted in the creation of military alliances designed to counter potential German military adventurism. But in an ironic twist, by 1914 the German military, led by the younger Moltke, was so wedded to its high-risk plan to win a two-front war that even state political decisions dealing with nonmilitary issues were made based on the primacy of military considerations in anticipation of such a war. In this way, when simmering nationalist passions erupted on the continent, the two-front war became a reality—not because it was necessarily needed, but largely because it had been planned for.

German senior leadership. Kaiser Wilhelm II had selected Moltke to lead the Imperial German Army primarily for his congeniality rather than for his military prowess. In 1914, the Kaiser, although technically the commander in chief of the armed forces, elected to let his highly trained military professionals do their jobs with minimum interference, offering only occasional common sense comments—that were generally ignored.

For his part, Moltke also trusted decentralization of execution authority. As a result, his faith in the mission-command-type approach led him to plan by giving only minimal direction to the activities of his subordinate field army commanders, but he did not anticipate how minimal his control would become as the campaign progressed.³ A weak technological communications system, together with an unwieldy organization, were vulnerabilities that helped create a command and control environment that largely went out of his control.

Communications technology. Organizationally, eight field armies reported directly to Moltke and his headquarters, *the Oberste Heeresleitung*, without any intervening army group headquarters. The great challenge of managing such a large span of control was exacerbated by poor communications technology as well as Moltke's decision not to move his headquarters forward, closer to his subordinates, which would facilitate giving his personal guidance at critical times when the technical communication capabilities broke down.

Communications technology in 1914 included the telephone, telegraph, and radio. In a pinch, aerial or

ground couriers could also be used. Typically, many national armies in 1914 used the telephone for local communications and the telegraph for longer distances. However, the German army had abandoned the telegraph in 1910, planning instead to depend on a combination of the telephone and the radio. As a result, at the outset of war in 1914, the telephone was supposed to be the primary means of communication, with signal troops laying semipermanent lines to each field army headquarters; temporary lines and personal contact supported units below that level.

However, peacetime maneuvers and planning had failed to provide an adequate appreciation for the extreme difficulties swiftly moving units in combat—advancing under fire from modern weapons across foreign territory—would encounter using the telephone in circumstances where existing civilian systems would not be available. Experience soon showed that the field-wire troops could not lay lines as quickly as the army advanced, and within six days, the radio had become the primary mode. However, the radio also proved to have significant shortcomings in actual use. The greatly expanded volume of radio transmissions that resulted from its having become the primary means of communication between echelons, combined with the need to encode and decode each transmission, resulted in a time delay of up to twenty-six hours for messages. Such delays meant that situation updates and directives passed each other in transmission, and both were obsolete by the time they reached the recipient.⁴ Additionally, contemporary radios were bulky, sensitive, and prone to breakdowns, and they were only issued in limited quantities down to the army level.⁵ As a backup to the electronic system, couriers were available, but using them was time consuming. In addition, a limited number of airplanes were available for carrying messages between headquarters, but the potential for using them in such a role was ignored.⁶

The technological vulnerabilities and limitations, frequent equipment failures, and failure to use alternate means to communicate vital instructions all combined to greatly disrupt the German field-command routine, which was based on nightly meetings where subordinates produced situation reports and commanders planned for the next day's operations. The systemic breakdown particularly affected Moltke.



(Photo courtesy of the Library of Congress)

Imperial German Army Gen. Karl von Bülow, 1915

Delayed reports meant Moltke issued directives that were already obsolete, compelling his subordinates to use their discretion and initiative in an attempt to divine the current operational situation and concept.

Nevertheless, despite such obviously serious flaws in the system, Moltke steadfastly remained at his headquarters well distant from the battlefield. Presumably, this was to keep the Kaiser, who would have insisted on accompanying him to the field, out of harm's way, but also it was because this was Moltke's command style.

Exercise Disciplined Initiative and Use Mission Orders

As a consequence of technological and organizational impediments, and a senior leader with a highly detached command style, the fog of war was omnipresent in the German chain of command. Since Moltke could exercise control only in a very detached way, the commanders of the field armies on the German right wing were left

to their own devices to interpret Moltke's intent from vague or outdated communiques.

While such a situation allowed for the field army commanders to exercise initiative, that initiative was only disciplined within the scope of each separate army's operations, and it lacked an overall current operational concept among the armies. As a result, the German forces as a whole were not synchronizing their activities with each other to achieve operational effectiveness. For example, while Kluck continued to advance every day, Bülow rested his troops, placing them a day's march behind. Kluck's reorienting of most of his army on the Ourcq River front while leaving a large gap screened only by cavalry lacked the prudence that disciplined synchronization with other armies (especially Bülow's) would have mitigated. But in this situation, Kluck felt the risk was justified.

Also, bad communications had adverse effects both ways. Frustrated by a lack of timely information coming to him, Moltke developed an overly pessimistic view of his operations in early September. From his perspective, the Allied forces were not being destroyed at an adequate level, as the few prisoners being sent to the rear seemed to indicate, and the defeated enemy forces as a whole still seemed to be retaining unit cohesion. What Moltke did not understand was that mass armies had changed operational conditions. It was now very difficult for an attacking marching army to destroy a defeated marching army except by encirclement because the lethality and effective stand-off range of weaponry, as well as unit mobility, had become too great.

Strategically, Moltke's main objective was to completely envelop the Allied forces and push them back upon the German forces on Moltke's left flank. While such a maneuver was probably beyond the capabilities of the German army, based on the number of troops available, Moltke lost sight of this and feared an enemy trap. The net result was that the German commander became very pessimistic and soon believed his right wing was in far greater danger than it actually was.

In any case, by the end of the campaign the commander's intent coming from Moltke was only reaching his commanders sporadically, based on days-old situation updates. Since events had generally overcome such directives by the time they were received, the field commanders, who were trained in a system that

emphasized initiative, responded by going their own ways.

The lack of information and apparent unresponsiveness from his field commanders in turn caused Moltke to issue new directives that did not necessarily reflect battlefield realities but instead resulted in responses to news of Joffre's counteroffensive with actions that, counterproductively, enhanced chances for Allied success.

Responding to this situation, as he refused to go to the front himself, Moltke instead sent his equally conservative and pessimistic intelligence officer, Hentsch, who, based on little accurate information, saw the situation as desperate. He subsequently manipulated Bülow into retreating even while he was still attacking—an action which then forced Kluck to do so as well.

However, the situation facing the Germans on 8 September was nowhere near as dire as Hentsch, Moltke, and then Bülow believed. Kluck had defeated the French Sixth Army on the Ourcq and had, at a minimum, destroyed its offensive capabilities. The cavalry screening force in the gap between Kluck and Bülow had greatly slowed the British advance. While Bülow's right wing was gradually giving way to the advance of the French Fifth Army, his left wing had crumbled the French Ninth Army. Rather than a retreat, a simple reshuffling of the German forces could have allowed the German advance to continue while Moltke brought up forces from his left. Instead, the Germans, upon the advice of Hentsch, backed by the endorsement of Moltke, elected to surrender the initiative and retreat. One result was that the Germans never really regained the initiative until 1918.

Accept Prudent Risk

Emerging aggressiveness on the part of senior leaders, manifest in willingness to accept prudent risk, appears to have been the key discriminating factor leading to the outcome. While both the Germans and French espoused assertiveness in field commands, the actual fog of war tempered this. During the first Marne campaign, an incomplete knowledge of the enemy's deployment on both sides led to a fear of encirclement. This fear curbed aggressiveness and created excessive caution among the Germans and long retreats in the case of the Allies. Even Kluck was at times fearful

of uncovering his right flank, which partially explains why he transferred so many troops to the Ourcq front. On the other side, French Fifth Army commander Gen. Charles Lanrezac, an intellectual and well-regarded peacetime officer, lost all aggressiveness once faced with the uncertainties of war. Lanrezac proved to be a poor subordinate that Joffre had to replace.

At a higher level, Joffre himself proved very aggressive in contrast to Moltke. Although his actions could have resulted in catastrophe, despite previous failures aggressiveness drove Joffre to attack on 6 September along the Marne and Ourcq fronts when the enemy was still successfully advancing or had previously repulsed earlier counterattacks. The large and risky French counteroffensive was successful enough to force the Germans to withdraw forty miles because its very aggressiveness frightened the German high command.

The Germans probably could have reshuffled their forces and repulsed the counteroffensive, but at that point they were basically fighting separate, disjointed



(Photo courtesy of the Library of Congress)

French Army commander Gen. Joseph Joffre issuing orders in the field.

battles at the field-army level rather than as a whole, so a coordinated response to the Allied advance, aside from a retreat to regroup, probably was not possible.

Other Impacts

The attitudes, personalities, and leadership styles on both sides of the conflict had a significant impact on the outcome of the campaign.

Contrasting attitudes. Moltke became very pessimistic at the first sign that there would be no swift victory despite having a very large, well-organized, and well-supplied force at his disposal that had won an impressive successive string of tactical victories. In contrast, his French counterpart, Joffre, remained optimistic despite a month of continuous defeats and retreat. In doing so, both Joffre and his troops showed great psychological resilience in the campaign in contrast to the German High Command.

For example, despite general weariness, the German troops continued to perform well. This was clearly evident in their ability to blunt the effects of a great French counterattack that could have been catastrophic for the Germans, who responded instead with a relatively short and well-ordered retreat. Nevertheless, Joffre publicly transformed the fact that the Allies had forced the Germans onto the defensive and into a retreat into a major victory—in the minds of his soldiers, the civilian population, and likely, the German High Command as well.

As a result, given the strategic situation, the lack of a quick victory was for Germany a major, if not immediately apparent, psychological and moral defeat. Ironically, while the Germans operated using what is today almost universally considered to be the superior mode of command (mission command) to tactically win all the battles of the campaign in terms of number of casualties inflicted and other damage to the Allies, they strategically lost because their leaders had decided they had. The purported Napoleonic adage which holds that “the moral is to the physical as three to one” evidently applied to the situation of the Germans and French on 9 September 1914, as it still applies to military forces today.

Impact of personality. Surely the personalities of the individual commanders played the greatest role leading to the outcome of the campaign. The most glaring examples are manifest in the relationships of Moltke, Kluck, and Bülow.

The personality differences are evident in the comparative reactions of the two field army commanders, Kluck and Bülow, to the abject fatigue resulting from a month of marching, intermittent battles, and the uncertainty of the enemy situation. While at the start of September both commanders recognized the exhaustion of their forces, Kluck continued to advance, crossing the Marne and then transferring the bulk of his army by forced marches to the Ourcq front. After fighting there for five days, Kluck marched his troops forty miles to the new Aisne positions, where they then repulsed Allied attacks. Kluck was able to lead his forces in such extraordinary effort even after they had reached extreme exhaustion.

Meanwhile, Bülow rested his troops for a day and a half and slowed his advance to invest the minor fortress of La Fere, which the French then evacuated. Bülow's caution resulted in Kluck's inadvertent gain of a day's march on him, which contributed to the gap that opened between the two armies. Only Bülow's left wing continued to attack until the retreat to the Aisne began.

Kluck was able to get so much more out of his troops than Bülow because his optimistic aggressiveness kept up their morale. He also seemed to have a clear understanding of what his troops were capable of, and he had confidence that he and his subordinates could get them to do it. However, Kluck's aggressiveness irritated both Moltke and Bülow, causing Moltke to twice place Kluck under Bülow's command.

The enduring importance of leadership. The most obvious lesson of first Marne campaign with relevance not only to mission command but also to the concept of command in general is the enduring importance of leadership at all levels. At the start of the war, Europe had enjoyed a period of more than forty years of general peace, although it saw a concurrent rise of large conscripted armies. Formerly intermixed national identities congealed into national states with deep mistrust of each other. Massive armies emerged as had never been fielded before. As a result, on the European continent, no senior officers in any of the alliances that would eventually fight each other had any practical experience commanding such large forces except in exercises, though a great deal of theory had been written about such commands. In Great Britain, British commanders did not even have the experience of exercise maneuvers, as the British

army only organized its larger commands upon mobilization in response to an emerging crisis because of the great expenses involved.

Conclusions

On paper, the prewar German conception of mission command championed similar concepts as the principles discussed above. However, a combination of leader inexperience in leading large bodies of troops (which often led to caution when audacity was required), overly pessimistic and easily discouraged personalities at the highest level of German command, and the unreliable communications technology of the day led to a poor use of several mission-command principles and the eventual withdrawal of German forces to static lines.

At the start of the war, the Imperial German Army was the major proponent of the concept of what we today would recognize as mission command at the operational level.⁷ However, in the first Marne campaign, the use of mission command appears to be one of the major reasons for German failure because it was conducted so poorly. At the same time, the French were ultimately successful while employing a method of command that was not close to the mission-command model but, in comparison, was highly disciplined by an aggressive senior commander.

In general, successful armies in the modern era have espoused mission-command-type concepts unless they had a major advantage in numbers or technology over their adversaries. Thus, one reason for studying the first campaign of World War I is the relevant parallelism of some of its aspects to the current day. For example, in recent military writings, we see a lot of debate about theory and philosophy related to conducting war (i.e., What is mission command? What is the center of gravity?

What is counterinsurgency? Should counterinsurgency be population- or enemy-centric? What is the proper acronym or designation for counterinsurgency?).

Similarly, strident debates regarding military theories of strategy and tactics during the era before August 1914 were diverse and abstract, and war—before the actual war—had become very theoretical. Many prewar theories were tested during the first six weeks after war broke out, resulting in reality—which had sometimes been ignored during prewar debate—creeping in. As in all wars, reality forced change.

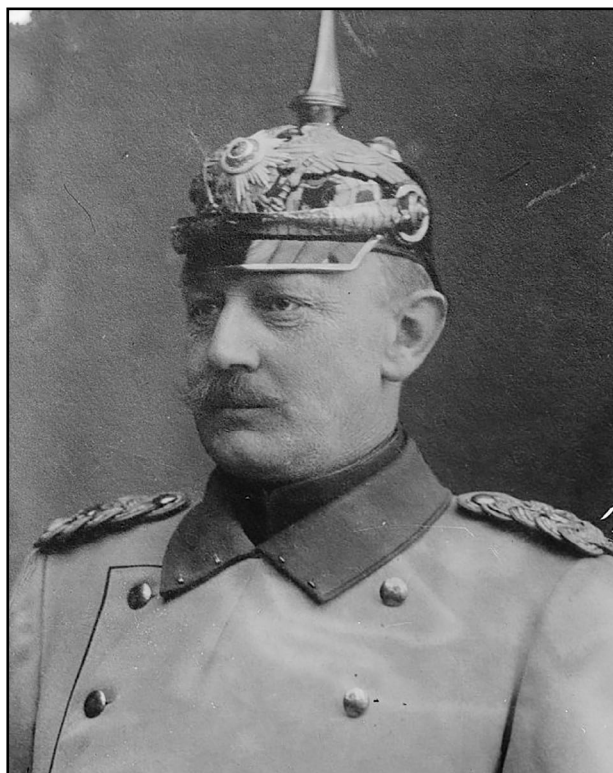
In the modern, technological age, such theoretical debates may also be leading to specious conclusions.

For example, the fog of war is often now minimized in importance, theoretically mitigated by the concept of “situational awareness” based on the assumption that technology-assisted intelligence collection can almost completely dissipate the fog. However, such dissipation is likely an illusion, and the fog will last as long as wars are fought between human beings who make decisions in unpredictable ways.

In 1914, there also were erroneous expectations as to how weapons would perform and how the enemy would react to them, just as there were

when the U.S. military embarked upon operations in Iraq and Afghanistan. Our experiences in those places illustrate that bad and misleading assumptions continue to be a persistent feature of warfare.

Additionally, the paradoxes of the 1914 Marne campaign, when compared to those of more recent conflicts, appear to validate a recurring pattern of needs. Combatants need a general concept of the conduct of operations to guide actions—at least a minimally accurate assessment of enemy capabilities—and planning that



(Photo courtesy of the Library of Congress)

Imperial German Army Chief of the General Staff
Helmuth von Moltke

adheres to time-honored principles of war that need to be followed, especially when situational awareness is incomplete or the enemy responds in an unexpected manner.

Epilogue

At the highest levels—despite his faith in them—the Kaiser’s professionals failed him in this campaign, ultimately resulting in the loss of the war together with the loss of his crown. With the loss of the war, the severe peace terms imposed on Germany played a key role in causing World War II. Thus, the mostly forgotten German defeat of a century ago not only played a major role in the shaping of the modern world but also holds lessons of importance for military professionals today.

Though the First Battle of the Marne was more than one hundred years ago, a reflection of the battle was recently invoked indirectly in the news when French police conducted a massive manhunt for two murderous terrorists across the villages and rivers that marked the 1914 battlefield. The town of Dammartin, where the manhunt ended, was, in fact, directly behind the Ourcq battlefield that was almost captured by the Germans in 1914—right before they retreated. Where it is remembered at all in the public consciousness today, the battle is mostly recollected for a legendary convoy of Paris civilian taxicabs that took troops to the front to

reputedly swing the battle to Allied victory—and the appearance of a gap in the German lines subsequently filled by Allied troops. In fact, the taxicabs played only a minor role in the campaign, as the troops they transported did not even fight until the next day, and the German gap was opposite an equally big gap in Allied lines, which the Germans were unable to exploit.

Nevertheless, such mythical lore—however accurate as a matter of historical fact—metaphorically highlights the decisive role that psychology played in the actual Marne campaign. This now-ancient campaign raises many questions for analysis, which may yield timeless lessons that transcend mere antiquarian interest. If the Germans were so successful, why did they ultimately fail? And, how did the French, initially operationally inept, manage to turn events around?

It is useful to note that the Germans won every battle at the tactical level—but strategically and operationally they lost the campaign. This appears to be mainly from the uncertainties of warfare that crept into the psychology of the German leadership, resulting in hesitancy and missed opportunities. Ultimately, the threat of the gap between the German units, because of communications failures, was mostly in the minds of the German commanders. Ironically, this mental gap was more decisive to the campaign than was the literal gap between the units. ■

John J. McGrath is an Army historian at the Combat Studies Institute, Fort Leavenworth, Kansas. He is the author or editor for eleven Army historical publications and a contributor to several more. He holds a BA from Boston College and an MA from the University of Massachusetts at Boston. He is a PhD candidate at Kansas State University. His most recent work on the First Battle of the Marne is expected to be published in 2015.

Notes

1. Army Doctrine Publication 6-0, *Mission Command* (Washington, DC: U.S. Government Printing Office, 2012), 2.

2. Martin Sonnenberger, "Mission Command During the War of Movement in World War I—Initiative and Synchronization of the German Right Wing in August and Early September 1914," (monograph, U.S. Army School of Advanced Military Studies, 2014), 41-43.

3. Mark Osborne Humphreys and John Maker, eds., *Germany's Western Front: Translations from the German Official History of the Great War. 1914: Part 1 The Battle of the Frontiers and Pursuit to the Marne* (Waterloo, Ontario: Wilfrid Laurier University Press, 2013), Kindle loc. 2877.

4. *Ibid.*; Bradley John Meyer, "Operational Art and the German

Command System in World War I" (PhD diss., Ohio State University, 1988), 133-137.

5. Paul Evans, "Strategic Signal Communications—A Study of Signal Communications as Applied to Large Field Forces, Based on the Operations of the German Signal Corps During the March on Paris in 1914," *Signal Bulletin* 82 (January-February 1935), 24-58.

6. *Ibid.*, 46-47.

7. Dennis E. Showalter, "The Retaming of Bellona: Prussia and the Institutionalization of the Napoleonic Legacy, 1815-1876," *Military Affairs* 44 (April 1980): 57-63; Antulio J. Echevarria II, *After Clausewitz: German Military Thinkers before the Great War* (Lawrence, KS: Kansas University Press, 2002), 13-14.

THE CAVALRY JOURNAL

Comments on "Cavalry Tanks"

BY

Major **GEORGE S. PATTON, Jr.**, Cavalry

(These comments are made at the request of the writer of the preceding article)

IN RESPONSE to a request for remarks on the foregoing article, I must begin by a most vigorous dissent from the writer's picture of a senile and impotent cavalry, futilely butting its head against impregnable strong points. I can agree only to the extent of admitting that a cavalry which so deported itself would certainly have no future; nor has it, when well led, had any such past in history.

Cavalry, now as always, must advance by enveloping. When the ground, as in France, was so limited as to prevent this, cavalry must await the breakthrough made by the tanks. However, western Europe is the only country small enough and with sufficient population and roads to render such a state of things possible. In other theaters of war, the constant power of envelopment which the mobility of cavalry makes possible will render strong points nothing but asylums for the safe-keeping of the hostile idiots who infest them.

There are many cases, such as in raids, long turning movements, screening, etc., where cavalry is and ever will be wholly self-sufficient and where the addition of mechanical devices will be more of a hindrance than otherwise. Cavalry has lived off the country and can yet do so. To it, lines of supply are unnecessary. Tanks, on the other hand, depend wholly on lines of supply for the vast tonnage of gas, oil, and spares. Without these they become merely inferior pill-boxes. Hence, to attach them to cavalry on lengthy operations is to seriously demobilize the latter.

In other cases, however, such as in short turning movements, advance and rear guard work of mixed commands, counter-attacks, etc., where lines of supply are not needed or already exist, tanks will be of

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great assistance to cavalry, combining, as they do, great mobility with concentrated firepower.

The point as to the economic impossibility of building enough tanks to constitute a mechanical army is well taken. In addition, however, to this vital objection to the ubiquitous use of tanks should be mentioned the restrictions due to unsuitable terrain and the difficulty of oversea transport. I was, and believe that I still am, as enthusiastic a tanker as ever caterpillared, yet I cannot bring myself to the point of picturing tanks, present or future, real or imaginary, as ever operating in the mountains of Mexico, the rice paddies of the Philippines, the forests of Canada, or, in face of competent artillery, on the sandy and gully-infested plains of Texas. I cannot picture a large oversea force giving up that priceless commodity, deck space, to large shipments of tanks; nor can I imagine a sea-borne invasion so transporting them to our shores.

Tanks are a new and special weapon – newer than, as special, and certainly as valuable as the airplane. Can one imagine infantry airplanes manned by detailed doughboys; or artillery airplanes manned by wagon soldiers or cosmoline kids; or yet cavalry airplanes ridden by sturdy troopers with the use of “lateral aids”? Hardly!

The tank is a special, technical, and vastly powerful weapon. It certainly is neither a cavalryman nor an infantryman. Yet, give it half a chance, over suitable terrain and on proper missions, and it will mean the difference between defeat and victory to the infantry or cavalry with which it is cooperating.

What is wanted, then, is neither infantry tanks nor cavalry tanks, but a **TANK CORPS**, a special mobile general headquarters reserve, to be detailed, as circumstances demand, with whichever arm it can best cooperate.

Editor's note: The U.S. Army has a long history of internal discussion and debate among junior and field grade officers on issues of contemporary military concern. Many important ideas surfaced in such discussions that incubated overtime and were later brought to fruition as those officers ascended to higher rank and influence. Among the many venues in which such important discussions took place was the *The Cavalry Journal*, which was published from 1888 to 1946, after which it was superseded by *The Armored Cavalry Journal*. As a prelude to a continuation of this heritage of internal Army debate over proposed innovations that appear in this issue of *Military Review*, an article written by then Maj. George S. Patton Jr. has been republished here for reader interest with permission of the U.S. Cavalry & Armor Association.



(U.S. Navy photo by Chief Photographer's Mate Edward Martens)

Soldiers assigned to the 2nd Squadron, 11th Armored Cavalry Regiment, cautiously advance into a bunker area as they conduct a raid on the Hateen Weapons Complex 26 March 2005 in Babil, Iraq. The raid was coordinated to disrupt insurgent safe havens and to clear weapons cache sites in the area of operations.

The Lights and the Heavies

Adapting Cavalry Branch to the Demands of Force 2025 and Beyond

1st Lt. Matthew J. McGoffin, U.S. Army

The moment of greatest peril is the moment of victory.

—Napoleon Bonaparte

The Army's white paper expressing the Army's latest vision for *Force 2025* delineates three primary lines of effort: First, *force employment* is defined as "Army forces in 2025 conducting decentralized, distributed, and integrated operations to prevent, shape, and win using agile, responsive, and innovative combined arms capabilities and special operations forces."¹ Second, *science and technology and human performance optimization* focuses on enabling effective combat units through effective and efficient application of science and technology.² Third, *force design* is developing and validating new operational and organizational concepts so the Army can accomplish its missions.³

Are these lines of effort sufficient to prepare the Army for dealing with threats in 2025 and beyond? From the perspective of maneuver warfare, this article suggests these lines of effort should be further evaluated to determine sufficiency in the context of emerging threats that cavalry squadrons will be called upon to address. Consider this alternate perspective on Army operations conducted during the last two decades: our success in Desert Storm, remarkable as it was, in fact became the death knell for large-scale, set-piece battles. The result of the one hundred hours of ground combat not only proved to the world our ability to

absolutely overmatch our enemy in a conventional fight, but it also highlighted to our enemies the necessity to adapt their forces in order to avoid such a fight in the future—which they have done.

Our Desert Storm experience lulled us into complacency and a disregard for the adaptive nature of our enemies. This became apparent as our initial success in the 2003 invasion of Iraq (with planning largely based on assumptions drawn from Desert Storm) proved, in reality, not to be a victory but rather a significant failure to anticipate the *primary* threat—the insurgency that immediately followed.

The consequence of the changed security environment after Operation Iraqi Freedom (OIF) and Operation Enduring Freedom is that the core competencies of the U.S. Army are now, and must continue to be, grounded in asymmetric warfare in order to deal with the most likely future threats. Conventional conflict has been redefined because of the recognition by our prospective enemies that they cannot stand and fight a set-piece war with U.S. forces. Just as important, our enemies have concluded that there is no need to attempt to match our outsized expenditure on defense programs when they may fight effectively on another level that exploits our weaknesses. An American



Forces Press Service story reports that Gen. Martin E. Dempsey, former chairman of the Joint Chiefs of Staff, said in late 2013 that “the risk of state-on-state conflict is *diminished*, [italics added] ... but because of the global proliferation of technology, the ability of nonstate actors to wage conflict to injure or destroy *has never been greater* [italics added].”⁴

David Kilcullen’s *Out of the Mountains: The Coming of Age of the Urban Guerrilla* describes how a combination of globalization, urbanization, weapons proliferation, and failed states will contribute to conflicts being fought within cities against a well-resourced, tech-savvy enemy who can rapidly scale to address our tactics, techniques, and procedures with the aid of commercial off-the-shelf materials and technology.⁵ According to FM 2-91.4, *Intelligence Support to Urban Operations*, such enemies “may view [urban conflict] as their best chance to negate the technological and firepower advantages of modernized opponents.”⁶ The National Aeronautics and Space Administration’s Langley Research Center corroborates this stance, according to a slide presentation by chief scientist Dennis Bushnell, which states that “warfare will become increasingly robotic and probably more affordable, [and] *swarms* of sensors/shooters are a given.”⁷ One need only look at

Russia’s successes with hybrid warfare in Ukraine and Georgia—pairing deceptive information operations with special operations and paramilitary forces—or at the similar successes of ISIS (Islamic State of Iraq and Syria) in employing swarming against traditional forces in Iraq and Syria, to see examples of threats to come.

Changing Role of the Cavalry

As the security environment has changed, so too has the primary demand for the cavalry squadron changed from destroying traditional enemy reconnaissance assets *en masse* to providing effective reconnaissance, surveillance, and targeting. This provides the senior ground commander with a better opportunity to assess cultural environments, threats, and opportunities; to complement special operations forces; and to neutralize the enemy. Improving the capabilities of our squadrons to match this demand is not as simple as adding a new weapon, sighting system, or vehicle; instead, it necessitates fundamental changes to cavalry squadron structure and employment.

Adapting Structure

Numerous cavalry professionals have written on this subject, including Capt. Joshua Suthoff and Michael Culler. In their excellent article “Ideas on Cavalry,” they write, “If cavalry is to be maintained, ideas to keep the branch relevant cannot be scoffed off as dangerous or outside our capabilities.”⁸ I stand atop their shoulders when saying that first, we must adapt our structure, recognizing that the Army of 2025 and beyond will have multiple requirements for cavalry squadrons.

The first requirement for decentralized light reconnaissance forces is best typified by the Army’s increasing use of special operators, combined with unmanned and strategic platforms, in wide area security, special reconnaissance roles. The second requirement, developed from past experience, calls for an expeditionary, combined-arms maneuver force likely to face enemy armor upon initial thrusts into foreign countries. Recognizing that each of the current cavalry squadron formations excels at certain distinctive



Soldiers from 1st Brigade Combat Team, 1st Cavalry Division, maneuver M1 Abrams tanks 15 February 2014 at the National Training Center, Fort Irwin, California, during decisive action rotation 14-04.

(U.S. Army photo by Spc. Randis Monroe, Operations Group, National Training Center PAO)

competencies, accomplishing these two missions requires harmonizing and enhancing our existing capabilities. Though others have written on the need to recognize current structural facts on the ground and change armor branch to cavalry branch, I propose one step further, dividing the new cavalry force into light and heavy cavalry fields, with distinctive characteristics noted as follows:⁹

Light cavalry—

- ◆ includes the current infantry brigade combat team, Stryker brigade combat team (SBCT), and legacy battlefield surveillance brigade cavalry squadrons
- ◆ performs reconnaissance, surveillance, and targeting, and thereby provides security
- ◆ has enhanced capability for decentralized, platoon-and-lower attachment to other formations, primarily infantry
- ◆ is provided with off-road vehicles and complementary sensors and sighting technology, which allow them to effectively operate using decentralized squads and teams
- ◆ conducts training that includes the Reconnaissance and Surveillance Leaders Course, Army Reconnaissance Course, Air Assault School, Pathfinder School, Joint Fires Observer Course, Sniper School, and Combat Tracker Course

Heavy cavalry—

- ◆ includes current armored brigade combat team (ABCT) armored reconnaissance and tank crew members
- ◆ performs offensive and defensive tasks and provides forward reconnaissance and traditional security functions for the combined-arms maneuver force
- ◆ operates as offensive-oriented hunter-killer teams due to a combination of armored reconnaissance and tank formations
- ◆ conducts training that includes the Master Gunner Course and Army Reconnaissance Course

This proposed division of cavalry into lights and heavies, which would include separate military occupational specialties for each cavalry type but only one cavalry officer control field, is built on two premises:

(1) A well-defined, well-equipped, and well-trained cavalry force responds more effectively to adaptive, innovative enemies.

(2) The mentality, training, and experience required for soldiers in light and heavy cavalry formations differ widely, a fact which will only increase with

the advent of new technology and shifting mission requirements going forward.

Separating soldier specializations into two elements will enable each formation's retention of well-trained personnel and organizational knowledge, and it will prevent the steep learning curve and difficulty understanding proper employment that often accompany soldier moves from one type of specialization to the other.

With the separation of specialized cavalry types established, we need more than structural change in the cavalry; we must also change how we fight.

Adapting Employment

Besides adapting the structure of cavalry units, the Army must adapt how it employs them. Several recommendations on the employment of light and heavy cavalry follow.

Decentralized light cavalry. In their current configurations, our light cavalry squadrons have a litany of well-documented problems, summed up in a single question posed by Suthoff and Culler: "What makes a cavalry squadron different from its fellow infantry battalion within an IBCT [infantry brigade combat team] or SBCT besides an anemic modified table of organization and equipment (MTOE)?"¹⁰

As our force stands now, cavalry squadrons have a recent employment legacy as something other than reconnaissance assets. Instead, they have been viewed as similarly equipped, less capable, land-owning formations that appear redundant alongside infantry within the context of wide area security and asymmetric warfare. In light of this current setting, our force must adapt or perish. Instead of competing against the infantry for a purpose, cavalry should complement the infantry by adding unique value together with, and alongside, infantry formations—as the cavalry has done in the past.

Unfortunately, there appears to be a lack of synchronization of effort and communication of task and purpose between cavalry squadrons and infantry-based maneuver units. Our squadrons are not built to decentralize; indeed, conventional wisdom has us typically moving in the opposite direction, consolidating more organic assets within the light cavalry squadron and rendering it an anemic maneuver force (compared to infantry).

Instead of consolidating a plethora of assets within these light formations, we should focus on our core reconnaissance and surveillance competencies and tailor these squadrons toward shearing—that is, being able to

operate as decentralized elements. They should be trained, equipped, and empowered for detachment at the platoon, squad, and team levels, in keeping with the Army's vision for Force 2025 and future asymmetric warfare settings.

We must accomplish this for the simple reason that rising hybrid and swarming threats call for a purpose-built response.

As future enemies become increasingly urban, networked, and dispersed, we must evaluate how our cavalry squadrons will continue to provide maximum value to the Army. One must consider that think tanks, military blogs, and our Army's strategic vision for Force 2025 have all highlighted the importance of special operations

capabilities and decentralization. To this end, we have an untapped asset in the form of cavalry scouts and the light cavalry squadron, especially given that "an asymmetric enemy requires scouts capable of conducting reconnaissance *dismounted in small teams* [italics added] to be effective."¹¹

Modular requirements necessitate unbinding cavalry. When detached from their parent squadron and working within infantry formations, small scout teams with enhanced training and technical capabilities could act as information nodes in an urban operational area, providing updated data and targeting information through close-access reconnaissance and surveillance. These teams could either work in a reconnaissance and surveillance capacity as "hunters," supporting infantry "killers," or they could fulfill a security function similar to the successful small-unit kill team methodology of OIF, where small ambush teams targeted improvised explosive device emplacement cells within urban areas and along main supply routes.¹² Whether actively or passively employed, these decentralized teams would be professionalized through schools, such as the Reconnaissance and Surveillance Leaders Course. They could become

experts of fieldcraft and concealability, drawing upon—as opposed to merely hand-waving—the lessons of Iraq and Afghanistan in order to conduct deceptive infiltration and exfiltration when attached to infantry units conducting operations

such as cordon and search. These teams would then be vastly more effective when paired with emerging technologies.

Force 2025 describes science and technology—particularly commercial off-the-shelf—as integral to the future of warfare. This bodes well for our cavalry squadrons because, as the Army's reconnaissance professionals, they are uniquely po-

sitioned to push for these capabilities and not simply to wait and see what technologies develop elsewhere and percolate down. Cheap and ubiquitous sensors could revolutionize the use of light cavalry as the sensors greatly expand potential reconnaissance and surveillance depth and coverage area, especially when paired with a structure of small, decentralized scout units.

Such teams would be equipped and trained to employ currently available sensors, such as the Close-Access Target Reconnaissance system and the Unattended Ground Sensor system.¹³ These are devices that enable audio and visual tagging, tracking, and locating of targets—particularly, though not exclusively, in urban settings—and easily, and comparatively cheaply, increase information-gathering capabilities for the entire combat formation. Teams would also be equipped with currently available mobile target acquisition systems, such as the VECTOR rangefinder binoculars that, when paired with a Global Positioning System receiver, allow the operator to generate target-location grids as accurately as, and with much greater freedom of employment than, a massive, unwieldy Long-Range Advance Scout Surveillance System (LRAS3), at ranges common to urban environments.¹⁴



(Artist's concept courtesy of DARPA)

An artist's concept of the new Ground-X Vehicle (GXV-T).

These technologies are currently taught in military schools but have yet to be assigned across all cavalry squadron MTOEs in the scout role. As Lt. Col. Eric Lowry wrote in a 2014 article, “Ten years of war in the Middle East fighting an enemy that can blend into the population have demonstrated the need for a more thorough ability to find and positively identify that enemy. The identification and destruction of enemy support networks ... [is a] vital aspect that supports the Army of 2020.”¹⁵

The aforementioned sensors and other unmanned surveillance technologies are examples of available capabilities that would allow detachments from light cavalry squadrons to more effectively identify and target these enemy networks. They would also greatly enhance a cavalry unit’s ability to fulfill information requirements in future asymmetric warfare settings.

Cavalry squadrons of the future. The ideal light cavalry squadron of the future will be prepared to operate in a decentralized manner, detaching teams of reconnaissance enablers to comparatively robust infantry units. This recommendation fits well into the paradigm of regionally aligned forces and small-unit deployments for foreign internal defense. Teams and squads of light cavalry scouts equipped with surveillance control systems and specialized light vehicles—such as, perhaps, the light tactical all-terrain vehicle currently in use by certain airborne units, or, further in the future, the Defense Advanced Research Projects Agency’s proposed Ground X Vehicle—could add unique value to infantry companies as currently provided by highly coveted sniper teams.¹⁶ Rather than simply operating an LRAS3 (typically used on an infantry vehicle such as the Stryker or the mine-resistant ambush-protected [MRAP] vehicles), these teams would include personnel qualified as joint fire observers and trained through attendance at the Army Reconnaissance Course, Pathfinder School, and Air Assault Schools. With light vehicles and emerging technology, these teams can provide a capability outside the means of infantry. Rather than passively consuming sensor information through viewing terminals, such teams could instead use sensor and unmanned platform control systems to increase reconnaissance coverage and produce complementary surveillance value.

With a new MTOE, our light cavalry squadrons could train and prepare these teams along with fellow

information-collection assets, such as an unmanned aerial surveillance platoon, a human intelligence team, and interpreters, all readily available for detachment to infantry companies. However, our current light formations err too far toward heavy and contiguous employment to operate along these lines. Decentralizing our light cavalry squadrons would allow the above-mentioned technology and training capabilities to be distributed across the entire maneuver force as opposed to being condensed within one formation. While bearing this in mind, the Army of 2025 also demands a combined arms maneuver capability—one that is best provided by heavy cavalry.

Combined arms heavy cavalry. Current cavalry squadrons equipped to provide armored warfighting capabilities include those within the ABCT and the SBCT. However, the lighter SBCT cavalry squadron is less effective in this role for a number of reasons. First, as practical experience has shown, the function of this squadron performing standoff reconnaissance as the tip of the spear for the SBCT and follow-on ABCTs does not survive first contact with commonly templated enemies. Employed within varied terrain, the cannon and antitank guided missile systems of even a small number of legacy Soviet systems, such as the BMP-2 infantry fighting vehicle, contain sufficient range and firepower to attrit an entire Stryker cavalry squadron and thus degrade the operational tempo of follow-on armored forces.

This employment dilemma calls to mind the similar invalidation of the pre-OIF brigade reconnaissance troop concept, in which light cavalry scouts equipped with high-mobility multipurpose wheeled vehicles failed to maintain heavy brigade combat team operating tempo due to sustaining unacceptable losses.¹⁷ Second, couple this lack of Stryker cavalry survivability with the absence of robust, organic maintenance or fueling capabilities—such as those provided by a forward support company—and you have a formation unlikely to be able to sustain operating tempo in a future conventional, forcible-entry fight.

It would be far more effective to set unambiguous priorities, to integrate this functionally light cavalry force into a follow-on, dispersed, wide area security role, and to employ more heavily armored ABCT assets in a hunter-killer role at the forefront. In this

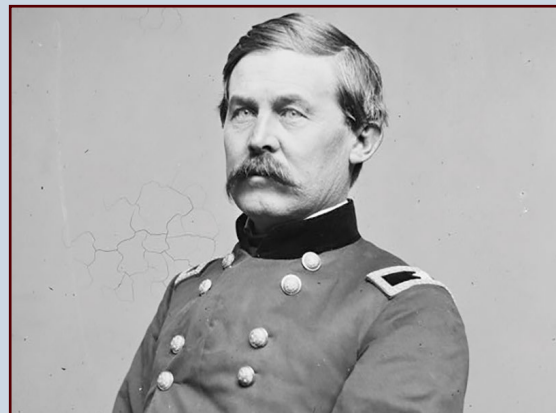
way, the Bradley-equipped cavalry scouts and tankers of the ABCT together would adopt the sole mantle of heavy cavalry.

Within heavy cavalry, effective force development and employment require specific preparation within a typically offense- and defense-focused mission-essential task list. However, a decade of general employment has meant that preparations for large-scale decisive-action missions have suffered. Additionally, as noted by Sgt. Maj. (retired) Derek McCrea, “the ABCT priority over the past decade has not included repetitive and traditional Bradley gunnery, maintenance, and maneuver training due to repeat deployments on nonstandard vehicles (MRAPs, etc.)”¹⁸ By muddying the waters between light and heavy cavalry, we have created broadly focused and less technically proficient formations. In order to build and maintain a heavy cavalry mentality focused around the characteristics of the offense—surprise, concentration, audacity, and tempo—we must necessarily employ light and heavy cavalry squadrons in roles specific to their composition and core competencies. Our problem, reinforced by current doctrine, is that we tend to assume that capabilities are virtually the same across all types of cavalry squadrons.

As seen in the table on page 52, current cavalry squadron mission profiles do not distinguish between most of the various, differently composed formations, thereby promoting employment for the same kinds of missions.¹⁹ We may improve our force by instead recognizing and harmonizing existing capabilities and limitations and making the ABCT heavy cavalry our primary *fighting cavalry*—a hunter-killer force capable of becoming decisively engaged when necessary and of being the tip of the spear in a forcible-entry fight into another country. Upon clearing the ground of armored threats, this force would be followed by a force of SBCT or IBCT infantry and light cavalry units in a primarily wide area security role, with decentralized scouts acquiring urban and low-intensity targets, gathering information, and developing the situation for their offense-focused infantry and heavy cavalry brethren.

Conclusion

The Army would do well to remember the French knights at Agincourt who rode forth tall, proud, and



(Photo courtesy of the Library of Congress)

Portrait of Brig. Gen. John Buford (Maj. Gen. from 1 July 1863), officer of the Union Army

The Decisive Role of Cavalry at Gettysburg

The Union Army's First Cavalry Division provided us with a classic example of the effective use of cavalry when it successfully accomplished traditional cavalry missions during the Battle of Gettysburg. In mid-June 1863, division commander Brig. Gen. John Buford was given the mission to find, impede, and collect intelligence on the Confederate Army, commanded by Gen. Robert E. Lee.

The Confederate forces had crossed north into Pennsylvania, but their exact location was unknown. However, on 30 June 1863, cavalrymen from Buford's force found the lead elements of Lee's army just west of the small town of Gettysburg, Pennsylvania. Buford immediately reported this via courier to the commanding officer on the field, Maj. Gen. John Reynolds, who ordered the bulk of the Union forces to begin prompt movement toward Gettysburg. In the meantime, Buford directed his force of about three thousand cavalrymen to seize the high ground overlooking the approaches to Gettysburg ahead of Confederate forces. Initially, Buford's cavalry, fighting as light infantry, caused Lee's army to deploy prematurely into fighting formations before it had fully concentrated its forces. This successfully helped delay the Confederate army's progress until the full complement of Union forces had arrived under overall commander Maj. Gen. George Meade. Subsequently, Buford's cavalry conducted relentless mounted reconnaissance missions that gave Union senior leaders accurate and detailed intelligence of Confederate force movements and dispositions.

Many historians regard the actions of Buford's cavalry at the outset of the engagement as perhaps the most important single factor that shaped the situation and enabled the Union Army to win the Battle of Gettysburg. Despite the passage of years and dramatic advances in equipment and technology, it is easy to envision how cavalry, both light and heavy, could play a similarly pivotal role in engagements fought under the conditions of the current operating environments.

