AN ARMY UNIVERSITY PRESS PUBLICATION

Cover photo: A UH-60 Blackhawk helicopter piloted by aviators from Company C, 2nd Battalion, 82nd Aviation Regiment, 82nd Combat Aviation Brigade sling-loads an M119A3 howitzer belonging to Alpha Battery, 1st Battalion, 319th Airborne Field Artillery Regiment, 3rd Brigade Combat Team, 82nd Airborne Division 24 October 2018 while a paratrooper from the battery receives mission details on the radio during an air assault and live-fire exercise held at Fort Bragg, North Carolina. (Photo by Spc. John Lytle, U.S. Army)

Next page: A 25th Infantry Division AH-64D Apache helicopter flies in formation 21 December 2018 for the 25th Infantry Division Review over Schofield Barracks, Hawaii. (Photo by Staff Sgt. Ian Morales, U.S. Army)

2019 General William E. DePuy

Special Topics Writing Competition

This year's theme: "What role do unofficial transnational and criminal organizations play in the global adversarial competition among nations occurring today? How specifically do China, Russia, Iran, North Korea, or other specifically named adversary employ unofficial transnational or criminal organizations in their strategic efforts to undermine the United States or its allies?"

Articles will be comparatively judged by a panel of senior Army leaders on how well they have clearly identified issues requiring solutions relevant to the Army in general, or to a significant portion of the Army; how effectively detailed and feasible the solutions to the identified problem are; and the level of writing excellence achieved. Writing must be logically developed and well organized, demonstrate professional-level grammar and usage, provide original insights, and be thoroughly researched as manifest in pertinent sources.

Contest closes 15 July 2019

1st Place	$1,000 and publication in *Military Review*
2nd Place	$750 and consideration for publication in *Military Review*
3rd Place	$500 and consideration for publication in *Military Review*

For information on how to submit an entry, please visit
https://www.armyupress.army.mil/DePuy-Writing-Competition/.

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Suggested Themes and Topics

General

- What operational and logistical challenges are foreseen due to infrastructure limitations in potential foreign areas of operation, and how can we mitigate them?

- What is needlessly duplicated in the Army (e.g., what should be done away with, how should the Army adjust, and how would it benefit)?

- What is the progress in development of Futures Command?

- Technology advancements and their application

- Case studies: How do we properly integrate emerging technology?

- What nations consider themselves to be at war or in conflict with the United States? How are they conducting war, and what does this mean for the Army?

- China case study: How does Japan's effort to establish the "Greater East Asia Co-Prosperity Sphere" compare with current Chinese efforts to develop the "New Silk Road" and assert control over the South China Sea?

- Case study on civil-military operations: How does tactical-level military governance during occupation following World War II and Operation Iraqi Freedom compare?

- Update on status of the regional power rivalry between Saudi Arabia and Iran

- What are the security threats, concerns, and events resulting from illegal immigration globally?

- What must we do to develop a more effective means of developing and maintaining institutional memory in order to deal with emerging challenges?

- What is the role for the Army in homeland security operations? What must the Army be prepared for?

- What is the role of the military in protecting natural resources?

- What are the potential adverse impacts on military standards due to factors associated with poor integration of new cultures, ethnicities, or racial considerations, and how can those impacts be mitigated?