Type of Squadron	Armored Brigade Combat Team Cavalry Squadron	Stryker Brigade Combat Team Cavalry Squadron	Infantry Brigade Combat Team Cavalry Squadron	Battlefield Surveillance Brigade Cavalry Squadron
Reconnaissance Tasks				
Zone Reconnaissance	F	F	F	P
Area Reconnaissance	F	F	F	F
Route Reconnaissance	F	F	F	P
Reconnaissance in Force	P	P	P	X
Security Tasks				
Screen	F	F	F	P
Guard	P	P	P	X
Cover	X	X	X	X
Area Security	F	F	F	R
Local Security	F	F	F	F
Offensive Tasks				
Attack	P	P	P	X
Movement to Contact	P	P	P	X
Defensive Tasks				
Area Defense	P	P	P	X
Mobile Defense	P	P	P	X
Retrograde	P	P	P	X
Stability Tasks				
Civil Security	F	F	F	R
Civil Control	F	F	F	R
Restore Essential Services	R	R	R	R
Support to Governance	R	R	R	R
Support to Economic/ Infrastructure Development	R	R	R	R
Civil Support Tasks				
Support to Disaster/ Terrorist Attack	Capability depends on specific missions assigned. Depending on the mission, the squadron may require augmentation.			
Support to Civil Law Enforcement				
Other Support				
F-Fully capable	R-Capable when reinforced			
P-Capable when enemy capabilities do not jeopardize mission accomplishment	X-Not capable			

Cavalry Squadron Capabilities Matrix



(Photo by Staff Sgt. Ryan C. Matson, 210th Mobile Public Affairs Detachment)

Sgt. James Small and Spc. Andreas Plaza, Company A, 1st Squadron, 61st Cavalry Regiment, scan the area from a mountaintop overlooking the Towr Gahr Pass 6 November 2010 in Nangarhar Province, Afghanistan. The soldiers climbed over a 4,000-foot mountain to visit Gurem Village for the first time.

confident, only to be destroyed by English longbows—of which they were aware before the battle but had not deemed a pressing threat, warranting critical reflection and reform of force employment. Similarly, the cavalry branch must adapt—as opposed to just revisiting old ideas. At the same time, the Army must adapt by reconstituting the force, which should include reforming employment of cavalry to face the primarily urban, decentralized, flatly networked threats of 2025 and beyond. To that end, the Army must recognize that asymmetric warfare is not a niche capability—it is the future. Therefore, it must improve

the force in accordance with two recommendations: development of specialized, decentralized light cavalry squadrons capable of detachment in reconnaissance, surveillance, and target-acquisition functions; and development of combined arms maneuver heavy cavalry squadrons trained and structured to conduct audacious offensive and defensive operations and more conventional reconnaissance and security, especially in forcible-entry situations. Above all, we must remember to be tactically sound and not doctrinally bound—in short, to innovate and not be like those French knights at Agincourt. ■

1st Lt. Matthew J. McGoffin, U.S. Army, is the executive officer for the Headquarters and Support Company, Headquarters and Headquarters Battalion, 1st Cavalry Division, Fort Hood, Texas. He holds a BS in geography from the U.S. Military Academy at West Point. McGoffin is a graduate of the Armor Basic Officer Course and the Army Reconnaissance Course, and he previously served as a tactical intelligence officer and a scout platoon leader. He has deployed in support of the Multinational Force and Observers, Sinai, Egypt, and he has worked as a Middle East and North Africa analyst for the Defense Intelligence Agency.

Notes

Epigraph. Herbert Edward Law and Charles Lincoln Rhodes, *Napoleon In His Own Words* (Chicago: A.C. McClurg & Co, 1916), 119.

1. Army Capabilities Integration Center (ARCIC), *Army Vision—Force 2025*, white paper (Washington, DC: ARCIC: 23 January 2014), 2, accessed 13 July 2015, http://www.arcic.army.mil/app_Documents/USArmy_WhitePaper_Army-Vision-Force-2025_23JAN2014.pdf, 2-3.

2. *Ibid.*, 3.

3. *Ibid.*

4. Gen. Martin E. Dempsey, quoted in Jim Garamone, "Dempsey: Military Battles Against Fiscal Uncertainty," *American Forces Press Service*, 16 November 2013, accessed 13 July 2015, <http://www.defense.gov/news>.

5. David Kilcullen, *Out of the Mountains: The Coming Age of the Urban Guerrilla* (New York: Oxford University Press, 1 July 2015), 16 and 176.

6. Field Manual (FM) 2-91.4, *Intelligence Support to Urban Operations* (Washington, DC: U.S. Government Printing Office [GPO], March 2008), vi, distribution authorized to U.S. Government agencies only.

7. Dennis M. Bushnell, "Future Strategic Issues/Future Warfare [Circa 2025]" (PowerPoint presentation, National Aeronautics and Space Administration, Langley Reserch Center, Hampton, VA, 23 May 2001), accessed 13 July 2015, <https://www.metabunk.org/attachments/future-strategic-issues-and-warfare-pdf.3295/>; for information on "swarms" and "swarming," see John Arquilla and David Ronfeldt, *Swarming and the Future of Conflict* (Santa Monica, CA: RAND Corporation, 19 December 2000), accessed 27 July 2015, http://www.rand.org/content/dam/rand/pubs/documented_briefings/2005/RAND_DB311.pdf.

8. Joshua T. Suthoff and Michael J. Culler, "Ideas on Cavalry," *ARMOR* (October–December 2013), 64, accessed 13 July 2015, <http://www.benning.army.mil/armor/earmor/>.

9. Nathan A. Jennings, "Cavalry Branch: a Redesignation for the 21st Century," *ARMOR*, (January–February 2014), 23, accessed 13 July 2015, http://www.benning.army.mil/armor/earmor/content/issues/2014/JAN_FEB/jennings.html.

10. Suthoff and Culler, "Ideas on Cavalry," 62.

11. *Ibid.*, 63.

12. Ken Segelhorst, "Small-Unit Kill Teams," *ARMOR* (January–February 2008), 26-33.

13. For information on the Close-Access Target Reconnaissance system, see Eric Lowry, "Tagging, Tracking, and Locating: Intelligence-Gathering in Support of Army 2020," *ARMOR* (March–June 2014), accessed 14 July 2015, http://www.benning.army.mil/armor/eARMOR/content/issues/2014/MAR_JUN/Lowry.html; for information on the Unattended Ground Sensor system, see Defense Update, "Unattended Ground Sensors," *International Online Defense Magazine*, 2006(1), accessed 24 August 2015, <http://defense-update.com/features/du-1-06/feature-ugs.htm>.

14. For information on VECTOR rangefinder binoculars, see "VECTOR 21: The Typical Forward Observer Device," Vectronix website, accessed 24 August 2015, <http://www.vectronix.us/handhelds/rangefinders-day/binocular/vector-21>; for information on the Long Range Scout Surveillance System, see Michel Jones and Christopher Wagner, "Long Range Scout Surveillance System (LRAS3)," *ARMOR* (November–December 1998), 22–24, accessed 24 August 2015, http://www.benning.army.mil/armor/eARMOR/content/issues/1998/NOV_DEC/ArmorNovemberDecember1998web.pdf.

15. Lowry, "Tagging, Tracking, and Locating," 71.

16. For information on the light tactical all-terrain vehicle, see Jason Hull, "New Equipment Makes Global Response Force More Mobile, Lethal," Army.mil website, 30 October 2014, accessed 24 August 2015, http://www.army.mil/article/137311/New_equipment_makes_Global_Response_Force_more_mobile_lethal/; for information on the Ground X Vehicle, see Defense Advanced Research Projects Agency, "New Ground X-Vehicle Technology (GXV-T) Program Aims to Break the 'More Armor' Paradigm for Protection," DARPA website, 18 August 2014, accessed 24 August 2015, <http://www.darpa.mil/news-events/2014-08-18>.

17. Stephen E. Bruch, "Did Force XXI Validate the Brigade Reconnaissance Troop?" (master's thesis, U.S. Army Command and General Staff College, 1998), iii, accessed 14 July 2015, <http://www.dtic.mil/dtic/tr/fulltext/u2/a350081.pdf>.

18. Derek D. McCrea, "TCM-ABCT Identifies Gaps in Bradley Training," *INFANTRY* (July–September 2013), 22, accessed 14 July 2015, <https://www.benning.army.mil/infantry/magazine/issues/2013/Jul-Sep/pdfs/McCrea.pdf>.

19. FM 3-20.96, *Reconnaissance and Cavalry Squadron* (Washington, DC: U.S. GPO, March 2010), 1–4, distribution authorized to U.S. government agencies and their contractors only.

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(Photo courtesy of The Boeing Company)

A Boeing multimission Avenger turret mounted on a mine-resistant, ambush-protected, all-terrain vehicle stands on display at a defense symposium 28 September 2010. Boeing developed the weapon system as a cost-effective option to modernize existing U.S. Army Avenger weapon systems.

Balancing Air and Missile Defense to Better Support Maneuver

Capt. Vincent R. Wiggins Jr., U.S. Army

Thus it is that in war the victorious strategist only seeks battle after the victory has been won, whereas he who is destined to defeat first fights and afterwards looks for victory.

—Sun Tzu

The U.S. Army is modernizing and cultivating specific echelons of air and missile defense (AMD) in response to evolving air and missile threats. According to Col. Robert Lyons, former director of the Department of the Army Military Operations Air Missile Defense, the projected threat force will be a sophisticated adversary consisting of multi-echeloned, asymmetric capabilities.¹ Upgrades and unit expansions in Army high-to-medium-altitude air defense (HIMAD) systems, such as Patriot and Terminal High Altitude Area Defense, defend critical assets and help the United States and its allies maintain a strategic advantage around the world; these assets—for the purposes of this paper, called *static-engagement-AMD*—enable AMD from stationary locations.² However, the Army prioritizes static-engagement-AMD assets at the expense of aggressive maneuver tempo, resulting in an unbalanced execution of the Army’s AMD strategy. For example, Army air defense artillery (ADA) includes fifteen Patriot battalions, which provide static-engagement-AMD, but only four active Avenger batteries and seven Army National Guard Avenger battalions, as of August 2015. These eleven Avenger units are the air defense’s only remaining *nonstatic-engagement-AMD* formations.³ This situation reflects a gap in the force’s protective capabilities, through degraded AMD support of maneuver.

The brigade combat team (BCT) is designed for operations encompassing the entire range of military operations; it is the primary close-combat force of the U.S. Army.⁴ However, no AMD engagement assets are organic to the BCT, and this limits effectiveness because it limits integration. Maj. Gen. John G. Rossi, commanding general of the United States Army Fires Center of Excellence and Fort Sill, Oklahoma, offered a viable perspective during an Association of the U.S. Army “Transform the AMD Force” panel in February 2015. According to Army reporter David Vergun, Rossi explained that AMD elements should improve communication with other forces, including BCTs, because “there are threats out there not just to combatant commanders; it’s also BCTs saying we need you back in the game.”⁵ The Army’s AMD strategy emphasizes the development of static-engagement-AMD assets and formations, but the solution to bridging the growing gap between aerial threat exposure and air defense

for maneuver forces is to modernize, grow, and integrate nonstatic-engagement-AMD assets, such as the Avenger, into the BCT.

Air Defense and Aggressive Maneuver Tempo

Short-range air defense protects units against threats such as unmanned aircraft systems (UASs), rotary-wing aircraft, fixed-wing aircraft, and cruise missiles. Traditionally, forces have accomplished short-range air defense through nonstatic-engagement-AMD. Some HIMAD assets also can defend against these kinds of threats, but their capability to support an aggressive maneuver tempo—through expedited tactical mobility and shooting on the move—is nonexistent. Army forces need AMD assets that help them maneuver faster than their enemies. According to Army Doctrine Reference Publication 3-0, *Unified Land Operations*, “during operations dominated by combined arms maneuver, commanders normally seek to maintain a higher tempo than the enemy does; a rapid tempo can overwhelm an enemy’s ability to counter friendly actions. It is the key to achieving a temporal advantage during combined arms maneuver.”⁶ HIMAD weapon systems are static-engagement-AMD assets with extensive time requirements for emplacement. Maneuver commanders who depend on these assets need to assume risk in protection or initiative when operating outside the narrow protection zone they provide.

In addition, HIMAD weapon systems cannot identify, track, or engage targets without radar radiating into the operational area. In comparison, Avengers are enhanced by radar rather than reliant on it. Their operators can manually engage targets through visual acquisition (line of sight) or remotely through automated radar targeting. The Avenger’s line-of-sight capability complements its ability to shoot on the move and enables the system to function throughout the maneuver area of operations.

Developed in the 1990s, the Avenger is a light-weight, shoot-on-the-move, rocket-launcher system that provides critical short-range nonstatic-engagement-AMD. Similarly, the Army developed the Bradley Stinger Fighting Vehicle, or Linebacker, to accompany its mechanized formations. According to Bradley manufacturer Raytheon, the “Stinger maintains a greater

than 90 percent success rate in reliability and training tests against advanced threat targets.⁷ The Avenger weapon system, which can fire Stingers, enables air defenders to protect from a mounted, motorized configuration or download shoulder-fired Stingers for dismounted operations.

Constraining the Force

Nonstatic-engagement-AMD units are disappearing from the Active Army. Based on the ongoing unit drawdown, implementation of the AMD strategy is increasing the Avenger's reduction from circulation, instead of increasing its employment to support maneuver.⁸ The strategy emphasizes HIMAD and static-engagement-AMD counterfire assets such as the counterrocket, artillery, and mortar (C-RAM) program.⁹ According to the strategy, "air and missile defense remains an Army core function, vital to the Army's core competencies of combined arms maneuver and wide area security."¹⁰ Ironically, the Avenger is the essence of the air defense's ability to enable maneuver commanders to seize, retain, and exploit the initiative with on-the-move protection—no other Army air defense asset has this capability. Without the Avenger, air defense cannot effectively facilitate maneuver.

Transitional Air Defense Capabilities

The transitional virtuosity of nonstatic-engagement-AMD interconnects air defense to maneuver forces through the most fundamental aspect of war—combat. While HIMAD elements defend and deter, they are statically postured and restricted to executing conventional air defense. They lack rapid deployability, and they operate separately from the combined arms force. According to Carl Von Clausewitz, "A sudden powerful transition to the offensive ... is the greatest moment for the defense."¹¹ In the absence of a traditional air defense mission, nonstatic-engagement-AMD forces

transition their capabilities to support maneuver, serving as a "dual-hatted" combat multiplier. In 2005, Stanley Davis, then command sergeant major of the Army ADA branch, expertly summarized the transformation of nonstatic-engagement-AMD forces in Iraq and Afghanistan:

Our Bradley Linebacker and Avenger soldiers fought their way to Baghdad and Kabul alongside our infantry and armored divisions. Following the redeployment of the Patriot force from the combat zone, our Romeos [Linebacker crewmembers] and Sierras [Avenger crewmembers] stayed on to battle insurgents and Taliban rebels, laying the foundations for Iraqi and Afghan democracy. They bore the brunt of battle and convincingly demonstrated the fighting qualities of ADA soldiers to the combined arms team.¹²

The Avenger is combat proven. Since the Army first began using it in the 1990s, upgrades have added supplemental capabilities to diversify and enhance its



(Photo courtesy of the Joint Readiness Training Center)

An Avenger gunner from Battery E, 3rd Battalion, 4th Air Defense Artillery Regiment, provides aerial and ground security from a deliberate fighting position in support of a 1st Brigade Combat Team, 82nd Airborne Division training exercise 20 April 2015 at Fort Polk, Louisiana.

effectiveness. In addition to the Stinger, the Avenger has an automated .50 caliber machine gun (M3P) and a forward-looking infrared (FLIR) optics system. According to Lt. Col. Rick Starkey, former director of the Office of the Chief of the ADA School, air defenders took advantage of these capabilities in Iraq to conduct combat patrols, such as convoy security, raids, armored reconnaissance, and cordon and search.¹³

The combination of the M3P and FLIR allows air defenders to acquire and engage aerial and ground targets. In many instances, maneuver commanders have requested air defense support to enhance their operations due to these capabilities. Capt. Scott Dellinger effectively describes his relevant combat experience in Iraq:

Air defense artillery soldiers became so proficient at identifying enemy positions and IEDs [improvised explosive devices] with the

FLIR that ADA vehicles were sent ahead of convoys to clear routes and identify IEDs or other threats along routes throughout the entire 1st Armored Division zone.¹⁴

Misperceptions of Air Defense

There is a clear disconnect between the maneuver and air defense communities. Students attending the Maneuver Captain's Career Course (MCCC) are taught a false conceptual application of protection from aerial threats because the curriculum incorporates legacy doctrine for air defense. MCCC scenarios include air threats that require students to receive nonstatic-engagement-AMD assets, such as Linebackers, which are no longer fielded, and Avengers, which are available in very limited quantity. In addition, the current platform of the Avenger is the high-mobility multipurpose wheeled vehicle, which no longer meets protection standards, thus rendering the system obsolete and unusable for combat operations without deliberate modernization efforts. As a result, maneuver leaders are being taught the employment of nonexistent air defense enablers.

According to the AMD strategy, "AMD capabilities are critical to the future force and the Army mission."¹⁵ When a force maneuvers, and when gaining access requires seizing key terrain, how can air defenders enable the maneuver commander without nonstatic-engagement-AMD capabilities? In a 2013 issue of *Fires*, Brig. Gen. Donald Fryc, commander of the 32nd Army Air and Missile Defense Corps, said the C-RAM system "is not suited to move and [cannot] protect the support elements of a brigade combat team when not in that [BCT's] fixed location."¹⁶ This statement applies to all HIMAD assets—the priorities of the AMD strategy.

The Army AMD strategy has emphasized the reduction of nonstatic-engagement-AMD for more than ten years. As part of Army transformation in 2005, the air defense branch announced the inactivation of divisional ADA battalions, the removal of the Bradley Linebacker, and the downsizing of the Avenger force.¹⁷

Meanwhile, maneuver forces continue to request Avenger assets to support global response force packages and to augment their exercises at the Joint Readiness Training Center (JRTC) and the National Training Center (NTC). In 2013, an ADA battery provided nine Avenger teams to augment JRTC rotation 13-

01.¹⁸ Another battery provided three Avenger teams in April 2015 to augment JRTC rotation 15-06 while simultaneously being attached to the 82nd Airborne Division global response force.

During JRTC and NTC rotations, training scenarios incorporate unmanned air assets, such as the Raven—a lightweight, high-mobility UAS designed for low-altitude surveillance and reconnaissance, to simulate the growing UAS threat.¹⁹ In a 2013 *Infantry* magazine article, Capt. Jeremy Phillips provides an insightful perspective of an infantryman's concern for units needing counter-UAS enablers. The



(Photo by Sgt. Christopher Kaufmann, Joint Combat Camera Afghanistan)

Sgt. Aubrey Caplinger and Spc. Gabriel Vega, Battery B, 3rd Battalion, 62nd Air Defense Artillery Regiment, pull security atop an Avenger 4 March 2004 during the opening ceremony of the Ghazni Provincial Reconstruction Team facility, Ghazni, Afghanistan.

article, “Training for the Enemy UAV [unmanned aerial vehicle] Threat,” articulates an interesting conclusion:

Being able to destroy the enemy’s capability to control unmanned platforms either by jamming the signals to and from a UAS, disabling the cameras onboard, or physically destroying them will be an invaluable asset for ground combat commanders.²⁰

Ironically, Capt. Phillips made this deduction after completing an NTC rotation with a combined arms battalion that was augmented with an Avenger team.

According to Field Manual 3-01, *U.S. Army Air and Missile Defense Operations*, “Avenger is designed to counter low-altitude unmanned aircraft systems, high-speed fixed-wing, and rotary-wing aircraft, [and] reconnaissance, intelligence, surveillance and target acquisition assets.”²¹

However, maneuver leaders are not familiar with Avenger capabilities due to fewer formations being available. In 2013, Shirley Dismuke, then editor-in-chief of *Fires* magazine, wrote, “the Avenger system ... will be phased into National Guard units ... [even though] it is currently the only system viable against unmanned aerial surveillance.”²² Nonetheless, Chief Warrant Officer 3 Wes Dohogn (Brigade Mission Command, JRTC Operations Group) emphasizes the idiosyncratic capabilities of Stinger and Avenger in “Airspace Management with SHORAD [short-range air defense] Integration”:

Stingers and Avenger are the Army’s defense against this enemy air threat [referring to UASs]. They have a unique ability that no other ADA asset has. They provide quicker response to the threat and are able to be inserted early on the modern battlefield, providing freedom of maneuver for the BCT while they expand and enlarge the lodgment.²³

Since Avengers are not organic to the BCT, maneuver commanders rarely have access to their capabilities before a JRTC or NTC rotation or a combat deployment. Army modernization, expansion, and integration of updated Avenger formations into maneuver forces would resolve this tactical shortcoming and better support maneuver leaders like Capt. Phillips. Dohogn supplements this point by analyzing the benefit of nonstatic-engagement-AMD assets incorporated into the maneuver structure. He offers practical applications learned from JRTC rotation 13-01:

The goal is to put ADA fire units strategically between the threat and the defended asset;

that simple formula is the best way to increase the probability of engaging an aircraft before it can attack or see a defended asset. This deliberate planning effort can result in Stinger teams conducting Stinger ambushes on known avenues of approach or Avengers moving forward with other mounted elements.²⁴

Modernizing the Avenger for Future Fights

The Army modernization strategy, as described in the 2015 *Army Posture Statement*, states, “While resource constraints will force the Army to delay new system development and investment in the next generation of capabilities, we will execute incremental upgrades to increase capabilities and modernize existing systems.”²⁵ Consistent with this strategy, Boeing offers a low-cost and operationally sound option for modernizing the currently fielded Avenger as a “multimission” weapon that would ensure air defenders and maneuver commanders remain on the cutting edge of aerial threat protection for several generations of conflict to come.²⁶

The innovations to the Avenger multimission rocket launcher reduce fielding time and cost by modifying the existing Avenger with new capabilities: interchangeable Stinger missiles, Longbow Hellfire missiles, guided and unguided rockets, Accelerated Improved Interceptor Initiative (AI3) missiles, high-energy lasers, a 25 mm gun, and other weapons. The updated Avenger can be mounted on the Army’s primary mobility systems, in addition to high-mobility multipurpose wheeled vehicles.²⁷

The AI3 provides enhanced protection capabilities to the Avenger because it detects and destroys rockets, mortars, UASs, and cruise missiles in flight.²⁸ On 19 August 2013, the AI3 “successfully intercepted and destroyed a low quadrant elevation 107 mm rocket” during a capabilities flight test.²⁹

The air defense’s response to advancing short-range air defense coverage is the developing static-engagement-AMD program called the Indirect Fire Protection Capability Increment 2–Intercept (IFPC Inc 2-I) system. According to a 2012 Program Executive Office Missiles and Space public release brief, the mission of the IFPC Inc 2-I system “is to provide a mobile, robust protection capability to critical assets within fixed and semifixed locations against UASs, CMs [cruise missiles] and RAMs [rockets, artillery, and mortars].”³⁰ This system includes

an application that “will replace Avenger” with a multimission launcher—not to be confused with Boeing’s multimission Avenger. Once developed and fielded, the new IFPC Inc 2-I launcher will be mount-restricted to a 10-ton utility truck, and it will have the capability to load a series of interceptors.³¹

Unlike the Avenger, the proposed launcher is not suited for aggressive maneuver tempo—primarily because it lacks immediate tactical employment capability, does not shoot on the move, and lacks a self-guiding missile engagement feature. Instead, like static-engagement HIMAD systems, the proposed weapon system relies solely on radar identification and intercept guidance from a fixed location. In addition, the proposed launcher does not incorporate organic ground-based defense weaponry. Therefore, it will rely on extensive force protection packages to provide security for its operations, and it will not enable air defenders to transition capabilities in support of maneuver commanders.

Enhancing the Brigade Combat Team with Air Defense Assets

Currently, BCTs only have air defense and airspace management cells allocated to them. These liaisons assist in planning but possess no intercept assets. To integrate nonstatic-engagement-AMD enablers effectively, maneuver commanders need organic upgraded Avenger units to incorporate into their training so units can learn and develop integrated tactics, techniques, and procedures before the next conflict. Capt. Winston Marbella masterfully articulates the importance of educating the maneuver commander on Avenger capabilities to enhance operations:

On night combat patrols, the Avenger is primarily assigned in the [over-watch] or support-by-fire role. With its enhanced FLIR, it’s the best night vision available to a light infantry task force. We educate task force leaders on the incredible capability the Avenger’s M3P .50 caliber machine gun—when combined with the FLIR and Avenger’s 360-degree turret—brings to the fight. The M3P’s longer barrel gives it increased range, and soldiers can fire the M3P mounted on the Avenger platform from a remote position. With [its] advanced target acquisition system, the

[M3P] machine gun’s combined capabilities are superior to the infantry’s M-2 .50 caliber machine gun. Highlighting the Avenger’s capability to the task force leadership greatly enhanced our platoon’s contribution to the task force’s success.³²

BCTs consist of a wide range of organic combat enablers from virtually every branch of the Army except air defense. However, the Army vision for the Force 2025 Maneuvers offers an opportunity to resolve the problem by anticipating an increase in capabilities of the future BCT, including effective counter anti-access/area denial (A2/AD).³³

The next-generation BCTs should integrate a modernized Avenger battery, configured to match the structure of each BCT—which would enable BCTs to counter A2/AD while maintaining unique combat advantages. Heavy BCTs should have a Bradley or medium tactical vehicle Avenger battery to defeat aerial threats while continuing to operate with “shock and speed.”³⁴ Infantry BCTs should have a mine-resistant, ambush-protected, all-terrain vehicle Avenger battery to eliminate aerial threats while operating in their optimal environment: close terrain.³⁵ Finally, Stryker BCTs should have a Stryker family of vehicles Avenger battery, to extend its intended protection and firepower to counter aerial threats while maintaining “operational and tactical mobility.”³⁶

Integrating modernized Avenger assets would enable BCTs to defeat the aerial threat and simultaneously gain forced access into an area of operations without sacrificing momentum. In the spirit of an analysis published in 2011 by Gen. Robert Cone, then commander of the U.S. Army Training and Doctrine Command, upgraded Avenger units would enable the “artful execution of combined arms maneuver” that “surprises the enemy by attacking from an unexpected direction and time or by employing combat power in unforeseen ways.”³⁷

Avenger formations have proven their battle-adaptive capability to provide air defense while simultaneously supporting ground forces. Without upgraded Avengers integrated into the BCT, maneuver units will remain unnecessarily exposed to aerial attack, especially by the rapidly expanding threat of UAS technology throughout the world, under the pretense that nonstatic-engagement-AMD enablers are postured to defeat them.

Money and Modernization

Common arguments for phasing out nonstatic-engagement-AMD have been based on military budget cuts and a lack of mission. The Army is downsizing in response to a combination of political requirements and the near completion of two wars—no question.³⁸ Recent budget cuts have undoubtedly created some friction between the traditional force structure and modernization of the military. However, history shows that the air defense began phasing out nonstatic-engagement-AMD assets as early as 2005—long before drastic reductions in military spending.

Ironically, regardless of the current fiscal challenges, the AMD strategy introduces the production of the IFPC Inc 2-I, which will be far less cost-efficient than upgrading the combat-proven Avenger. An upgraded Avenger would exceed the capabilities of the IFPC Inc 2-I, further enhance maneuver, maintain rapid deployability, and become available to the force more quickly and at a fraction of the cost.

The mission of nonstatic-engagement-AMD remains nested with the Army of the future. The force design of the Army beyond 2025 “will be fundamentally changed, uniquely enabled, and organized to conduct expeditionary maneuver of operationally significant forces.”³⁹ In the past, nonstatic-engagement-AMD formations simultaneously enhanced maneuver and diminished air threat exposure. The Army should balance the execution of the AMD strategy by reversing the trend toward static-engagement-AMD development at the expense of aggressive maneuver tempo.

Air and Missile Defense Resolve

In order to establish balance in the AMD strategy, the Army should develop a priority and timeline to upgrade each Avenger formation into the

Avenger multimission and embed them into the BCT. According to Maj. Gen. Rossi, “Air and Missile defense needs to be better incorporated into the maneuver scheme of warfighting.”⁴⁰ This approach would further enhance the combat readiness, capability, and lethality of BCTs while reducing costs. Historical accounts of nonstatic-engagement-AMD units provide a sound basis for projecting the full range of increased combat power that the Avenger multimission would bring to the fight.

Imagine an air defense component that could counter and defeat advanced threats such as UASs, cruise missiles, fixed-wing aircraft, rotary-wing aircraft, rockets, artillery, and mortars, and simultaneously employ capabilities such as FLIR optics, an automated .50 caliber gun,

and an automated 25 mm gun—all on a 360-degree turret—to contribute to a BCT’s ground maneuver combat capabilities. The prospect of providing these enhanced capabilities makes the BCT-embedded Avenger multimission a next-level combat multiplier that would be critical to the agility, readiness, and direction of the modernized Army.

Conclusion

Maneuver is a fundamental priority of the Army. However, air defense is not organized to facilitate aggressive maneuver tempo. With minimal active and no upgraded Avenger units available, the aerial threat may eventually restrict maneuver on the battlefield and constrain operating forces. Without a modernized nonstatic-engagement-AMD capability in the BCT, the shrewd and opportunistic asymmetrically inclined adversary that the Army anticipates would expose combat forces unnecessarily to grave and lethal challenges, which prudence and common-sense planning now could preclude. ■



(Photo by Spc. Brian Barbour, 123rd Mobile Public Affairs Detachment)

Spc. Jamael O. Turner, Battery A, 2nd Battalion, 44th Air Defense Artillery Regiment, shows one of the first rockets his unit shot down with the counterrocket, artillery, and mortar (C-RAM) 4 March 2009 at Joint Base Balad, Iraq. Turner operates the C-RAM, which can identify, track, and shoot mortar rounds and rockets out of the sky before they detonate.

Capt. Vince R. Wiggins Jr., U.S. Army, commands Headquarters and Headquarters Battery, 108th Air Defense Artillery Brigade, Fort Bragg, North Carolina. He holds a BA from the U.S. Military Academy and is a graduate of the Air Defense Officer Basic Course and the Maneuver Captains Career Course. He deployed to Afghanistan in support of Operation Enduring Freedom from 2010 to 2011.

Notes

Epigraph. Sun Tzu, *The Art of War*, trans. Lionel Giles (London: Arcturus, 2008), 44.

1. Robert W. Lyons, "2012 Army Air and Missile Defense Strategy," *Fires: Fires 2020*, (March–April 2013): 59–63, accessed 17 July 2015, http://sill-www.army.mil/firesbulletin/2013/Mar-Apr/mar_apr.pdf.
2. Field Manual (FM) 3-01, *U.S. Army Air and Missile Defense Operations* (Washington, DC: U.S. Government Printing Office [GPO], 15 April 2014), 1-3, accessed 17 August 2015, available only to U.S. government agencies and their contractors with login at <http://armypubs/army.mil>, "Terminal High Altitude Area Defense (THAAD) ... provides a capability to engage and shoot down short-, medium-, and intermediate-range ballistic missiles within and outside the atmosphere. ... Patriot is a guided missile system with long-range, medium- to high-altitude, all-weather capabilities designed to counter tactical ballistic missiles, cruise missiles, large-caliber rockets, unmanned aircraft systems, and fixed-wing and rotary-wing aircraft."
3. Force Management System Web Site (FMSWeb), modified table of organization and equipment (MTOE), accessed 4 August 2015, <https://fmsweb.army.mil> (requires common access card [CAC]).
4. FM 3-90.6, *Brigade Combat Team* (Washington, DC: U.S. GPO, September 2010), 1-6.
5. Maj. Gen. John G. Rossi, paraphrased and quoted in David Vergun, "Air, Missile Defense Effectiveness Transcends Materiel Solutions," U.S. Army website, 13 February 2015, accessed 17 July 2015, <http://www.army.mil/article/142901>.
6. Army Doctrine Reference Publication (ADRP) 3-0, *Unified Land Operations* (Washington, DC: U.S. GPO, May 2012), 4-7.
7. Raytheon, "Stinger Weapon System," Raytheon Company website, accessed 17 July 2015, <http://www.raytheon.com/capabilities/products/stinger/>.
8. Air and Missile Defense Directorate, *2012 Air and Missile Defense Strategy*, 2012, 21, accessed 17 July 2015, <https://www.us.army.mil/suite/doc/44668368>. The AMD strategy establishes a line of effort to identify a replacement for the Avenger by 2020 (requires CAC).
9. FM 3-01, *U.S. Army Air and Missile Defense Operations* (Washington, DC: U.S. GPO, 2014) (requires CAC) 1-4, "The C-RAM [counterrocket, artillery, and mortar] system is used to detect and destroy incoming rockets and mortar rounds in the air before they hit their ground targets, or simply provide early warning."
10. Air and Missile Defense Directorate, *2012 Air and Missile Defense Strategy*, 5.
11. Carl Von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1989), 370.
12. Stanley L. Davis, "Stripes," *Air Defense Artillery Magazine* (April–June 2005): 6, accessed 17 July 2015, http://sill-www.army.mil/ada-online/pb-44/_docs/2005/4-6/ADA_MAG%20April-June%202005.pdf.
13. Rick Starkey, "Divisional Air Defense Artillery Units Learn Keys to Survival and Victory in Iraq and Afghanistan," *Air Defense Artillery Magazine* (April–June 2005): 12, accessed 17 July 2015, http://sill-www.army.mil/ada-online/pb-44/_docs/2005/4-6/ADA_MAG%20April-June%202005.pdf.
14. Scott Dellinger, "Task Force 1-4: 1-4 ADA Soldiers Defend Bagdad International Airport," *Air Defense Artillery Magazine* (April–June 2005): 22, accessed 7 July 2015, http://sill-www.army.mil/ada-online/pb-44/_docs/2005/4-6/ADA_MAG%20April-June%202005.pdf. Capt. Dellinger commanded Battery B, 1st Battalion 4th Air Defense Artillery, 1st Armored Division, in Iraq. He also served as a small-group instructor at the U.S. Army Air Defense Artillery School.
15. Air and Missile Defense Directorate, *2012 Air and Missile Defense Strategy*, 10. The AMD strategy outlines ends (*defend the homeland, defend the force and protect critical assets, and assure access*), ways, and means.
16. Don Fryc, "Air Defense Artillery: Fires 2020" *Fires: Fires 2020* (July–August 2013): 11, accessed 17 July 2015, <http://sill-www.army.mil/firesbulletin/2013/Jul-Aug/July-August.pdf>. Brig. Gen. Fryc is the former chief of Air Defense Artillery and commandant of the U.S. Army Air Defense Artillery School.
17. "Air Defense Artillery School/Fort Bliss Updates: Office, Chief of Air Defense Artillery," *Air Defense Artillery* (April–June 2005): 44–45.
18. Wes Dohogn, "Airspace Management with SHORAD Integration," in Center for Army Lessons Learned (CALL) Lessons and Best Practices newsletter no. 13-13, *Operations in the Decisive Action Training Environment at the JRTC, Volume I: The Brigade Combat Team*, (Fort Leavenworth, KS: CALL, May 2013): 115 (requires CAC).
19. "UAS: RQ-11B Raven," AeroVirnonment Incorporated website, accessed 17 July 2015, http://www.avinc.com/uas/small_uas/raven/.
20. Jeremy M. Phillips, "Training for the Enemy UAV Threat," *Infantry* (May–June 2013): 47, accessed 17 July 2015, <http://www.benning.army.mil/infantry/magazine/issues/2013/May-June/pdfs/May-June.pdf>.

21. FM 3-01, *U.S. Army Air and Missile Defense Operations*, 5-1.
22. Shirley Dismuke, "The 2013 State of Fires," *Fires: Fires 2020* (July–August 2013): 14.
23. Wes Dohogn, "Airspace Management with SHORAD Integration," 120.
24. *Ibid.*, 117.
25. John M. McHugh and Raymond T. Odierno, *U.S. Army Posture Statement 2015*, submitted to the Committees and Subcommittees of the United States Senate and the United States House of Representatives, March 2015, 25, accessed 4 August 2015, http://usarmy.vo.llnwd.net/e2/rv5_downloads/aps/aps_2015.pdf.
26. Boeing Defense, Space, & Security, "Backgrounder: Avenger Derivatives," June 2013, accessed 31 August 2015, http://www.boeing.com/assets/pdf/defense-space/space/avenger/docs/Avenger_overview.pdf.
27. *Ibid.*
28. "Accelerated Improved Interceptor Initiative (AI3)," Raytheon Company website, accessed 17 July 2015, <http://www.raytheon.com/capabilities/products/ai3/>.
29. News Release, "US Army, Raytheon Achieve First Inflight Lethal Intercept of Low Quadrant Elevation Rocket," Raytheon Company website, 19 August 2013, accessed 17 July 2015, <http://investor.raytheon.com/phoenix.zhtml?c=84193&p=irol-newsArticle&iD=1848385&highlight=>.
30. Program Executive Office Missiles and Space, "IFPC Inc 2-I" (Public Release Capability Briefing, Redstone Arsenal, AL, 2013), 1–6, accessed 17 July 2015, http://www.msl.army.mil/Documents/Briefings/CMDS/CMDS%20Public%20Release%20Brief_27%20Aug%202013_IFPC%20Inc%202-I.pdf.
31. *Ibid.* Program Executive Office Missiles and Space released an additional overview brief of the IFPC Increment 2–Intercept Block 1 program on 1 April 2014, accessed 17 July 2015, http://www.msl.army.mil/Documents/Briefings/CMDS/CMDS%20SS%20198%20IFPC%20Inc%202-I%20Product%20Overview_25%20Mar%202014.pdf. See also Aviation and Missile Research Development Engineering Center (AMRDEC), "Multi-mission launcher preliminary design review successful," www.army.mil, 16 July 2015, accessed 31 August 2015, http://www.army.mil/article/152399/Multi_Mission_Launcher_Preliminary_Design_Review_successful?from=RSS.
32. Winston M. Marbella and Benjamin Quesada, "A Maneuver Air and Missile Defense Battery Adapts to Ground Combat in Iraq: Tropic Lightning Air Defenders Learn to Fight, Survive and Win in the Contemporary Operational Environment," *Air Defense Artillery* (April–June 2005): 32.
33. U.S. Army Capabilities Integration Center, *Force 2025 Maneuvers*, White Paper (23 January 2014), 2, accessed 17 July 2015, http://www.arcic.army.mil/app_Documents/USArmy_WhitePaper_Force-2025-Maneuvers_23JAN2014.pdf.
34. "Medium Tactical Vehicles," Oshkosh Defense LLC website, accessed 17 July 2015, <http://oshkoshdefense.com/products/medium-tactical-vehicles/>.
35. FM 3-90.6, *Brigade Combat Team*, 1-10; "Mine Resistant Ambush Protected (MRAP)," Oshkosh Defense LLC website, accessed 17 July 2015, <http://oshkoshdefense.com/products/mine-resistant-ambush-protected-mrap/>.
36. "Stryker Family of Vehicles," Program Executive Office Ground Combat Systems website, accessed 17 July 2015, <http://www.peogcs.army.mil/documents/FMS-Stryker.pdf>.
37. Robert W. Cone, "Shaping the Army of 2020," *Army*, October 2011, 72, accessed 17 July 2015, http://www.ansa.org/publications/armymagazine/archive/2011/10/documents/cone_1011.pdf.
38. Nick Simeone, "Hagel Outlines Budget Reducing Troop Strength, Force Structure," Department of Defense News website, 24 February 2014, accessed 17 July 2015, <http://www.defense.gov/news/newsarticle.aspx?id=121703>.
39. U.S. Army Capabilities Integration Center, *Army Vision—Force 2025*, White Paper (23 January 2014), 2, accessed 27 August 2015, http://www.arcic.army.mil/app_Documents/USArmy_WhitePaper_Army-Vision-Force-2025_23JAN2014.pdf.
40. Vergun, "Air, Missile Defense Effectiveness."

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(Associated Press photo)

A camera-equipped Phantom unmanned aerial vehicle (UAV) made by Chinese company Dajiang Innovations (DJI) hovers 10 January 2015 during a test in Shanghai, China. A DJI-manufactured UAV like the one shown crashed on the White House lawn 26 January 2015.

Countering the Unmanned Aircraft Systems Threat

Col. Matthew T. Tedesco, U.S. Army

A key lesson of history is that every war is different. Consequently, to benefit from the insights provided by history, prudent war planners must confront the probability of the unexpected by applying training, doctrine, and equipment aimed at anticipating and addressing a wide variety of future challenges. For example, militaries that are not examining ways to defend against the use of

unmanned aircraft systems (UASs) are not preparing adequately for the next war, or even the emergence of an already clear and present danger to their interests.

Unfortunately, the U.S. military has been among those slow to acknowledge the UAS threat and has only recently started to examine the basic requirements to address the challenges associated with UAS defense. Although the United States—fueled by

technological advances—was a leader in revolutionizing the offensive use of UASs to support land power during its campaigns in Iraq and Afghanistan, it now must show at least as much leadership by allocating resources to defend itself against the growing threat of UASs, or, at some point, the Nation will be unpleasantly and tragically surprised. This article will provide six recommendations for assuming such a leadership role by adopting a joint approach for implementing counter-UAS (C-UAS) operations.

Background and Context

Much of the contemporary attention on UASs in the media and from the public is focused on the commercialization of unmanned capabilities, the legality and impact on the laws of warfare stemming from the use of UASs against terrorists, and calls to stem the proliferation of this growing technological capability in general. Although these are all important discussions, missing from the discourse on UASs is the critical discussion of how to defend against a UAS attack or against a persistent enemy intelligence, surveillance, and reconnaissance threat from this technology.

While the United States has successfully employed UASs to support its strategic objectives basically unchallenged in both Iraq and Afghanistan for more than ten years, many nations and nonstate actors have been acquiring the ability to field their own UASs as a result of the proliferation of new technology in the field. This means many already have the ability to employ them against the United States and its allies. Consequently, the limited U.S. capability to neutralize UASs guided by sophisticated surveillance technology and equipped with weapons that are accurate at a distance—especially at the tactical and operational levels of warfare—is already a serious vulnerability that should be addressed in policy similar to that concerning UAS use in the offensive.¹

Improved technology associated with the application of UASs on the battlefield has already caused changes that will have a long-term impact on the future application of military power. For example, reputedly covert targeted strikes against terrorist targets are now relatively common practice. Such will continue to be the norm on future battlefields. However, the transition of UASs from covert action to more conventional applications by the United States

and its adversaries poses an important question: Are U.S. forces trained, equipped, and organized to successfully defend the Nation against UAS infiltrations and attacks? Currently the answer is no. Consequently, as a matter of prudent policy, it is imperative that the United States develop a credible capability to counter the use of UASs against its forces and its allies.²

Technological improvements support the growth and proliferation of a commercial market that desires to exploit the capabilities of UASs.³ According to the Teal Group's 2014 market study, "the overall UAV [unmanned aerial vehicle] electronics market is the world's fastest-growing aerospace payload market, with spending on UAVs to nearly double over the next decade from current worldwide UAV expenditures of \$6.4 billion annually to \$11.5 billion, totaling almost \$91 billion in the next ten years."⁴ Such investment will add to the existing four thousand different unmanned aircraft platforms in circulation in the global market and to the number of countries (already at seventy-six) known or suspected to have military UASs.⁵

Moreover, sources of demand for UASs are shifting. It is projected that at least one-quarter of that demand will come from outside the United States by 2023.⁶ This rapid global proliferation of UAS capabilities will have a direct impact on U.S. operational accessibility (the ability to project military force into an operational area with sufficient freedom of action to accomplish the mission) in future operations.⁷

Preparing for a Growing Threat

Current service and joint C-UAS capabilities cannot protect U.S. forces. As a result, the United States may have already lost much of its freedom of action to operate and maintain operational dominance over an adversary possessing an unexpectedly sophisticated UAS capability. This lack of C-UAS capabilities also means a greater likelihood for increased casualties and a lower probability for mission success. In other words, if proper steps are not taken to develop robust C-UAS capabilities, the president and Congress may find themselves in the not-too-distant future with significantly less flexibility in their options during a crisis, and thus they may feel unduly hesitant to use ground forces at critical times due to the higher level of risk. More limited options for using force will directly



(Photo courtesy of the U.S. Army)

The AN/MPQ-64 A3 Enhanced Sentinel Radar System is the only 360-degree coverage air defense radar in the Army's inventory. It features a 3-D X-band phased array antenna that provides an instrumented range of seventy-five kilometers.

impact U.S. power projection globally in support of U.S. interests and allies.

The lack of sufficient C-UASs also may have the secondary effect of limiting coalition participation in operations where an adversary fields a capable UAS threat. Levels of coalition involvement usually depend on the degree of importance of a particular mission to the vital interests of the coalition partner. Situations where there are minimal vital interests at stake for a coalition partner and greatly increased risk due to lack of C-UASs could potentially force the United States to spread thin its available resources by sharing what C-UAS capabilities it has, or to take unilateral actions. Fortunately, the nature of the UAS threat has already resonated with many U.S. allies, who are taking steps to improve their C-UAS capabilities. To ensure the cohesiveness of future coalitions, the United States must exercise leadership in developing C-UASs to stress the importance of such measures, as it did with the development of ballistic missile defense capabilities.

Army Has the Lead for C-UASs

The Army has the lead for C-UASs specifically associated with threats to land forces because of the significant impacts an unchecked UAS threat could have on it in the future. The employment of UASs provides a significant area-and-access denial capability,

operating in the seams between the employment of artillery and mortars and the use of fighter aircraft. Consequently, effective C-UASs limit the enemy's ability to impede fires, enabling a key component of the U.S. Army's operating concept, which states, "the ability to deliver fires [both offensive and defensive] to defeat the enemy and preserve freedom of maneuver and action across the range of military operations" is a required capability that the Army must possess to win in a complex world.⁸

Six Recommendations

Six recommendations for improving overall Department of Defense C-UAS capabilities follow.

The Department of Defense should designate a service or an organization as the proponent for all categories of C-UASs. The proliferation of UASs employable in various land, air, and sea domains requires a common direction and joint action to unite future C-UAS efforts and to improve effectiveness. The actions of individual services are important, but a unified joint approach, similar to those taken to address ballistic missile and cruise missile threats, is needed. Applicable to the C-UAS problem, former Chairman of the Joint Chiefs of Staff Gen. Martin E. Dempsey stressed the importance of cooperation among the U.S. armed forces, stating that "improved cooperation hinges on viewing military problems from a comprehensive cross-domain perspective rather than viewing them through an individual service lens."⁹

A joint solution is required to address the challenges of detection and identification in order to improve defeat mechanisms. A common definition of the threat, the establishment of a common threat database, and the establishment of a blue-force positive identification requirement will enhance identification and classification and will help reduce fratricide. In the case of UASs, everything is enemy—until proven friendly. Currently, multiple intelligence organizations are responsible for this mission, and they track fixed-wing and rotary-wing UASs separately. Establishing a common UAS database, with a single intelligence organization responsible for its operation, would provide a considerable advantage for the warfighter.

Timely detection is the critical requirement that leads to identification and classification. The joint force must take advantage of developing

technologies to enhance detection capabilities found in our fielded programs of record such as the AN/MPQ-64 Sentinel radar. Preliminary results from joint tests, as well as observations from exercises, support retired Air Force Col. David M. Neuenswander's conclusion that "effective C-UAS operations require the joint force to fuse air- and ground-based sensors in a real-time common operating picture, enabling the force to detect and engage threat UASs using lethal and nonlethal options."¹⁰

Other materiel solutions for improving detection capability are being examined. More sensors available for detection of the threat, as well as a greater variety of sensor capabilities provided by the joint force, increases overall situational awareness of the warfighter. Lessons learned from the Israeli C-UAS experience illustrate this point:

The UAVs pose several challenges..., one of the most important of which is the process of identification and classification. To deal with this problem, the IAF [Israeli Air Force] uses a larger number of detection and identification systems, both radar-guided and optical.¹¹

Services must modernize their air- and-missile defense capabilities and examine other materiel solutions to address the growing threat. The Department of Defense is taking a proactive approach with the military acquisition Milestone A decision to develop the Army's Indirect Fire Protection Capability (IFPC), Increment 2-Intercept (IFPC Inc 2-I) capability.¹² IFPC Inc-2I is a mobile ground-based weapon system, slated to replace the Avenger system. IFPC is designed to acquire, track, engage, and defeat multiple threats, to include UASs. It can provide 360-degree protection and will simultaneously engage threats arriving from different directions.¹³ Additionally, C-UAS defeat is not just achieved by options on the ground.

Traditional electronic warfare will play a role, along with kinetic alternatives such as proximity fragmented explosive devices carried by systems like Spike or United States Special Operations Command's Switchblade

micromissile. The unhardened nature of smaller UAVs makes the use of electromagnetic pulse tactics possible as well.¹⁴

Other technologies to examine that possibly apply to the C-UAS fight include Extended Area Protection and Survivability, a science and technology program applicable for C-UAS comprised of miniaturized hit-to-kill interceptor technology, high-energy lasers, and the use of defensive swarms.

Of course, an important issue for any future defeat technology will be the consideration of the cost, as analyst Paul Scharre explains:

It is not enough merely to find a way to destroy an enemy's drone; it must be done in a cost-effective manner. If taking out a \$1,000 enemy drone requires a \$1 million missile, then every drone shot down is a win for the enemy because it imposes tremendous costs on the defender.¹⁵



(Photo by 1st Lt. Lee-Ann Craig, 2nd Battalion, 44th Air Defense Artillery Regiment) Soldiers from Battery A, 2nd Battalion, 44th Air Defense Artillery Regiment, 101st Sustainment Brigade, 101st Airborne Division (Air Assault), load ammunition into a Land-Based Phalanx Weapon System 18 December 2013, Fort Sill, Oklahoma.

Expansion of force structure is also not a course of action that will be pursued in the current fiscal climate, so the emphasis on active measures across the Army and the services is important. Funding at the current level is sufficient to maintain a capability that can be modestly expanded somewhat if the threat grows modestly larger than anticipated. However, if the UAS threat to tactical formations continues to expand exponentially as current trends indicate, the Army must seriously examine bringing a basic capability to brigade combat team formations that will protect them, or otherwise it must accept the losses that will follow.

The services must reexamine joint tactics, techniques, and procedures (TTPs), and training required to defeat UAS capabilities. The emergence of the UAS threat has revealed that the Army does not have sufficient forces at all levels to combat it. Leveraging combined-arms air defense procedures, utilizing friendly armed UASs, and examining Army aviation's role in C-UAS can help to alleviate the problem of insufficient UAS defense assets currently faced by the Army. The examination of current techniques can help maximize the effectiveness of existing air and missile defense systems and improve current organizational capabilities to execute essential tasks.

This reexamination needs to lead to the development of a joint C-UAS concept, a joint C-UAS strategy, and an update of Joint Publication 3-01, *Countering Air and Missile Threats*, to address the evolving threat in greater detail.¹⁶

The development of TTPs to improve interoperability among the services supports the joint integration of mission command. Current cross-domain detection and combat-identification efforts are time consuming, and C-UAS is dynamic. The most likely individual to come into contact with a small-threat UAS in the future will be a soldier on the forward edge of the battlefield. How will he or she know the unknown UAS is a threat? Neuenswander emphasizes the importance of good interoperability across all levels to counter the UAS threat in his 2012 article "Wargaming the Enemy Unmanned Aircraft System Threat":

If the soldier can confirm the UAS is a threat, this is the first step in the UAS defense kill chain. However, [lack of] interoperability can become a great obstacle in the process. Soldiers at the squad level do not have access

to an air picture and no standard service or joint air defense request system currently exists. The development of a Joint Air Defense Request System that would correlate visual detections from ground units and enable follow on engagement is needed.¹⁷

Services must pursue a common command and control capability to exercise control of the complex C-UAS environment. The U.S. Army has taken positive step with its ongoing development of an Integrated Air and Missile Defense Battle Command System (IBCS). The IBCS provides users with a fused, composite air picture for greater situational understanding and awareness, automated battle management tools to aid in engagement decisions, and an integrated planning capability that assists in C-UAS defense design.¹⁸ The planned introduction of IBCS in 2018 will allow Army air and missile defense elements to receive friendly UAS locations from nearby ground stations and to pinpoint aerial position reports from self-reporting UASs. It will also provide the force with a highly accurate and correlated common tactical air picture.

The joint force needs to expand its exercises to address evolving threats. The joint force must refine its doctrine to address engagement authority demonstrated by C-UAS scenarios and match emerging technological developments. It must continue to evaluate its doctrine and TTPs, using exercises that include C-UAS scenarios to practice and refine the application of TTPs.

A proactive approach to address the emerging UAS threat supports the vision of Secretary of Defense Ashton Carter, who said, "the Pentagon must always have a watchful eye on the horizon, anticipating needs and gaps in capabilities before they become dire."¹⁹ As the chief of staff of the Army also outlined in the Army Operating Concept,

One of our most important duties as Army professionals is to think clearly about the problem of future armed conflict. That is because our vision of the future must drive change to ensure that Army forces are prepared to prevent conflict, shape the security environment, and win wars.²⁰

By taking the proactive steps outlined above with regard to C-UASs, the Army and the joint force will be better prepared to prevail against a serious, imminent threat. ■

Col. Matthew T. Tedesco, U.S. Army, is the TRADOC Capabilities Manager (TCM) Global Ballistic Missile Defense at Redstone Arsenal, Alabama. He holds a BA in History from Pennsylvania State University, an MA in Public Administration from the University of Oklahoma, and a Masters in Strategic Studies from the U.S. Army War College. During his twenty-four year career he has commanded at battery- and battalion-level, and previously served as the TRADOC Capabilities Manager (TCM) Air Defense Artillery Brigade at Fort Sill, Oklahoma.

Notes

1. John P. Abizaid and Rosa Brooks, *Recommendations and Report of the Task Force on US Drone Policy* (Washington, DC: The Stimson Center, 2014), accessed 29 September 2015, http://www.stimson.org/images/uploads/research-pdfs/task_force_report_FINAL_WEB_062414.pdf.
2. Robert O. Work and Shawn Brimley, *20YY: Preparing for War in the Robotic Age* (Washington DC: Center for a New American Security, January 2014), 7, accessed 29 September 2015, <http://www.cnas.org/20YY-Preparing-War-in-Robotic-Age>.
3. Yasmin Tadjeh, "Small UAV Demand by U.S. Army Ebbs as Overseas Market Surging," *National Defense Magazine* website, September 2013, accessed 29 September 2015, <http://www.nationaldefensemagazine.org/archive/2013/September/Pages/SmallUAVDemandByUSArmyEbbsasOverseasMarketSurging.aspx>.
4. Teal Group, "Teal Group Predicts Worldwide UAV Market Will Total \$91 Billion in Its 2014 UAV Market Profile and Forecast," Teal Group Corporation website, 17 July 2015, accessed 29 September 2015, <http://www.tealgroup.com/index.php/about-teal-group-corporation/press-releases/118-2014-uav-press-release>.
5. Ulrike Franke, "Drone Proliferation: A Cause for Concern?" ISN [International Relations and Security Network] ETH Zurich website, 13 November 2014, accessed 29 September 2015, <http://www.isn.ethz.ch/Digital-Library/Articles/Detail/?id=185404>.
6. Dan Parsons, "Worldwide, Drones Are in High Demand" National Defense Industrial Association website, May 2013, 30–33, accessed 14 August 2015, <http://www.nationaldefensemagazine.org/archive/2013/May/Pages/Worldwide,DronesAreinHighDemand.aspx>.
7. Department of Defense, *Joint Operational Access Concept (JOAC)*, Department of Defense website, 17 January 2012, 10, accessed 29 September 2015, http://www.dtic.mil/doctrine/concepts/joint_concepts.htm.
8. U.S. Army Training and Doctrine Command (TRADOC) Pamphlet (TP) 525-3-1, *The U.S. Army Operating Concept: Win in a Complex World* (Fort Eustis, VA: TRADOC, 7 October 2014), 33.
9. Martin E. Dempsey, "The Future of Joint Operations: Real Cooperation for Real Threats," *Foreign Affairs* (20 June 2013), accessed 17 August 2015, www.foreignaffairs.com/articles/139524/martin-e-dempsey/the-future-of-joint-operations.
10. David M. Neuenswander, "Wargaming the Enemy Unmanned Aircraft System Threat," *Fires* (November-December 2012): 63, accessed on 17 August 2015, http://sill-www.army.mil/firesbulletin/2012/nov_dec/Nov-Dec.pdf.
11. Nadav Berger, "The UAV threat is growing," Israeli Air Force website, 12 September 2014, accessed 2 January 2015, <http://www.iaf.org.il/4415-43568-EN/IAF.aspx>.
12. See "Acquisition Process: Milestone A," AcqNotes website, accessed 2 September 2015, <http://acqnotes.com/acqnote/acquisitions/milestone-a>. "Milestone A is a Milestone Decision Authority (MDA)-led review at the end of the Materiel Solutions Analysis (MSA) Phase. Its purpose is to make a recommendation or seek approval to enter the Technology Maturation & Risk Reduction (TMRR) Phase. A milestone marks the start or finish of a phase and has defined entrance and exit criteria."
13. Program Executive Office [PEO] Missiles and Space, "Indirect Fire Protection Capability, Increment 2–Intercept (IFPC Inc-2-I)," PEO Missiles and Space, Army.mil website, accessed 29 September 2015, <http://www.msl.army.mil/Pages/CMDS/ifpc2.html>.
14. Eric Tegler, "Duck hunt: U.S. military plans defenses against growing UAV threat," *Aviation Week & Space Technology*, 12 May 2014, 28.
15. Paul Scharre, "Robotics on the Battlefield Part II: The Coming Swarm," Center for A New American Security website, 15 October 2014, 42, accessed on 17 August 2015, <http://www.cnas.org/the-coming-swarm>.
16. Joint Publication 3-01, *Countering Air and Missile Threats* (Washington, DC: U.S. Government Printing Office [GPO], 23 March 2012).
17. Neuenswander, "Wargaming the Enemy Unmanned Aircraft System Threat," 9-10.
18. Northrop Grumman, "Integrated Air and Missile Defense Battle Command System (IBCS)," Northrup Grumman website, accessed 17 August 2015, <http://www.northropgrumman.com/capabilities/ibcs/Pages/default.aspx>.
19. Ashton B. Carter, "Running the Pentagon Right: How to Get the Troops What They Need," *Foreign Affairs* (January-February 2014), accessed 17 August 2015, <https://www.foreignaffairs.com/articles/united-states/2013-12-06/running-pentagon-right>.
20. TP 525-3-1, *The U.S. Army Operating Concept*, iii.



Drones, Honor, and War

Cora Sol Goldstein, PhD

Drones have become a symbol of the new American approach to warfare. Yet, the American use of weaponized drones has elicited vocal and persistent criticism both at home and abroad. While majorities in the United States and Israel continue to approve the use of drone strikes, the Pew Research Center polls from 2014 indicate that majorities or pluralities in thirty-nine of forty-four countries surveyed have misgivings about U.S. drone strikes. The strongest disapproval is registered in Venezuela (92 percent), Jordan (90 percent), Greece (89 percent), Nicaragua (88 percent), Egypt (87 percent), Argentina (87 percent), Brazil (87 percent), Colombia (86 percent), Senegal (86 percent), Spain (86 percent), the Palestinian territories (84 percent), Turkey (83 percent), and Japan (82 percent). In France, 72 percent disapprove of drone strikes, and in Germany, 67 percent disapprove.¹

It is not that drones have allowed the killing of more people than prior technology did, but rather that they have made possible targeted killing conducted remotely—eliminating risk for the attacker but bringing up a host of new questions about war, morality, and killing. The national and international press coverage of U.S. drone strikes emphasizes not only the efficiency of

drones but also the dangers associated with their use. The United States is often characterized, much as it was during the Cold War, as an all-powerful and arrogant nation that exploits its technological supremacy without concern for human rights or human life. The morality of American foreign policy is being put into question. The drone is often taken to represent everything that is wrong with the recent American wars, and maybe with American culture.

A growing body of literature on the robotic revolution in warfare focuses on the tactical successes of drones as military weapons and on their potential strategic problems. In this article, however, I am interested not in discussing the military capabilities of drones, but rather in examining the perception of drones in critical discourse. My contention is that there is an assumption, often explicitly voiced, that by using drones, the United States is in fact fighting in a cowardly fashion.

In general terms, violence in war is deemed acceptable, and even honorable, when personal confrontation is involved, and when opposing forces are assumed to share equivalent risks. There is a discrepancy between contemporary technological warfare, exemplified by



(Photo courtesy of the U.S. Air Force)

An MQ-9 Reaper takes off March 2009 at Balad Air Base, Iraq.

the use of armed drones, and the classical conception of honor and courage in war. In this context, both academic literature and popular media tend to portray the drone as a symbol of America's cultural disintegration. What emerges in the antidrone discourse is a critique of modernity, and a melancholic longing for imagined traditions of bravery and honor.

A Weapon of Cowards?

In *The Thistle and the Drone*, Akbar Ahmed, chair of Islamic studies at American University, and a former senior fellow with the Project on U.S. Relations with the Islamic World at the Brookings Institution, suggests that the drone is far more than "the twenty-first century's most advanced kill technology."² He sees weaponized drones as the symbol of the cultural clash between the United States and the tribal Muslim societies in the "periphery." According to Ahmed, who studied the Pashtuns, Yemenis, Somalis, and Kurds, the use of drones represents America's new reliance on a martial ethos that is no longer about traditional military values. The American use of drones, Ahmed claims, shows that the United States does not abide by the same rules of honor as ancient cultures. Instead, it embraces a modern philosophy that is alien to the people it attacks. Therefore, Ahmed explains, Muslim tribesmen see drone warfare as "dishonorable" and "blasphemous."³

Tribal societies, Ahmed contends, are deeply rooted in tradition, making sense of the present through their

understanding of shared experience. Men in these societies, Ahmed contends, live by an ancient code of honor passed on through generations by the actions and oral narratives of a community's elders. The tribal lineage system is characterized by its martial tradition, and the ancient code of honor and revenge. The claim is that the essence of tribal societies is a tapestry of courage and pride, and a sense of egalitarianism, and that these features have remained remarkably unchanged through time.

In the novella *Hadji Murad*, Leo Tolstoy writes about the strength of a Muslim tribal leader facing imperial Russia, and a century later Ahmed detects the same fortitude in the tribal societies he studies. Ahmed argues that, coming from this stable tradition, tribesmen do not respect the new ways in which Americans fight. The drone comes to represent American power, overwhelming and, by definition of its very modernity, unfair, unjust, and unnatural. Honor is equated with the traditional, while dishonor with the modern. It is not only ideology that defines what is or is not honorable but also the techniques or modes of warfare.

Ahmed remarks that Americans *can* fight bravely, and they have proven to be brave, in past battles. There is a sense of nostalgia in this argument. Ahmed turns to World War II to pinpoint a historical moment that he claims showcases American bravery in combat. In the past, he argues, the American soldier could win battles through hand-to-hand fighting that



(U.S. Air Force photo by Master Sgt. Steve Horton)

Photo: Capt. Richard Koll, left, and Airman 1st Class Mike Eulo, both from the 46th Expeditionary Reconnaissance Squadron, perform function checks after launching an MQ-1 Predator unmanned aerial vehicle 7 August 2007 at Balad Air Base, Iraq. Capt. Koll, the pilot, and Airman Eulo, the sensor operator, handle the Predator in a radius of approximately twenty-five miles around the base before handing it off to personnel stationed in the United States to continue its mission.

Inset top left: A MQ-9 Reaper unmanned aerial vehicle prepares to land after a mission in support of Operation Enduring Freedom in Afghanistan.

(U.S. Air Force photo by Sgt. Brian Ferguson)

Inset middle: MQ-9 Reaper firing a Hellfire missile.

(Photo illustration courtesy of the U.S. Air Force)

Inset bottom right: A view of the drone's targeting screen.

(Photo courtesy of the U.S. Air Force)

exposed soldiers to tremendous risk. This, according to Ahmed, was honorable:

... for anyone who doubts the tenacity, ferocity, courage, and moral purpose of Americans at war, they need to look at them in action in the last century, at Iwo Jima, for example, and in landing on the beachhead at Normandy—where ground was won through hand-to-hand, inch-by-inch fighting, with enormous casualties.... To lead the allies to victory, the Americans had to show resolve and honor.⁴

American participation in World War II is reified, and the American soldier of the present is imagined as a mere shadow of the brave combatant of the American past. The drone epitomizes, in this narrative, a

challenge to American martial traditions of honor, bravery, and sacrifice.

Drones certainly change the dynamics of warfare. Drone operators are not offering their life for the defense of their country or its ideology. Are drones, therefore, the weapons of cowards? Diverse voices seem to imply this.

Mobashar Jawed Akbar, founding editor of the *Asian Age* and a former senior fellow with the Project on U.S. Relations with the Islamic World at the Brookings Institution, argues that the American use of drones will be interpreted as an act of cowardice, not strength: “It will be seen as American cowardice. In war terms, if you are not willing to sacrifice blood, you are essentially a coward.”⁵ Counterinsurgency

expert David Kilcullen, who served as adviser to Army Gen. David Petraeus, contends that “using robots from the air ... looks both cowardly and weak.”⁶ George Monbiot, who writes for *The Guardian*, claims that “with its deadly drones, the United States is fighting a coward’s war.”⁷ Deputy Assistant Secretary of Defense for Middle East Policy Dr. Andrew Exum, a former U.S. Army officer who advised Army Gen. Stanley McChrystal in Afghanistan, explains: “There’s something about pilotless drones that doesn’t strike me as an honorable way of warfare.”⁸

The allegation seems to be that a weapon that eliminates the possibility of personal risk for the perpetrator is, by definition, dishonorable. Marine Sgt. Matt Walje, writing on ethics and war, argues that “drone strikes are a kind of ambush kill, an ambush where the killer is invulnerable,” adding that “the manner in which drone strikes are carried out has a dishonorable feel, encouraging the dehumanization of the enemy, and in this way, assisting the operators and their leadership in assuaging the blood guilt that follows a kill.”⁹ Foreign policy journalist Glenn Greenwald agrees:

Whatever one thinks of the justifiability of drone attacks, ... [attacking by drone is] one of the least ‘brave’ or courageous modes of warfare ever invented. It’s one thing to call it just, but to pretend it’s ‘brave’ is Orwellian in the extreme. Indeed, the whole point of it is to allow large numbers of human beings to be killed without the slightest physical risk to those doing the killing. Killing while sheltering yourself from all risk is the definitional opposite of bravery.¹⁰

Ed Kinane, an antidrone activist in New York, argues that aerial warfare is cowardly in general, and that drones “raise cowardice to new heights.”¹¹ Rev. Kenneth Tanner, an antidrone activist from Michigan, claims that drone violence is particularly dishonorable:

There’s something dishonorable about killing without the risk associated with the act If you must kill to defend against killers ... I believe the only honorable way to do it is to risk your own death or the death of those you love in the effort.¹²

Does killing without risk violate the warrior code of honor and bravery?

Armed drones, however effective they may be militarily, are taken by critics to reflect the frailty of the culture that uses them. The machines are the weapons of the weak, in this narrative, protecting the fearful from sacrifice and danger. If the drone symbolizes the safe, uncommitted, and even cowardly modern approach to warfare, the “traditional” emerges as the risky, committed, and brave. German journalist Dirk Kurbjuweit expresses this sentiment clearly:

A suicide bomber needs to be 100 percent willing to sacrifice his life. With a drone pilot, on the other hand, the risk of pilot death drops to zero percent. ... It’s a war between those who are willing to sacrifice everything and those who are unwilling to give up anything—a war of sacrifice versus convenience, bodies versus technology and risk versus safety.¹³

The claim is that the U.S. military is hiding behind its technological superiority because American society is not actually able to fight a war that necessitates commitment, sacrifice, and risk. The predator can never be the prey, and this shows feebleness, rather than strength. The drone, therefore, is supposed to represent the trepidation to face death in battle, and an attempt to bypass an ancient martial ethos.

There is also the suggestion that the post-9/11 wars have created a generation of “cubicle warriors” that are not as courageous as the soldiers of the past, or as the soldiers against whom they fight. Drones, the idea is, have turned our fighters into office workers immersed in the drudgery of the mundane.¹⁴ Instead of showing their military strength physically, instead of risking and sometimes sacrificing their bodies, and instead of committing completely to war, drone pilots are removed from harm’s way. This situation is diametrically opposed to the romantic notion of war as a battle of the brawn, where hand-to-hand combat, bravery, and high risk prove physical strength and superiority.¹⁵ The place for romantic notions of masculine heroism dissipates. Drones are a mode of killing that cannot threaten the body of the perpetrator. This position of tremendous power can be conceptualized as a weakness.

An alternative to the “cubicle warrior” image has also emerged in the antidrone discourse, and that is the drone pilot as a “gamer.” Controlling a drone is likened to playing a video game. The idea is that the drone

operator, removed from both risk and fear, and sitting at a computer's controls surrounded by joysticks and buttons, is disconnected from the scene of battle and its concomitant dangers. War is allegedly transformed in the imagination of the cyber warriors into a virtual landscape, removed from the brutal reality of death, and its moral implications. According to Walje, "Killing through a computer screen sterilizes and dehumanizes the act, and seems to create a cavalier attitude toward their [drones'] use by both their operators and senior leadership in the U.S. government."¹⁶

The video game quality allegedly makes violence easy for the perpetrators, who become desensitized to it, and who can imagine they are playing in a death-delivering video game. In his 2010 "Study on Targeted Killings," Philip Alston, then United Nations special representative on extrajudicial executions, made the parallel between operating a drone and playing a video game. He wrote, "Because operators are based thousands of miles away from the battlefield, and undertake operations entirely through computer screens and remote audio-feed, there is a risk of developing a 'PlayStation' mentality to killing."¹⁷ In this scenario, drone warfare is the worst form of violence, the encouragement of aggressiveness robbed of *gravitas* and sacrifice.

In this context, the debate concerning a service medal for drone pilots is interesting. In 2012, the Pentagon decided to create the Distinguished Warfare Medal specifically for drone pilots. The war medal reflected the changing nature of war in the twenty-first century, then Secretary of Defense Leon Panetta explained. In fact, the proposed medal ranked above the Purple Heart and other decorations earned in direct combat. Yet, the opposition to the medal was strong. A petition on the website Change.org opposing the medal quickly gathered thirty thousand signatures. One of America's largest veterans groups, the Veterans of Foreign Wars, vocally and publicly opposed the medal, as did others such as the American Legion and VoteVets.org. In 2013, a bipartisan group of twenty-two U.S. senators pressed the Pentagon to reconsider the medal. In a letter to new Secretary of Defense Chuck Hagel, they wrote,

We believe that medals earned in combat, or in dangerous conditions, should maintain their precedence above noncombat awards. Placing the Distinguished Warfare Medal above the

Bronze Star and Purple Heart diminishes the significance of awards earned by risking one's life in direct combat or through acts of heroism.¹⁸

Forty-eight members of the House of Representatives also wrote Hagel, questioning the new medal. The main point voiced was that drones may be important to modern American warfare, but controlling them does not involve gallantry, risk, or valor—the conditions that make a great warrior. This shows there is political ambivalence towards the figure of the drone operator as warrior. Hagel canceled the medal soon after replacing Panetta.¹⁹

Good Kill?

Good Kill, the first Hollywood feature film about a drone pilot, was released in the United States in May 2015.²⁰ Unlike *American Sniper*, which came out six months prior, the film has not become a blockbuster hit or received extensive media coverage.²¹ Nonetheless, Andrew Niccol's *Good Kill* is an interesting film from a political perspective because it brings to life many of the tropes that circulate in the academic literature and in the press concerning drones. Many reviews of *Good Kill* discuss drones as a symbol of our cultural decay. Anthony Lane, writing in *The New Yorker*, claims that the drone is "almost too convenient an emblem of alienation."²² Stephen Holden writes in the *New York Times* that the "movie makes a persuasive case that our blind infatuation with all-powerful technology is stripping us of our humanity." He claims that *Good Kill* is "a contemporary horror movie about humans seduced and hypnotized by machines into surrendering their souls."²³ Ethan Hawke, who stars as Maj. Thomas Egan, believes that the drone symbolizes a larger drama we all face: "It's not a huge jump from what's happening to these pilots to what's happening to all of us," he said. "More and more of our intimacy, what used to feel real and tangible, is now automated, [and] is now from a distance. We're avoiding ... [things that were] difficult, war being one of them."²⁴ The idea is clear. Drone technology strips us of our humanity, increases and displays our alienation, and destroys our ethical center.

The movie, said to be based on actual events, follows Egan, an experienced F-16 fighter pilot who has served six combat tours but is now stationed in Las Vegas as a drone pilot. Therefore, the film does not take place in Pakistan or Afghanistan, but rather in a bunker, a suburban

home, and the highways and casinos of Las Vegas. Yet, like many contemporary films about the post-9/11 wars, the movie is a study of alienation and anger.

Within the first five minutes of the film, the audience sees that drones can monitor, and on occasion kill, civilians. On repeated occasions, in fact, the drone crew is ordered to deploy weapons that will kill both known targets and noncombatants. Even children playing in nearby areas. Even people attending burials. Even whole families, in the middle of the night, while they sleep. This is shocking to witness, because in American war movies, American soldiers are rarely seen killing unarmed civilians.²⁵ In *Good Kill*, the viewer observes civilians being killed, but the victims do not see the threat coming, and the perpetrator is immune from attack. The asymmetric relation between the victim and victimizer is highlighted.

Egan is, clearly, increasingly tormented by his role. It is not so much *the killing* that disturbs him as it is *the method* of killing. Talking to the teenage cashier of a liquor store, he says, “I blew away six Taliban, in Pakistan, just today. Now I’m going home to a barbecue.”²⁶ He internalizes his anger and withdraws from his wife, who remarks that he always seems “miles away.” In a heated discussion with her, Egan reflects on this: “I am a pilot, and I’m not flying. I don’t know what it is that I am doing, but it’s not flying.” While flying is deemed honorable, operating a drone is imagined as cowardly. In the city of replicas that only mirror the originals, Egan is imagined as fake pilot “flying” only in name.

Egan is not a pacifist, and it is not war in general, nor the post 9/11 wars, that he opposes. In fact, he desperately misses flying and repeatedly begs for the chance to return to a war zone. In a dream sequence, images of fighter planes are romanticized much as they are in the film *Top Gun*.²⁷ Flying is conceived as exciting, fun, and dangerous. Exhilarated with his memories of flying, and all

of a sudden energetic, Egan reminisces: “I miss the fear. You are up in the sky; something can happen. There’s risk.” He craves the adrenaline rush and the danger, and he feels none of this while controlling a drone: “I feel like a coward every day, taking pot shots from half the world away in an air conditioned cubicle. Worst thing that could happen to me is carpal tunnel, or spilling coffee on my lap. Most dangerous thing I do is drive home on the freeway.”

Conclusion

The use of weaponized drones has elicited national and international criticism. There is concern about the morality of drone-mediated killings, and critics denounce as excessive the collateral damage associated with the use of drones. Some pundits claim that the Obama administration is in fact abusing its power. There is a fear of surveillance and of creating and allowing a technology that can watch and kill remotely, both abroad and, eventually, in the United States itself. The American Civil Liberties Union, for instance, has litigated numerous lawsuits on the American use of drones, and it lobbies for increasing the accountability and transparency of the drone program. The specter of technology overpowering the human can be terrifying, and it precipitates questions about morality, war, and killing.

Is drone warfare intrinsically morally apprehensible? No, because it minimizes risk for the attacker and



(Photo by Mohammad Hussain, Associated Press)

American citizens hold a banner during a peace march organized by the party of Pakistan's cricket star turned politician Imran Khan (not pictured) in Tank, Pakistan, 7 October 2012. The Pakistani military blocked a convoy carrying thousands of Pakistanis and a small contingent of U.S. anti-war activists from entering a lawless tribal region along the border with Afghanistan to protest U.S. drone strikes.

reduces collateral damage. Yet drones often are *perceived* as particularly problematic. As suggested in this article, there is a narrative about the drone as a symbol of weakness. It is not that there is a concerted and uniform discourse advancing this proposition, but rather that disparate voices touch upon common

themes in their critique of drones. The allegation seems to be that drone operators are not really warriors, and that drones are not a courageous form of battle. The United States emerges as a representation of modernity, ruthless and simultaneously weak. The perception of the drone embodies this caricature. ■

Dr. Cora Sol Goldstein is a professor of Political Science at California State University, Long Beach. She received her PhD from the University of Chicago in 2002. Her book Capturing the German Eye: American Visual Propaganda in Occupied Germany (Chicago: University of Chicago Press, 2009) focuses on the U.S. experience in postwar Germany. She has published in Diplomatic History, German Politics and Society, Intelligence and National Security, Parameters, Internationale Politik, and Military Review.

Notes

1. Pew Research Center, "Global Opposition to U.S. Surveillance and Drones, but Limited Harm to America's Image," Pew Research Center Global Attitudes & Trends website, 14 July 2014, accessed 1 September 2015, <http://www.pewglobal.org/2014/07/14/global-opposition-to-u-s-surveillance-and-drones-but-limited-harm-to-americas-image/>.

2. Akbar Ahmed, *The Thistle and the Drone: How America's War on Terror Became a Global War on Tribal Islam*, (Washington, DC: Brookings Institute Press, 2013), 1.

3. *Ibid.*, 2.

4. *Ibid.*, 326.

5. Mobashar Jawed Akbar, quoted in P.W. Singer, *Wired for War: The Robotics Revolution and Conflict in the 21st Century* (New York: Penguin Press, 2009), 312.

6. David Kilcullen, quoted in Doyle McManus, "U.S. Drone Attacks in Pakistan 'Backfiring,' Congress Told," *Los Angeles Times*, 3 May 2009.

7. George Monbiot, "With Its Deadly Drones the U.S. Is Fighting a Coward's War," *The Guardian*, 30 January 2012.

8. Andrew Exum, quoted in Jane Mayer, "The Predator War: What are the risks of the C.I.A.'s covert drone program?" *New Yorker*, 26 October 2009.

9. Matt Walje, "Drone Warfare and Jus ad Bellum: Mala Prohibita under Right Intention," *The Polemist's Ethos* weblog, accessed 1 September 2015, <http://thepolemistsethos.wordpress.com/2012/09/27/hello-world/>.

10. Glenn Greenwald, "Bravery and Drone Pilots: The Pentagon Considers Awarding War Medals to Those who Operate America's Death-delivering Video Games," *Salon* website, 10 July 2012, accessed 30 July 2015, http://www.salon.com/2012/07/10/bravery_and_drone_pilots/.

11. Ed Kinane, "Drones and Dishonor in Central New York," *Dissident Voice* website, 25 September 2009, accessed 30 July 2015, <http://dissidentvoice.org/2009/09/drones-and-dishonor-in-central-new-york/>.

12. Kenneth Tanner, "Rand Paul, Drones, and Honor," *Sojourners* website, 8 March 2013, accessed 1 September 2015, <http://sojo.net/blogs/2013/03/08/rand-paul-drones-and-honor>.

13. Dirk Kurbjuweit, "Fear the Reaper: 'Humane' Drones Are the Most Brutal Weapons of All," *Der Spiegel*, 9 August 2012.

14. The term "cubicle warrior" was used by P.W. Singer in *Wired for*

War (New York: Penguin, 2009), and developed by other authors.

15. Historically, war has served as a framework to shape the social construction of masculinity. See Barbara Ehrenreich, *Blood Rites: Origins and History of the Passions of War* (New York: Holt), 1998. For a study of drones and the issue of gender, see Mary Manjikian, "Becoming Unmanned: The Gendering of Lethal Autonomous Warfare," *International Feminist Journal of Politics*, 16(1) (2014): 48–65.

16. Walje, "Drone Warfare and Jus ad Bellum."

17. Philip Alston, *Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions, Addendum: Study on Targeted Killings*, U.N. Human Rights Council, 28 May 2010, 25.

18. "Manchin, Rockefeller Bipartisan Group Protect Rank of Purple Heart, Bronze Star," Joe Manchin website, 8 March 2013, accessed 29 July 2015, <http://www.manchin.senate.gov/public/index.cfm/2013/3/manchin-rockefeller-bipartisan-group-protect-rank-of-purple-heart-bronze-star>.

19. The debate about the award was extensively covered in the media. See, for instance, Ernesto Londono, "Pentagon Cancels Divisive Distinguished Warfare Medal for Cyber Ops, Drone Strikes," *Washington Post*, 15 April 2013.

20. Andrew Niccol, *Good Kill* (Voltage Pictures, Dune Films, and Sobini Films, 2015).

21. Clint Eastwood, *American Sniper* (Village Roadshow Pictures, Mad Chance Productions, 22nd & Indiana Pictures, and Malpasio Productions, 2014).

22. Anthony Lane, "Distant Emotions," *New Yorker*, 18 May 2015.

23. Scott Shane, "Drone Strikes Reveal Uncomfortable Truth," *New York Times* (23 April 2015).

24. Ethan Hawke, quoted in Stephanie Merrie, "Ethan Hawke on 'Good Kill' and the Difficulty of Getting Good Dramas Made," *Washington Post* (21 May 2015).

25. Cora Sol Goldstein, "Good Kill? U.S. Soldiers and the Killing of Civilians in American Film," in *Disappearing War*, Christina Hellmich and Lisa Purse, eds., (Edinburgh University Press, forthcoming 2015).

26. All dialogue quoted is from *Good Kill*.

27. Don Simpson and Jerry Bruckheimer, *Top Gun* (Simpson/Bruckheimer, 1986).



(U.S. Air Force photo by Tech. Sgt. Erik Gudmundson)

The sun sets behind a C-17 Globemaster III 17 November 2008 at Joint Base Balad, Iraq, as soldiers begin boarding. C-17 aircraft can carry payloads up to 169,000 pounds and can land on small airfields. The C-17 in the photo was deployed from the 437th Airlift Wing at Charleston Air Force Base, South Carolina.

Air Force Leaders Take Note The Army is Changing

Lt. Col. Jason Earley, U.S. Air Force

The United States Army is changing. Visibly, the physical size of the force is reducing dramatically. Doctrinally, new manuals are both addressing a hybrid threat via unified land operations and reshaping leadership focus through mission command. Understanding these changes is critical for the next generation of Air Force decision makers. The Air

Force must focus leadership decisions to match each of these changes through procurement, doctrine, and teamwork in order to leverage lessons learned and to codify relationships forged during thirteen years of shoulder-to-shoulder combat operations. The interaction between Gen. Omar Bradley and Gen. Elwood “Pete” Quesada in World War II provides an excellent



(Photo courtesy of the National Archives and Records Administration)

Gen. Dwight D. Eisenhower (right) talks with Lt. Gen. Omar Bradley (center, First Army) and Maj. Gen. Pete Quesada (9th Air Force) about the heavy bomber attack that preceded Operation Cobra, a coordinated attack to break through German lines conducted 25–31 July 1944, seven weeks after the combined allied invasion of Normandy, France.

example of how cooperation and mutual understanding benefit the land and air arms of the United States military. The two generals realized operating in a vacuum, independent of one another, would not work. Their cooperation was in the best interest of both parties, and it produced success. The stakes are high, and America's military stands at a crossroads. The Army and Air Force rely on each other to be effective. Understanding is the first step in building an effective joint team.

Mutual Respect— Shared Understanding

The mutual respect between mid-level Army and Air Force officers is at a pinnacle. Air Force field grade officers at the Army's Command and General Staff College (CGSC) are surrounded by Army peers who have served multiple twelve- or fifteen-month deployments in Iraq and Afghanistan. Interviews with these airmen suggest a tremendous respect for soldiers who have sacrificed and served with diligence. Nearly every Army field grade officer lost a friend, a subordinate, or a mentor. Their families endured years of worry and absence while they defended the Nation. Army officers usually attend CGSC after commanding at the

company level. They were captains in charge of organizations with more personnel than many Air Force squadrons. Many managed fourteen M-1 tanks or M-2 Bradley Fighting Vehicles, or a hodge-podge fleet of vehicles resistant to improvised explosive devices. Some were in charge of entire combat outposts. They directed soldiers to conduct combat patrols and then held memorials when some did not make it back. They are experienced, and their experiences command respect.

This feeling of respect earned by Army officers is not one-sided. Army officers know the Air Force has done its part. Many of them tell war stories that capture life-saving actions by airmen. Statements like, "I love my joint terminal attack controller;" "when I heard the jets, I knew we'd be safe;" and "the Air Force saved us" are commonplace. Soldiers are thankful for ten-minute troops-in-contact close air support (CAS) response times. They appreciate low-altitude shows of force that drive off the enemy. They know airmen gave their lives, or were willing to give their lives, while trying to get ordnance on target. They also sense a strong dedication by airmen who strive to provide skilled, agile combat support. Young Army field grade officers trust the Air Force.

This feeling of mutual respect and trust produces dividends. For example, Army and Air Force field grade officers seem to have an uncommon recognition of the each other's joint spending needs. Army officers jest about the F-35's long procurement process. Nevertheless, they want the Air Force to have this premium fighter; they want to maintain the nation's one-sided airpower advantage. They are open-minded about other spending projects, like the purchase of a new aerial refueling tanker. After receiving an explanation of why the new tanker is necessary, most Army field grade officers clearly understand and support the need. Air Force officers display similar tendencies.

Recent budget cuts are forcing the Army to change the way it trains. Air Force field grade officers recognize that actions such as restricting the training use of combat vehicles, limiting training ammunition, and reducing the number of soldiers who attend important schools significantly affect combat capability. The Army and Air Force want each other to be highly proficient. The trust and respect earned over the last thirteen years opens the door to compromise. Compromise often leads to the best solution.

Historical Precedence— Generals Bradley and Quesada

The air and land components have compromised before. During World War II, Gen. Bradley commanded First Army. His Army Air Corps counterpart and the commander of IX Tactical Air Command was Gen. Quesada.¹ Thomas Hughes, author of *Overlord: General Pete Quesada and the Triumph of Tactical Air Power in World War II*, summarizes their relationship: “The two had a common zeal to win the war and to ignore the bitter history of air-ground animosity.”²

Bradley and Quesada helped enable the effective innovation of CAS during World War II. At the outset of the war, the United States did not have the capability to conduct efficient CAS. During the interwar period, political maneuvering and a focus on strategic bombers took the Army Air Corps in a direction away from CAS. Dr. Richard Muller, professor of airpower history at the U.S. Air Force School of Advanced Air and Space Studies, states, “The strides made in aircraft technology during the 1930s virtually expunged close air support from the Air Corps’ roster of capabilities.”³ Gen. Henry “Hap” Arnold believed CAS should not be the Air Corps’ focus. He felt even the name—close air *support*—indicated the Air Corps was subsidiary to ground forces. Arnold placed CAS sixth on his prioritized list of air tasks.⁴

Quesada and Bradley overcame these hurdles. By the end of World War II, CAS operations became a key element in the defeat of Axis forces. An example from D-Day helps demonstrate this claim and shows the fruit of the cooperation between Bradley and Quesada. Close air support, or tactical aviation, was a key enabler of the breakout from the beaches of Normandy. Specifically, CAS helped link the two American footholds at the Utah and Omaha Beaches.⁵ The town of Carentan, located thirty miles inland, quickly became a key piece of terrain. Controlling Carentan would bridge the two American beachheads and avoid a potentially nightmarish fight in regions flooded by the German defenders.⁶ Securing Carentan became the task of the 101st Airborne Division. Unfortunately, the lightly equipped 101st faced Germans equipped with much heavier weaponry.⁷ Tactical airpower provided the 101st the firepower it needed. Planes from Quesada’s command spotted a two-division-sized group of Germans known as *Kampfgruppe* Heinz. P-51 and P-47 aircraft brought these German reinforcements to a near standstill.⁸ Even Field Marshall Erwin Rommel recognized

the impact of U.S. tactical air support. In a letter to his wife, he lamented, “The enemy’s air superiority has a very grave effect on our movements. There’s simply no answer to it.”⁹ *Kampfgruppe* Heinz eventually limped into Carentan, but most of the force was more than a week late.