- Case study: How is gender integration changing the Army and how it operates?
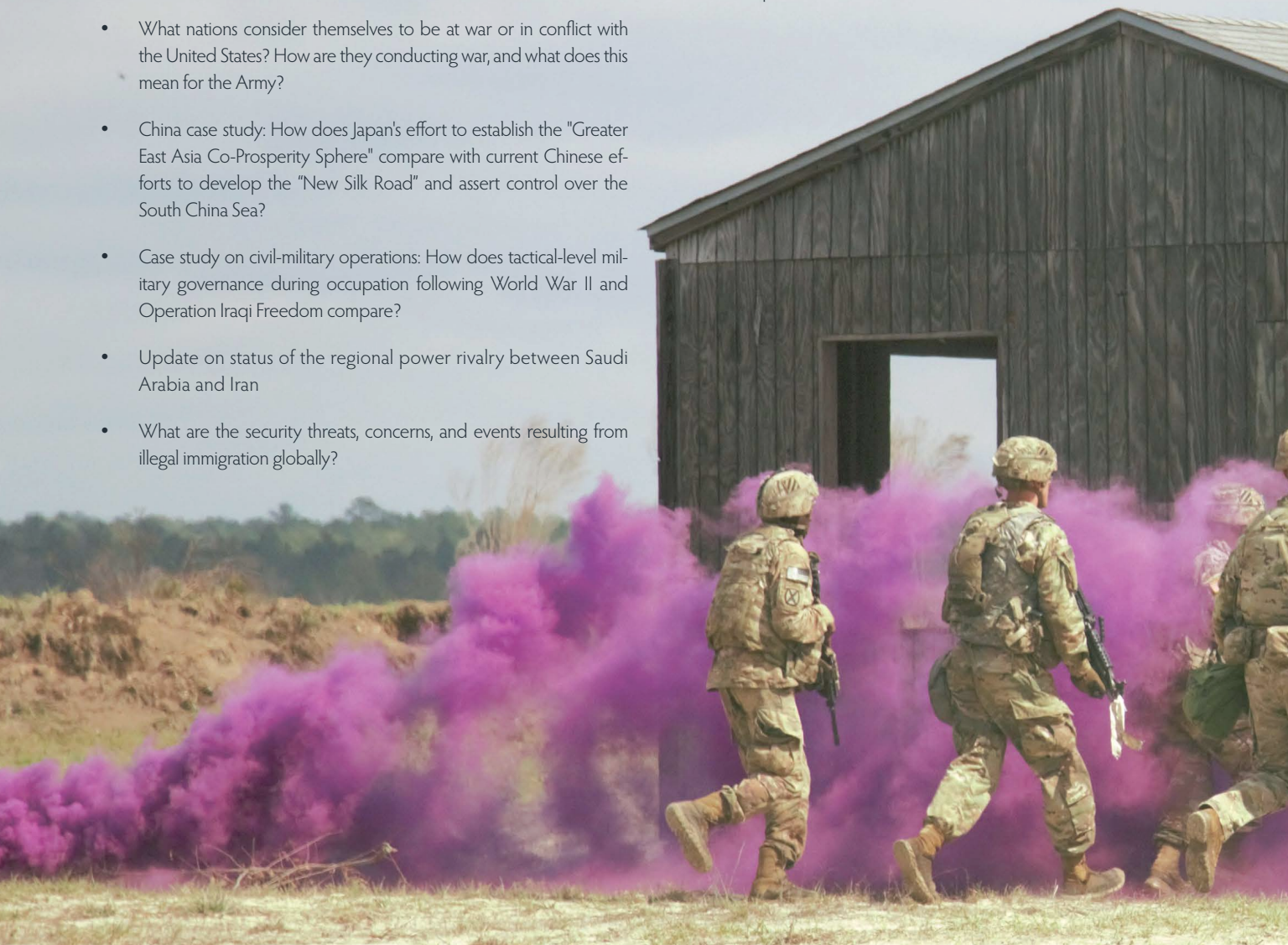
Large-Scale Combat Operations

- How do we foster deep institutional focus on large-scale land combat operations (LSCO)?

  - Needed restructuring?
  - See/understand/seize fleeting opportunities?
  - Develop the situation in contact and chaos?
  - Offset "one-off" dependencies and contested domains?
  - Rapidly exploit positions of advantage?
  - Survive in hyperlethal engagements (including attacks using weapons of mass destruction)?
  - Continuously present multiple dilemmas to the enemy?
  - Decide and act at speed?
  - Fully realize mission command?
  - What must be done to adjust junior leader development to a modern operational environment?
  - Changes demanded to the professional development models of the officer and noncommissioned officer structure?
  - Increased readiness challenges?

- Required adjustments that need to be made among the Army's support elements to reset for LSCO (e.g., personnel, logistics, medical, etc.)?
- What is the correlation between multi-domain operations and LSCO? Impact on the Army's training, readiness, and doctrine?
- What material solutions are required to fulfill the Army's unified land operations obligations in LSCO?
- Hypersonic weapons: What are their real capabilities? How do we defend against them?

A U.S. Army infantry squad assigned to Company A, 3rd Battalion, 15th Infantry Regiment, 2nd Armored Brigade Combat Team, 3rd Infantry Division, moves toward its next objective 5 March 2019 during a live-fire exercise at Fort Stewart, Georgia. (Photo by Spc. Jordyn Worshek, U.S. Army)

Reinvigorating the Army's Approach to Command and Control

Leading by Mission Command (Part 2)

Gen. Stephen Townsend, U.S. Army

Maj. Gen. Gary Brito, U.S. Army

Maj. Gen. Doug Crissman, U.S. Army

Maj. Kelly McCoy, U.S. Army

This is as good a place as any to start the war. We'll start right here.

—Brig. Gen. Theodore Roosevelt Jr.
Utah Beach, 6 June 1944

Through the chaos on the beaches of Normandy on 6 June 1944, men with white stripes on the back of their helmets were clearly visible among the most forward troops, shouting orders and leading the way. The scene was reminiscent of Gen. George Washington's order on Christmas day that every officer put white paper in their hats to distinguish themselves as they prepared to cross the ice-filled Delaware River to attack the British position at Trenton.[1] For D-Day, officers and noncommissioned officers had painted those white stripes with the intent that any soldier in the heat of battle would see leaders wherever they looked. The most senior American leader to arrive in the first wave was Brig. Gen. Theodore "Ted" Roosevelt Jr.[2] Once on land, Roosevelt realized his division was two thousand yards off their objective and immediately took decisive action to restore some semblance of order and move units off the beach. His commitment to lead from the front significantly reduced confusion and prevented the Germans from defeating the first Allied landings on the beaches of Normandy.