The Germans had to evacuate Carentan because of CAS’s decisive role. The German army commander, Field Marshal Gerd von Rundstedt, believed they lost Carentan due to the “unbearable” air attacks making daytime movement “impossible.”¹⁰ Quesada’s fighters answered 184 CAS requests during the first week following the invasion.

Tactical aviation grew rapidly from 1941–1945. The relationship between Bradley and Quesada facilitated that growth. Throughout this discussion, other examples from their excellent working relationship will shed light on how Air Force leaders can focus decision making to support the rapidly changing Army.

Army Size and Restructuring Requires Air Force Critical Thinking

Sometimes innovation is a luxury; sometimes it is a requirement. The Army is drastically reducing its size, which is driving significant changes in organization. Although some of these changes are required, the Army is using the opportunity to innovate. Air Force leaders must understand these changes and think critically about how to support future Army operations. On 30 July 2013, U.S. Army Forces Command issued a warning order (WARNO) regarding brigade combat team (BCT) reorganization. The WARNO reiterated an Army end strength of 490,000 soldiers by the end of fiscal year 2017.¹¹ The order goes on to provide specifics on a new force structure and the number of BCTs—the Army’s primary fighting element. When considering these new numbers, it is important to consider remarks by former Secretary of Defense Chuck Hagel. On 31 July 2013, Hagel indicated that sequestration budget cuts could drive the planned end strength to 380,000 soldiers.¹² These changes are significant. What are they? And, how do they impact the Air Force?

Over the past two years, the Army significantly reduced its active strength from approximately 570,000 soldiers to just under 495,000—a loss of 75,000 personnel. As this is happening, the Army is shifting to its 2020 BCT design.¹³ The Army has three categories of ground maneuver BCTs: infantry,

armored, and Stryker. Maneuver BCTs are the Army's primary fighting elements and land-space owners. Under Army 2020, infantry and armored BCTs will receive an additional maneuver battalion. This increases a brigade commander's battalions from two to three and correspondingly drives up combat power. (Stryker BCTs already possess three maneuver battalions and will remain unchanged.) However, these forces are not new elements; they are coming from other organizations. The Army is reducing the number of BCTs from forty-five to "an interim solution of thirty-three."¹⁴ The BCT breakdown will be twelve armored, fourteen infantry, and seven Stryker. To complement these changes, the Army is also dispersing and reorganizing engineer and artillery assets with the goal of empowering the BCT commander with the assets directly under the commander's control. Finally, division structures are also changing. Although there is not one specific formula, the 4th Infantry Division (4ID) provides a model. After the restructuring, 4ID will employ one of each type of BCT—Stryker, infantry, and armored.

The implications of these changes are difficult to predict. Staffing fewer BCTs reduces the forces available to rotate through a theater for a sustained campaign. However, this is offset by each BCT's increased combat power, which translates into a bigger area of operations and/or the ability to counter more enemy forces. In the case of 4ID, the new structure provides excellent flexibility—especially against a hybrid threat. 4ID's armored BCT provides tremendous firepower and mobility—but takes time to arrive in theater. The division's infantry BCT provides a quickly deployable force well suited for urban operations—but without armored protection. The Stryker BCT—with its light armored vehicles and numerous dismounted soldiers—brings elements of both. The inherent fire support and engineering assets round out the BCTs' and division commander's employment capabilities.

How does the Air Force respond to these changes? Looking back to actions taken by generals Bradley and Quesada provides a framework for critical thinking. During World War II, the Air Corps needed to innovate tactical support aviation quickly. One of the ways it was able to do this was by relying on existing technology. Unlike other World War II aviation tasks, such as strategic bombing or fighter escort, CAS did not rely on a specific technology to achieve success.¹⁵ The development of a specific airframe for a specific task requires

a lengthy timeline or the commitment of significant wartime resources. Two examples of this are the four-engine strategic bomber and the high-performance fighter aircraft designed as escorts. The United States developed the B-17 and P-51 specifically to facilitate the daylight bombing of European Axis powers.¹⁶

World War II CAS did not face this limiting requirement. Engineers originally designed the P-47 Thunderbolt as an interceptor. The aircraft never excelled in this role, but soon became one of the Army Air Corps' best and most prolific close support aircraft.¹⁷ In fact, after P-47s from Quesada's IX Tactical Air Command began providing armed tank column support, an army division commander stated, "Many veteran tankers now refer to the P-47 as the best and only effective antitank weapon."¹⁸ The Germans agreed. They began calling the fighters *Achtung Jabos* (most terrible weapon).¹⁹ The P-47s thrived in their new role. A German soldier attempting to counter the Normandy invasion complained, "Yah, for eleven days I saw seven Luftwaffe and seven thousand Thunderbolts."²⁰

What techniques and equipment does the Air Force currently possess that will support the new Army structure? In the 2012 *Army Training Strategy*, the document's authors close by stating, "Army leaders ... must recognize that there are no predetermined solutions to problems."²¹ Obviously, this is true for Air Force leaders as well. Can the Air Force change the way it currently employs its systems? Existing training opportunities should be maximized; tactics, techniques, and procedures from Iraq and Afghanistan should be studied; and modifications to current equipment should be considered.

For example, when an Army BCT attends training at the National Training Center in California, the Air Force normally supports the exercise by conducting a Green Flag Exercise. In the past, Green Flags employed a single type of aircraft from a single squadron. The current Green Flag goal is to provide at least two airframes, unmanned aircraft, and electronic warfare assets.²² Although this training is excellent, it does not completely maximize what the Air Force can provide. Imagine an exercise where the Air Force participated in each step of the process. Mobility aircraft like C-130s could airdrop an infantry element at the outset of the engagement. Air Force fighters, bombers and

unmanned aerial systems could provide the initial firepower the light infantry lacks. C-17s would follow with Strykers, a few heavily armored vehicles, and attack helicopters. After fighting a conventional force-on-force engagement, the scenario would transition to counterinsurgency warfare typical of the hybrid threat many expect to face. Air Force pilots would practice shows of force or nontraditional intelligence, surveillance, and reconnaissance. The Air Force and the BCT would fight together from home station to mission completion. Just like Quesada's P-47, the Air Force has all of these assets. Each of these platforms already conducts annual training. Each of these platforms already spends precious defense budget dollars to train. Airdropping or airlifting the entire BCT to California is not possible, and CAS might not be available every day of

the BCT's scenario. However, the benefits gained from practicing even with small company-sized elements would pay huge dividends in future operations.

In his thesis on CAS in World War II, Maj. Scott Hasken stresses the importance of detailed liaison as an aspect of any operational approach:

It was also in World War II where commanders began to learn that planning for CAS made a significant difference in the execution of air-to-ground operations. Those battles and engagements that were planned thoroughly with the integration of the Air Corps in a ground attack role inflicted heavy damage on troops and material. These coordinated attacks also had a significant psychological impact on the enemy, and demonstrated tremendous potential as a way to conduct more aggressive joint operations. Conversely, only marginal effects were achieved against



(9th Air Force photo courtesy of the National Archives)
A P-47 Thunderbolt piloted by Capt. Raymond M. Walsh of the U.S. 406th Fighter Group is silhouetted against an exploding Nazi ammunition truck he just strafed 23 June 1944 behind enemy lines in Normandy, France. The image was taken by his wingman's gun camera.

enemy forces in battles where there was little coordination between the Air Corps and the ground forces commander.²³

Hasken's comments seem intuitive given the luxury of hindsight and current joint doctrine. However, the focus on detailed liaison was a new concept in the early 1940s. It helped enable the World War II innovation of CAS. What is the corollary to today? Have the Army and Air Force captured the lessons learned during thirteen years of war? Armed with facts about the "new" Army and with opportunities for continued joint training, Air Force leaders can transition some viable techniques while avoiding stagnation by resting on others.

Army Doctrinal Changes Impact Air Force Leaders

The Army is not just changing its size and structure—doctrine is changing too. In 2012, the Army began releasing a new series of doctrine publications.



(U.S. Air Force photo by Senior Airman Kenny Holston)

A U.S. Air Force A-10 Thunderbolt II demonstrates its air-to-ground capabilities 12 November 2011 during the 2011 "Aviation Nation" open house on Nellis Air Force Base, Nevada.

The Army doctrine publications (ADPs) and Army doctrine reference publications (ADRP) represent a distinct change from the Army field manuals. ADPs are short, efficient documents that provide an overview of a specific doctrinal concept. ADRPs provide significantly more amplifying information and guidance. As the Army changed its doctrine format, it took the opportunity to codify two major doctrinal approaches: unified land operations (ULO) and mission command (MC).

As detailed in ADP 3-0, *Unified Land Operations*, ULO "describes how the Army seizes, retains, and exploits the initiative to gain and maintain a position of relative advantage in sustained land operations through simultaneous offensive, defensive, and stability operations in order to prevent or deter conflict, prevail in war, and create the conditions for favorable conflict resolution."²⁴ ULO is the Army's means of nesting its doctrine in Joint Publication (JP) 1, *Doctrine for the Armed Forces of the United States*, under the theme of unified action.²⁵ ULO encompasses four main ideas: initiative, the Army core competencies, decisive action, and mission command.

This article is not conducive to a complete description of ULO or its components. However, Air Force field grade officers need a basic understanding of the doctrine to

support Army operations. The first element, initiative, is simple; it gives all operations "the spirit, if not the form, of the offense."²⁶ Although Army formations may be defending, they will defend with an offensive mindset. Seizing the initiative is a critical component of ULO.

Decisive action is the simultaneous and continuous combination of offensive, defensive, and stability operations. (Within the United States, *defense support of civil authorities* replaces stability.) Decisive action doctrine assumes the Army will conduct offensive, defensive, and stability tasks simultaneously against a hybrid threat. Many doctrinal experts use the concept of a three-block war as an example of decisive action. Imagine a three-block area of a city during operations where a company commander has one platoon conducting an offensive cordon and search, one platoon defending a combat outpost, and a third platoon helping restore essential government services. This concept could apply to a town, a province, or an entire country.

There are two Army core competencies—combined arms maneuver (CAM) and wide area security (WAS). CAM uses all elements of combat power to defeat the enemy with offensive and defensive tasks. CAM relies on the defeat mechanisms—destroy, dislocate, disintegrate, and isolate—to accomplish the mission. WAS, on the other hand, seeks to protect populations and infrastructure. WAS focuses on stability and leverages stability mechanisms—control, compel, influence, and support—to achieve the mission.

In the simplest of terms, a review of the initial days of major combat operations, during Operation Iraqi Freedom provides an example of CAM. In contrast, the counterinsurgency effort during the remainder of the conflict is an example of WAS.

Finally, mission command is ULO's guiding principle. MC is the Army counterpart to the Air Force's centralized control/decentralized execution command model.²⁷ MC has six basic principles: build teams through trust, create a shared understanding, provide a clear commander's intent, use mission orders, and accept prudent risk. At its root, the distinguishing difference between

MC and previous doctrinal approaches is increased empowerment of subordinate leaders. Higher echelon leaders issue orders to lower echelons with the who, what, when, where, and why. However, under MC, they are careful not to tell subordinate leaders the how.

Why are these doctrinal changes important to the Air Force? Quesada and Bradley provide another applicable case study. One example of their cooperation in doctrinal initiatives was the birth of the modern-day air liaison officer. During discussion between the two generals, Quesada requested permission to install common radio sets in some of Bradley's tanks. Bradley agreed. Quesada then placed a pilot in each of the radio-equipped tanks and scheduled aircraft to operate in waves over their locations.²⁸ The results were amazing. Due to this innovation, air support requests that had often gone unfilled or took hours for a response at the beginning of World War II were processed quickly, and the ability to attack targets in close proximity to friendly forces improved dramatically. Air support to ground operations was greatly improved.

This advance reached a pinnacle of success during the Third Army's push to Bastogne, Belgium, during the Battle of the Bulge (16 December 1944–25 January 1945) to relieve the weary 101st Airborne Division, which was surrounded by German forces. Army tankers met significant German resistance near the town of Remichampagne. As a consequence, U.S. forces radioed for air support, and P-47 "Thunderbolts" arrived overhead only twenty minutes later. The aircraft dropped ordnance that destroyed German positions within hundreds of yards of the friendly front line, enabling the American tanks to forge ahead.²⁹ This incident, together with many others like it, prompted one general defending in Bastogne to remark, "The fighter-bombers did work equivalent to the employment of two U.S. Infantry Divisions."³⁰ This was high praise, given the complete lack of U.S. CAS capability at the outset of World War II.

How does this history apply to the current situation and recent Army doctrinal changes? First, it is easy to trace Bradley and Quesada's plan to the current JP 3-09.3, *Close Air Support*, requirement for detailed CAS integration.³¹ Second, though the Air Force can employ elements of MC, it cannot completely adopt the concept due to inherent constraints on some of its components. And, third, the Army employment of ULO may require the Air Force to make some significant changes.

The Air Force already uses MC in numerous environments. When a strike package mission commander is tasked to destroy a target, he or she is told the what and when, but definitely not the how. On the other hand, Air Force nuclear missile operators must work under tight centralized control. Numerous other similar examples of Air Force organizations exist for which MC is not feasible, so the bottom line is this: the Air Force can adopt some elements of MC but not the entire doctrine.

For example, the Air Force does not have sufficient airframes to align a four-ship formation of F-16s with a specific Army battalion, so the Air Force needs centralized control of those aircraft in order to maximize their effectiveness. Consequently, the Army's approach to ULO will influence the Air Force. As the F-35 and F-22 become the backbone of the fighter force, innovative techniques and smart procurement can ensure tactical air support retains its current outstanding capability. The Air Force continues to ramp up the number of MQ-9 Reaper unmanned aerial systems in the fleet. In a permissive environment, the MQ-9 is an excellent CAS platform. The increased number of aircraft, long-on-station time, and significant ordnance load of the MQ-9 are a powerful combination for future hybrid-threat operations. The MQ-9 is a multidimensional weapon system with a wide variety of uses. As Air Force field grade officers influence procurement decisions, the MQ-9 is an excellent model to follow.

The Air Force needs to replace its aging T-38 jet trainer fleet. The new trainer should follow the MQ-9 model as a multidimensional platform capable of a variety of missions. Trainer-X is an excellent example of an opportunity for Air Force officers to critically consider ways to solve multiple needs with a single solution. A new trainer is required; however, what else does the joint force need? Pilots selected to fly the F-22 and F-35 require advanced pretraining because of their new aircrafts' capabilities and the lack of two-seat trainer variants. Additionally, flying the F-22 and F-35 for some missions does not make sense. Using F-22s as alert aircraft or for continental U.S. combat air patrols is costly and taxes a very limited resource. Finally, the F-22 and F-35 are often flown in an adversary role to simulate threat aircraft. This use of costly aircraft as "Red Air" wastes resources. Can the new trainer accomplish all three of these missions? Can the Air Force purchase an aircraft capable of training that also possesses a combat capability? This combat-coded trainer may not

be feasible, but it is one example of the critical thinking young Air Force field grade officers need to support a rapidly changing Army.

Additionally, many are pushing for the inclusion of MC in joint doctrine. If included as another option to centralized control/decentralized execution, Air Force leaders must make smart decisions on when and where to apply the new joint doctrine.

Conclusion—Sustain the Momentum

The connection between the Air Force and Army is at a high point. Friendships and sturdy working relationships

forged over the last thirteen years of combat provide a stepping-off point for future operations. Both services have needs, and both services need each other. The Army is changing its structure and size. It is also changing its doctrine. A smaller Army with powerful BCTs employing unified land operations via mission command requires unique, well-thought-out support. The relationship between Bradley and Quesada provides the historical structure and “how to” precedent. The generals worked together to find solutions that benefited both the air and land arms of the U.S. military. Young Air Force and Army field grade officers should follow their example. ■

Lt. Col. Jason Earley, U.S. Air Force, is a command pilot with more than 2,500 hours in F-15C and T-38C aircraft. He holds a BS from the University of Michigan College of Engineering, an MBA from Towou University, and an MMAS from the School of Advanced Military Studies, Fort Leavenworth, Kansas. Earley served as an air liaison officer for the 2nd Brigade Combat Team, 4th Infantry Division, and has deployed in support of Operations Allied Force, Southern Watch, and Iraqi Freedom. He wrote this article in 2013 while attending the U.S. Army Command and General Staff College, Fort Leavenworth, Kansas.

Notes

1. Thomas Alexander Hughes, *Overlord: General Pete Quesada and the Triumph of Tactical Air Power in World War II* (New York: Free Press, 2002), 156.

2. *Ibid.*

3. Richard Muller, “Close Air Support: The German, British, and American Experiences, 1918-1941,” *Military Innovation in the Interwar Period*, eds. Williamson Murray and Allan Millet (Cambridge, UK: Cambridge University Press, August 1998), 180.

4. Hughes, *Overlord*, 14.

5. *Ibid.*, 144.

6. *Ibid.*

7. *Ibid.*

8. *Ibid.*, 145.

9. *Ibid.*, 146.

10. *Ibid.*, 148.

11. U.S. Army Forces Command, *FORSCOM WARNO to the HQDA EXORD 184-13: BCT REORGANIZATION*, Fort Bragg, NC, 1.

12. Tom Vanden Brook, “Hagel Outlines Bleak Future for Pentagon,” *USA Today*, accessed 20 May 2015, <http://www.usatoday.com/story/news/politics/2013/07/31/sequestration-budget-cuts-pentagon/2603997/>.

13. *FORSCOM WARNO*, 1.

14. *Ibid.*

15. Muller, “Close Air Support,” 189.

16. *Ibid.*

17. *Ibid.*, 190.

18. Hughes, *Overlord*, 228.

19. *Ibid.*, 151.

20. *Ibid.*

21. U.S. Army Chief of Staff, *The Army Training Strategy: Training in a Time of Transition, Uncertainty, Complexity, and Austerity*, 3 October 2012, 20, accessed 20 May 2015, <http://www.forscom.army.mil/leaderdevelopment/Content/Desktop/pdf/ATS.pdf>.

22. 99th Air Base Wing Public Affairs, “Green Flag-West Fact Sheet,” Nellis Air Force Base, Nevada, 12 July 2012, 2, accessed 20 May 2015, <http://www.nellis.af.mil/library/factsheets/factsheet.asp?id=19524>.

23. Scott Hasken, “A Historical Look at Close Air Support,” (master’s thesis, U.S. Army Command and General Staff College, 2003), 2.

24. Army Doctrine Publication (ADP) 3-0, *Unified Land Operations* (Washington, DC: U.S. Government Printing Office [GPO], 10 October 2011), 1.

25. Joint Publication (JP) 1, *Doctrine for the Armed Forces of the United States* (Washington, DC: U.S. GPO, 25 March 2013), II-7.

26. Army Doctrine Reference Publication (ADRP) 3-0, *Unified Land Operations* (Washington, DC: U.S. GPO, 16 May 2012) 2-1.

27. U.S. Air Force, *Volume 1: Basic Doctrine* (Maxwell Air Force Base: Curtis E. LeMay Center for Doctrine Development and Education, 27 February 2015), chap. 5, accessed 22 September 2015, <https://doctrine.af.mil/download.jsp?filename=V1-D81-CC-DE.pdf>.

28. Hughes, *Overlord*, 184.

29. *Ibid.*, 286.

30. *Ibid.*, 287.

31. JP 3-09.3, *Close Air Support* (Washington, DC: U.S. GPO, 8 July 2009).



(Photo by Sgt. 1st Class Jason Beattie, 7th Army PAO)

A mobile training team from the U.S. Army's 7th Army Noncommissioned Officer Academy, Grafenwoehr, Germany, assists the Romanian Army with its Warrior Leader Course 3-20 March 2014 at the Romanian Infantry and Mountain Troop Training Center in Fagaras, Romania. The Romanian course is modeled on the U.S. Army's noncommissioned officer training program and includes drill and ceremony training, physical readiness training, and classroom leadership modules.

The United States Army's Secret to Success

Capitalizing on the Human Dimension to Enhance Its Combat Capabilities

Maj. Jonathan Bissell, U.S. Army

Command Sgt. Maj. Carlos Olvera, U.S. Army

Following the conclusion of the Vietnam War, the U.S. Army had a series of successful combat operations, including Operation Urgent Fury, Operation Just Cause, Operation Desert Storm, Operation Enduring Freedom, and Operation Iraqi Freedom. Military pundits, both friendly and unfriendly, often attribute much of this success to the technological advantages the United States has had over its enemies—in weaponry, modern equipment, and cutting-edge intelligence-gathering capabilities—as well as to the diplomatic, political, and military support of its close allies. However, insufficient attention has been given to the human dimension of the Army's structure, particularly the doctrinal manner in which it encourages initiative through the decentralization of power from the officers who plan its operations and command its formations to the noncommissioned officers (NCOs) who execute those plans in both garrison and combat.

The secret to the success of the Army is twofold. The first aspect is the manner in which it capitalizes on the effective use of its most important resource—soldiers. The second, and the focus of this paper, is the manner in which the NCO corps, promoted from the most talented members of the population of enlisted soldiers, has developed over the last forty years into a professional institution. The empowerment of U.S. Army NCOs over this period is now an indispensable feature of Army structure and culture that saves officers' precious resources—principally in freeing up their time to concentrate their attention on the

management of vast and increasingly complex organizations. This creates efficiencies in the Army that effectively extend its operational and tactical reach—especially at the battalion level and below—by enabling each soldier to take initiative and resolve problems at the lowest level appropriate to achieve the commander's intent.

As partner nations look forward, to plan, build, and implement new security cooperation agreements over the future decades with the United States, it may be to their advantage to take a closer look at the pride of the Army—the NCO corps—and the way it was developed following the Vietnam War to become the professional institution it is today.

Some traditional U.S. allies, such as Jordan and Colombia, have recently recognized the lack of an empowered NCO corps as a shortfall within their own armies, and they are working with the United States to bring about systemic long-term changes to increase the autonomy of lower-level units within their armed forces.¹ They are doing this by improving the leadership qualities in their NCOs and revamping their NCO education systems. This change can reap benefits by expanding the operational and tactical range of those armies.

The U.S. Army Model

Toward the end of the unpopular Vietnam War, strategic leaders within the Army recognized that the conscripted force would soon be a relic of the past. The war-weary U.S. citizenry was tired of the draft and called for an all-volunteer force. Among the many initiatives Army leaders discussed to encourage enlistment and reenlistment for the volunteer soldiers were better pay, fair and improved opportunities for promotion and upward mobility, and a diffusion of power to enhance the capacity and effectiveness of the all-volunteer force. Officers in charge of implementing these changes, such as Gen. Eugene Depuy, spent several years perfecting the model that would eventually be adopted.



(Photo courtesy of the National Army of Colombia)

Colombian army Col. Juan Felipe Yepes Lara presides over a military ceremony 22 February 2013 honoring 658 graduates of the Colombian "Sargento Inocencio Chincá" Noncommissioned Officer Academy, Tolomaidá, Colombia.



(Photo by Sgt. Leon Cook, 20th Public Affairs Detachment, USARCENT Public Affairs)

Egyptian soldiers listen to an Arabic translation of a speaker over headsets 18 May 2015 during the first U.S. Army Central (USARCENT) Multinational Noncommissioned Officer Symposium at El Paso, Texas. USARCENT hosted officers and NCOs from seven countries during the weeklong symposium, which aimed to strengthen relationships between U.S. and partner-nation NCOs from the U.S. Central Command area of responsibility.

Depuy envisioned that this new model would be built around the squad leader, one of four primary subordinates of a platoon leader (the lowest organizational level of authority for officers).² The squad leader would be a staff sergeant, an NCO with a few years' experience as a sergeant or team leader. The span of control for the squad leader would remain eight to eleven soldiers. The doctrinal change would increase the amount of power extended to the squad leader as well as other NCOs in the Army. This newly empowered group of NCOs would be formally educated in the classroom and trained in tactical field environments using advanced tactics and new doctrine—with a heavy emphasis on leadership. In this manner, the Army would develop NCOs who were fully capable of managing, leading, and directing squads. In Depuy's words, the new NCO would be "... a commander, just like an officer. ... It's just the smallest tactical element [the squad]."³

By empowering these sergeants, and demanding they possess high-level leadership capabilities, the Army developed a corps of professional NCOs over time. The NCO corps created its own motto, proudly proclaiming that "no one is more professional than I." Part of this "NCO Creed" also declares, "officers of my unit will have maximum

time to accomplish their duties; they will not have to accomplish mine."⁴ They took, and continue to take, great pride in performing the daily tasks that make an army function. These include accountability for personnel and equipment; equipment maintenance; and individual and team training on tasks such as marksmanship, first aid, patrolling, land navigation, and radio communication procedures, to name just a few.

As the NCO corps matured, the Army increased the responsibility of its NCOs, demanding that more senior NCOs mentor inexperienced officers. The senior NCOs were to provide a voice of skilled reason and to offer sound advice based on their years of accumulated professional knowledge. Soon, NCOs also were required to demonstrate a baseline competency by successfully performing standardized tasks, regardless of their particular specialty, during annual skill qualification testing or common task training. Task difficulty and complexity increased with higher skill levels and grades. The Army also began introducing NCOs to future officers at the earliest opportunities in officer educational institutions, including the three commissioning sources: Reserve Officer Training Corps programs, the U.S. Military Academy at West Point, and

Officer Candidate School. The NCOs with duty at these education sites demonstrated to the prospective lieutenants what their future subordinate squad leaders and other NCOs should be, know, and do.

In the U.S. Army today, officers and NCOs are paired together at each level of command to form an efficient and effective *command team*. As a captain, an officer typically has the opportunity to command a company—his or her first command. This occurs at the seven- to ten-year mark of the officer’s career. The officer is normally paired with a senior NCO—a first sergeant—who typically has between seventeen and twenty-two years’ professional experience. At battalion level and higher, commanders are paired with even more-experienced senior NCOs: command sergeants major.

Over time, a unique and mutual trust has developed between officers and NCOs. Army NCOs indeed follow “the orders of the officers appointed over” them and, in fact, affirm their commitment to do so frequently in the oaths they take.⁵ Officers, on the other hand, learn quickly to appreciate the experience and wisdom shared with them by seasoned NCOs, and they quickly learn to distinguish the poorly performing NCOs from the exceptional ones. An officer’s responsibility includes applying pressure where it needs to be applied to motivate and elevate the abilities of those poorly performing NCOs; officers are assisted in doing so by other NCOs. Conversely, oftentimes seasoned professional NCOs can make up for the shortcomings of poorly performing or inexperienced commissioned officers, tactfully assisting in the professional development of those officers while cushioning the potentially negative effects poor junior officer leadership could have on their units.

In the end, what the Army has developed is a highly educated, all-volunteer enlisted force, fully capable of executing a wide variety of missions in accordance with the commander’s intent in a fully decentralized manner. Led by career and midcareer professional NCOs, many with post-high-school degrees and other higher-education credentials, this potent force has yielded tremendous benefits for the U.S. Army.⁶ Officers, supported by their NCOs in a team effort, have more time available to plan, coordinate, and synchronize garrison, training, or combat events, as compared to their counterparts in similar armies without such a well-developed and self-aware NCO corps. Officers in other armies often must personally manage numerous

time-intensive tasks that would be regarded as NCO duties in the U.S. Army, which interferes with focusing on the next mission or critical leadership issues.

Mission Command Philosophy: Decentralized Execution

Employing the U.S. Army’s mission command philosophy—decentralized execution—means a commander economizes time by only having to move within his or her command to where the commander’s presence is most needed, where a conflict exists or a decision requires command authority.⁷ Nevertheless, decentralizing exercise of power by delegating authority does not relieve the commander of any responsibility, nor does it drain the commander’s power away. Counterintuitively, it actually increases the commander’s power and makes him or her accountable for even more, as many more macro- and micro-actions occur simultaneously in this decentralized model, often without the direct supervision of the officer. Irrespective, it remains incumbent upon the officer to follow up with his or her NCOs to ensure command guidance is being met. A well-worn adage in the Army is that “one can delegate authority, but never responsibility.”

Though U.S. Army planning is largely centralized, with ample input from senior NCOs, execution is nearly always accomplished in a decentralized manner. This is especially true in combat environments, where young officers often rely on their squad leaders—who are, at many times, well beyond the officers’ line of sight—to provide updates on the rapidly changing situations on the battlefield. Skillful officers use these extensions of their power to quickly transition phases of tactical operations, synchronize operational areas with adjacent units, and execute complicated tactical maneuvers at the small-unit level. The net effect is a thoroughly efficient organization that maximizes the use of all of its assets, especially its technically and tactically proficient NCO corps, in a decentralized manner.

Today’s NCOs pride themselves on being able to operate under duress with little or no supervision from officers to accomplish their units’ missions. This gives officers the freedom to concentrate their own leadership skills and capabilities on more narrowly focused areas of concern where they need to be applied the most. Meanwhile, competent, dedicated, and trusted NCOs operate efficiently in their commands without the officers’ direct supervision—but following the direction of a

widely disseminated commander's intent and within the realm of officer influence.

A recent example of poor NCO development highlights the advantages effective development provides to officers and the U.S. Army overall. The recent defeat of the Iraqi army by the ISIS insurgents is a case of what can happen when all the decision making is concentrated solely in the hands of senior leaders. Recent combat history shows much of the same style of hierarchical structure in the defeated armies from Operation Just Cause to Operation Iraqi Freedom. In each of these operations, the losing forces were configured with command structures that were centralized, unwieldy, and inflexible.

While technological advantages cannot be discounted as contributing to the U.S. Army's success, the inability of the enemies' professional enlisted corps (and junior officers) to take autonomous initiative was a debilitating factor that negatively affected enemy combat performance. Institutional decentralization of authority, if it had been fostered over time, could have made huge differences in the manner the various battles and operations played out in these conflicts. Given the rapid nature of modern-day combat, an army that is encumbered with poor tactical and operational agility, stemming from a lack of an empowered NCO corps, will

have a clumsy and slow force that can quickly become outflanked, encircled, and overwhelmed at all levels of command from platoon to division. This was recently demonstrated in northern Iraq by Iraqi government forces with a weak and ill-trained NCO corps.

From the present doctrinal perspective of the U.S. Army, the more operations are decentralized, the more flexible and ingenious the methodologies that junior officers and their NCOs will develop to overcome the obstacles they encounter to reach their objectives and complete their assigned missions.

Recommendations—Making Changes to Business as Usual

Nation-states and their armies that desire to develop a professional NCO corps similar to that of the U.S. Army should consider the following recommendations as they make that transition.

Add leadership training. Leadership training must be incorporated into all NCO training and education. While many armies, including those within our own hemisphere, have for their officers robust military academies that emphasize leadership and technical training through four or more rigorous years as a cadet, many of their professional enlisted educational academies train strictly on technical



(U.S. Navy photo by Petty Officer 1st Class Mark O'Donald)

Afghan soldiers attending the Afghan National Army Noncommissioned Officer Academy await further training 11 May 2010 at Forward Operating Base Thunder, Gardez District, Paktia Province, Afghanistan.

skills with little emphasis on leadership. These technical schools rarely elaborate on leadership principles, indoctrinate leadership abilities, or encourage unilateral decision making to facilitate mission accomplishment. This lack of emphasis on junior leadership can handicap a platoon leader by having an entire platoon awaiting its officer's instructions without the willingness or ability to independently resolve problems within the scope of their own competencies in order to carry out the mission.

Change the pay system. As the U.S. Army realized following the Vietnam War, you eventually “reap what you sow.” In order to attract quality recruits, the pay scale for enlisted personnel should at least be comparable to the civilian sector's wages. In nation-states that are postconflict, this can be a subject of great controversy and may create negative headlines in the national press. The United States faced similar problems following the Vietnam War when defense budgets were slashed. Nevertheless, restructuring defense spending methods is a matter of national priorities and an important component of reform. In addition, pay tables should be configured so that promotions are encouraged, earned, and awarded with a monetary incentive. This goes along with the enhanced military prestige and increased levels of both authority and responsibility for the promoted NCO.

Transform the promotion system. A professional NCO corps requires a merit-based promotion system where upward mobility is encouraged, competitive, and rewarded. This may require modifying the way NCOs are traditionally promoted in other countries. In many armies, career soldiers are compensated based exclusively on their time of military service. In contrast, while the U.S. Army also rewards time in service, the rank and pay grade of each NCO is also determined based on an individual's merit.

Over time, U.S. Army NCOs build individual profiles based on their job performances, which are evaluated for promotion by more senior NCOs and officers. Promotion boards for junior NCOs (corporal through staff sergeant) are decentralized and conducted locally, but promotion boards for senior NCOs (sergeant first class through sergeant major) are centralized and conducted annually.

Adapt the evaluation system. Assuming a desire to emulate such a merit system for promotion, the NCO evaluation system of a given army may need to be revamped as well. It should continue not only to evaluate technical skills but also to place a much greater emphasis

on evaluating leadership—an emphasis that reflects the changing relationship between the NCO and the officer.

Empower the NCO support channel. In the U.S. Army, the chain of command is reinforced by the NCO support channel. The NCO support channel serves as an administrative and operational “backbone” supporting the officers' command positions and military authority. While this system is not required, it certainly has been effective for the U.S. Army. Therefore, it should be considered by armies in other countries desiring to mold a professional NCO corps that works efficiently and effectively with their officers' corps.

Change the officer mind-set. A reforming army's officer corps may need to be entirely retrained as well. Many U.S. Army officers were very resistant to what some perceived as a radical change in doctrine in the 1970s.⁸ They mistakenly thought that empowering their subordinates would hollow out their own power base. This type of resistance can be expected in any army attempting to implement similar changes. However, with military orders mandating change, along with the support of senior and midgrade officers who buy into the changes and possess the ability to foresee the long-term benefits of enforcing these improvements, this innovation will eventually be accepted and endorsed.

The benefits and ground rules must be explained thoroughly to the entire officer corps—from cadets to general officers. Benefits from NCO empowerment can include, for example, improved logistical support, equipment maintenance, and personnel accountability. Additionally, delegation of authority to NCOs for conducting individual and small-unit collective training without constant direct supervision saves officers time and eliminates duplication of effort. Empowering and trusting NCOs with these responsibilities greatly increases small-unit cohesion, morale, and technical and tactical proficiency.

Improve the personnel management system. Finally, improvements must be made to enlisted personnel management systems in changing armies. Many armies have not invested deeply in their enlisted personnel management systems, which may make the creation of a competitive centralized promotion board and a professional career track for NCOs difficult. Having gone through the evolutionary process of establishing an enlisted personnel management system initially in the 1970s, the U.S. Army is still in the process of modifying its own system. For example, it is currently streamlining its personnel system

and minimizing the differences between the way NCO and officer records are managed.

Conclusion

Although the human dimension alone does not fully explain the success of the U.S. Army, it is often underappreciated as the foundation upon which the Army is built. Recognizing this frequent omission, the U.S. Army celebrated the “Year of the NCO” in 2009, acknowledging the critical contributions of its career enlisted soldiers.⁹ While media headlines related to the military consistently mention general officers, much of what happens within the U.S. Army is attributable to its structure and its effective employment of its human dimension resource—specifically, its NCOs and enlisted soldiers. The proof lies not only in the U.S. Army’s successes but also in its sacrifices; of the eighteen soldiers awarded the Medal of Honor (the

highest medal for valor presented by the United States) in the post-Vietnam War era, sixteen were enlisted.¹⁰

There are no magic bullets, weapons platforms, defense alliances, communications systems, or any other advanced technologies that can replace solid leadership. By pushing power both down and out to expand the influence of competent leadership to its lowest organizational levels, by encouraging the upward mobility of its greatest resource, its volunteer force, and by demanding successful results, the U.S. Army has set a shining example of how to effectively utilize soldiers, especially career NCOs, to the maximum extent of their abilities. Other advantages are important but not nearly as critical. Partner nations of the United States should look internally, within their own armies, and analyze if they are leveraging their own enlisted corps to the maximum extent of their capabilities. It is an affordable military solution well worth exploring. ■

Maj. Jonathan Bissell, U.S. Army, is a student at George Washington University’s Elliott School of International Affairs in the Master of International Policy and Practice program. He is a graduate of the U.S. Army Command and General Staff College. He holds a BS from Cameron University and an MS in international relations from Troy University. A logistician for the majority of his career, he has worked as a foreign area officer in Latin America for the last four years. He has served overseas in Panama, Saudi Arabia, Kuwait, Iraq, and Peru.

Command Sgt. Maj. Carlos Olvera is the senior enlisted advisor for U.S. Army, Southern Command. He holds a BS in business management from Empire State College, and he is currently pursuing an MS in management from Excelsior College. Olvera has graduated from the Joint Staff College Course for Senior Enlisted Leaders and the Army Force Management Course for Command Sergeant Majors. His most recent assignment was as the command sergeant major of the Western Hemisphere Institute for Security Cooperation.

Notes

1. Joseph Rank, “Building Partnership Capacity 101: the New Jordan Armed Forces NCO Corps,” *Military Review* (September-October 2014). See also, Gabriel Marcella, *The United States and Colombia: The Journey from Ambiguity to Strategic Clarity, Special Series, Shaping the Regional Security Environment in Latin America* (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2003), 43, accessed 16 July 2015, <http://catalog.hathitrust.org/api/volumes/oclc/52427009.html>.

2. Ernest F. Fisher, *Guardians of the Republic: A History of the Noncommissioned Officer Corps of the U.S. Army* (New York: Ballantine Books, 1994), 394.

3. *Ibid.*, 392.

4. U.S. Army website, “NCO Creed,” accessed 14 July 2015, <http://www.army.mil/values/nco.html>.

5. U.S. Army website, “Oath of Enlistment,” accessed 14 July 2015, <http://www.army.mil/values/oath.html>.

6. United States Army Deputy Chief of Staff G-1, Office of Army Demographics website, “Demographics,” accessed 25 April 2015, <http://www.armyg1.army.mil/hr/demographics.asp>.

7. Army Doctrine Publication 6-0, *Mission Command* (Washington, DC: U.S. Government Publishing Office, May 2012), 5. The Army promotes decentralized execution through the use of mission orders.

8. Fisher, *Guardians of the Republic*, 392.

9. Army News Service, “Army Leaders Kick Off Year of the NCO at Texas Installation,” accessed 14 July 2015, <http://www.army.mil/article/15567/army-leaders-kick-off-year-of-nco-at-texas-installation/>.

10. Congressional Medal of Honor Society website, accessed 14 July 2015, <http://www.cmohs.org/>.



(U.S. Air Force photo by Greg L. Davis)

Pfc. Sean Chasteen focuses his attention on a group of Air Force Junior Reserve Officer Training Corps cadets during the 2013 Delaware State JROTC Drill Competition 20 April 2013 at Dover Air Force Base, Delaware. Chasteen, a former JROTC cadet at Caesar Rodney High School, was invited to help judge the drill competition after he completed training to become an explosive ordnance disposal technician.

An All-Volunteer Force for Long-Term Success

Col. Michael Runey, U.S. Army

Col. Charles Allen, U.S. Army, Retired

In 2014, America's modern all-volunteer force (AVF) observed its fortieth anniversary. The AVF has, largely, been deemed a success by policy makers as well as the general public since its inception during the Vietnam War up until the conflicts initiated by the 9/11 attacks. However, the last fourteen years of war have placed unprecedented demands on the AVF that have pushed the enlisted force in the

Army to near the breaking point. The consequence of such prolonged stress is that the AVF's long-term viability as a high-quality, affordable, professional force is now at risk. Of particular concern, as the military faces new, rapidly mutating global threats, is the increasing challenge the services—especially the Army—have in acquiring the high-quality enlisted talent they need.

In an effort to aid lawmakers and policy makers in ensuring the continued success of the AVF, this article applies an operational design approach from U.S. joint doctrine to frame the environment, define the strategic problem, and propose the broad outlines of solutions to problems of enlisted recruitment and retention. The intent is to stimulate and focus further research and discussion.

Current Views on the Problem

The problems the military faces are real: the force requires quality enlistees, a civil-military divide does exist, and the current level of required funding for the AVF is fiscally unsustainable. Moreover, these salient issues are interrelated, and any approach that fails to link solutions to all the different parts of the problem in a holistic way will not address the root, systemic issues that put the AVF's future at risk.

Those who value the status of U.S. military members as elite professionals place a premium on the quality of military personnel. But, while the military has focused on improving recruiting efforts, it faces significant challenges in getting those quality personnel. The AVF's major enlistment challenges each can be placed in one of three bins: the decreasing quality pool of potential recruits, a decreasing willingness among the youth within the public to serve in the military, and the unsustainable costs of today's volunteer force.

Shrinking pool of potential recruits. Recruitment for officer corps talent is relatively sound. However, the main risk to the AVF is recruitment of sufficient quality personnel to fill the enlisted ranks in the face of a dwindling talent pool available to the U.S. military.

Decreasing willingness to serve in the military. To complicate the recruiting challenge, although the military as an institution remains highly regarded by the public, there is clear evidence of declining interest among young Americans to serve in the military. Those who see the AVF's problems in terms of a civil-military divide promote different concepts for service requirements and opportunities for U.S. citizenry. U.S. Rep. Charles Rangel and retired U.S. Army Gen. Stanley McChrystal champion two distinctive approaches. Each proposes a form of national service aimed at youth.

Since 2004, Rangel has regularly introduced legislation to reinstate the military draft; however, it routinely receives little support from colleagues.¹ On the

other hand, as head of the Aspen Institute's Franklin Project, McChrystal is leading a separate effort that aims to make national service more attractive to youth by expanding both opportunities and expectations for voluntary public service.² Rangel's approach abolishes the AVF, replacing it with involuntary service under a draft system; McChrystal's makes the AVF a possible subset of a broader national service voluntary system that provides training and benefits calculated to better attract recruits.

Unsustainable cost of the all-volunteer force.

Some, including members of the Department of Defense (DOD) and Congress, view the AVF issue primarily through a fiscal lens. They aim to save the AVF by finding some way to balance the need to provide increases in competitive compensation and benefits with the ability to pay for the force. Advocates of this approach are exploring compensation reform, focusing on DOD healthcare, retirement, and benefits packages.³ They realize that additional fiscal obligations associated with increases in benefits and pay will be unsustainable in the long run, threatening the overall viability of the AVF.

Broad environmental scanning—the “purposeful search in the environment for relevant information”—enables researchers to see these intersections of the problem and frame it to develop solutions.⁴ Joint doctrine provides the political, military, economic, social, information, and infrastructure (PMESII) construct, which is helpful to analyze and determine such interrelationships.⁵ Although all factors of PMESII influence the viability of the AVF, three are most relevant and are most interrelated: political, military, and social.

The Political Framework: Balancing Quantity and Quality of its New Talent

Congress recognizes that to sustain the U.S. military as a viable and sufficient instrument of national power, a steady and sufficient flow of fully qualified volunteers is required. Congress determines sufficiency by mandating end strength and resourcing the military through budget appropriations.⁶ Congress also establishes through law the minimum quality standards the military can accept in an enlisted recruit.⁷

DOD has long managed this quantity-quality tension with two tools: policy for managing the system, and incentives for acquiring and retaining talent.

DOD manages some policy decisions but delegates most to the services. In difficult recruiting environments, or when trying to grow the enlisted ranks' numbers for a specific purpose, DOD modifies policy to ease quality requirements within the limits of the law. When the recruiting environment improves or when the force needs to get smaller, DOD tightens quality standards to slow or constrain enlistment within fiscal requirements. The services then shape their enlisted forces with appropriate training and assignment depending on talent requirements to accomplish their service-specific roles, missions, and functions.

In the past, when faced with downturns in recruiting, DOD simply adjusted accession policy toward the legally lowest-quality standards. If those steps proved insufficient, the Pentagon requested increased funding for recruiting incentives. Such policies worked well in an environment of robust personnel interest and availability in the population pool. However, circumstances have dramatically changed. A deeper examination of the environment indicates that in 2015 and beyond, no combination of policy-loosening measures or incentive increases will solve the longer-term, systemic problems in acquiring talent the military requires because the talent pool is decreasing while the competition for recruiting talent from the private sector is increasing due to perceptions of better benefits and opportunities.⁸ The

military, and the Army in particular, will be hard pressed to keep up. The Army does not have the capability to expand the quality of the talent pool, nor does it have the resources to sufficiently compete for the remaining talent by offering competitive incentives.

The Emerging Quantity and Quality Problem

The challenge for the services today and in the future is how to maintain the balance between quantity and quality in an era when both appear to be decreasing in the available manpower pool. The traditional course in a tough recruiting environment has been to recruit to the minimum DOD policy standards. This provided the best opportunity to meet the quantity the services required under the assumption that what was lacking in quality could be overcome by additional training. It was recognized that such a policy did put the quality of the force at increased, albeit what was deemed acceptable, risk. Of the services, the Army traditionally has been the most challenged in managing such quantity-quality tension because it is the largest service.

Today, as its end strength is being drawn down, the Army is struggling to enlist the level of talent it needs under current policy management guidance.

Additionally, in a logical but unanticipated turn, the Army is increasing its quality requirements for new recruits in order to grow advanced specialties such as special operations and cyber forces, among others, that demand high-quality recruits with the ability to learn complex skills. By requiring future soldiers to have enhanced mental and physical capabilities as well as to "demonstrate strong moral, ethical, and spiritual beliefs," the Army is seeking even better talent from a pool already straining to meet today's quality demands.⁹ While the Army has yet to define these new capabilities and develop the tools to assess them, the Army's recruiting assumption is clear: to win in the complex future environment, today's quality standards are insufficient for tomorrow's Army. Therefore, the Army faces a predicament. To succeed in future conflicts, it requires higher-quality recruits.



(Photo by Jasmine Chopra-Delgado, U.S. Army Corps of Engineers)
Sgt. Koutodjo Ayivi, a prime power production specialist and contracting officer's technical representative with the U.S. Army Corps of Engineers' 249th Engineer Battalion, points to electrical equipment 10 August 2013 at the Bagh-E Pol power plant in Kandahar, Afghanistan. The Army faces stiff competition from colleges, other military services, and civilian employers for recruits with the potential to learn complex skills like those of Ayivi.



(Photos by Sgt. Richard Hoppe, 123rd Mobile Public Affairs Detachment)

Applicants are sworn into service 7 October 2014 at the Military Entrance Processing Station on Joint Base McGuire-Dix-Lakehurst, New Jersey.

Yet, it is struggling under current, less rigorous standards to acquire both the quantity and quality it needs today.

Societal Challenges: Drying up the All-Volunteer Force Talent Pool

America wants not only capable men and women to join the military, but also it requires highly motivated volunteers. Americans' regard for their service members continues to be strong relative to other professions; they place military service at the top.¹⁰ However, despite such widespread and sustained public respect, the desire to serve among young people of military age, eighteen to twenty-four years, has slowly but steadily declined.¹¹ Schools, as well as industrial and commercial interests in the civilian sector, recognize the same potential as DOD does in these young people, but they are increasingly better able to better compete for it. As a result, today's potential volunteers have what they might consider more attractive options in the civilian sector than in military service, from college enabled by school loans to a wave of cooperative work-school options near home.

One consequence of the increasing society-wide demand for talent is the trend among civilian recruiters to identify and recruit based on potential, not

developed competency in a given skill. In the 2014 article "21st Century Talent Spotting," international search consultant Claudio Fernández-Aráoz highlights the global demand for high-quality potential as opposed to demonstrated skill development. He recommends companies focus on identifying and recruiting talent based on key aspects of potential, including a person's motivation, determination, and curiosity.¹²

Although Fernández-Aráoz focuses on executive leadership, the military can apply two key conclusions from his observations. First, the talent market at all levels is tightening, with little relief in sight. Second, DOD's talent acquisition model should shift from recruiting for skills to focusing on identifying and recruiting for perceived potential. However, DOD currently has no proven ways to assess potential and then win in the competition for recruits. To highlight the vital need for an improved recruitment system adapted to present circumstances, it is useful to observe that in the talent market of 2016, the military's pipeline for identifying and developing senior military enlisted leaders of 2035—in what most would agree will be a much more complex security environment due to technological advancements and demographic changes—will be rife with competition.



(Photo by Sgt. First Class Rebecca Doucette, Defense Language Institute Foreign Language Center)

Sgt. Janiece Marquez, a Pashto linguist, engages members of the Afghan Local Police 1 February 2011 in Kunar Province, Afghanistan. The Army must compete for the 4 percent of Americans who, like Marquez, are willing and qualified to serve.

The Political Challenges: Paying for Talent

To support the military's efforts to recruit talent, Congress has not neglected compensating military service. Since 2001 especially, America's leaders in the executive and legislative branches of government have recognized the challenging requirements of military service, with its increased pace of operations on a global scale. Accordingly, Congress has enabled military recruiters to attract sufficient talent in most years to fill the ranks, in part by increasing pay and benefits for military members and families.

Steady improvements in compensation and benefits have sustained enlisted talent acquisition during very difficult years, especially for the Army. However, one result is that the AVF has become increasingly expensive over the long term. Some would describe paying for the AVF as an economic challenge rather than a political one. But, because Congress is constitutionally required to raise and support the Army and provide and maintain the Navy, these acts are inherently political.¹³

In 2011, then Secretary of Defense Leon Panetta declared military personnel costs unsustainable in the long run: "The fiscal reality facing us means that we have to look at the growth in personnel costs, which are a major driver of budget growth and are, simply

put, on an unsustainable course."¹⁴ Reinforcing Panetta's remarks on personnel expenses, Gen. Martin Dempsey, former chairman of the Joint Chiefs of Staff, in a 2013 joint town hall forum stated, "But compensation ... and health care costs are growing at rates that are unsustainable to the all-volunteer force."¹⁵

As costly as recruiting and sustaining the AVF has become, reformers and policy makers must consider that young people in the talent market have already factored today's military compensation into their decision making. Consider that today's Marine or Army privates receive compensation that puts them in the ninetieth percentile of their societal peer group.¹⁶ Even with ongoing uncertain economic conditions, especially those affect-

ing young adults, today's relatively generous military compensation and benefits package already is priced into the talent market where the military competes each day with businesses and colleges.¹⁷

However, even if the political will existed to appropriate more money to increase military compensation, benefits, or even enlistment bonuses, such incentives would have to alter the market calculus in favor of military enlistment. In terms of budget and relative compensation, the AVF faces strong headwinds if it is to sustain its talent base, much less improve it, by adding fiscal incentives.

To complicate decisions in the current fiscal environment, Congress, with the power of the purse, has little flexibility due to the Budget Control Act of 2011. Without action by both congressional chambers and the president to ease budget constraints, there will be even less flexibility for spending on recruitment. Consequently, while DOD is asking for controls on compensation and benefits, it is also demanding improved quality of its enlistees in the future force—which implies increased compensation. Thus, the political tensions with regard to quality versus quantity are substantial. However, this is just one dimension of the recruiting challenge.

Redefining the Problem

Today, America's military is a professional, world-class, highly recruited, volunteer organization widely respected by its society. Its youngest members are well compensated relative to other Americans their age. But the combination of the military, social, and political factors in the strategic environment leads one to conclude that the AVF cannot survive without fundamental redesign. Demonstrably, Congress currently has no fiscal stomach for enlistment bonuses, nor has the president requested them. Policy shifts by DOD (such as opening enlistment to more non-high-school graduates or accepting more medical and moral waivers) can provide limited help to address recruiting sufficient quantity, but conversely may undercut quality of the force.

For the AVF's long-term viability, the military, the political leaders, and the American people must address a deeper underlying problem: the military cannot satisfy its demand for increasingly qualified enlistees due to societal factors. With obesity at 40 percent for youths ages sixteen to twenty-four, mental- and behavioral-health medications prescribed for 34 percent of youths ages thirteen to seventeen, and arrest rates

among U.S. youths estimated between 25.3 percent and 41.4 percent by age twenty-three, it is clear that enlistment policy adjustments and increases to compensation, benefits, and enlistment incentives are insufficient to resolve the recruiting challenges.¹⁸ The core issue is an increasing societal reluctance, as well as inability for various reasons, among young potential recruits to serve in the military.

Quantifying this problem clarifies the core issues and offers a clearer picture of the competition for talent among businesses, colleges, and the military. Figure 1 illustrates the AVF problem using DOD and U.S. Army Recruiting Command data for the 4.1 million Americans turning eighteen in 2015.¹⁹ About four of every one hundred of these young Americans are both qualified and willing to serve. Colleges and other postsecondary education and training institutions, the military, and employers vie for them; the military needs at least one to enlist, and traditional colleges will draw at least two of the four. Of the remaining ninety-six, twenty-five are qualified but unwilling to serve, and fifteen are unqualified but willing. Remaining are about fifty-six Americans who are both unwilling and unable to serve

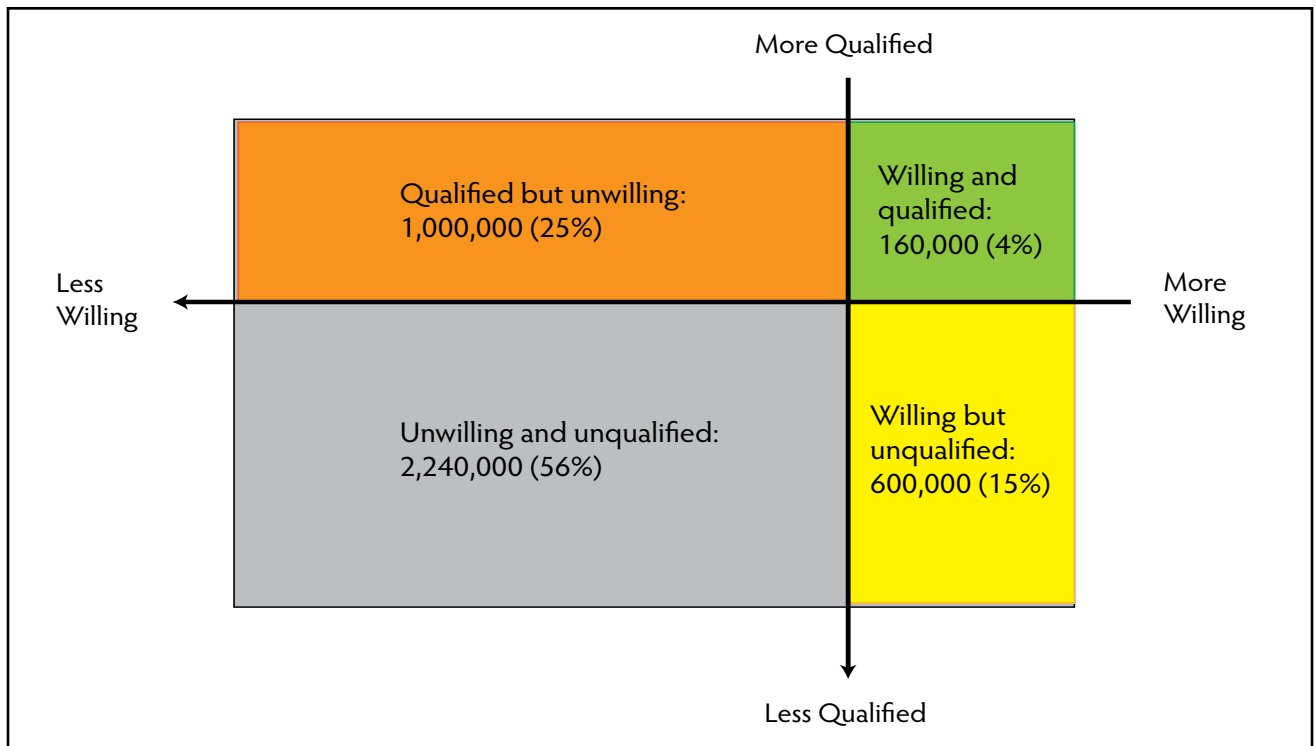


Figure 1. The All-Volunteer Force's Strategic Problem

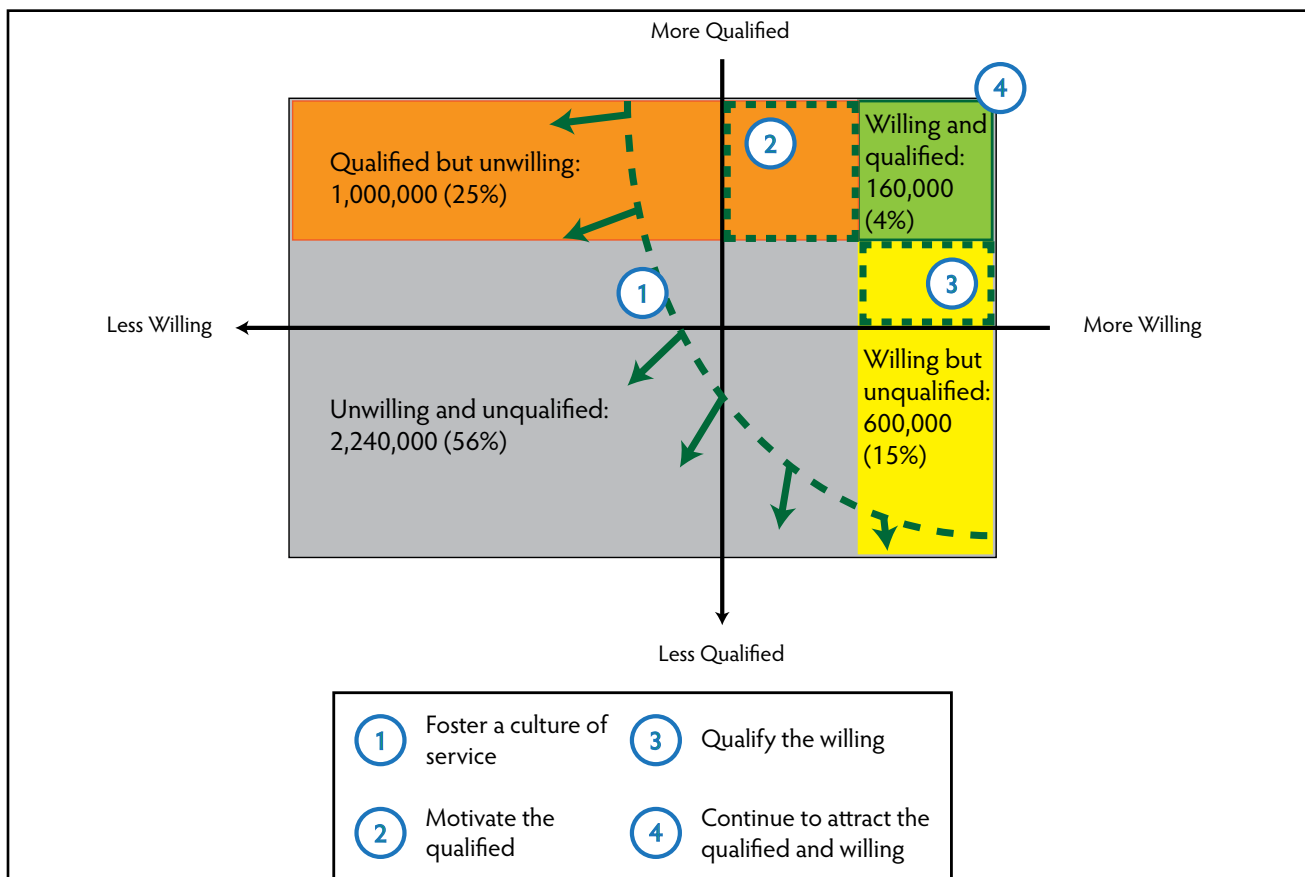


Figure 2. The Approach Applied to the Problem

under today’s standards. Currently, only 4.3 percent of young people are both willing and qualified to serve in the military, and that number is declining. To make matters worse, this dynamic situation is trending in the wrong direction for the AVF. Figure 1 illustrates the long-term movement toward both decreased willingness as well as decreased qualification to serve (figure 1, down and left). As DOD’s demand for highly qualified, motivated young talent continues, competition for talent represented in figure 1’s upper right quadrant becomes even more challenging. Long-term solutions must address the trends in both quality and quantity, but any redesign of the AVF must account for the deep tensions between the military and social aspects of the problem. Failure to do so threatens any future approach.

Expanding the Talent Pool of Willing and Qualified: Four Lines of Effort

A redesigned AVF requires a holistic approach aimed at long-term, systemic issues to ensure an

accessible talent pool of qualified and willing young adults to serve in the military. Accomplishing this requires decisive change without violating the fundamental interests of two key AVF stakeholders: the military and society. For example, the military will not sacrifice the principle that uniformed recruits be sufficiently intelligent, physically sound and capable, and morally fit for the demands of military life. Similarly, the approach should not require society to forego preparing young people for college or other high-value opportunities.

Figure 2 illustrates a holistic approach that would use four lines of effort to engage each quadrant of the problem diagram introduced in figure 1. This approach would renew the AVF’s long-term viability and account for military and societal factors—for each stakeholder’s core interests.

First, at the policy level, the U.S. leadership must begin cultivating a culture of voluntary national service that includes as many young people as possible, regardless of willingness or qualification to serve.

Second, among those one million eighteen-year-olds qualified to serve but unwilling (top left), policy makers must devise means for incentivizing such service by aligning the desires of the unwilling with national interests, of which a high quality military is one.

Third, steps must be taken to qualify those willing to serve but who today cannot fully qualify (bottom right). To enhance the process, the military must develop more refined methodologies for a talent-spotting and vetting process, akin to what Special Forces employ to identify and select their talent today. For example, the Junior Officer Reserve Corps programs provide both a history and a mechanism that could help such an effort.

Fourth, and finally, the military should employ its legacy tools for continuing to pursue and attract the already high-quality, highly motivated young people the Nation seeks today (top right). Though many of such talented young men and women want to serve in the military, they still need to be actively recruited, or many will be enticed by agents of other organizations who put forth the interest and effort to recruit them.

An approach that proceeds along these four lines of effort can arrest and then reverse the drift toward fewer and fewer qualified and willing young men and women by expanding the pool of those qualified and willing to serve the Nation, both in military and civilian capacities. In doing so, the AVF's enlisted talent requirements are more likely to receive long-term, sustainable support from both society and the military, as well as political leaders. More detailed proposals with development of appropriate ways and means along these four lines of effort are still needed. Due to space limitations, this article has only identified the challenges and suggested starting points for broader and deeper analysis leading to a redesign of the AVF.

Conclusion

Divergent military, societal, and political forces risk the AVF's future viability. Although America likes its

volunteer force, the military is attempting to drive it to higher quality through recruitment even as society is showing it will not sustain the military's steady call for volunteers. To be sure, many dedicated and experienced leaders in DOD, Congress, and across society have and will continue to support the AVF. But few are aware of, or acknowledge, the degree and power of current tensions on the AVF's foundational structures.

The DOD commitment to conduct a holistic review of the AVF is a necessary start. However, national inattention thus far to recruitment of enlisted talent risks reliance on quick fixes without addressing the fundamental issues. Further analysis must integrate the relationships among the military, the government, and the society, with special focus on fiscal issues such as pay and compensation.

U.S. political leaders are charged with managing these tensions and forging practical solutions. In developing a more long-term approach to the AVF's enlisted talent acquisition, future efforts must be acceptable to key stakeholders. They must assign responsibility, propose objectives, and develop basic assessment tools to monitor the AVF's viability and account for changes in the broad system. Redesigning the future AVF must begin at the beginning: with the young men and women who join the ranks. All those involved with DOD talent acquisition effort must pitch in: military, societal, and political leaders.

The call for a redesign of America's AVF is timely; the very life of today's high-quality force is at stake. Time, however, is not our ally. Our nation needs a concerted, whole-of-nation approach to successfully complete a reform of the AVF. The solution must account for the pervasive problems, especially with enlisted talent acquisition, without killing what makes the military so venerated and potent today. Those undertaking this task should gain encouragement in this: Americans can agree they want their all-volunteer force, and they want it healthy and good and strong for the long haul. For the force's redesign, this is a solid foundation. ■

Col. Michael Runey, U.S. Army, is the director of the Security Force Assistance Center (CJ-35) in Headquarters Resolute Support (NATO) in Kabul, Afghanistan. He educated cadets in military history at the U.S. Military Academy, served as professor of military science at Pennsylvania State University, and served on the commander's initiatives group at U.S. Army Recruiting Command. Experience gained in raising and educating the all-volunteer force served as the catalyst for his research at the Army War College.

Col. Charles D. Allen, U.S. Army, Retired, is professor of leadership and cultural studies in the Department of Command, Leadership, and Management at the U.S. Army War College, Carlisle Barracks, Pennsylvania. He holds a BS from the U.S. Military Academy, an MS from Georgia Tech, an MMAS from the School of Advanced Military Studies, and a Master of Strategic Studies from the U.S. Army War College.

Notes

1. Office of Rep. Charles Rangel, "Rangel Introduces Legislation Reinstating Draft and Requiring Women to Register in Selective Service System," press release, 15 February 2013, accessed 17 August 2015, <http://rangel.house.gov/press-release/rangel-introduce-legislation-reinstating-draft-and-requiring-women-register-selective>; Sandy Fitzgerald, "Rep. Charles Rangel Again Calls for Military Draft, War Tax," *Newmax*, 3 September 2015, <http://www.newsmx.com/US/Charles-Rangel-military-draft-war-tax/2015/03/20/id/631560/>.
2. James Kitfield, "The Great Draft Dodge: Karl Eikenberry and What Americans Lost When They Stopped Fighting," *National Journal Magazine*, 13 December 2014, accessed 17 August 2015, <http://www.nationaljournal.com/magazine/the-great-draft-dodge-20141212>.
3. Military Compensation and Retirement Modernization Commission, *Report of the Military Compensation and Retirement Modernization Commission: Final Report*, 29 January 2015, accessed 17 August 2015, <http://mldc.whs.mil/public/docs/report/MCRMC-Final-Report-29JAN15-LO.pdf>.
4. "Strategic Leadership and Decision Making," National Defense University website, accessed 5 September 2015, <http://www.au.af.mil/au/awc/awcgate/ndu/strat-ldr-dm/pt1ch6.html>. Environmental scanning is also a subject area in the curriculum of the U.S. Army War College.
5. Joint Publication 5-0, *Joint Operation Planning* (Washington, DC: U.S. Government Printing Office, 11 August 2011), III-9.
6. Permanent End Strength Levels to Support Two Major Regional Contingencies, 10 U.S.C. § 691 (2012), accessed 3 September 2015, <http://www.gpo.gov/fdsys/pkg/USCODE-2010-title10/html/USCODE-2010-title10-subtitleA-partII-chap39-sec691.htm>.
7. Enlistments, 10 U.S.C. § 501-520c (2012), accessed 17 August 2015, <https://www.law.cornell.edu/uscode/text/10/subtitle-A/part-II/chapter-31>.
8. Rick Ayers, U.S. Army Recruiting Command's Commander's Initiatives Group, 23 January 2015, e-mail message to author.
9. U.S. Army Training and Doctrine Command (TRADOC) Pamphlet 525-3-7, *The U.S. Army Human Dimension Concept* (Fort Eustis, VA: TRADOC, 12 May 2014), accessed 9 September 2015, <http://www.tradoc.army.mil/tpubs/pams/TP525-3-7.pdf>. Cognitive, physical, and social comprise the three components of the Army's human dimension integration framework.
10. Gallup, "Confidence in Institutions: Gallup Historical Trends," Gallup website, 2-7 June 2015, accessed 17 August 2015, <http://www.gallup.com/poll/1597/confidence-institutions.aspx>.
11. Stephen M. Kosiak, "Military Manpower for the Long Haul," Center for Strategic and Budgetary Assessments, 15 October 2008, accessed 17 August 2015, 33, <http://csbaonline.org/wp-content/uploads/2011/02/2008.10.15-Military-Manpower.pdf>.
12. Claudio Fernández-Aráoz, "21st Century Talent Spotting," *Harvard Business Review* (June 2014): 50, accessed 17 August 2015, <https://hbr.org/2014/06/21st-century-talent-spotting>.
13. United States Const., Art. 1, § 8, Cl. 12-13.
14. Leon Panetta, quoted in Arnold Punaro, "Tame the Pentagon's Personnel Costs: Adjust Retirement, Health Care for Future Troops," *Defense News*, 5 December 2011, accessed 17 August 2015, <http://www.defensenews.com/article/20111205/DEFBEAT05/112050306/Tame-Pentagon-s-Personnel-Costs>.
15. Chairman of the Joint Chiefs of Staff Gen. Martin Dempsey, quoted in Jim Garamone, "Dempsey: Military Must Slow Growth for Military Pay, Health Care," *Armed Forces Press Service*, 1 October 2013, accessed 9 September 2015, <http://content.govdelivery.com/accounts/USDOD/bulletins/8d93ab>.
16. Department of Defense, *Military Pay and Compensation Quadrennial Review, 11th Report*, June 2012, xvii and 5, accessed 9 September 2015, <http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA563239>.
17. Jennifer Liberto, "Food Stamp Use Among Military Rises Again," *CNN Money* website, 17 February 2014, accessed 17 August 2015, <http://money.cnn.com/2014/02/17/news/economy/military-food-stamps/>. Research for this essay did not reveal the influence of a third factor potentially effecting young adults' decision: direct government assistance. This deserves further exploration. A key data point undermining the fact that soldiers are well paid compared to their peers: many soldiers are still receiving food stamps, despite such programs such as the Family Subsistence Supplemental Allowance (FSSA).
18. Paul R. Sackett and Anne S. Mavor, eds., *Assessing Fitness for Military Enlistment: Physical, Medical, and Mental Health Standards* (Washington DC: The National Academies Press, 2006), 111 and 138; and Maia Szalavitz, "Study: 1 in 3 Americans Arrested by Age 23," *Time* Childhood website, 19 December 2011, accessed 9 September 2015, <http://healthland.time.com/2011/12/19/study-1-in-3-american-youth-are-arrested-by-age-23/>.
19. See *Qualified Military Available (QMA) Final Technical Report*, The Lewin Group, 10 October 2013, 50, for estimates of people qualified to serve. Percentages in figures 1 and 2 for qualification and willingness to serve were provided by Headquarters, U.S. Army Recruiting Command, e-mail to authors, 13 July 2015. Calculations are based on 71.4 percent of young American adults unqualified to serve from the *QMA Final Technical Report* and 85.0 percent unwilling to serve from the DOD's 2014 Joint Advertising, Marketing Research, and Studies (JAMRS) Recruiting Database 2014 update. Each year approximately 4.1 million American youths turn eighteen years old and are part of the 20.6 million prime youth market of seventeen to twenty-one year olds who are the focus of DOD recruiting efforts. The JAMRS program conducts a quarterly poll of youth interest and qualification for military service.



2nd Place, General Douglas MacArthur Military Leadership Writing Competition, CGSC Class 14-02

(Photo by Staff Sgt. Taikeila Chancey, 704th Military Intelligence Brigade PAO)

Soldiers with the 741st Military Intelligence Battalion, 704th Military Intelligence Brigade, compete in the battalion's Silent Warrior Challenge 5 October 2012 at Fort Meade, Maryland. The event provided an opportunity for soldiers to build resiliency skills by competing in demanding training events that developed teamwork, esprit de corps, and unit cohesion.

Leading Soldiers with—Not Primarily through— Communication Technology

Maj. Andrew B. Stipp, U.S. Army

Recent advances in communication technology have made the world smaller in many ways. Individuals are now able to communicate

with others in real or near-real time from almost anywhere in the world. While these advances are remarkable, they also engender potentially negative

consequences for an individual's social skills and interactive abilities. These negative consequences can directly affect the U.S. Army because it relies heavily on interpersonal communication and relationships when conducting operations.

The Army is organized to maximize the effectiveness of cohesive teams so they can achieve their objectives. The force's emphasis on the team dynamic is understandable because only through teamwork can it accomplish its fundamental mission—to protect and defend the Nation and its interests. Army leaders need to carefully manage various skills, personalities, and emotions in the stressful circumstances that soldiers are likely to endure so they can protect their people and accomplish their assigned missions. This means leaders should give priority to communication technologies and techniques that enhance interpersonal relationships. They must never allow technology to supplant those relationships. Leaders should emphasize the use of *active communication channels* as the bedrock for unit cohesiveness, developing interpersonal relationships, and accomplishing missions. For the purposes of this article, active communication channels are those most likely to deliver a message immediately to its intended recipient and to elicit immediate confirmation that the recipient has received and understood it. Active channels (e.g., face-to-face) tend to facilitate prompt, interactive feedback for establishing context and clarifying the message because the sender is more able to require the attention and feedback of the receiver.¹ At the other end of the continuum, *passive communication channels* (e.g., text messaging) are those less likely to provide prompt reception and confirmation of the message because they require less attention from the receiver.

Communication Technology Research

Advanced communication technology (such as the Internet, social media, e-mail, and text messages) has been a topic of psychological and sociological research for at least twenty years. Many researchers explore the effect technology has on social skill development and the social well-being of children and adolescents. A research project called the HomeNet Project (a study of how families use the Internet) demonstrated that Internet use correlated with a decline in social

well-being among ten- to nineteen-year-old participants.² Authors Kaveri Subrahmanyam et al. cite research from David Krackhardt that supported the theory that social relationships created online provide less support than those developed face-to-face.³ Additionally, the HomeNet project results demonstrated that online communication correlates with loneliness and depression when involving “weak-tie” relationships.⁴ Weak-tie relationships are formed through online communication, without prior connections between the acquaintances. The relationships are deficient in supportive interpersonal interaction. The HomeNet data showed these patterns over one- and two-year studies; Subrahmanyam et al. maintain that more research is needed into the long-term effects of Internet use on social relationships and well-being.⁵

Other research has yielded a disturbing association between antisocial personality traits and social media use. For example, Laura E. Buffardi and Keith Campbell conducted a study of narcissism and its relationship to the frequency and content of a person's social media site (such as a Facebook page, which is a primarily passive communication channel). The research took self-reported narcissistic ratings of webpage owners and compared them to the ratings of an unbiased observer for narcissistic traits. Higher narcissism ratings correlated with higher levels of activity in the online forum as well as more self-promoting content.⁶ While a causal relationship between social networking sites and narcissism was not established, the correlation is worth noting.

Lt. Col. Joe Doty, U.S. Army, retired, and Master Sgt. Jeff Fenlason, U.S. Army, discuss the problem of extremely narcissistic leaders in a 2013 article in *Military Review*.⁷ Citing leadership research, they assert that toxic leaders tend to exhibit excessive narcissistic traits. When toxic leaders exhibit extreme narcissism, they negatively affect relationships within the team. The implication for communication is that leaders who communicate mainly through passive communication channels might tend to be satisfied with promoting their message to as many people as possible, rather than ensuring that any one recipient understands it in depth. At a minimum, if leaders are emphasizing social media or other passive communication channels, they likely are not developing effective communication skills or interpersonal relationships. On the other hand, any

team member who displays high levels of narcissism likely does not possess effective communication skills or well-functioning interpersonal relationships.

Developing new and meaningful interpersonal relationships is paramount to serving effectively in the military. Soldiers routinely interact with people, often without the benefit of an existing relationship. They need to be able to jump start effective working and social relationships; active channels facilitate a good foundation for both. This is especially true for new soldiers, who typically join the service between the ages of eighteen and twenty. They often find themselves far from their homes and established social networks.

Patti M. Valkenburg and Jochen Peter conducted a review of research literature regarding the Internet and social consequences, published in 2009.⁸ They cite studies indicating a positive relationship between Internet communication and a sense of social connectedness and well-being among adolescents. However, they highlight that this positive relationship was found primarily in adolescents maintaining previously existing relationships. When it came to creating new friendships or communicating with strangers, the positive effects between Internet communication and social connectedness did not hold. This finding supports the idea that a strong connection may not readily form between, for example, a new soldier and a team leader having no prior relationship if their interactions rely heavily on communication technology.

Technological advances make communication more rapid and efficient, but speed and efficiency do not guarantee that communication will be more meaningful or beneficial to teamwork and cohesion. Direct communication and interpersonal skills are vital to developing a strong dynamic among team members. Further research supports that an emphasis on direct, active communication has a generally positive effect on social cohesion. For example, Yuhyung Shin and Kyojik Song conducted a field study of forty-two student groups to assess the relationship of communication channel and time, cohesion, and task performance.⁹ The two communication modes studied were computer-mediated communication and face-to-face communication. Previous studies were cited that supported the notion that “when group members are ... close to one another, they are more likely to help one another frequently.”¹⁰ Shin and Song’s study demonstrated that



(Photo by Claire Heininger, visual information specialist, Fort Drum PAO)

A soldier from 2nd Battalion, 87th Infantry Regiment, 3rd Brigade Combat Team, 10th Mountain Division (Light Infantry), communicates using a Nett Warrior device during the Mountain Peak training exercise 19 April 2013 at Fort Drum, New York. Nett Warrior, a handheld situational awareness and messaging tool, is a key component of Capability Set 13, which extends the tactical network down to the dismounted soldier.

more time spent in face-to-face communication had a positive effect on group *social* cohesion, while more time spent in computer-mediated communication had a positive effect on group *task* cohesion.¹¹ Results also supported that face-to-face communication had a positive effect on how well groups performed tasks.¹² Computer-mediated communication presented some value, particularly when it came to specific group task performance. However, social cohesion and group ability to perform in any context were most positively influenced by face-to-face communication.

Effective, direct communication—and the cohesion it subsequently produces—is crucial in a unit’s ability to handle high-stress environments. Military units frequently serve in stressful operational environments, in combat or in garrison; other professions also work in high-stress environments. A network analysis of communication in a medical emergency department, conducted by Daniel P. Patterson et al. in 2013, illustrates the importance of communication and cohesion

for teams that operate under arduous conditions.¹³ The authors describe the emergency department as a “high-risk environment for patients and clinicians that demands colleagues work together as a cohesive group.”¹⁴ The findings indicated that poor team communication was the most common root cause of errors in health care. Additionally, the findings indicated that a concentration of communication was occurring between groups (or cliques) of teammates. The authors further highlighted that many safety-related health programs focus on improving communication.¹⁵

Aside from its importance for task performance, effective communication and cohesion are also tied directly to individual and unit resilience. Paul T. Bartone’s 2006 research discusses resilience and the ability of leaders to influence hardiness in subordinates.¹⁶ According to Bartone, the first of six primary stressors that define military operations is isolation. A further explanation of this stressor is described as follows: “Soldiers deploy to remote locations, far away from home, separated from their families, frequently without good tools or methods for communicating ... often surrounded by coworkers that are new to them.”¹⁷ Unsurprisingly, communication seemed vital to a leader’s ability to shape how

subordinates framed a stressful experience. The “leader who, through example and discussion, communicates a positive construction or reconstruction of shared stressful experiences, may exert an influence on the entire group in the direction of his or her interpretation of experience.”¹⁸ While the article does not specify what communication channels were used to instill hardiness, it is a reasonable assumption that direct, active contact under these circumstances would be most effective.

Technology and Communication in the Army

Like the other military branches, the Army has become heavily reliant on technology to conduct daily operations. Jokes about the Army’s overdependence on Microsoft Outlook and PowerPoint are common at all levels of headquarters. This not to say that the adoption of technological communication tools is entirely negative; many technologies have enhanced the force’s operational effectiveness. Technology has greatly improved commanders’ abilities to understand their operational environments, communicate orders to units, and synchronize warfighting functions. At battalion level and above, technology is essential to exercise mission command effectively. The use of

e-mail enables a brigade commander to send the same structured message to five battalion commanders in five different geographic locations at the click of a mouse button.

However, the operations planned at the battalion level and higher are executed at the company level or lower. Granted, junior leaders need proficiency in communication technologies so they can conduct frequent communication with higher headquarters. However, their team, squad, or platoon cohesion and effectiveness depend primarily on frequent direct interaction and active communication. Views expressed by Army captains at Solarium 2014 (an annual meeting of captains to discuss key issues and develop recommendations for the chief of staff of the Army) support this principle.¹⁹



(Photo by Staff Sgt. Rob Strain, 15th Sustainment Brigade PAO)

Lt. Col. Peter Haas, the commander of the 49th Transportation Battalion, 15th Sustainment Brigade, 13th Sustainment Command, gives his soldiers a safety briefing 20 November 2008 at the brigade’s headquarters on Fort Bliss, Texas, before they begin classes as part of the brigade’s safety stand-down day activities.



(Photo by Sgt. 1st Class Kap Kim, 2nd Brigade Combat Team, 1st Cavalry Division PAO)

Soldiers from Troop C "Crazy Horse," 4th Squadron, 9th Cavalry Regiment, 2nd Brigade Combat Team, 1st Cavalry Division, "heave to" against soldiers from Troop D, Forward Support Company's "Defenders," during a tug-of-war competition 17 July 2013 at Fort Hood, Texas. The Crazy Horse team proved victorious in the competition, which was conducted as part of the squadron's family day activities.

Junior soldiers need to know their leaders from team to platoon level, even company level, primarily through direct interaction. Leaders at team, platoon, and company level are wise to use primarily active communication channels (e.g., face-to-face or telephone conversation) more than primarily passive communication channels (e.g., e-mail or text message). The message may be delivered, but confirmation may not be provided quickly. In executing operations at the company level and below, both information and confirmation that a message is clearly received are essential for accountability and mission success.

In order to develop cohesive teams, leaders must actively communicate regularly and effectively with their subordinates. In addition, leaders should understand the time and place for using passive communication channels, and they should avoid overusing them.

Soldiers' proclivity for depending on communicating through technology was apparent to me during my time as a company commander from 2010 to 2012. During a month of consolidated training at Fort Bragg, North Carolina in November 2011, I directed that cell phones

were not authorized for soldiers (staff sergeant and below) during the established training hours. There were two main reasons for this decision: first, the use of cell phones for sending text messages or using the Internet could become a training distraction; and second, I wanted to set conditions for personal, face-to-face interactions to take place. The latter reason was especially important because our unit had experienced significant personnel turnover following redeployment just six months before. As one might expect, this decision was not popular; it required daily leader inspection to ensure the directive was being followed.

During a company after action review with sergeants and staff sergeants in early December 2011, many grievances were voiced about the logic of my decision regarding cell phones. Their argument was that I had taken their "power base from them" (their words) by denying their immediate access to communication during training hours. They believed that, void of instant communication with their soldiers, they were not able to adequately monitor whereabouts and maintain accountability. The over-dependency on technology was clear: if young

leaders at the squad-level associate one channel of communication with power, technology has become a crutch for the most basic of interactions. My counterargument was, first, to explain the logic behind my decision. I continued by discussing that I had removed (or limited) a means of communication, but I stressed that *communication itself* was their power base—not the specific means. I created a more restrictive environment for communication, but this should not have been their primary concern. They should have adjusted their style in order to maintain communication with their soldiers in other, more active methods. In other words, I implicitly told the noncommissioned officers that they should not be “leading by text.”

Why do soldiers overuse technology to communicate? They overuse it because it is convenient, inexpensive, and easy to control. Writer Jeffrey Kluger explains the appeal of conversation by texting:

I embraced the arrival of e-mail and, later, texting. They meant a conversation I could control—utterly. I get to say exactly what I want, exactly when I want to say it. It consumes no more time than I want it to and, to a much greater degree than is possible with a phone call, I get to decide if it takes place at all.²⁰

Kluger’s justifications may not be all encompassing, but it is reasonable to assume that many share his self-oriented perspective. Despite the need for text message communications at times, this self-serving justification is, in many ways, contrary to Army values. Selfless service to the Nation may involve taking an emergency phone call at an odd hour of the night, on a weekend with family, or at some other inconvenient time. In the context of selfless Army service, however, the point is not to satisfy a soldier’s wish to communicate using a certain channel. It is the duty of soldiers and leaders to ensure messages are sent, received, and understood via the most effective channels. Moreover, relationships among team members matter more than an individual’s convenience. Relationships are essential to mission accomplishment, and building them depends on emphasizing active communication channels.

Face-to-Face Communication— A Vignette

On 6 April 2011, I received an inconvenient and life-changing phone call. I was on block leave following our company redeployment, spending time with

my wife at a hockey game. Perhaps I could have avoided the call and enjoyed the rest of my evening, but that would have only delayed the inevitable. The call I received was one that no leader wants—one of our recently redeployed soldiers was involved in a serious motorcycle accident. My wife and I immediately left the hockey game for the hospital, hoping to uncover the details and to provide support to his friends and family. When we arrived at the intensive care unit, his prognosis looked grim; the nineteen-year-old soldier was in a medically induced coma, and his brain was swelling after undergoing emergency surgery to amputate his right arm. I arrived earlier than the soldier’s mother and, eventually, had to share the news I just received with her face-to-face. I will always remember her look of horror after I delivered the unwanted message. She fell apart in the most poignant way; her reaction was completely understandable. The next few emotionally draining hours turned into the remaining weeks of my block leave; I spent the majority of my time in the intensive care unit awaiting the next steps. The soldier’s condition progressively degraded, forcing his mother to make the unfortunate decision to remove him from life support 15 April. He passed away within hours.

This was a high-stress leadership moment where face-to-face communication was not merely the *right* answer; it was the *only* answer. As commander, I fully accept responsibility for all that happened in my unit, which included this soldier’s death. The soldier’s mother was not under my command, yet I owed her the best information and support I could provide, delivered personally, at a time in which she needed it. Passive communication would not have sufficed in this situation. Leaders need to be present and directly engaged, especially in the toughest situations. Soldiers and their family members deserve nothing less.

Conclusion

Leaders must embrace the concept of selfless service and model it for soldiers. Leaders cannot allow their soldiers to be seduced by the idea that their communication preferences are more important than their duty. Leaders should prioritize face-to-face communication as a means of understanding their soldiers’ values, principles, and emotions. Counseling sessions and end-of-day formations

provide opportunities for such interaction. Training and accountability at this level will further develop soldiers and create the kind of relationships and team cohesiveness the Army needs.

It is clear that developments in technology have rapidly advanced our means for communicating. Advanced communication technology is a phenomenon born of the information age; it is one that is likely to progress in its availability and use. People will continue to use technology for routine communication, and the channels for communicating will, no doubt, evolve further. These advances help leaders command and control large formations more efficiently, thus enabling mission accomplishment. Even so, there are potentially negative effects for individual social skills, connectedness, and

unit cohesion from relying too heavily on communicating through technology.

Protecting lives while enabling a unit to succeed in combat or under stressful circumstances necessitates strong unit cohesion. Moreover, individuals may further develop their personal resilience and social skills by emphasizing active communication channels. The recent advances in technology are certainly astounding, but optimally, personal relationships are built primarily upon direct contact, communication, and trust. The Army needs this trust to be firmly established by direct, active communication, with support from communication technology, rather than primarily by communication through mediating technologies. ■

Maj. Andrew B. Stipp, U.S. Army, is the operations officer for the Provost Marshal, 1st Armored Division, Fort Bliss, Texas. He holds a BA in psychology from Purdue University and an MA in business and organizational security from Webster University. This article won second place in the General Douglas MacArthur Leadership Writing Competition, Command and General Staff College class 14-02.

Notes

1. Michael Braun, "Classifying Communication Channels: The Active-Passive Continuum," MichaelBraun.me website, undated blog post, accessed 5 August 2015, <http://www.michaelbraun.me/2012/05/classifying-communication-channels-the-active-passive-continuum/>.
2. Kaveri Subrahmanyam et al., "The Impact of Home Computer Use on Children's Activities and Development," *The Future of Children* 10 (Fall/Winter 2000):135.
3. David Krackhardt, "The Strength of Strong Ties: The importance of Philos in Organizations," N. Nohria and R. Eccles, eds., *Networks and Organizations: Structure, Form, and Action* (Boston: Harvard Business School Press, 1994), cited in Subrahmanyam "The Impact of Home Computer Use," accessed 5 August 2015, http://www.google.com/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CB4QFjAAahUKEwiY-oZHQyJLHAhVHjw0KHZUWDHU&url=http%3A%2F%2Fwww.cdmc.ucla.edu%2Fpublished_research_files%2Fspkg-2001.pdf&ei=tkjCVZjuJMeeNpWtsKgH&usq=AFQjCNEUal-xIVH_0krb-9dyo15oS3JYWXg&bvm=bv.99261572,d.eXY.
4. Subrahmanyam, "The Impact of Home Computer Use," 137.
5. Ibid., 140.
6. Laura E. Buffardi and W. Keith Campbell, "Narcissism and Social Networking Web Sites," *Personality & Social Psychology Bulletin* 34 (October 2008): 1303-1314.
7. Joe Doty and Jeff Fenlason, "Narcissism and Toxic Leaders," *Military Review* (January-February 2013): 55-60.
8. Patti M. Valkenburg and Jochen Peter, "Social Consequences of the Internet for Adolescents: A Decade of Research," *Current Directions in Psychological Science* 18 (2009): 2.
9. Yuhung Shin and Kyojik Song, "Role of Face-to-Face and Computer-Mediated Communication Time in the Cohesion and Performance of Mixed-Mode Groups," *Asian Journal of Social Psychology* 14 (2011): 126-139.
10. Ibid., 129.
11. Ibid., 132.
12. Ibid., 133.
13. Daniel P. Patterson et al., "Network Analysis of Team Communication in a Busy Emergency Department," *BMC Health Services Research* 13 (1 May 2013): 1-12.
14. Ibid., 1.
15. Ibid., 12.
16. Paul T. Bartone, "Resilience Under Military Operational Stress: Can Leaders Influence Hardiness?" *Military Psychology* 18 (July 2006): 131-148.
17. Ibid., 135.
18. Ibid., 141.
19. David Vergun, "Texting No Substitute for Face-Time, Captains Tell CSA," U.S. Army Homepage, 14 July 2014, accessed 19 June 2015, http://www.army.mil/article/129901/Texting_no_substitute_for_face_time_captains_tell_CSA.
20. Jeffrey Kluger, "We Never Talk Anymore: The Problem With Text Messaging," CNN [Cable News Network] Tech, 6 September 2012, accessed 17 June 2015, <http://www.cnn.com/2012/08/31/tech/mobile/problem-text-messaging-oms/>.



(Photo by Mark Beattie, Human Terrain System)

Human Terrain System (HTS) students practice engaging with and interviewing members of a foreign culture 31 March 2012 during the Research Operations Exercise conducted at Fort Leavenworth, Kansas. The exercise was the capstone assessment activity for the training program prior to student graduation and deployment. HTS trainers found that the more realistic and engaging the training, the better the students retained and applied their new skills to their in-theater jobs.

A Way to Teach Critical Thinking Skills so Learners Will Continue Using Them in Operations

Marcus B. Griffin, PhD

Lt. Col. Rob B. McClary, PhD, U.S. Marine Corps, Retired

It was a special kind of failure. Of course, members of human terrain teams—sociocultural research teams deployed with U.S. and partner forces in Iraq and Afghanistan—had no monopoly on cognitive rigidity. Nor were all team members guilty of it. But as he stood there in the waning heat of October in Baghdad, Dr. Marcus Griffin, the team's lead social scientist, found himself confronting an extreme case of rigid thinking. It was 2008, and the team was struggling to come up with recommendations about how to promote reconciliation between Sunni and Shia.

Someone recommended that the team should consider interviewing families who had married their sons and daughters across the sectarian divide as a starting point for understanding how families reconciled sectarian differences and tensions. The reasonable assumption was that marriage and family were the basic building blocks of communities, and since Iraqis usually arranged their children's marriages, knowing how and why some would knit diverse families into a new whole could yield insight.

As they discussed the recommendation, one of the team's analysts, an Arab Christian who had immigrated to the United States after the first Gulf War, quickly spoke up, "Sunna and Shia do not marry each other."

"What do you mean?" Griffin asked. "Of course they do. There is a long history of it."

"Well they don't do that anymore," he stated authoritatively.

"How do you know?" Griffin asked, knowing that Hussein, the Shia interpreter sitting across the room studying, had married his son to a woman from a Sunni family the previous year.

"I'm Iraqi," said the analyst. "You can ask me anything. I know everything about Iraq."

And there it was: "I know everything about Iraq." Not only was this trained analyst wrong, but he was so sure of himself that he was not open to new information and, in essence, he was incapable of learning.

Good Classes, Poor Results

It was displays of this type of rigid, overgeneralization based on knowledge of a small or nonrepresentative sample, or premature acceptance of an idea as fact, coupled with the persistent adherence to a belief even in the face of evidence to the contrary, that

caused the Human Terrain System training and education program to reexamine its curriculum, method of instruction, and academic assessment process. Like virtually all Army education programs, the curriculum already included classes in critical thinking skills. Also like most Army education programs, not only did the instructors enjoy teaching the critical thinking classes, but also, for the most part, the students provided very positive feedback about the classes on student surveys.

However, despite both instructors and students enjoying the critical thinking classes, many graduates were failing to think critically where it mattered most—on the job.

Critical Thinking Education for Complex Cultural Interactions

An experimental program quickly created in 2006 in response to a Joint Urgent Operational Needs Statement (JUONS), the Army's Human Terrain System aimed to provide a sociocultural analysis capability to Army and partner forces in Iraq and Afghanistan. The program recruited and trained civilian and former military personnel who attended a training program at Fort Leavenworth.¹ Individuals would deploy after training, joining teams already embedded in Army or coalition partner staffs. The teams conducted research and interacted with the local peoples to help their military leaders better understand the dynamic and complex societies in their areas of operation.

Team members needed effective cross-cultural skills they could apply well beyond a traditional two-dimensional model. They needed to be able to communicate and work effectively with individuals and groups (both homogeneous and heterogeneous) with a wide range of cultural backgrounds, including their own diverse team members, U.S. and coalition military commanders and staffs, host-nation forces, and diverse civilian populations.

Team members needed to recognize and interact with numerous individual and collective cultural frameworks, all the while being aware of how their own cognitive lenses and filters influenced their understanding. Success in these complex interactions, illustrated in figure 1, page 110, would depend on applying critical thinking skills.

As the Human Terrain System training and education managers recognized how important critical thinking skills were to the graduates, and how poorly some were applying those skills, they began to reexamine what was taught, how it was taught, and how the results were assessed.

The managers conducted research for five years. They reached out to and collaborated with experts such as Dr. Diane Halpern, former president of the American Psychological Association.² A true educator and professional, she not only provided invaluable insights and advice throughout the process but also delivered an in-person faculty development session on the effective instruction of critical thinking skills, free of charge. In addition, the researchers worked with Dr. Suzanne Bell, associate professor of industrial and organizational psychology at DePaul University.³ Her research and consulting specialties include team composition, fostering team effectiveness, predictors

of job performance, and organizational training. The researchers discovered that team interactions and climate also significantly affected the degree to which graduates would use their critical thinking skills on the job. Bell provided vital insights, particularly regarding the design and management of high-performing teams.

The researchers also consulted with experienced human terrain team members and military commanders and staffs. They experimented with different program designs and assessed results until, finally, they identified five keys to teaching critical thinking skills so that human terrain team members would apply them after leaving the classroom:

1. An effective talent management program to inform hiring and assignment practices and ensure person–job fit (with *fit* in this context referring to *compatibility*) and person–organization fit for team members and faculty

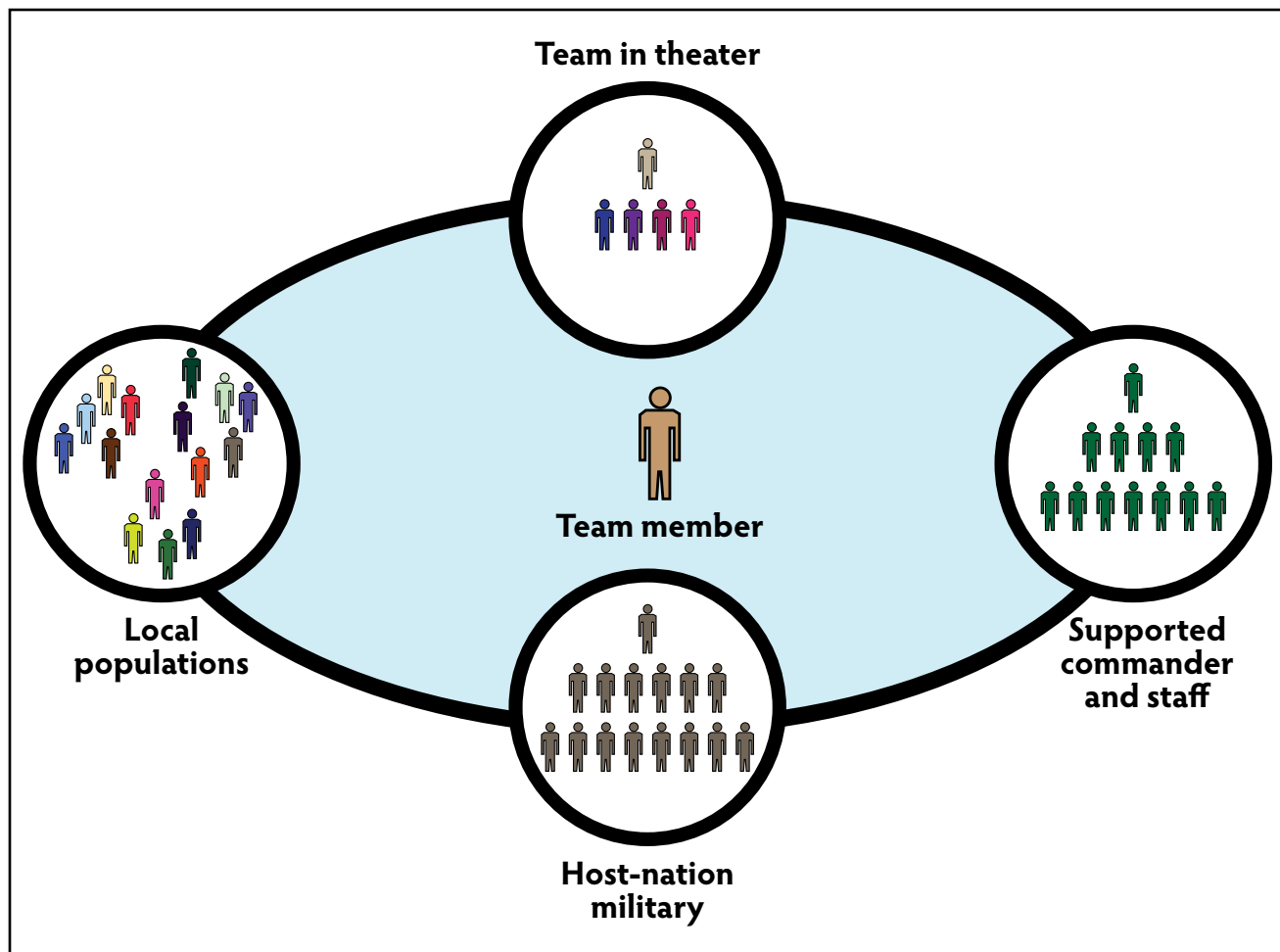


Figure 1. Multidimensional Cultural Understanding

2. An organizational climate that values, expects, and rewards critical thinking and innovation
3. A shared understanding of the specific critical thinking skills and behaviors most important for on-the-job success
4. Faculty members who integrate critical thinking instruction into all classes and effectively model critical thinking skills
5. A comprehensive assessment program to facilitate organizational agility

Although the researchers identified these keys specifically for implementing a program in the Human Terrain System (which hired civilians for its teams), their findings are relevant to any military educational program that measures its success by the degree to which graduates think critically on the job—and not merely how much learners enjoy their classes.

An Effective Talent Management Program to Inform Hiring, Employment, and Retention Practices

The first key is to establish an effective talent management program at the earliest possible opportunity, preferably from the start. Until an organization gets talent management right, with a high degree of person-job and person-organization fit, it will have very limited success with its other functions.⁴

Designing an effective talent management program, however, takes time. Because the Human Terrain System was started in response to a JUONS, there was a great sense of urgency in fielding teams. This urgency, unfortunately, precluded the type of initial talent management analysis that was needed, with the result that many Human Terrain System staff and team members were hired solely based on the academic degrees they held. Some members were not very compatible with the organization and tasks.

To avoid hiring unsuitable applicants, a talent management program should include the following:

- ◆ A job-task analysis that identifies the knowledge, skills, attitudes, and behaviors required for each position on a team
- ◆ A comprehensive applicant screening that includes cognitive, social, and physical suitability for the job and organization

- ◆ An evaluation of applicants' critical thinking skills
- ◆ An evaluation of prospective faculty members' critical thinking and teaching skills before hiring

Much has been written elsewhere about the program's struggles early on. Suffice it to say that until the Human Terrain System implemented the talent management program, none of the other necessary innovations and improvements in training and education were possible.⁴

An Organizational Climate that Values, Expects, and Rewards Critical Thinking and Innovation

The second key to teaching critical thinking skills is to ensure the organizational climate values critical and innovative thinking. Building upon, and made possible by, a talent management program, an organization demonstrates its commitment to these values by expecting and rewarding critical thinking and innovation. An organizational climate emerges when a majority of the members form consensual, collective perceptions regarding such things as organizational purpose, values, and priorities.⁵ An organization's leaders, both formal and informal, must play the main role in establishing an organizational climate.⁶

Indeed, some of the informal leaders in the Human Terrain System training and education directorate were instrumental in helping generate the collective feeling that critical thinking was an essential requirement for the team members. Examples of this include faculty members with recent experience on human terrain teams emphasizing the importance of critical thinking, and the supervisor for the contractor faculty leading the critical thinking faculty development sessions. The establishment of the climate was not instantaneous. Through the talent management program—screening and selective hiring of faculty; dismissal of individuals who lacked the required knowledge, skills, and behaviors; and the continual efforts of the leadership—the change in organizational climate became effective.

A Shared Understanding of the Specific Critical Thinking Skills and Behaviors Most Important for On-the-Job Success

The third key is to achieve a shared understanding of the needed skills and behaviors—to identify them and

achieve consensus on their definitions. Following research and collaborative discourse during faculty development sessions, the researchers adopted the definition used by Army Doctrine Reference Publication 5-0, *The Operations Process*: “Critical thinking is purposeful and reflective judgment about what to believe or what to do in response to observations, experience, verbal or written expressions, or arguments.”⁷

To determine the specific critical thinking skills most needed by the graduates, the researchers started with the results from the job-task analysis. Then, they drew upon doctrine and the input from deployed and experienced team members.

Because any human terrain team’s research and analysis would be valuable only if they could be communicated in a manner that fit into the supported staff’s battle rhythm, the researchers also drew heavily upon the staff’s and faculty’s experiences working on Army staffs and teaching at the United States Military Academy and the School of Advanced Military Studies. The researchers also conducted an extensive review of the academic and professional literature. Through this process, they identified three main critical thinking skills:

- ◆ *Verbal reasoning*: the ability “to comprehend and defend against the persuasive techniques found in everyday language.”⁸
- ◆ *Argument analysis*: the ability to judge how well reason and evidence support a given conclusion or assertion.⁹
- ◆ *Thinking as hypothesis testing*: the ability to base hypotheses on and formulate beliefs effectively from observations while remaining open to new and possibly disconfirming information.¹⁰

Individuals combine these three skills using cognitive self-regulation so they can separate an argument from rhetoric (verbal reasoning), determine the validity and soundness of an argument (argument analysis), and remain open to—and even seek—new information that challenges their existing belief or conclusion (thinking as hypothesis testing).

The researchers also learned early in the process that a person’s disposition to think critically was just as important as his or her critical thinking skills. Moreover, the more emotionally involved people were with a subject, the less they tended to use their critical thinking skills even if they were naturally inclined to think critically.¹¹ The program managers

accounted for this through the design of realistic training scenarios that would engage the students both cognitively and emotionally.

Faculty Members Who Integrate Critical Thinking Instruction into All Classes and Effectively Model Critical Thinking Skills

The fourth key is to ensure faculty members integrate and reinforce critical thinking skills instruction throughout all other classes and exercises. The entire faculty must be engaged. They need to view themselves as instructors of critical thinking skills in addition to their assigned subjects. Moreover, individual instructors need to see the relationships between their and other instructors’ subjects.

Initially, the Human Terrain System was like many other military and civilian educational institutions in that the program taught critical thinking skills as stand-alone classes. During this time, the instructors enjoyed teaching critical thinking skills, and the students generally provided very favorable feedback on post-course surveys. However, although everyone was enjoying the instruction, reports from the field repeatedly indicated that graduates were failing to demonstrate the required critical thinking skills and behaviors where it mattered most—on the job.

Made possible by the then-established organizational climate that embraced change, the Human Terrain System implemented a faculty development program focused on critical thinking skills, with three main purposes: (1) to ensure the entire faculty understood the specific critical thinking skills required of the graduates; (2) to identify where these critical thinking skills would be applied, reinforced, and assessed throughout the curriculum; and (3) to ensure the faculty were fully prepared to model the desired critical thinking behaviors and coach the students.

As part of faculty development, all staff and faculty completed the Halpern Critical Thinking Assessment (HCTA).¹² The HCTA helped identify the faculty members’ individual critical thinking strengths and weaknesses, thereby enabling informed self-improvement efforts and coaching by the leadership. The faculty then integrated critical thinking skills reinforcement and rubric-based assessments into their classes, assisted by the faculty supervisor and the curriculum designers.



(Photo by Human Terrain System)

Human terrain team social scientist Muna Molyneux interviews a widow 21 July 2010 at Karmah-Subayhat, Anbar Province, Iraq during a combined U.S. and Iraqi Army medical engagement. The widow's husband and sons were killed by al-Qaida operatives during the Anbar Sunni tribal Awakening circa 2006. Molyneux was conducting a research project that included ascertaining how persons who lost their family support network during the Awakening were able to continue sustaining themselves.

For example, the program sought to reinforce the skill of cognitive self-regulation. The intent was to help students improve their ability to remain open to new information and to continuously reevaluate their existing beliefs as new information becomes available.¹³ To reinforce this skill, practical exercises were designed so that information provided initially would be ambiguous. Some information would intentionally lead the students to form one conclusion, but subsequent information would, ideally, lead them to question and refine it. Faculty members would then be able to coach the students to reinforce their cognitive agility or to correct their cognitive rigidity as appropriate. By the end of the program, students were expected to actively seek out such disconfirming information and fully demonstrate the skill of thinking as hypothesis testing.

Changing one's thinking about something based on new information, what design methodology calls "reframing," is not easy for most people. It becomes even more difficult when the dynamic of an authority figure is added. Since the human terrain teams' purpose was to enable commanders to make more informed plans and decisions, their training needed to be built upon realistic scenarios and supported by realistic role players who served as the staff and commander of a brigade combat team. We found that exercises limited to planning and to preparing initial reports were insufficient to develop students' abilities to use what Christopher Paparone calls "the two faces of critical thinking."¹⁴ Only in a realistic, execution-based practicum were students required to reevaluate their conclusions, reframe, or adapt to unanticipated events. For human terrain team members,



(Photo by Staff Sgt. Whitney Hughes, Task Force Wolverine PAO)

Malal Loynab, a human terrain analyst with Combined Joint Task Force 101, teaches an Afghan child English during a literacy program 28 October 2010 at the Egyptian Field Hospital on Bagram Airfield, Afghanistan. The program, which Loynab helped start, was facilitated by members of the CJTF-101 Human Terrain Analysis Team to educate children who visited the hospital for Women and Children's Day twice a week.

and likely for all Army leaders, these skills are essential. The training designers therefore ensured that exercises included some aspect of execution. Finally, to add to the challenge, they added an ethical dilemma to the critical thinking task by introducing disconfirming information after the commander had been briefed and had fully endorsed the students' initial conclusions.

A Comprehensive Assessment Program to Facilitate Organizational Agility

The fifth and final key to teaching critical thinking skills is to use a comprehensive assessment program that enables the leadership to continuously monitor the students in class, the graduates in the field, and

the operational environments where they deploy. With feedback from monitoring, the leadership can then make changes to the curriculum, learning environment, and instructional approach to ensure mission accomplishment.

As mentioned earlier, the program had been receiving generally positive feedback from students about the critical thinking classes but generally disappointing feedback from the supported commanders about the team members' performance on the job. The training and education directorate's leadership came to realize that although monitoring students' reactions to their classes was important, they needed to have a more robust assessment process that would help guide effective change. Therefore, the training staff created an assessment process based on Donald L. Kirkpatrick's model for evaluating training programs. In addition to the four levels of assessment included in the

Kirkpatrick model, they added a "level 0."¹⁵

Training assessment level 0: preexisting knowledge and skills. The program needed to identify incoming students' individual and collective strengths and weaknesses with regard to critical thinking. This information would help instructors avoid wasting time on topics for which students were not ready or were already proficient. Every class needed to achieve maximum effectiveness and seek ways to accelerate learning in every way possible because the training was limited to ten weeks.

The program designers adopted a critical thinking pretest administered as part of student orientation. They used a modified version of the HCTA that focused on the three high-priority critical

thinking skills: verbal reasoning, argument analysis, and thinking as hypothesis testing (this test also served as a posttest in level 2). The pretest accomplished numerous objectives.

First, the pretest enabled training managers to identify incoming students' individual and collective strengths and weaknesses. Then, they could customize the instruction to meet their precise learning needs.

Next, it enabled trainers to empower those incoming students who had already mastered particular subskills to assist in teaching. This practice extended the learning environment to include times and locations beyond the classroom, such as in the dining facilities and student lodging. Informal peer-to-peer teaching accelerated the learning for many students during training and facilitated graduates' continued learning when deployed.

In addition, the pretest provided a baseline from which student learning throughout the training program could subsequently be measured.

Finally, it provided learners with an enhanced self-awareness. Many of the incoming students who most needed critical thinking instruction arrived feeling confident in their critical thinking skills. For them, the pretest was an invaluable means to ignite their desire to learn.¹⁶

Training assessment level 1: reaction. According to Kirkpatrick, "if training is to be effective, it is important that trainees react favorably

toward it."¹⁷ Student reactions to training were collected through anonymous online surveys. These enabled managers to continuously refine the program to keep students challenged but not overwhelmed.

Training assessment level 2: learning.

According to Kirkpatrick, assessing the learning is important because unless students have gained some new knowledge, skills, or attitudes, there will be no change of behavior on the job.¹⁸

The faculty assessed students' learning in two ways. First, they used a posttest based on the HCTA, which students would take during their final week of training. As illustrated in figure 2, the students in the 2013 and 2014 cycles increased their average critical thinking composite scores by 18 percent, from the 71st percentile on the pretest

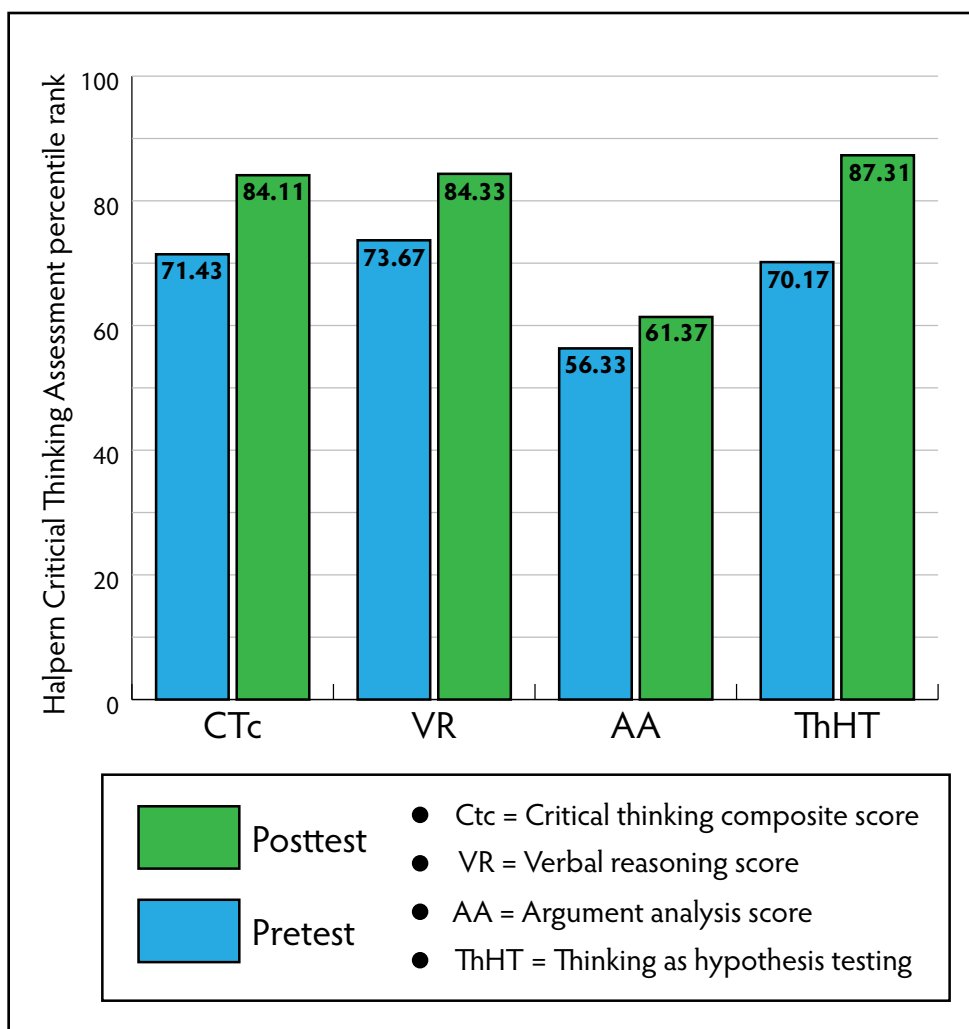


Figure 2. Student Gains in Critical Thinking Scores during Fiscal Years 2013 and 2014

to the 84th percentile on the posttest. The organization benefitted from the use of a valid, reliable, impersonal instrument for feedback on teaching success, and the students also were very motivated to show improvement.

The assessment program also incorporated continuous observation, rubric-based assessment, and coaching by the faculty. Observing the students during their exercises enabled assessment of their disposition to think critically during the performance of their duties (as opposed to thinking critically “on demand,” as measured by the HCTA).

Training assessment level 3: behavior. The next level of assessment in the Kirkpatrick model is *behavior*: the degree to which participants apply on the job what they learned during training.¹⁹ Assessment consisted of surveys completed by the staffs that the teams supported, weekly communications with deployed team leaders, and evaluations of the research products developed by deployed teams.

Training assessment level 4: results. The highest, and most important, level of the Kirkpatrick model is the assessment of the degree to which desired organizational outcomes occur as a result of the learning event(s).²⁰ The means of assessment were similar to level 3. For example, in response to 138 organizational surveys conducted throughout 2013 and 2014, 99 percent of deployed commanders and staffs reported they agreed or strongly agreed their supporting human terrain teams provided information that effectively contributed to their sociocultural understanding. These results indicate that team members performed consistently with strategic objectives, lines of effort, and key tasks of the Army’s 2015 human dimension strategy.²¹

In sum, the assessment program integrated feedback from a range of stakeholders within the schoolhouse, from deployed teams, and from the units they supported. The chief of training and education, the assessments lead, and often the curriculum planner joined weekly teleconferences with deployed team leaders to ascertain emerging needs that should be incorporated into classes, and to get timely feedback on the performance of newly deployed personnel.

Graduates completed posttraining surveys after ninety days on the job. Often, their reactions changed once they gained experience in the field.

Finally, with this rich body of feedback from across the organization and supported units, training meetings became idea meetings, and the training calendar became more of an organizational learning tool than a spreadsheet that merely depicted scheduled activities.

Integration Consistent with the Human Dimension Strategy

By the end of 2011, the Human Terrain System managers had developed an essential task list for the teams and a job-task analysis for each team position. Additionally, all new personnel joining the program came in as contractors, and the main organization supplying personnel had established a comprehensive screening process that included assessment of applicants’ physical fitness levels, job-related experience and skills, and psychological suitability for service on small teams operating in conditions of ambiguity, danger, and adversity. The integrated five-part model developed through years of experimentation, innovation, and organizational learning became an effective program for teaching critical thinking skills in the Human Terrain System.

Other Army training and education programs could apply this design, illustrated in figure 3, which proved its effectiveness in operations. The model reflects the important connection between the Army’s operational capabilities and its institutional processes. It also represents a way to integrate the strategic objectives, lines of effort, and key tasks of the Army’s human dimension strategy so that soldiers, civilians, and leaders can win in complex operational environments.²¹

The first step in the model, at the far left, is the talent management system. To develop leaders and team members who can thrive and win in the expected complexity of future operations, the organization must first ensure there is a means to ensure person-organization fit and person-job fit. For the Human Terrain System, this required an overhaul of the recruiting process and implementation of an effective applicant assessment and screening process. For organizations that do not conduct their own recruiting, this would likely require effective processes for organizational socialization. The talent management system also must ensure that individuals selected for

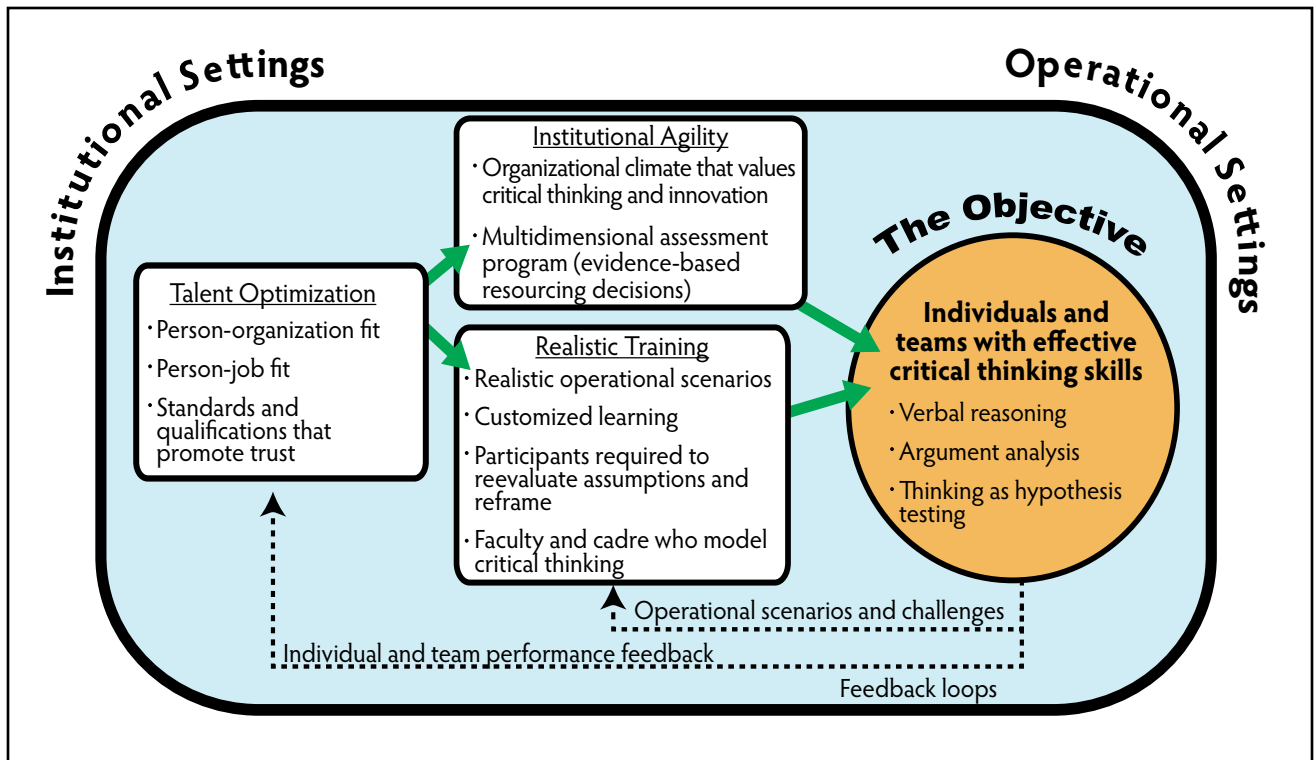


Figure 3. An Integrated Training Model for Increasing Critical Thinking Skills

teaching assignments have effective critical thinking skills and can model them for their students.

Building upon the talent management program, the organization needs to develop a climate that values critical thinking and innovation. The critical thinking skills, coupled with a multidimensional organizational assessment program, enable members and leaders in the organization to detect when change is needed. The innovative mindset enables the organization to develop and implement creative ideas. The climate of critical thinking and innovation, together with the organizational assessment processes, generates institutional agility.

Institutional agility is important to the organization's ability to develop and continuously refine realistic training. Deployed soldiers and leaders are continually required to wrestle with complex situations and make decisions in ambiguous conditions. Training situations must require them to do the same.

Too often, especially in classroom settings, Army training and education sessions are built upon complex scenarios but require students only to develop and brief a plan. To prepare soldiers, civilians, and leaders to thrive in ambiguity, the training must

continue past planning and into execution. The training must require the students to avoid confirmation bias and remain open to new and contradictory information, to objectively assess the unfolding events, and to reevaluate their assumptions, inferences, and conclusions. Otherwise students likely will graduate with the erroneous notion that success in complex environments is the result of a perfect plan.

Conclusion

Although presented sequentially, the five keys to teaching critical thinking skills are interdependent. Together, they form an integrative model that illustrates a way to integrate the strategic objectives, lines of effort, and key tasks of the Army's human dimension strategy. The specific critical thinking skills required by individuals and teams in other organizations could be, and probably will be, different from those required by the Human Terrain System's sociocultural research teams. However, because this model is not restricted to specific jobs or tasks, it is relevant to any units. Successful implementation would depend on integrating the talent management, assessment, and training processes. ■

Lt. Col. Rob B. McClary, U.S. Marine Corps, Retired, works for Booz Allen Hamilton leading a research team for the Army's Human Dimension Capabilities Development Task Force. He holds a BS from the United States Naval Academy, an MMAS from the Army's School of Advanced Military Studies (SAMS), and a PhD from Kansas State University. His research explored the relationships between tolerance of ambiguity and creativity among military officers. He has served as an armor officer, as a civilian assistant professor at SAMS, and as the contractor lead of the Training and Education Directorate of the Army's Human Terrain System.

Dr. Marcus Griffin is a cultural anthropologist. He served as the lead social scientist for one of the first Army human terrain teams in Baghdad, Iraq. After subsequently serving as an Asia-Pacific regional scholar for the Army's Cultural Knowledge Consortium, Griffin returned to the Human Terrain System as lead instructor for research operations. He has published significant studies from the Middle East, Southeast Asia, and Oceania. He currently works as a research information scientist for Information International Associates Inc. and serves as a cultural studies subject matter expert for the Homeland Defense Intelligence Analysis Center. He may be reached at marcus.b.griffin@gmail.com or at www.linkedin.com/in/marcusbgriffin.

Notes

1. See the Human Terrain System website, accessed 3 September 2015, <http://humanterrainsystem.army.mil>, for more about the now-discontinued program.
2. Diane Halpern, "Teaching Critical Thinking for Transfer across Domains: Dispositions, Skills, Structure, Training, and Metacognitive Monitoring," *The American Psychologist* 53(4) (1998): 449-455.
3. Suzanne Bell, "Deep-level Composition Variables as Predictors of Team Performance: A Meta-analysis," *Journal of Applied Psychology* 92 (2007): 595-615.
4. Jeffery B. Vancouver and Neal W. Schmitt, "An Exploratory Examination of Person-Organization Fit: Organizational Goal Congruence," *Personnel Psychology* 44 (1991): 333-352.
5. Steven W.J. Kozlowski and Daniel R. Ilgen, "Enhancing the Effectiveness of Work Groups and Teams," *Psychological Science in the Public Interest* 7(3) (2006): 81-82.
6. Michael W. Grojean et al., "Leaders, Values, and Organizational Climate: Examining Leadership Strategies for Establishing an Organizational Climate Regarding Ethics," *Journal of Business Ethics* 55(3) (2004): 224.
7. Army Doctrine Reference Publication 5-0, *The Operations Process* (Washington, DC: U.S. Government Printing Office, May 2012), 1-10.
8. Halpern, "Teaching Critical Thinking": 452.
9. *Ibid.*, 182.
10. *Ibid.*, 231.
11. Peter A. Facione et al., "The Disposition toward Critical Thinking," *Journal of General Education* 44(1) (1995): 3, describes the disposition to think critically and its importance in everyday life. Per Facione et al., someone with a high disposition toward critical thinking is "habitually inquisitive, well-informed, trustful of reason, open-minded, fair-minded in evaluation, honest in facing personal biases, prudent in making judgments, [and] willing to reconsider"
12. Heather A. Butler, "Halpern Critical Thinking Assessment Predicts Real-World Outcomes of Critical Thinking," *Applied Cognitive Psychology*, 26(5) (2012): 721-729. The training managers selected the HCTA from among several assessments piloted because of its validity and reliability, its open-ended questions, and its ability to assess participants' cognitive abilities in both free recall and recognition domains. Two versions allowed the program to alternate the pretest and posttest.
13. Peter A. Facione, *Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction: Research Findings and Recommendations* (Newark, DE: American Philosophical Association, 1990), 10, accessed 11 September 2015, <http://eric.ed.gov/?id=ED315423>.
14. Christopher Papparone, "Two Faces of Critical Thinking for the Reflective Military Practitioner," *Military Review* (November-December 2014): 104.
15. Donald L. Kirkpatrick, *Evaluating Training Programs: The Four Levels* (San Francisco: Berrett-Koehler, 1994), 27.
16. Malcom Knowles, *Self-directed Learning: A Guide for Learners and Teachers* (Englewood Cliffs: Prentice Hall/Cambridge, 1975), offers a description of self-directed learning and adult learning theory.
17. Donald L. Kirkpatrick, *Evaluating Training Programs: The Four Levels*, 27.
18. *Ibid.*, 42.
19. *Ibid.*, 52.
20. *Ibid.*, 63.
21. U.S. Army Training and Doctrine Command (TRADOC), TRADOC Pamphlet 525-3-7, *The U.S. Army Human Dimension Concept* (Fort Eustis, VA: TRADOC, 21 May 2014), describes the human dimension concept. See also Army Human Dimension Council, *The Army Human Dimension Strategy 2015* (Washington, DC: Department of the Army, June 2015), accessed 3 September 2015, <http://usacac.army.mil/pubs/Force-2025-and-Beyond-Human-Dimension>.

A Good Death Mortality and Narrative in Army Leadership

Maj. Dan Leard,
U.S. Army

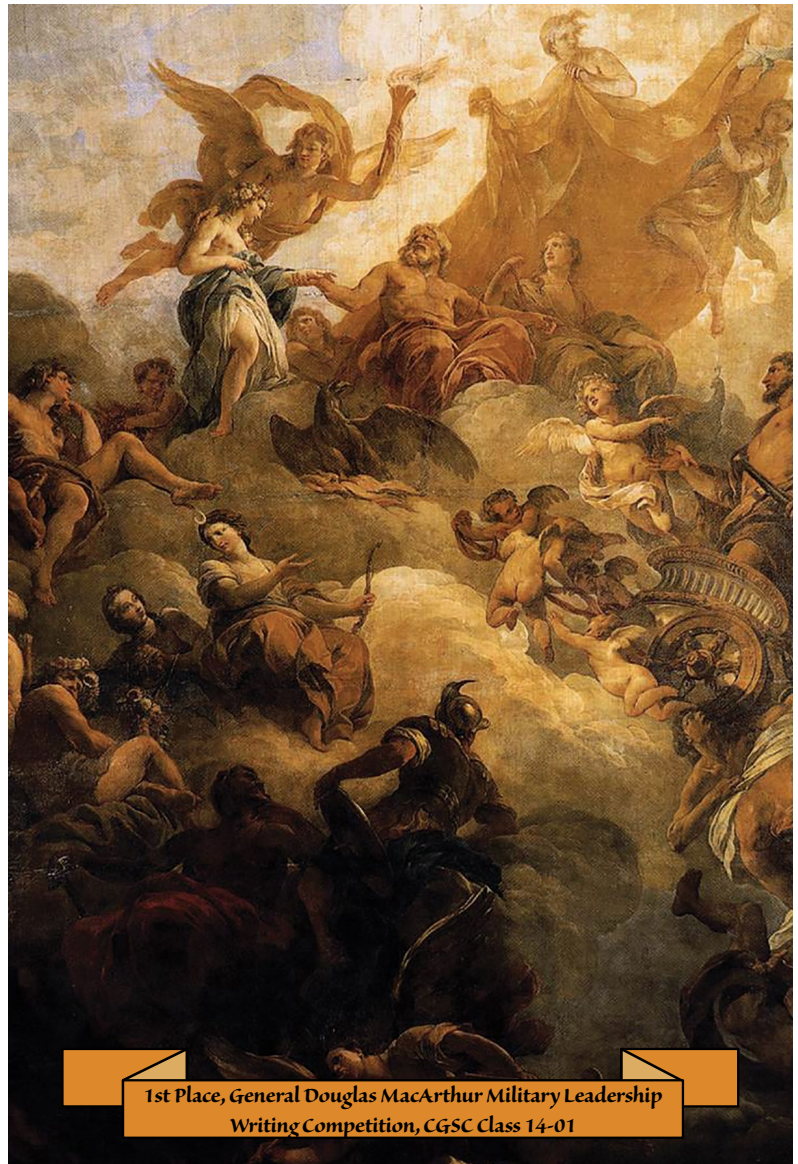
What does it matter when death comes, since it is inevitable? To the man who told Socrates, “The thirty tyrants have condemned you to death,” he replied, “And nature, them.”

—Michel de Montaigne

A soldier sees death more vividly than most. Mortality’s daily presentation in war has major implications for how leaders induce individuals and organizations to operate under the shadow of stark possibilities. To most leaders, this omnipresent threat of death may seem unremarkable—a benign fact—unless as soldiers we acknowledge just how important *immortality* is to each of us.

Philosopher Stephen Cave, in his book *Immortality*, identifies narratives that, in one form or another, all civilizations have used to sate human anxiety over death.¹ Countless soldiers have steered

their minds against battle’s peril using four immortality narratives that Cave calls staying alive, resurrection, the soul, and legacy. Army leaders have used them to influence soldiers to carry out dangerous missions and to try to stay alive. However, leaders should use caution when employing these narratives as paths to build hardy, courageous formations. They are not one-size-fits-all and may produce undesired consequences. Leaders need to fully understand their shortcomings, and perhaps find a better approach, to manage the terror of combat in themselves and in others.



(The Apotheosis of Hercules, oil on canvas, François Lemoyne (1688–1737), circa 1736)

To understand why immortality narratives are central to the profession of arms, it is essential to understand what Cave calls humanity's "mortality paradox," a psychological contradiction hardwired into every human:

Our awareness of ourselves, of the future, and of alternative possibilities enables us to adapt and make sophisticated plans. But it also gives us a perspective on ourselves that is at the same time terrifying and baffling. On the one hand, our powerful intellects come inexorably to the conclusion that we, like all other living things around us, must one day die. Yet on the other, the one thing that these minds cannot imagine is that very state of nonexistence; it is literally inconceivable. Death therefore presents itself as both inevitable and impossible.²

Immortality narratives try to reconcile this dilemma. Various philosophies have explored the mortality paradox for thousands of years. Sigmund Freud explored the cognitive inability to imagine one's own death and the resulting subconscious conviction of one's immortality.³ The inborn will to live sharpens as an individual becomes more aware of his or her own mortality. For the soldier, this meeting with

imminent death in battle can become a paralyzing confrontation. Australian war hero Peter Ryan describes the experience as leaving him "a shuddering mess of demoralised [sic] terror."⁴ As danger and the threat of death approach, the first issue emerging for the soldier is how to stay alive.

Survive

The drive for survival is the first and most basic narrative, and it has a single, simple tenet: do not die. Unfortunately, avoiding death is also the most problematic. In his study, Cave illustrates the history of man's obsessive search for a cure for dying through magic, alchemy, and even modern science.⁵ However, soldiers in battle have a comparatively simple dilemma—living forever first requires living until tomorrow. Army leaders often approach this narrative using two themes: that obedience leads to survival and that the medical system can save wounded or injured soldiers. When employed to satisfy the mortality paradox, these—like the fabled elixir of life—are false promises.

The first theme proposes that soldiers who are skilled enough in battle, and who listen to and obey their leaders, will come home alive. Hollywood portrays this idea in the film *Starship Troopers*, when a young lieutenant shouts to a group of soldiers:

"Remember your training, and you will make it out alive!"⁶ The lieutenant dies almost immediately after giving the advice. While darkly comical, the story highlights the fallacy.

The military invests significant effort in developing both realistic training and smart leaders. These may improve soldiers' odds of survival. Neither, however, can banish death's power in combat because neither can banish the role chance plays in survival. For example, a veteran of combat in Vietnam described being surrounded by metal flying through the air in the chaos of battle. He said the only reason anyone survived was dumb luck, the grace of God, or both.⁷ On the other hand, a remark by a noncommissioned officer in 2008 illustrates



(Photo by Christopher Menzie, Veterans Affairs)

Spc. Lyle Yantz and several other service members participating in Operation Proper Exit are greeted 6 December 2012 after arriving at Kandahar Airfield, Afghanistan. Operation Proper Exit brought severely wounded service members back to the theater where they were injured to provide them with a first-hand progress update on the continuing mission and to help in their healing process.

the fallacy. He said only good soldiers die; the enemy cannot kill a bad soldier.⁸ There is a morbid principle here. After the first “good soldier” dies, his or her comrades quickly lose their sense of invincibility. Well-intentioned rhetoric tying skill or obedience to one’s chances of survival can lead to cynicism among those who witness its falsehood.

The second theme proposes that medical science can rebuild wounded, injured, or sick soldiers. It extols the quality of U.S. battlefield trauma care and the confidence that it can provide.

The U.S. military’s medical evacuation and treatment system is truly unparalleled. According to the U.S. Army Office of the Chief of Public Affairs, the medical evacuation survival rate in Afghanistan in 2012 was 92 percent.⁹ This achievement through the disciplined application of science and technology is phenomenal, but survival is not guaranteed for anyone. The statistic does not include those who died before evacuation or from injuries not related to combat. Moreover, of those evacuated, eight percent still died, under the care of the best combat medical care system in the world.

Soldiers need confidence in their training, leaders, and medical care system; however, these themes are inadequate to satisfy soldiers’ need to reconcile the mortality paradox. If leaders communicate these themes in absolute terms, they risk their credibility when chance takes its toll. Presenting combat as a controllable quantity—that the application of some technique, tactic, procedure, or technology can eliminate death in battle—denies the role of chance, which is part of warfare’s unchanging nature. A soldier’s acknowledgment that death is inevitable, regardless of skill, performance, and quality of care, leads to a search for immortality beyond this earth.



(*The Storming of Ft Wagner*, lithograph, Kurz and Allison, circa 1890)

The 54th Regiment Massachusetts Volunteer Infantry was one of the first official black Union Army units formed during the U.S. Civil War. The regiment gained national and international attention when, on 18 July 1863, it spearheaded an assault on Fort Wagner, South Carolina, taking heavy casualties. The unit had among its ranks many former slaves. Its battlefield valor at Fort Wagner and elsewhere established a precedent and legacy for recruitment of additional black units to fight slavery and preserve the Union.

To Rise Again

The second and third immortality narratives—resurrection and the soul—are suitable for combination into a single discussion. Both are central doctrines for most religions, and each promises a continuation of life in some far future or other realm of existence.¹⁰ The religious context of these narratives allows opportunity for their use but also makes them perilous to organizational unity within diverse groups.

A certain leader introduced himself to a group of new subordinates—the critical first step in building rapport and establishing a positive command climate. He described himself as a husband, father, and “child of the one true king.” It was clear that the officer wanted to relate to the group by conveying his Christian faith; however, his manner of trying to relate was counterproductive. To the two Muslim and three atheist soldiers in the room, he had drawn a line in the sand: he was a child of the true god, and they were not. In effect, he had informed these soldiers that their personal immortality narratives were void. The resurrection and soul narratives’ inseparable relationship with religion makes them difficult to employ without opening rifts, or worse, within a diverse organization. Social psychiatrist Robert Jay Lifton



(Photo by Staff Sgt. Justin Holley, 982nd Combat Camera Company)

Sgt. 1st Class Matthew Kahler, left, supervises and provides security as Pfc. Jonathan Ayers and Pfc. Adam Hamby emplace an M240 machine gun 23 October 2007 in the mountains of Afghanistan's Kunar Province. The soldiers are all from 2nd Battalion, 503rd Parachute Infantry Regiment, 173rd Airborne Brigade Combat Team. Kahler was killed 26 January 2008. Respected and admired for his skill, professionalism, and dedication to duty, he was universally mourned by those who knew him.

proposes that groups will “fight and die in order to affirm [their mode of immortality] or put down rivals who threaten their immortality system.”¹¹ This is not to say that religion and views of resurrection and the soul have no place in Army leadership, but they remain deeply personal, not universal, views. Leaders who attempt to use them must take care not to expect conformity within their units or to proselytize.

A dominant trend within the U.S. military is the increasing diversity of the force, including a religious diversity that mirrors America's changing religious landscape.¹² This is a trend that then chairman of the Joint Chiefs of Staff, now retired U.S. Navy Adm. Mike Mullen, said in 2010 “can't go fast enough.”¹³ Despite this narrative from strategic leaders to accept diversity, friction surrounds a significant population of military leaders who struggle to integrate soldiers and families whose beliefs lie beyond Judeo-Christian perspectives.¹⁴

Certain warrior societies—the Japanese samurai and Greek hoplites, for example—successfully employed a belief in the immortal soul to promote resolve in battle; however, these societies exhibited nearly perfect ethnic and religious homogeneity.¹⁵ In a diverse force such as the U.S. Army, using such narratives to bolster collectively hardy attitudes toward mortality is risky. Some in the formation may find courage, but leaders who emphasize unequivocal religious themes

will cause division among the increasing number of soldiers with diverse perspectives. Accepting then that everyone will die with no valid guarantees otherwise, and acknowledging the organizational problems generated by spiritual narratives in diverse forms, perhaps leaders could focus on the accomplishments and contributions that fallen comrades leave behind.

Remember Me Forever

The fourth narrative is legacy.

Of all the narratives of immortality, legacy lends itself most easily to the military context. In Homer's *Iliad*, the mythical warrior Achilles must choose to leave Ilium for “a long life” or stay and die to “gain unfading glory.”¹⁶

He chooses glory, and it is not surprising that his story endures. Achilles symbolizes a warrior's immortality through legacy, in the Western tradition. However, few warriors—sparing names such as Alexander the Great and Julius Caesar—gain enduring fame. Still, legacy offers a path to avoiding complete personal extinction, but it comes with a dark side.

The search for legacy through personal glory is a narcissistic one that runs counter to the selflessness needed for a unit-based ethos; therefore, modern armies seldom celebrate heroes as the Greeks did. Since the Napoleonic era, the common tool for constructing a legacy narrative has been nationalism. Soldiers may die, but their achievements live on in the security and prosperity of the nation-state.

A nationalistic theme is problematic for two reasons: the relationships between the force and the host-nation population, and the relationships among members of the force whose cultures differ. This is because a nationalistic theme tends to be based on an ethnocentric defense mechanism (a superior attitude about one's culture).

Enhanced cultural themes such as nationalistic messages, combined with the high mortality risk of combat, will generate increased tension between soldiers and populations of other nationalities, cultures, and religions—if they apply at all within a diverse force. Nationalistic messages require a significant amount of uniformity within the force.

Terror management theory's "worldview defense" hypothesis proposes that reminders of mortality inspire a need to validate faith in one's cultural worldview.¹⁷ Multiple studies confirm that "in response to reminders of mortality, people become more favorable toward those who support their worldview and more unfavorable toward those who violate it."¹⁸ As warfare moves toward an increased reliance on multinational coalitions, and combat operations require increased cultural competence to negotiate complex environments, nationalistic messages as a buffer against the fear of death seem increasingly less applicable.

Some forms of legacy do have merit: contributions to collective efforts, a mission that has some enduring worth, and a personal legacy such as having children. However, these are difficult to share universally across an organization. Leaders should consider the consequences of nationalistic narratives in addressing the mortality paradox. Inspiring nationalistic pride among soldiers may generate an aggressive but xenophobic force.

A Fifth Narrative

The four immortality narratives presented exhibit flaws that should cause Army leaders to question their validity. The ideas that obedience, skill, or medical science can guarantee survival are false promises; resurrection and the soul are acceptable individual narratives but can fissure organizational trust and cohesion in diverse organizations; and nationalistic narratives that satisfy a need for legacy can promote dangerous intolerance toward others inside or outside the organization. Still, the mortality paradox needs reconciliation. Ethicist and author James Toner describes the soldier's duties this way: "In addition to killing and preparing to kill, the soldier has two other principal duties. Some soldiers die; when they are not dying, they must be preparing to die."¹⁹

Cave proposes a fifth narrative that soldiers can apply to face their own mortality, *wisdom*, but Army leaders can think of it as *professionalism*. Through professionalism, soldiers can prepare to die by acknowledging their mortality without reservation and cultivating values that enable wellness.²⁰

World War II infantryman and writer James Jones posits, "every combat soldier ... must make a compact with himself or with Fate that he is lost."²¹ Through this

conscious decision to face mortality, he can "function as he ought to function, under fire" because "he knows and accepts beforehand that he's dead."²² After accepting this fate, a soldier must cultivate values-based habits, or virtues, to reinforce the decision to expel the fear of death. The first virtue is to seek empathy, or relatedness to and respect for others. The second is to dwell in the present and clear the mind of unstructured plans and "plots, worries, and idle speculations."²³ The third is to exhibit gratitude and joy in interactions with others.²⁴

According to Army Doctrine Reference Publication 1, *The Army Profession*, an Army professional is "bonded with comrades in a shared identity and culture of sacrifice and service to the Nation. An Army professional is one who acts as a steward of the Army Profession while adhering to the highest standards of the Army's ethic."²⁵ These characteristics parallel the virtues of the fifth narrative.

Leaders seeking to inculcate a true servant spirit must endeavor to build bonds beyond simple unit comradeship. Professional American soldiers are bound not only to their fellow soldiers but also to the citizenry they serve and the broader humanity whose dignity and lives they preserve. Instilling empathy in every soldier is among a leader's most vital tasks to ensure a professional force. A true servant spirit, with the deepest knowledge of U.S. Army values, is humble and grateful. Gratefulness is a quintessential characteristic of a selfless actor. To steward the profession is a daily, moment-by-moment activity. As stewards, soldiers are future-oriented but present-focused. A steward—a professional—asks continually, am I preserving this profession with what I do now? Stewardship inspires thoughtful and structured goal setting and emphasizes present duties over future worries.

Death is nothing fearful to one who lives a meaningful life, and few lead more meaningful lives than professional soldiers. The four immortality narratives are opiates for the masses, but when applied in combat leadership they leave something wanting. Army leaders must break free of them and inspire more meaningful and lasting mechanisms to foster courage, resolve, and resilience in confronting the harshest realities of battle. The professionalism narrative provides a path to embracing death as part of a life committed to a worthy task. Leaders seek to build character that echoes the Roman poet Ovid: "When death comes, let it find me at work."²⁶ ■

Maj. Dan Leard, U.S. Army, is currently serving as an operations officer in the 75th Ranger Regiment. He holds a BS in history from West Point and a MMAS from the U.S. Army Command and General Staff College. He is an infantry officer who has held numerous direct leadership positions in combat, most recently as a company commander in Afghanistan in 2011.

Notes

Epigraph. Michel de Montaigne, "To Philosophize is to Learn How to Die," in *The Complete Essays of Montaigne*, ed. and trans. Donald M. Frame (Stanford, CA: Stanford University Press, 2004), 64.

1. Stephen Cave, *Immortality: The Quest to Live Forever and How It Drives Civilization* (New York: Crown, 2012), 4-6.

2. *Ibid.*, 16.

3. *Ibid.*, 16-21; Sigmund Freud, *Reflections on War and Death*, trans. A. A. Brill and Alfred B. Kuttner (New York, NY: Moffit, Yard, and Company, 1918), excerpt reprinted online by SigmaOmni Press, accessed 5 August 2015, http://www.sophia-project.org/uploads/1/3/9/5/13955288/freud_waranddeath.pdf; See also Jessie Bering, *The God Instinct: The Psychology of Souls, Destiny and the Meaning of Life* (Boston, MA: Nicholas Brealey, 2010).

4. Peter Ryan, "Behind Enemy Lines with Marcus Aurelius," *Quadrant* (April 2010), 128.

5. Cave, *Immortality*, 29-82.

6. *Starship Troopers*, directed by Paul Verhoeven (TriStar Pictures, 1997), based on a novel by Robert A. Heinlein, *Starship Troopers* (New York: G.P. Putnam, 1959).

7. Master Sgt. Lloyd Haseleu, U.S. Army, retired, reported from a discussion with the author, Slippery Rock, Pennsylvania, June 1997. Originator served as an Army Special Forces staff sergeant in Vietnam.

8. Patrick Jarchow, discussion with author, Kandahar, Afghanistan, September 2008. Originator served on active duty as a U.S. Army first sergeant at the time of discussion.

9. U.S. Army Office of the Chief of Public Affairs, "Army Statement on MEDEVAC [Medical Evacuation] Issue," news archive at the homepage of the U.S. Army, 20 January 2012, accessed 8 August 2015, http://www.army.mil/article/72250/Army_statement_on_MEDEVAC_issue/.

10. Karen Armstrong, *A Short History of Myth* (Edinburgh, UK: Cannongate, 2005) discusses the relationship of religion and reconciliation of the mortality paradox.

11. Robert Jay Lifton, *The Future of Immortality and Other Essays for a Nuclear Age* (New York: Basic Books, 1987), quoted in Cave, *Immortality*, 13.

12. Department of Defense, *2011 Demographics Profile of the Military Community* (Washington, DC: Office of the Deputy Under Secretary of Defense [Military Community and Family Policy], November 2012), accessed 8 August 2015, http://www.militaryonesource.mil/12038/MOS/Reports/2011_Demographics_Report.pdf; and Department of Defense, "Pay Grade and Religion of Active Duty Personnel by Service," (Washington, DC: Defense Manpower Data Center, 2009), accessed 5 August 2015, <http://www.google.com/>

http://www.militaryonesource.mil/12038/MOS/Reports/2009_Demographics_Report.pdf&ei=2iHCVd7BL8yq-QHC-5blBg&usg=AFQjCNG1rqW87olt348Uw_HVTz3VzEy4FQ. In 2009, members of the active duty force represented more than one hundred religious sects and denominations, with more than a quarter of the force declining to identify religious preferences.

13. Karen Parrish, "Mullen: U.S. Military Needs More Diversity," Department of Defense News online, 18 October 2010, accessed 8 August 2015, <http://www.defense.gov/News/NewsArticle.aspx?ID=61315>.

14. Charlotte E. Hunter and Lyman A. Smith, "Religious Diversity in the U.S. Military: Human Potential Supporting Cultural Acuity and Mission Accomplishment" (Patrick Air Force Base, Florida: Defense Equal Opportunity Management Institute, 2009) accessed 5 August 2015, https://www.deomi.org/EOEEOResources/documents/Religious_Diversity_in_the_US_Military-Hunter_and_Smith.pdf.

15. Ted M. Preston, "The Stoic Samurai," *Asian Philosophy* 13(1), 39-52; M.R. Wright, *Introducing Greek Philosophy* (Oakland, CA: University of California Press, 2009), 107-133.

16. Homer, *The Iliad*, trans. Robert Fitzgerald (New York, NY: Everyman's Library, 1992), 216.

17. Sheldon Solomon, Jeff Greenberg, and Tom Pyszczynski, "Tales from the Crypt: On the Role of Death in Life," *Zygon* 33(1), 20.

18. Linda Simon, et al., "Terror Management and Cognitive-Experiential Self-Theory: Evidence That Terror Management Occurs in the Experiential System," *Journal of Personality and Social Psychology* 72(5), 1123. See also Jeff Greenberg, et al., "Evidence for Terror Management II: The Effects of Mortality Salience on Reactions to Those Who Threaten or Bolster the Cultural Worldview," *Journal of Personality and Social Psychology* 58, 308-318; Abram Rosenblatt, et al., "Evidence for Terror Management Theory I: The Effects of Mortality Salience on Reactions to Those Who Violate or Uphold Cultural Values," *Journal of Personality and Social Psychology* 57, 681-690.

19. James H. Toner, *True Faith and Allegiance: The Burden of Military Ethics* (Lexington: The University Press of Kentucky, 1995): 22-23.

20. Cave, *Immortality*, 268-273.

21. James Jones, *The James Jones Reader: Outstanding Selections from His War Writings*, eds. by James R. Giles and J. Michael Lennon (New York, NY: Birch Lane, 1991), 262.

22. *Ibid.*

23. Cave, *Immortality*, 279.

24. *Ibid.*, 276-283.

25. Army Doctrine Reference Publication 1, *The Army Profession* (Washington, DC: U.S. Government Printing Office, 2013), 1-1.

26. Ovid, quoted in Montaigne, *The Complete Essays*, 62.

ORDER IN CHAOS

The Memoirs of General of Panzer Troops Hermann Balck

Hermann Balck, edited and translated by David T. Zabecki and Dieter J. Biedekarken, University Press of Kentucky, Lexington, Kentucky, 2015, 578 pages

FIGHTING THE COLD WAR

A Soldier's Memoir

John R. Galvin, University Press of Kentucky, Lexington, Kentucky, 2015, 568 pages

Certain distinguished senior military leaders tend to be overlooked by historians, resulting in public unfamiliarity with these soldiers. This is unfortunate, since some of these leaders have been hugely influential through their service during particular wars or conflicts—and within their countries and their armed forces. Their accomplishments and their influence should be known and appreciated by far more people.

What are the reasons for this oversight? For some, it may be that these leaders were simply overshadowed by their peers, perhaps due to personality, flamboyancy, or politics. For others, it may be that their most important contributions were achieved in a period that historians tend to overlook. And for yet others, perhaps their disdain for self-promotion facilitated the oversight. Finally, it may be due to historians' personal biases toward certain leaders.

Over the years, I have enjoyed debates with friends on the topic of which leaders have been slighted by historians—and the reasons for these oversights. Two leaders

I always bring up in these conversations are former U.S. Army Gen. John "Jack" Galvin and former German Gen. Hermann Balck.

I argue that Galvin's impact during the final years of the Cold War was unparalleled. Yet, as the years have passed, so has interest in the Cold War. As for Balck, I consider him to be one of the elite battlefield commanders of World War II. And yet, he is overshadowed by numerous World War II commanders from his own army: Rommel, Guderian, Kesselring, and Manstein.

Because of this relative anonymity, it is appropriate that the books *Order in Chaos: The Memoirs of General of Panzer Troops Hermann Balck* and *Fighting the Cold War: A Soldier's Memoir* now provide a concise biography on each leader. In *Fighting the Cold War*, we learn that Galvin, who graduated from West Point in 1954, served throughout a sterling career with the Army that spanned nearly forty years. His first two decades of service included two tours of duty in Vietnam, where he eventually served as a battalion

commander in the 1st Cavalry Division. He also served in a variety of staff positions, many of them in Europe, which greatly benefited him in the latter years of his career.

During the 1980s and the early 1990s, Galvin served in a succession of commands that were all important in the prosecution of the Cold War. He commanded the 24th Infantry Division, 1981–1983; served as the commanding general of VII Corps, 1983–1985; commanded U.S. Southern Command, 1985–1987; and culminated his career as commanding general of United States European Command and NATO supreme allied commander, Europe, 1987–1992. Those who served in the armed forces during this period know the tremendous effect Galvin had throughout the Cold War.

Balck began his service in the German army in 1913. As one might expect, his formative years as an officer were spent on the World War I battlefields. During the Great War, he led soldiers as a platoon leader and company commander, where he earned numerous decorations. His performance clearly impressed his superiors, as he was one of the only four thousand officers selected to continue service in the German army following the war.

Balck gained acclaim as a commander during World War II. He began the war as a lieutenant colonel in command of a rifle regiment. By the end of the war, he had risen to the rank of general der panzertruppe (lieutenant general) in command of a German army group. It was on the Eastern Front that Balck developed a reputation as one of his army's most exceptional battlefield commanders. In fact, some of his own peers—and several U.S. Army general officers—considered Balck the best field commander in the German army. He is one of only twenty-seven German officers to receive the Knight's Cross with Oak Leaves, Swords, and Diamonds (awarded for extreme battlefield bravery or outstanding military leadership).

Balck was, unquestionably, one of those aforementioned officers not seeking self-promotion. Following the war, he made no effort to publicly address his battlefield experience or accomplishments. During the late 1940s and early 1950s, when the U.S. Army was conducting a debriefing program of captured German senior leaders, Balck refused to participate. Finally, from 1979 to 1980,

Balck discussed his experiences with representatives of the United States. The results of these discussions were significant; they eventually found their way to the classrooms of the U.S. Army Command and General Staff College and greatly influenced U.S. Army airland battle doctrine.

The stellar military careers of both men call for further study by military historians. Perhaps the recent release of the memoirs of these compelling men by the University of Kentucky Press will serve as the initial step in making further study a reality.

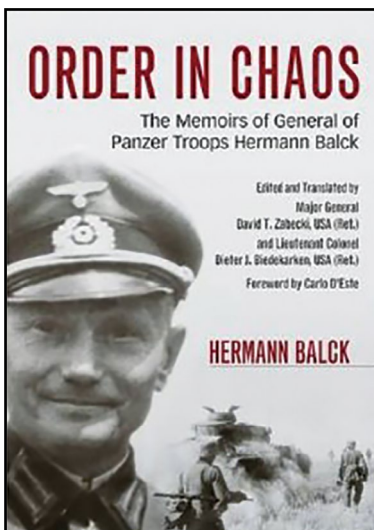
The two books share three main characteristics. First, each is superbly written in conversational style. Both authors are highly adept at reliving events and telling stories and vignettes. These characteristics make each book extremely readable and

engaging. An interesting note is that neither memoir was crafted with the assistance of a ghost writer, which so many authors use today.

Second, each of these memoirs was years in the making. A recent trend I have observed is for senior officers who decide to write their memoirs to publish their reflections soon after retirement. This is clearly not the case with Galvin or Balck. Galvin's memoir was published some twenty years after his retirement from the U.S. Army, and Balck's volume was released in Germany in 1981, more than three decades after the end of World War II. And, it was another three and a half decades before Balck's memoirs were translated into English and published in the United States.

Third, both authors include much detail, considering that the events they address took place so long ago. Galvin was able to recall these events through his use of thousands of note cards he accumulated during his service. As events transpired, he would compose his notes on the cards to keep a record he could revisit in the future.

For Balck, it was the use of the comprehensive journals he kept during his military career. Perhaps the greatest challenge Balck faced was keeping the journals intact through the years. Before World War II, Balck personally preserved his journals. During World War II, however, he had to send his completed journals back from the field to his family who, in turn, stored them in



various locations to ensure they would not be destroyed or confiscated. To further complicate his record-keeping challenges, Balck was forced to keep his last six months of journals in his own possession during his captivity after the war. He managed to save the journals by covertly passing them to his wife during her visits, who then smuggled them out of the prison. Once released, Balck was reunited with the journals and began work on his memoirs.

Finally, unlike many memoirs I have read, I cannot detect any overt agendas on the part of either author. Unfortunately, some military memoirists' purposes seem deceptive, either masking a veiled campaign of self-promotion in which the pages strive to enhance the author's achievements, or functioning as a forum to degrade others or downplay the accomplishments of peers. It is refreshing that I found neither tendency evident within these volumes.

While these memoirs share some exceptional characteristics, the volumes are certainly distinctive from one another in that they differ in focus, perspective, and, obviously, the time periods and conflicts they address. These differences benefit and appeal to different reading audiences.

The title of the Galvin memoir will not mislead readers. For the entirety of his military career, Galvin was part of the force dedicated to "fighting the Cold War," and he reflects on his role in this fight. In a career as long as his, there is much to reflect on, such as leading soldiers at every level of command and serving in Vietnam.

Although Galvin's story is engaging throughout, it is his reflection on time spent as the commander of U.S. Southern Command, and as the commanding general for U.S. European Command and NATO's supreme allied commander, Europe, that I find particularly fascinating. He provides a unique perspective that includes candid thoughts on his personal engagements with leaders such as Ronald Reagan, George H. Bush, Mikhail Gorbachev, and Colin Powell. He also addresses the numerous events

that occurred while he commanded Southern Command, such as the unrest in Panama, El Salvador, Honduras, and Colombia. As commanding general for U.S. European

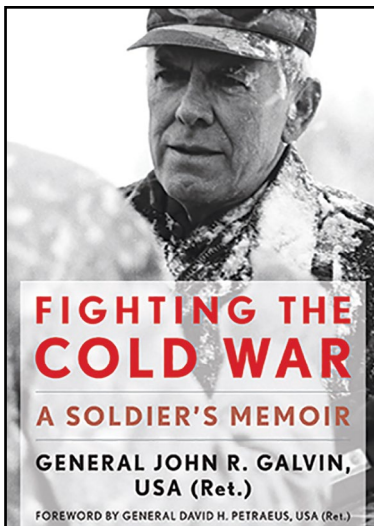
Command and NATO's supreme allied commander, Europe, he dealt with key issues such as nuclear and conventional arms-control talks with the Soviet Union, the tearing down of the Berlin Wall, and the rescue of the Kurds following the first Gulf War.

Balck's *Order in Chaos* is an incredible surprise for those seeking fresh discussion on World War I, the interwar years, and World War II. His reflection on World War I is, as one would expect, heavily weighted to his platoon- and company-level experiences. Interestingly however, following his years of reflection, Balck also provides

his thoughts on the strategic and political aspects of World War I, which are thought-provoking.

It was with much anticipation that I began reading Balck's account of World War II, and I was not disappointed. Balck, who commanded units from regiment to army level during the war, provides vivid accounts of the battles and campaigns in which he led armored forces. His recounting of events is aided tremendously by the twenty superb maps included in his book. He discusses strategy, his decision-making process, the challenges of command, and the human dimension of war. As with his World War I discussion, he shares his opinions on various topics. I found these pages absorbing.

Order in Chaos and *Fighting the Cold War* are two of the best memoirs I have read. Both are superbly written, highly detailed, and, together, provide brilliant perspectives and background on the major wars waged from World War I through the first Gulf War (sans the Korean War). Perhaps equally as important, the memoirs provide readers an opportunity to begin to develop an understanding and an appreciation for two overlooked senior military leaders. Perhaps their own words will provide the spark to encourage further study of Galvin and Balck. ■



Lt. Col Rick Baillergeon, U.S. Army, retired, is a faculty member in the Department of Army Tactics in the U.S. Army Command and General Staff College at Fort Leavenworth, Kansas.

**LET US FIGHT AS FREE MEN:
Black Soldiers and Civil Rights**

**Christine Knauer, University of Pennsylvania Press,
Philadelphia, 2014, 352 pages**

In *Let Us Fight As Free Men: Black Soldiers and Civil Rights*, Christine Knauer, a postdoctoral research fellow at Eberhard Karls University of Tübingen, Germany, thoroughly investigates the long, challenging, humiliating, and ultimately triumphant road to integration of the United States Armed Forces. Over eight chapters, from the Korean trenches to Capitol Hill, Knauer examines the struggle by relying on personal accounts, archives, editorials, columns, and letters, which poignantly reveal some of the truest feelings and motives of our political and military luminaries. The Korean War and the segregated South serve as the military and domestic panoramas. These lenses provide unique insight into the intersection of Jim Crowism and the military. The book's only shortcoming, which Knauer concedes, is the limited narrative and space given to women. They are peripheral players; this is a story about masculinity.

Consider the moment: America, the purveyor of global democracy, fighting in Korea—even as it struggles with its own civil rights problems at home. Hypocritically, the United States expected black men to fight for the country while it simultaneously upheld a caste system in the South. This dichotomy enabled a white-hot political, social, and ideological struggle, pitting the white power structure, which held stereotypes and negative sentiments toward blacks, against a marginalized citizenry. Knauer presents the confrontation in stunning detail and clarity. You witness a craven Harry Truman politicking for votes and reelection; the high-powered military brass—mainly those in the Army—steadfast in their opposition to integration; the civil rights activists and pols prodding the system for change; and the press—both mainstream and minor outlets—lobbing editorial salvos with the skill and precision of artillerymen sparing

no target or opportunity. This collection of players is depicted as having framed and pushed this policy debate to the forefront of American consciousness. Their actions were volatile, impassioned, and influential. Nevertheless, all of this occurred as segregated units were fighting and dying in a difficult war in Korea.

Despite political roadblocks, social sabotaging, vigorous debate over black military performance, and Truman's ineffectual executive orders, black soldiers persevered, and segregation ended in the spring of 1951. Henceforth, everyone would fight together in the defense of the country. Black Americans, never losing sight of their ultimate goal, viewed military equality as pivotal in securing future civil rights in the United States. Their service indicated their commitment to America, regardless of social status.

Serving in the military has been, and remains, a proud tradition for black Americans. Knauer's research adequately reflects this pride and the complexity of the atmosphere from which this distinction and honor emanates. Given current political and social moods, it is a timely and cogent book. It is essential reading for all service members.

**Maj. John L. Hewitt III, U.S. Army, Shaw Air
Force Base, South Carolina**

**FOR LIBERTY AND THE REPUBLIC: The
American Citizen as Soldier, 1775-1861**

**Ricardo A. Herrera, New York University Press, New
York, 2015, 272 pages**

More than fifty years ago, in his famous book *The Soldier and The State: The Theory and Politics of Civil-Military Relations*, Samuel P. Huntington argued that the American liberal ideology was inimical to military values, and therefore it subtly undermined national security—especially in its hostility to a professional military. In *For Liberty and The Republic*, Ricardo A. Herrera reminds us that Americans in the early republic were not only inspired by liberalism but also by a republican ideology that was far more sympathetic to military values. Herrera's "military ethos of republicanism"

captures the martial spirit that animated so many Americans from the Revolution to the Civil War.

To make his argument, Herrera exploits thousands of unpublished letters and manuscripts gleaned from dozens of archives around the country. Preferring contemporary letters and accounts to later memoirs and reminiscences, he captures the “unrehearsed and unembellished” thoughts of several generations of American soldiers. From these he deduces a common multigenerational ideology that provided “order and gave greater meaning” to their soldiering. Unlike scholars who take a more sociological approach, such as Samuel Watson and Robert Wettemann, Herrera adopts an almost pointillist method. He carefully marshals his evidence point by point, alternating color and contrast to paint a portrait of early American soldiers.

The author builds his “military ethos of republicanism” through five overlapped topics: virtue, legitimacy, self-governance, national mission, and fame and honor. I found the chapter on self-governance, entitled “Free Men in Uniform: Soldierly Self-Governance,” the most stimulating and central to his argument. Here, he describes how the individualism of liberalism somewhat fitfully reconciles itself to the hierarchical and communal demands of military service. American soldiers did this chiefly through an insistence on voluntarism and negotiations over the terms and conditions of military service. For example, the near-universal militia system gradually evolved into a more voluntary and self-governing collection of militia units, where many had the characteristics and exclusivity of social or political clubs. Similarly, the volunteer soldiers enlisted as “a contractual agreement freely entered into by the soldiers and the government.” American soldiers took these contracts seriously and expected their leaders to do so as well.

Yet, Herrera links self-governance to the communal responsibility of citizenship. He observes that to these men, “bearing arms was the right and the responsibility of the virtuous citizen.” Thus, the other chapters on virtue, legitimacy, national mission, and honor combine to shape the self-governing individual into a soldier willing to risk death. This martial spirit sustained these men through ferocious battles in the Mexican and Civil Wars. Indeed, the common “military ethos of republicanism” or “shared civic-martial culture” contributed to the long and bloody ordeal of the war for the Union.

While regular soldiers from colonial times onward have lamented the preoccupation with individual rights and often have complained about the indiscipline of volunteers and the militia, American military leaders adapted to the style of leadership needed to inspire the American citizen-soldier. Schofield’s “Definition of Discipline,” originating from the general’s experience in the Civil War, is still memorized by West Point’s plebes today. Our modern professional army remains imbued with many of the same values that inspired the largely volunteer soldiers two hundred years ago. Today’s citizen-soldiers still fight for “liberty and the republic.”

**Donald B. Connelly, PhD,
Fort Leavenworth, Kansas**

BEYOND THE CALL: The True Story of One World War II Pilot’s Covert Mission to Rescue POWs on the Eastern Front

**Lee Trimble and Jeremy Dronfield, Berkley Caliber,
New York, 2015, 352 pages**

Beyond the Call is a son’s discovery of his father’s role in rescuing Allied prisoners of war trapped in Eastern Europe prior to the end of the war in Europe. Lee Trimble knew that his father, Capt. Robert Trimble, served in World War II, and that he flew thirty-five missions as a B-17 pilot with the 493rd Bomb Group of the United States Eighth Air Force. It was during a 2006 conversation at a nursing home that his father let it slip that his role in the war did not end upon completing the magical thirty-fifth combat mission on 30 December 1944. Capt. Trimble embarked on a new covert mission to recover Allied prisoners of war located behind Russian lines in Eastern Europe.

The author takes the reader to the beginning days of the Cold War as the alliance between the United States, Great Britain, and the Soviet Union began unraveling in the concluding months of World War II. As Russian forces advanced toward Berlin, Allied prisoners of war were set loose from German prison camps throughout Eastern Europe. Soviet policy on repatriated prisoners, paranoia toward foreigners, and desire to hide the Soviet-planned conquest for liberated areas all placed Allied prisoners in danger of being sent to Russia, where they

would be used as political pawns for future concessions and for the return of repatriated Russian army prisoners who sought asylum in the West. Capt. Trimble operated in Soviet-occupied Ukraine under the cover of ferrying American aircraft back to England. He would spend several harrowing months outwitting Soviet authorities in returning stranded flight crews, liberated Allied prisoners, and displaced civilians.

Capt. Trimble witnessed the horrors of war and a precursor to the crushing brutality of the Soviet oppression that was to come in Eastern Europe. The author provides a riveting account of his father's greatest accomplishment in rescuing more than four hundred French female forced laborers despite the fact that alerted Soviet authorities had set a trap for Capt. Trimble and the French women.

The strengths of *Beyond the Call* are Trimble's extensive search of National Archives files in researching his father's story and his candid account of his father's difficulty in returning home after the war. *Beyond the Call* is a remarkable story of courage in the face of incredible danger. It is also a testament of a son's love for his father and the desire to share his father's heroic story with others. *Beyond the Call* is highly recommend for anyone interested in a true story of courage, heroism, or World War II.

Jesse McIntyre III, Fort Leavenworth, Kansas

**THE FORECAST FOR D-DAY: And the
Weatherman behind Ike's Greatest Gamble**
John Ross, Lyons Press, Guilford, Connecticut,
2014, 235 pages

Author John Ross admits in his acknowledgments that he is not a historian or a meteorologist. While he may not possess a credential that one might expect in writing such a book, he readily declares a fascination for "the intersection of natural history and human events." This fascination, coupled with an interest in World War II and an awareness that the invasion of Western Europe in 1944 had been postponed a day because of weather, motivated Ross to write about the forecast and the weatherman who advised Gen. Dwight D. Eisenhower. That weatherman was Group Capt. James Martin Stagg from the British Royal Air Force.

The reader learns that Stagg, a geophysicist, was challenged to assemble one weather forecast from three

independent weather forecasting sources: the British Meteorological Office, the United States Strategic Air Force (USSTAF), and the Royal Naval Meteorological Service. Additionally, at that time, divergent schools of meteorological thought influenced forecasting. The civilian meteorological office depended considerably on the emerging science of atmospheric physics to prepare forecasts believed reliable no more than forty-eight hours in advance. The principal USSTAF meteorologists subscribed to analog forecasting that held accurate predictions could be articulated weeks ahead. Stagg, fortunately, subscribed more to the former point-of-view in the face of tremendous pressure to endorse a favorable forecast. Impatient commanders were anxious to move forward with the invasion.

Ross is particularly informative when focused on Stagg. One learns about the weatherman's personal and professional background as well as the stress he was under to deliver appropriate advice. To develop this narrative, Ross relies on several sources, including Stagg's *The Forecast for Overlord*, published in 1971. Ross is careful to add a cautionary note about the reliability of memoirs and recollections years after an event occurred.

While Stagg is appropriately featured in Ross's account, the reader is introduced to others who helped shape or influence the forecast. C.K.M. Douglas, Sverre Petterssen, Irving P. Krick, Donald N. Yates, and Edward H. "Iceberg" Smith are among those who had roles in predicting the weather or gathering data to do so. Ross taps interviews, archives, obituaries, histories, and online sources, including Wikipedia, to develop the story. Occasionally, Ross is given to speculation, or the "educated guess." For example, he ponders and suggests how different the world might have been if "Ike and his meteorologist, James Martin Stagg, had gotten it wrong." On a lesser scale, Ross suggests that Stagg at an early age, "may well have been fascinated by radio;" while later in life, he may have shared "in the back of his mind, perhaps," Douglas's doubts about the value of forecasts beyond three days.

Speculation aside, Ross's book is informative and worth the read. It gives one an appreciation for the state of weather forecasting in World War II and the work of the men and women who advised the commander on his decision to initiate Operation Overlord.

**Stephen D. Coats, PhD,
Fort Leavenworth, Kansas**

MINISTERS AT WAR: Winston Churchill and His War Cabinet

Jonathan Schneer, Basic Books, New York,
2015, 352 pages

What more can be said or written about Sir Winston Churchill? It has been seventy-five years since he first obtained the position that has long since secured his place in history. Yet, in a new work, Jonathan Schneer takes a fresh perspective on Churchill. Schneer reminds us that not less than two months following the surrender of Nazi Germany, Churchill was, shockingly, defeated for a second term as prime minister, voted out by a largely grateful constituency that he had just led from imminent defeat to resounding victory in World War II.

The author argues that the seeds of Churchill's political demise in 1945 perhaps were sown in his earliest days as prime minister while selecting the members of his cabinet. Schneer maintains that Churchill selected an inner circle that put a premium on talent over party affiliation, personal affinity, or other secondary considerations, in a manner similar to former U.S. president Abraham Lincoln. Both leaders faced a direct threat to national security and picked men with the necessary qualifications to *win wars*. In building his particular team, Churchill was compelled to form a coalition involving his own Conservative Party, as well as the rival Labour and Liberal Parties.

Thus, *Ministers at War* works on several levels. To be sure, Churchill's talented lineup of ministers was concerned first about national survival, especially during the dark years of 1940-1941, and later about winning the war, given the United States' eventual entry. Nevertheless, these men of great ability—including Lord Privy Seal Clement Atlee, Foreign Secretary Anthony Eden, Minister of Aircraft Production Lord Beaverbrook, and Minister of Labour Ernest Bevin—were also worried about political survival, and, in some cases, they aspired to the position of prime minister. Atlee and Eden both eventually became prime ministers; Beaverbrook, a close confidante, would challenge Churchill while he was still in office. Hence, this team of rivals waged smaller “wars” with Churchill, with each other, within their parties, and with the British public. Indeed, it is these internal conflicts and their largely

domestic political implications that comprise the essence of Schneer's book.

In the end, Schneer makes two indelible and convincing points. The first is that no one other than Winston Churchill could have held this particular coalition of strong personalities together under such abject wartime conditions. Only someone of Churchill's personal cachet and managerial aplomb could have held this highly effective but equally temperamental group together for so long—his core advisers stayed with him for five years. The second is that Churchill never could overcome the basic ideological differences separating him and the other members of his war cabinet. In picking his team to form a truly representative national government during wartime, Churchill never embraced the increasingly socialistic Labour agenda that proposed a very different post-war Britain than he himself envisioned. As a consequence, he grew increasingly distant from a British public desirous of a better future, one not necessarily including Winston Churchill.

Jonathan Schneer's *Ministers at War* makes a valuable contribution to the pantheon of work on Winston Churchill. Eminently readable and making extensive use of diaries and personal papers, the book represents a fresh perspective on this venerable yet unendingly fascinating subject.

Mark Montesclaros, Fort Gordon, Georgia

THE BATTLE OF THE BULGE: A Graphic History of Allied Victory in the Ardennes, 1944-1945

Wayne Vansant, Zenith Press, Minneapolis,
2014, 104 pages

My father introduced me to the Battle of the Bulge when I was a teenager. His roommate in college was Charles B. MacDonald, who had just returned from World War II to complete his college degree. I had the honor to meet MacDonald on a few occasions, and my interest in World War II and the Battle of the Bulge grew from there. The graphic novel *The Battle of the Bulge: A Graphic History of the Allied Victory in the Ardennes, 1944-1945* by Wayne Vansant does a great job telling the story—good and bad—by combining art and storyline, much like a comic book. While I would suspect most children get their

knowledge of World War II from the Call of Duty: World at War video game instead of reading books, this book would be suitable to give to a young person who has an interest in history. I was able to read the book quickly, and it retained my interest. As much as I have studied this event, I learned new information.

There are several positive aspects of the book. The drawings were created professionally, and they illustrate the right emotions for the reader. The German and American panels, for the most part, are separated by a different sky tone, which provides a subtle transition between the different points of view and actions described. The text is not technical, which could make the book more interesting for a younger audience. Readers should not expect a lot of weapons specifications or battle statistics; however, the equipment and uniforms were illustrated with precision.

Overall, the accuracy of the events is very good, but two areas may be incorrect. First, the author writes that SS-Standartenfuehrer (Col.) Jochen Peiper stated that for the offensive to succeed, a specific Allied fuel depot had to be captured. However, interviews of German generals and studies conducted after World War II clearly indicate that the capture of Allied fuel would have been a bonus—but not a necessity. The second inaccuracy is the description of the action at Parker's Crossroads, which included several attacks by a German force on a small American force. The text states the first incident occurred 21 December 1944, but by other accounts it occurred 23 December. In addition, it states that Maj. Parker was injured 22 December, but other reports state his injury and evacuation occurred 23 December. I do not believe the potential errors were intentional. The events at Parker's Crossroads so, understandably, details within the different actions can mix and merge over time.

The book does a good job of setting up *why* the German offensive took place, but it could have added one or two panes to show the enormous effort the German military took to build up its forces for the offensive despite the challenges of fighting the war on three fronts. Some additional details on the strategic situation at the time would have been helpful. However, small area maps are placed appropriately to illustrate locations as needed.

The author makes a point of identifying certain civilians, service members, and units decorated for their

actions during the battles. However, on several occasions, it does not mention the medals they received. He addresses two units that were awarded citations for their actions but only mentions the Presidential Unit Citation for the all-black 333rd Artillery Battalion—one of six units to receive the same citation during the Battle of the Bulge. Although it is widely known that German forces carried out several massacres of American troops during this German campaign, the author depicts an occasion where American troops executed unarmed German soldiers, which must be intended to illustrate that atrocities happen on both sides.

Overall, the different aspects of the actions within the Battle of the Bulge are very well portrayed through both accuracy in text and illustration. This book is recommended for middle school or high school students of history.

Col. James Kennedy, U.S. Army, Retired, Fort Belvoir, Virginia

GENERALS OF THE BULGE: Leadership in the U.S. Army's Greatest Battle

Jerry D. Morelock, Stackpole Books, Mechanicsburg, Pennsylvania, 2015, 384 pages

In *Generals of the Bulge: Leadership in the U.S. Army's Greatest Battle*, Jerry Morelock's compilation of historical biographies reexamines the leadership of six general officers directly involved in combat during the Battle of the Bulge. Morelock, a soldier and historian, looks at the actions and decisions of the general officers through the lens of how their personalities and character influenced the performance of their duties. His work is particularly valuable and instructive in its examination of the effectiveness of the "American brand" of leadership exemplified by these senior-level commanders in battle—as successes and failures.

The opening chapter provides a comprehensive, yet succinct, summary of the Army's posture as well as that of the German forces at the time of the Ardennes offensive. Additionally, the author describes the leadership, doctrine, organization, manpower, and equipment of the U.S. Army in the European theater. These details of the structure and organization are researched well. They provide a skillful depiction of the background of the Army at the time. The book's appendices have a

wealth of information regarding orders of battle and lists of key individuals. Of particular note in this chapter is a description of how Gen. George C. Marshall Jr. groomed selected officers during the interwar years for significant future assignments. The information provided in this chapter offers a broad context of the overall condition of the Army leading up to the Battle of the Bulge.

In the subsequent chapters, Morelock provides insightful details and battlefield leadership analysis of six general officers who led large Army formations in late 1944. Morelock begins with Gen. Dwight D. Eisenhower, the supreme commander, Allied Expeditionary Force; then it continues with Lt. Gen. Omar N. Bradley and the 12th Army Group, to provide significant understanding into strategic-level leadership. There are several references to the influential leadership of then Chief of Staff of the Army Gen. Marshall on these individuals. The author continues with his review of Lt. Gen. William H. Simpson and the Ninth Army; Maj. Gen. Troy H. Middleton's VIII Corps; Maj. Gen. Alan W. Jones, commander, 106th Infantry Division; and Brig. Gen. Bruce C. Clarke, commander, Combat Command B. In each account of these general officers, the author brings to light their strengths and weakness as commanders by reflecting on their prewar experiences and their actions during the Army's toughest battle of the war.

The strongest point Morelock brings in the conclusion of his book is, "strength of character is the common denominator shared by successful leaders." Gen. Eisenhower's character trait of being a team player strongly influenced his success in leading a wartime coalition. His *leadership by consensus* is a significant example for all future coalition leaders. Lt. Gen. Simpson's unselfish leadership, Maj. Gen. Middleton's calm leadership, and Brig. Gen. Clarke's self-confidence are more examples of successful senior-level military leadership traits illuminated in this book. Morelock also provides honest examples of flaws and weaknesses in leadership at the most senior levels. The author's balance of examining these officers' successes and failures provides a far-reaching examination of senior Army leadership that is an exemplar for all leaders. As Morelock states, "we cannot cheat the future generations of the rich history of leadership in battle." The character demonstrated by these general officers

will remain powerful examples for future generations of leaders.

**Brig. Gen. John C. Hanley, U.S. Army, Retired,
New Berlin, Wisconsin**

WHY SOUTH VIETNAM FELL

Anthony James Joes, Lexington Books, Lanham,
Maryland, 2014, 218 pages

This review is best subtitled "The Good, the Bad, and the Ugly." First, the good. There is a lot here to like. Professor Joes has succinctly compiled and synthesized a great deal of contemporary scholarship on the Vietnam War in an engrossing way. The volume is extensively documented—a good thing for those interested in taking issue with some of his more provocative conclusions. For those who think the war was one where American prospects of victory were squandered needlessly, this book will be a central pillar for arguments along that line. We have seen similar assertions before, such as Michael Lind's *Vietnam, The Necessary War* (Simon & Schuster, 1999), Lewis Sorley's *A Better War* (Harcourt Brace & Company, 1999), and Mark Moyar's *Triumph Forsaken: The Vietnam War, 1954-1965* (Cambridge University Press, 2006). Instead of taking a topical approach, such as Lind, or focusing on a discrete period within the larger war, as Sorley and Moyar do, Joes surveys the entire regional conflict, from its French Indochina beginnings to the Republic of Vietnam (South Vietnam) collapse in 1975, to make his argument. He manages to do this quite well in only 187 pages of text and notes.

Joes persuasively articulates his central points, and none will be a surprise to longtime scholars of the conflict. For those without a deep background in the subject, his conclusions will seem novel—and therein lies the prime value of the book. The author questions commonly held views regarding the causes for defeat, particularly when more popular notions contain an air of inevitability to them. Professor Joes does not believe the French were destined to lose their war in Indochina; had they used an approach similar to that used in Algeria, they would have enjoyed better chances. He agrees with Mark Moyar that Ngo Dinh Diem was the best leader the fledgling Republic of Vietnam had, and his assassination seriously compromised eventual prospects for victory. Joes takes on the critics of the Army of the Republic

of Vietnam (ARVN), echoing Andrew Weist's argument that sufficient spirit of resistance remained within it, only needing more encouragement. His chapter entitled "The Americans Abandon the South Vietnamese" will startle—and possibly shock—some readers with its very brief description of the terms of the Paris Peace Accords of 1973 and the subsequent drastic reduction in foreign aid that all but guaranteed the Republic of Vietnam's demise at the hands of its communist enemies.

The chapters on the 1968 Tet Offensive and the 1972 Easter Offensive contain analysis more familiar to military readers, as these recount the unmitigated tactical disasters the ARVN and their American and free world allies inflicted. Less well known are the notions that the South Vietnamese public rallied against the Communists in the wake of Tet and that the ARVN enjoyed a much-needed morale boost after it turned back the Easter Offensive, admittedly with help from American airpower.

In addition, the intense vitriol that the author employs against the American press for intentionally misrepresenting the situation at specified times and places is not surprising. While readers probably have been exposed to this before, they will appreciate some of the specifics he relates in precise detail.

Next, we come to the bad: The reader cannot escape Professor Joes' continuously asking, "What if?" While a wonderful exercise in imagination and fuel for counterfactual reasoning scenarios in historical war-gaming, this is not strictly history. One might have titled the book *Why South Vietnam Should Not Have Fallen*, given how it is written. Professional historians of the war will be unsatisfied as Joes provides little that has not already been said in the other works he cites. There are no new sources brought to light here, no new archival discoveries, no correspondences recently discovered, nor any other documentary revelations. The real value this book provides to historians will be its grist for debate, further research, and far weightier published argument and counterargument. One imagines a slew of master's degree theses and PhD dissertations inspired by Professor Joes' conclusions herein.

One should also keep in mind other worthwhile scholarly treatments the author chose not to use, or, if he did use others, perhaps he decided not to list them in his references. Discerning scholars will no doubt notice that works that disagree with the author's assumptions and conclusions are missing. For example, John Prados' book on the Ho Chi Minh Trail was consulted; his other books on the Vietnam

War, among them *The Hidden History of the Vietnam War* and *Vietnam: The History of an Unwinnable War, 1945-1975*, apparently were not. Just comparing the title of the latter work with the argumentative thrust of *Why South Vietnam Fell*, one can easily guess why.

Finally, we finish with the ugly. This book should have been an entry point for new students of the Vietnam War, given how it synthesizes much current scholarship, eloquently articulates a stimulating viewpoint, and provides good recommendations for further reading in the notes to the text. But, it costs eighty-five dollars retail. As of this writing, no paperback or e-book at significantly less cost is available. It is hard to imagine readers buying one of their first books on the Vietnam War at such a high price. The larger military academic and university libraries that can afford it will no doubt purchase this volume, but that means it that will not get much exposure outside the narrow sphere of Vietnam War scholars and historians. The book is not really intended for them anyway, except perhaps as a goad—a dare—for them to explicitly contradict its controversial conclusions.

I definitely recommend this work for military officers, civilian policy analysts and decision makers, and, yes, even Vietnam War historians. However, get someone to loan it to you—do not buy it unless the cost comes down well below its current stratospheric level. I cannot advise purchasing this book at this price, not unless you intend to consult it a lot—and then only if you are going to challenge its arguments in print.

**Col. Eric M. Walters, U.S. Marine Corps, Retired,
Fort Lee, Virginia**

**SO MUCH TO LOSE: John F. Kennedy and American
Policy in Laos**

**William Rust, University Press of Kentucky, Lexington,
Kentucky, 2014, 376 pages**

In his inaugural address, John Kennedy promised to "... bear any burden ... in order to assure the survival and the success of liberty." Historians of his administration regularly cite Cuba, Berlin, and Vietnam as the defining fronts in this, Kennedy's self-proclaimed "long twilight struggle." William Rust, in his history *So Much to Lose: John F. Kennedy and American Policy in Laos* does a great service in shedding light on the less well-known,

but highly contentious, Cold War struggle for the small, landlocked nation.

The challenges of describing the Laotian situation in the early 1960s are daunting. A panoply of actors appears: a trifurcated Lao population (neutral, pro-Western, and Communist), the Kennedy administration and the U.S. military establishment, and other entities ranging from the Soviet Union to the Southeast Asia Treaty Organization.

Initially, Rust superbly sets, and then continues to track, the all-important context in which the crisis in Laos played out. His weaving of the situation in Berlin and Cuba into the narrative is not distracting; it gives the reader a deep understanding of how the lens of the Cold War could magnify even such a small, strategically insignificant country.

Working chronologically, Rust details the Laotian morass that would dog Kennedy for his entire presidency. He begins with an excellent basic history of what was then a kingdom, culminating in his succinct exposition on the positions of the three main Lao factions and their relations to the United States and the Communist world. With this solid foundation, Rust traces the arduous yearlong negotiations that resulted in the 1962 Geneva Treaty neutralizing Laos. He provides fascinating insights into the maddening challenges of dealing with Laotian interlocutors as well as the Soviets and even allies Great Britain and France. He ably drives home the point that by 1963, with the neutralization process faltering, Kennedy was anchored with a problem without any satisfactory solution. Only Kennedy's death, and the subsuming of the Laotian conflict under the broader Vietnam War, moved the issue of Laos to the periphery.

Rust's work is extensively footnoted with primary sources, notably the *Foreign Relations of the United States* volumes and *United States-Vietnam Relations 1945-1967*, commonly referred to as the Pentagon Papers. But far from being a dry reiteration of meeting minutes, Rust imbues the proceedings with a tension, highlighting President Kennedy's vacillations amidst varying political and military advice. Of particular interest are two appendices: the first, a full copy of the 1962 Geneva Agreement neutralizing Laos, and second, a 1963 State Department/Department of Defense memorandum for President Kennedy laying out his options for leveraging all instruments of national power. The latter is of particular interest to students of the historical use of the DIME (an acronym used to identify four instruments of national power: diplomatic, informational, military, and economic).

If there is a weakness in Rust's work, it is the lack of a strong conclusion to either the final chapter or the epilogue; both seem to end abruptly. Regardless, this is an excellent, very readable book. *So Much to Lose* ably proves that John Kennedy's soaring rhetoric could not always carry the day—especially in a small, isolated country.

Robert M. Brown, Fort Leavenworth, Kansas

NORTH KOREA UNDERCOVER: Inside the World's Most Secret State

**John Sweeney, Pegasus Books, New York,
2015, 336 pages**

Posing as a university professor with a visiting group of students from the London School of Economics, renowned investigative journalist John Sweeney, in *North Korea Undercover: Inside the World's Most Secret State*, returns an outstanding accounting of conditions in North Korea. Sweeney's goal in writing this book was to “make the world's most secretive society a little less unknown, to map this terra incognita that loves to tell us: Be Quiet.” Combining research, interviews with several defectors, and his personal observations from an eight-day trip in March 2013, the author clearly achieves his goal.

Despite a choreographed itinerary guided by two “tourist agency” minders, Sweeney offers evidence of a North Korean government that is undoubtedly the most evil, oppressive, and propagandizing in the world today. He posits that North Korean claims of nuclear capabilities are a bluff that masks a tragic human rights crisis, and that, excluding the elite, the vast majority of its citizens are malnourished. Conservative estimates put five hundred thousand dead of starvation in the famine of the 1990s. He also writes about a general population that is brainwashed; the mausoleum that houses the glass cases displaying the preserved remains of Kim Il Sung and Kim Jong Il—exhibited like Lenin—receives electricity 100 percent of the time, while hospitals, schools, and the rest of the country do not enjoy reliable electricity. Sweeney cites other examples of North Korean failures: libraries have few books, most of which he says are not worth reading; universities have few students; children's camps have no children; large highways have little to no traffic; and nonconformists are either executed or sent to

gulags, where it is estimated that the government has incarcerated more than one hundred thousand individuals. He also writes of factories that are dormant, a bottling plant that produces no bottles, and hospitals that have few patients.

However, there may be room for optimism. More and more North Koreans are becoming aware of the outside world via smuggled information technology such as smart phones that provide access to the Internet, particularly for those located near the Korean demilitarized zone in the south and near the Chinese border in the north. The author suggests that the West should do more to inform the people of North Korea. For example, the British Broadcasting Corporation could establish a North Korean Service, and Voice of America could increase its output. South Korea could reverse-engineer North Korean mobile phones, of which there are two million, to see what can be modified to provide the North Koreans with the ability to do more with their mobile phones—and then build the world’s largest cellular masts near the demilitarized zone. “Information is light, and the people of the dark state of North Korea need more of that than anything else.”

The author suggests that the Kim dynasty will eventually fall. When it does, dealing with those implications promises to be a daunting task for the international community and particularly for South Korea. *North Korea Undercover* provides relevant insights into the country today. The book will be of interest to many, ranging from the casually curious to those who one day will help rebuild the country once its people are freed from the oppressive grip the Kim regime has imposed for three generations.

Col. David D. Haught, U.S. Army, Retired, Fort Belvoir, Virginia

ACT OF WAR: Lyndon Johnson, North Korea, and the Capture of the Spy Ship Pueblo

Jack Cheevers, NAL Caliber, New York, 2014, 448 pages

The 1968 capture of the *USS Pueblo* by North Korea and the detention of its crew for almost a year are incidents largely forgotten with the passage of time. In *Act of War*, author Jack Cheevers writes

a comprehensive history of a significant and controversial event. He makes a persuasive case that, considering the asymmetric threats we face today, we should be revisiting its lessons rather than letting it be forgotten.

Act of War reads like novel. It is fast paced, rich in detail, and covers events in a style that keeps the reader constantly engaged. The author uses interviews, declassified reports, transcripts, and summaries of the negotiations to provide the reader with a thorough understanding of the events. It includes the ship’s mission, its seizure, the imprisonment and torture endured by the crew, the crew’s release, and the subsequent naval inquiry. Cheevers covers the events and decisions from multiple perspectives, including those of the crew, the ship’s captain, the U.S. Navy, South Korea, and President Johnson’s administration. Calling it “one of the worst intelligence debacles in American history,” Cheevers uses recently declassified National Security Agency damage assessments to provide a fresh appraisal of the amount of damage the ship’s capture caused to national security.

The book is a study of decisions, assumptions, risk, and the consequences of being wrong. The author has a knack for clearly describing the difficult choices and the factors affecting the decisions; this is the true strength of the book. Cheevers does an excellent job of providing all the options open to the decision makers and discussing why they ultimately arrived at their decisions. The tension and the gravity of the decisions are especially clear as the events unfold. Readers ultimately will ask themselves what they would do if confronted with the same circumstances.

The author is balanced in his approach. He presents the facts—both good and bad—and lets the reader determine whether the decision maker made the best decision. What readers likely will find most interesting is the clash of values, which is clearly outlined by the author. For example, while the ship captain’s decision “to save his men’s lives had been a humane one,” the Navy, whose “self-image was built on heroic tales of sea commanders who fought against long odds,” could not understand his decision.

Winner of the Samuel Eliot Morison Award for Naval Literature, this book is a cautionary tale with many lessons relevant to the asymmetric threats we face today. In addition to posing tough questions, it also tells a story of resilience, leadership, and cohesion. I recommend this book to all readers, but especially those interested in international affairs because of the lessons it provides.

Robert J. Rielly, Fort Leavenworth, Kansas

NORTH KOREA: State of Paranoia

Paul French, Zen Books, New York, 2014, 480 pages

For many, when they think about the Democratic People's Republic of Korea (North Korea), words like black hole, isolated, hermit kingdom, cult of personality, and even failed state often come to mind. However, few of us really have an accurate idea as to what is actually happening in North Korea. In *North Korea, State of Paranoia*, Paul French provides a glimpse behind the curtain and furthers our understanding of how North Korea became one of the most isolated places on Earth.

French provides us with a systems analysis of North Korean society, politics, philosophy, economy, and the “military-first” approach followed for the last sixty-five years to explain how North Korea became a failed state. While the author does offer images of the Spartan lifestyle most Pyongyang citizens live, the majority of his analysis focuses on the socialist command economy employed by the government, which has crippled the country since the 1970s. With, essentially, no reliable official statistics upon which to base his work, French pieces together his analysis from available sources and augments his insights with comparisons to the Soviet Union and China, both of which also suffered from the effects of similarly dysfunctional economic systems. While most nations throughout the world have abandoned these types of economic principles, North Korea continues producing its centralized plans, which have led to the 1990 famine, misallocated resources, and a failed industrial system.

What prevents the required economic reform needed to save the country, in French's mind, is the country's guiding philosophy of *juche*—a mix of Marxism-Leninism, Maoism, Confucianism, and hypernationalism—which is supposed to lead the country to independence. This philosophy entangles every aspect of society—from the dynastic succession of the Kim family, to its economic policies, to its militaristic approach against the imperialistic West. Clouded by this ultrawarrior communism, the leadership used *juche* to declare all other socialist societies failed because they succumbed to capitalism, creating the illusion that capitalist countries are an existential threat to North Korea's survival. The *juche* philosophy places the society in a constant state of war, requiring the state to maintain its military-first approach. French believes the

juche ideals prevent the government from admitting its economic programs are failing and prevent it from wholeheartedly implementing reforms.

The author does an excellent job, through his analysis, outlining how North Korea transitioned from a growing nation that reached its economic tipping point of production in its first twenty years, to a crippled society burdened with a self-imposed economic straitjacket, almost totally isolated from the world. Past North Korean reforms were, at best, superficial, and they served the interests of the Kim dynasty and the regime's elite.

In the end, French points out that North Korea's most destructive act is the preservation of its failed economic principles. He asserts that radical changes are required to overcome its economic deficiencies, but any such changes would potentially result in the weakening of the Kim dynasty or the power of the military elite—both of which control the manpower to reinforce failing industries and, at least, to prevent North Korea from complete collapse. With no alternative to lead the way to transformation, French clearly outlines a bleak future for the people of North Korea.

Lt. Col. Karl Ledebuhr, U.S. Army, Fort Leavenworth, Kansas

FIRES OF OCTOBER: The Planned US Invasion of Cuba during the Missile Crisis of 1962

Blaine L. Pardoe, Casemate Publishers, Havertown, Pennsylvania, 2013, 376 pages

FIRES OF OCTOBER: The Planned US Invasion of Cuba During the Missile Crisis of 1962 gives a detailed account of the planned but never fully executed U.S. invasion of Cuba during the 1962 missile crisis—and the possible ramifications had it been fully executed. The author spent three years gathering documents from national archives; historical documents from U.S. Army, Air Force, Marine Corps, and Navy units—including copies of the invasion operation plan, OPLAN 316-62; and eyewitness interviews.

The author does a very good job of including the relevant world events that led up to the crisis, such as the Soviet blockade of Berlin, the presence of U.S. missiles in Turkey, and the emergence of Fidel Castro as a new revolutionary leader in Cuba. Together, these events led

to a situation that was the closest the United States and the Soviet Union would ever come to nuclear war during the twentieth century.

The primary focus of the book is the invasion plan itself, OPLAN 316-62, and the many assumptions the Continental Army Command and XVIII Airborne Corps planners made. As it turns out, the United States had a very poor appreciation of the terrain and the disposition of Cuban and Soviet forces on the island, as well as the attitude of the Cuban population in their support for Fidel Castro. Compounding these problems was the magnitude of logistical resources that were needed to move U.S. forces from their various home bases to staging areas in Florida, and then into assault echelons for a multi-axis assault onto the island. As the planners started to war-game the deployment, the assault, and the post-attack stabilization phase, they quickly realized they lacked sufficient transportation assets to move tanks and other heavy equipment into position to keep pace with the intended assault timetable. As the war-gaming continued, they soon realized that if the Soviets fired even one tactical nuclear weapon against the U.S. forces attempting to invade the island, the invasion plan likely would be called off, and the conflict would become a quid-pro-quo battle of tactical nuclear weapons.

Other significant findings from the war-gaming included a high number of expected casualties on both sides. At that time, the combined Soviet and Cuban forces outnumbered the projected U.S. forces approximately three to one. And, if the U.S. forces were successful in defeating their adversaries on the island, the U.S. forces would likely remain there for months trying to restore order and services for the population—which the forces were not prepared to do.

Finally, the author plays out several “what if” scenarios. Each one is very plausible, but he determines all are essentially “lose-lose” cases for the United States, Cuba, and the Soviet Union.

The book is well written and easy to follow, and it cites credible sources. It was interesting from start to finish, and I would recommend it for field grade officers who will likely serve as military planners on division and higher staffs. It is an excellent study about the timeless importance of the necessity and validity of quality planning assumptions.

**Lt. Col. George Hodge, U.S. Army, Retired,
Lansing, Kansas**

**FAILED STATES AND THE ORIGINS OF
VIOLENCE: A Comparative Analysis of State Failure
as a Root Cause of Terrorism and Political Violence**

**Tiffany Howard, Ashgate Publishing Company,
Burlington, Vermont, 2014, 210 pages**

Along with poverty and political radicalization, what economic or sociopolitical factors bring about political violence and terrorism? To answer this, Dr. Tiffany Howard examines how state failure contributes to an individual’s decision to resort to political violence or terrorism. Specifically, what factors in the environment of state failure foster political violence?

Political scientists agree that isolated causes, such as poverty or physiological traits, do not necessarily lead to political violence—nor are there unified agreements regarding causes or definitions of terrorism. Observing these limitations, Howard assertively attempts to identify which factors, stemming from the failure of the state, lead individuals to engage in political violence, specifically terrorism.

Howard’s primary focus is on political violence and cases of terrorism in domestic contexts of failed states. She argues that individuals resort to political violence—and not always terrorism—as a method to ensure individual and group survival as well as to achieve a measure of security within a failing or failed state. Examining the factors that lead individuals to resort to violence is the key task of the book.

The first chapter of the book, “Breeding Grounds,” goes beyond a simple explanation of her thesis: The environment of state failure fosters political violence. Howard anticipates the potential “so what?” question by digging in to the broader consequences of state failure. This is accomplished through an analytical examination of the specific factors and characteristics of state failure that potentially lead to terrorist violence. These factors include grievances such as failed elections and inadequate representation, among many others. Not surprisingly, Howard finds that radical religious terrorism is prevalent in failed states; this is a phenomenon that political scientist David Rappaport considers to be the fourth wave of terrorism.

The remaining chapters of the book test Howard’s hypothesis in several global regions. These cases include

Sub-Saharan Africa, the Middle East and North Africa, Southeast Asia and South Asia, and Latin America. Howard bases her analysis of these regions on data gathered from Global Barometer data and the 2008 Index of State Weakness rankings. Howard uses logistical regression analysis, which is a tried and true methodology of political science; each region is systematically examined.

Those unfamiliar with analytical tools such as correlative analysis may still find the data useful to support qualitative projects involved in state failure or political violence. On a downside, her data sets from 2008 have been eclipsed by world events. The Arab Awakening of 2011, which is briefly touched on in the book's conclusion, dynamically changed many previously held assumptions about state failure and political violence. This demonstrates a weakness of the book. However, Howard does not deserve criticism in this regard; rather, this problem indicates how political science, along with other fields of research, struggles to keep up with world events.

**Capt. Nathaniel L. Moir, U.S. Army Reserve,
Albany, New York**

LENINGRAD 1943: Inside a City Under Siege

**Alexander Werth, L.B. Tauris, New York,
2015, 256 pages**

Alexander Werth's gripping narrative delves into the siege of Leningrad. It presents a poignant example of the cruelty and horrors that are unique to military operations in a city. Alexander Werth, a correspondent for the *London Sunday Times* and the British Broadcasting Corporation, was the first Western correspondent allowed into the city immediately after the blockade was broken by Soviet forces in September 1943. The book presents a graphic story of the viciousness and destruction produced during the battle within the city.

It must be remembered that Werth's visit was after the worst of the siege and while Leningrad was starting to recover; he did not directly experience the siege. However, he visited a number of buildings, including the apartment he had lived in as a youth, and conducted a mixture of formal and informal interviews with the people there (both civilians and soldiers). In this manner, he was able to hear their experiences directly

and weave them into an enlightening, comprehensive narrative. With its firsthand accounts, the book secures two positions in literature: first, as an authoritative historical document, and second, as a journalistic narrative of the overpowering grief and the futility of modern urban warfare. The book provides an unparalleled look at the conduct of modern warfare in heavily urbanized terrain.

Leningrad 1943 is written in Werth's perspective. He grew up in Leningrad and left Russia at the age of fifteen with his father, Adolph, in 1917, but he returned immediately after the "blockade" had been broken by the Soviet army in 1943. At that time, the German army was only three kilometers away in the suburbs south of the city.

The author uses his journalism skills to paint a vivid picture of the atrocities and the struggles that the population endured during the 872 days of battle. He interviewed ordinary people as well as members of the local government, and he toured selected military areas, which provided him the opportunity to better understand and to draw attention to the hardships the people faced—and survived—during the siege. He also addressed some of the survival tactics and strategies the people developed and employed to combat the never-ending bombardment.

One of the interesting points the author discusses focuses on how the Soviets developed and utilized urban camouflage techniques to confuse the German artillery spotters. It is such accounts that lift the book into the category of "noteworthy" when looking at urban combat from both the operational and strategic perspectives.

The constant interviews and the barrage of places, names, and locations can become a bit overwhelming—especially when the author refers to the same location in both its pre- and post-revolution names. The repetitive references and comparisons to his childhood are a distraction. With this book, I recommend that the reader first peruse the entire introduction from Nicolas Werth, the author's son. The introduction fills in some of the story background and provides useful information.

I recommend this book for anyone interested in urban warfare and the lessons that may be applied to developing theories on combat in megacities, as well as for anyone interested in World War II on the Russian Front. My impression of this book is that it is well written and still relevant.

**Lt. Col. David Campbell Jr., U.S. Army, Fort
Leavenworth, Kansas**

GROUNDLED: The Case for Abolishing the United States Air Force

Robert M. Farley, University Press of Kentucky, Lexington, Kentucky, 2014, 272 pages

For nearly two centuries, *On War*, by Carl von Clausewitz, has been considered the primer on the interface of war and politics and the nature of war itself. The basic argument of *Grounded: The Case for Abolishing the United States Air Force* is that the U.S. Air Force has never been effective in dealing with the realities of war as described by Clausewitz. Rather, from its outset as a component of the U.S. Army, the Air Force has persisted in the delusion that it could lift the fog of war, that it could win wars without boots on the ground, and that technology would inevitably bring improvement, supremacy, and domination of a clearly understood battlefield from a vantage point high in the air and even over the horizon. However, rather than over the horizon, the Air Force was over the rainbow, according to this author. And, the lure of technology and victory—without mud or blood (on our side)—seduced politicians of most persuasions during the century of airpower.

After laying out his argument that Clausewitz remains valid, Farley traces the development of airpower history from early in the twentieth century into the twenty-first. He deals with the wars and the interwar periods; with the creation of the United Kingdom's independent Royal Air Force; with Billy Mitchell, Giulio Douhet, and other airpower-above-all advocates; and with the changes in aircraft technology over time. He finds that advocates inside and outside the service have consistently exaggerated the effectiveness of airpower, whether in the bombing campaigns of World War II or in the drone forays of the current era. Despite the myth, winning wars requires boots.

In fact, the delusional Air Force and its backers have hampered, if not endangered, the efforts they were to have supported. The belief in strategic airpower minimizes close-air support and general assistance to ground forces. That is an immediate battlefield problem. More serious is the way that the promises of cheap and easy victories influence the civilian government, mostly nonveteran as it is, to venture into

risky escapades that inevitably lead to introduction of ground forces after the air effort prove inconclusive.

Farley contends that the Air Force is not useless—it is merely an overpriced attractor for those who would throw around America's weight with less risk than using ground troops. He lays out a plan for integrating air resources into the U.S. Army and the U.S. Navy; cites instances where reintegration has occurred, primarily in Canada; and argues forcefully, if not convincingly, for the abolition of the free-standing air arm.

There is probably no real chance that any of the author's suggestions will come to fruition. The Air Force lobby is quite strong, and its contractors are spread throughout the myriad congressional districts. Still, *Grounded* does raise interesting questions and challenge the status quo, and it should give pause to those who might be inclined to assume that the Army of today is for now and always ideal and immutable. Unstated is the question: If the Air Force can lose independent status, why not the Army and Navy too?

John H. Barnhill, PhD, Houston, Texas

A LAND OF ACHING HEARTS: The Middle East in the Great War

Leila Tarazi Fawaz, Harvard University Press, Cambridge, Massachusetts, 2014, 416 pages

Leila Tarazi Fawaz's sweeping synthesis of the First World War in the Middle East explores the social and cultural transformations wrought by the war. Understanding the war's influence, Fawaz argues, is essential to understanding the social and political turmoil of today's Middle East. According to Fawaz—the Issam M. Fares professor of Lebanese and Eastern Mediterranean studies at Tufts University—World War I was the “foundational experience of the modern Middle East.” The war was a global conflict but generated very specific and lasting effects on local identities and politics. As a result, a central feature of Fawaz's narrative is that the conflict resulted in tremendous political changes, such as the breakup of the multifaith, multiethnic Ottoman Empire, but Fawaz never loses sight of the diverse experiences of common people. “The principal heroes,”

she writes, “are the regular folks who face the worst and make the best of it.”

To tell this story, Fawaz focuses each chapter on a specific theme related to the impact of the war on Middle Eastern societies. The first chapter provides a broad overview of the social, political, cultural, and economic situation in the Middle East on the eve of the Great War. The following chapter examines how mobilization and the costs of war waged on many fronts exhausted the Ottoman Empire politically and militarily. The third chapter covers the experience of regular people facing hardships such as unwanted military conscription, migration to escape the war’s devastation, and the great famine caused by the Ottoman hoarding of food supplies and the allied naval blockade. Whereas chapter 3 reveals the experience of many who endured extreme hardships during the war, chapter 4 tells the story of entrepreneurs and profiteers who often benefited from others’ suffering. Fawaz explains that such disparate experiences sharpened class consciousness in many Middle Eastern societies.

Chapters 5 and 6 explore the soldier’s experience—first from the Ottoman and then from the British perspective. Fawaz notes that the burden of Ottoman military service fell heavily on rural populations, as 80 percent of Ottoman soldiers were from rural backgrounds and only 11 percent were literate. On the British side, ground forces in the Middle East included large contingents of colonial troops from territories such as India, Egypt, and Australia. More than two hundred thousand Indian troops were deployed to Middle East by 1916—and almost sixty thousand died during the war.

Through her exploration of the conflict’s influence on Middle Eastern societies and cultures, Fawaz demonstrates that “World War I was not one Great War but rather a series of local or regional wars.” Fawaz’s investigation pulls back the curtain over the social experience of one of those subconflicts. *A Land of Aching Hearts* provides an intriguing overview of the relationship between war and society in the Middle East. By casting the First World War as a key moment in which to understand the emergence of the contemporary Middle East, the book will prove useful for scholars and military practitioners alike.

**Capt. Brian Drohan, U.S. Army,
West Point, New York**

**THE DELUGE: The Great War, America and the
Remaking of the Global Order, 1916-1931**
Adam Tooze, Viking, New York, 2014, 672 pages

Adam Tooze writes about the emergence of American power in the midst of World War I. While American military power enabled the Entente Powers, also known as the Allies, to defeat Germany and the Central Powers, its real power was economic and financial—since it was American loans that paid for munitions and food from the United States.

Viewed from 1931, Tooze sees that the interwar system of international diplomacy and economics—in which military power was an afterthought—was sustained by American power, which was constrained by the limits set by Congress and public opinion. This emergence was rapid given that the United States was perceived as insignificant both before 1914 and after 1931.

This book is a splendid analytic and interpretive narrative that goes beyond Europe and ties together events in East Asia, Asia Minor, Africa, and Latin America, as well as the policies created in response, moving from striking metalworkers in Buenos Aires, to emerging Chinese nationalism and the foreign reactions to it, and to postwar American investment in Australia.

After 1916, American economic and financial power could easily be converted into military power when the president and the Congress so chose. The prime example is the Nation’s 1916 decision to build a two-ocean navy. The war left the international system of states and alliances in a shambles, with devastated and radicalizing European societies, and it provided glimpses of the possible futures in the events in Germany, Eastern Europe, and Russia. New countries demanded more influence based on their wartime activities—notably Japan, China, Australia, Canada, and New Zealand.

Woodrow Wilson emerges in this account as an annoying, moralistic advocate of American supremacy. As the various crises between 1916 and 1921 revealed the weakness of British, French, German, Japanese, and Soviet power, Wilson appeared as a tough-minded advocate of American primacy when he believed American vital interests were at stake. The Americans were the key to international stability throughout the period; however, by 1924, and with the American rejection of the League of

Nations, potential allies in Japan and Germany were left at the mercy of their internal enemies. America's failure, despite its new power, to support France in deterring potential German aggression defined the interwar era.

Wilson was a Burkean conservative in his intellectual response to the American Civil War and Reconstruction; he believed in incremental, generational change and white supremacy. He was contemptuous of Germany's new political leadership, and he worried about Japan's rise in power as Europe was tearing itself apart in war. The author presents the Treaty of Versailles as a peace settlement that created its own problems, given its respect for German national sovereignty, as opposed to earlier settlements in 1648 and 1815. He notes that Wilson habitually raised hopes of American intervention and support for nascent democracies—and then dashed them, especially regarding postwar Germany, the Chinese entrance into the war, and Sino-Japanese relations.

As American attention concentrated on its own internal politics in the 1930s, the totalitarians seized their chance for world domination. The author believes that Hitler, Stalin, the Fascists, and the Japanese militarists embarked on their policies as a response to their fears about a world dominated by American capitalist democracy. In 1918, Wilson thought of American dominance in the world as a chance for peace and justice, asserting he was thinking a century ahead. World War I, which began as a classic great power war for political influence, ended as a morally and politically charged war about changing the nature of the world. In this timely book, Tooze shows we are still dealing with the aftershocks of the earthquake that was World War I.

Lewis Bernstein, Woodbridge, Virginia

THE BATTLE FOR MOSCOW

David Stahel, Cambridge University Press,
Cambridge, United Kingdom, 2015, 480 pages

On 12 November 1941, the German Wehrmacht launched the final push of Operation Typhoon, the offensive to seize Moscow. Typhoon was to be the final and climactic act of the Barbarossa campaign, Hitler's bid to crush Stalin's Soviet empire in a single, decisive campaign. However, the German forces before Moscow in November no longer resembled

those that crossed the Soviet frontier in June. Where the initial stages of Barbarossa had featured slashing breakthroughs and vast encirclements in the summer heat, the attacks in November featured bitterly contested frontal attacks conducted in frigid cold. And, after months of hard fighting, the strong and confident German host of June had become a weary, depleted, and poorly supplied remnant. Barbarossa had become a case study in operational culmination.

David Stahel describes this culmination in his new book, *The Battle for Moscow*. It is the fourth in the Australian historian's series of books on the 1941 battles on the Eastern Front. In the previous three books—*Operation Barbarossa and Germany's Defeat in the East*, *Kiev 1941*, and *Operation Typhoon*—Stahel focused on the panzer groups that spearheaded the operations of Army Group Center, the German main effort throughout the campaign. In each book, the author painted a devastating picture of the senior military leadership of the Third Reich. Where previous historical accounts depicted the German general staff as military history's most accomplished planning body, Stahel shows a planning process based on racist arrogance and willful ignorance. Where popular narratives lionize the panzer generals such as Hoth, Hoepner, and Guderian as military virtuosos, Stahel would have us see them as men blinded by ambition and increasingly divorced from frontline reality.

In this newest book, the focus remains on the panzer groups of Army Group Center. However, where the earlier volumes in the series focused primarily on operational planning and execution, *The Battle for Moscow* devotes more attention to soldier letters and firsthand accounts of the campaign. It makes for depressing reading. The suffering of the exhausted German soldiers, attacking into ferocious cold without proper winter uniforms, is a constant reminder of the consequences of the high command's poor planning. Yet, lest we pity the poor *Landser* too much, Stahel reminds of the barbaric nature of the German invasion of the Soviet Union. In particular, Stahel examines and explodes the notion that the *Wehrmacht* served as an innocent bystanders to the atrocities the Nazi regime committed against Soviet prisoners and civilians.

By the end of his narrative, Stahel demolishes other commonly held beliefs about the Moscow Campaign. At no time, he argues, was the Soviet capital ever in real

danger of falling to the Germans. It was no “near-run thing.” Despite the persistent myth, no German units came in sight of the Kremlin. Instead, Stalin kept five armies in reserve as he waited for the German attacks to wear themselves out. Meanwhile, with their fixation on the final prize, the German generals missed the evidence of growing Soviet strength and preparations for the Zhukov’s crushing counterattack.

Like the previous three books in the series, *The Battle for Moscow* is very highly recommended for buffs and scholars alike. Stahel’s research, writing, and analysis give us a new and gripping account of one of the greatest and most momentous campaigns in history.

**Scott Stephenson, PhD,
Fort Leavenworth, Kansas**

A HANDFUL OF BULLETS: How the Murder of Archduke Franz Ferdinand Still Menaces the Peace
Harlan K. Ullman, Naval Institute Press, Annapolis, Maryland, 2014, 256 pages

A Handful of Bullets: How the Murder of Archduke Franz Ferdinand Still Menaces the Peace has virtually nothing to do with Franz Ferdinand. Instead, Ullman offers an insightful and daunting strategic analysis of today’s globalized world. One of the Navy’s foremost strategic thinkers, Ullman argues that rapidly increasing interconnectivity has fundamentally changed the potential reach of individuals across the globe—no longer does someone have to assassinate an Archduke to have a global impact. Ullman argues that the traditional state is failing, but American strategic planners remain locked into state-centric and outdated modes of thought. He sprinkles his book with potential solutions to many of America’s ills. Although many of his solutions are unlikely to be implemented—such as reintroducing the draft to reduce the insularity of our professional military—they are certainly worthy of discussion.

At the heart of *A Handful of Bullets* is Ullman’s “New Four Horsemen of the Apocalypse.” The new horsemen are “Failed and Failing Governments;” “Economic Despair, Disparity, and Disruption;” “Ideological Extremism and Religious Fanaticism;” and “Environmental Calamity and Climate Change.” While

war, famine, pestilence, and death presumably are still in business, Ullman’s horsemen summarize the most serious threats to the world today. Ullman believes that Failed and Failing Governments is the most dangerous of the horsemen, but he emphasizes the interconnectivity of the horsemen. One of the best sections of the book is a series of “nightmare scenarios”—looming crises that could have a geopolitical effect similar to Franz Ferdinand’s murder. These include everything from a super storm, to the dissolution of NATO, to large-scale cyber disruption of the economy. These crises will see combinations of his horsemen feeding off each other. Within these scenarios, Ullman argues that unlike the Cold War—where the danger was of mass destruction, today we face the imminent danger of mass disruption to our economy, infrastructure, government, and environment. Disruption can come from virtually anywhere. It will need to be responded to with innovation and flexibility.

While Ullman is insightful, *A Handful of Bullets* suffers from poor editing—many of the same arguments and phrases are repeated ad nauseam and Ullman often leaps from topic to topic without transition. He also makes some factual and rhetorical errors, such as when he writes, “America was the uncontested dominant global power by 1945,” or when he refers to World War I as “tragically unavoidable,” a descriptor that current historiography would contest.

Despite these failings, Ullman makes a powerful and timely plea for a reinvigoration of strategic thinking within the U.S. defensive apparatus. He has specific and useful suggestions—the restructuring of U.S. Cyber Command, the intelligent use of reserve status for ships and units to provide flexible defensive capacity, a special U.S. ambassador to NATO to reinvigorate that alliance, and discarding the Electoral College. His focus, though, is on revitalizing the U.S. Army War College and inculcating a culture of “brain-based” solutions. This idea is worthy of consideration.

Incidentally, if you are curious about the assassination of Franz Ferdinand and the start of World War I, Christopher Clark’s *Sleepwalkers* is an excellent examination of the European drift to war. Geoffrey Wawro’s *A Mad Catastrophe* is perhaps the best recent study of Austria-Hungary in 1914, and it provides a very sympathetic treatment of Franz Ferdinand.

**John Fahey, Purdue University,
Vienna, Austria**

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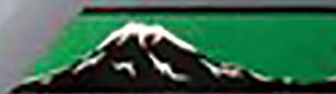
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Our wrath remains

To all who read these presents, Greetings:

When you see the headlines, the commentaries, the talk shows, the social media bloviating, and hear the wonks and pundits of all shapes and sizes wringing their hands and gnashing their teeth over the proposed personnel and budgetary cuts to the United States military

Be you Friend or Foe...

If you think America is weaker

Then ask an Air Force B2 Pilot

If you think America can't get there

Then ask a Navy Aircraft Carrier Commander

If you think America won't have enough people to get the job done

Then ask a Marine

If you think America has lost its ability to fight anywhere, anytime against any enemy in 24 hours or less

Then ask a Ranger

If you think the tip of the American spear has been blunted and you believe there is truth to the end of American Military dominance

We can assure you, though we are few,

We are the perennial Tom Joad and *our wrath remains.*

Both living and dead

Soldier or Sailor

Airman or Marine

Uniformed or Civilian

General or Private

Just look and you'll see

We'll be there.

Lt. Col. David S. Eaton, U.S. Army

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