Leading from the front is a defining characteristic of leadership in the U.S. Army. It is not limited to being the first out of the boat, the lead in the stack, or the point on patrol. Leading from the front applies in garrison and training, just as it does in war. It means being where your soldiers are—demonstrating that you are capable and willing to do what you are asking them to do. Good leaders continuously employ a philosophical approach that is adaptable and effective in every context.

In our Army, that approach is mission command. Leading by mission command requires a commitment to action, not just words. Developing competence, establishing mutual trust, and learning to operate from shared understanding does not start in the field. It starts in the unit area with clear commander's intent. It is tested and refined on operations with mission orders and risk acceptance, and it culminates in action with disciplined initiative. Successful leaders instill a culture of leadership by mission command, and their units live it every day.

In his jeep, "Rough Rider," Brig. Gen. Theodore Roosevelt Jr. moves 6 June 1944 away from Utah Beach with front-line troops in Normandy, France. He was the only general officer to accompany U.S. troops on the initial Operation Overlord landings. (Photo by Walter Scott Shinn via the U.S. Library of Congress)

single individual has a monopoly on all the best ideas or all the information necessary to make every decision. Self-confident commanders foster a culture of teamwork and unit cohesion, and they build trust and confidence in every member of the team. Self-confident and humble leaders also dedicate their personal time and energy to developing subordinate leaders' initiative and empowering their decision-making and risk acceptance. In doing so, commanders set conditions to routinely push their authority downward to enable subordinate leaders while constantly managing the combination of leader control and subordinate initiative to accomplish missions.

Leader control is fundamental to mission command. Given their ingenuity, instinctive can-do attitude, initiative, and bias toward action, well-trained American soldiers naturally thrive in decentralized environments. However, appropriate supervision and control are not micromanagement; they are a leader's duty. Leaders adapt the amount of guidance they provide and control they exert to the specific conditions and personnel involved. This applies equally for company commanders

They give subordinate leaders opportunity for frequent repetitions—repetitions in every context that pay dividends in combat when the plan is faltering or unforeseen opportunities arise and soldiers' lives are on the line.

So how do leaders actually employ these principles? They do so with a commitment to lead from the front and set the example. Leaders committed to mission command balance self-confidence with humility. No

Mission Command Instilled in Soldiers

" One of the bravest men that I ever saw was a fellow on top of a telegraph pole in the midst of a furious fire fight in Tunisia. I stopped and asked what the hell he was doing up there at a time like that. He answered, 'Fixing the wire, Sir'. I asked, 'Isn't that a little unhealthy right about now?' He answered, 'Yes Sir, but the Goddamned wire has to be fixed'. I asked, 'Don't those planes strafing the road bother you?' And he answered, 'No, Sir, but you sure as hell do!' Now, there was a real man. A real soldier. There was a man who devoted all he had to his duty, no matter how seemingly insignificant his duty might appear at the time, no matter how great the odds. And you should have seen those trucks on the road to Tunisia. Those drivers were magnificent. All day and all night they rolled over those son-of-a-bitching roads, never stopping, never faltering from their course, with shells bursting all around them all of the time. We got through on good old American guts. Many of those men drove for over forty consecutive hours. These men weren't combat men, but they were soldiers with a job to do. They did it, and in one hell of a way they did it. They were part of a team. Without team effort, without them, the fight would have been lost. All of the links in the chain pulled together and the chain became unbreakable. "

—Gen. George S. Patton Jr., extract from speech to soldiers in Great Britain, June 1944, http://www.pattonhq.com/speech.html

developing platoon leaders or division commanders developing battalion commanders. A squad leader rightfully applies a greater level of control to the bravo team leader who is new to the position and the squad. That same squad leader applies a lower level of control to the alpha team leader—an experienced team leader who has many training repetitions with the squad and consistently demonstrates competence, initiative, and positive results when completing tasks. Through repetitions, the squad leader adjusts the level of control applied to accomplish missions and to build trust and confidence in the bravo team leader.

Leaders apply this same approach when employing command-and-control systems to establish adequate connectivity and situational awareness. This approach to command and control does not require continuous communication or leader interaction to accomplish missions. Well-trained units discipline their use of these systems to protect the initiative of soldiers closest to the problem. Mission command leaders avoid the temptation of unnecessarily applying increased control or "reaching down" just because they have the tools to do so. This commitment starts with commanders, but it is shared by competent subordinate leaders acting decisively to accomplish the commander's intent.

The most effective leaders routinely enable training repetitions up to the edge of failure. They accomplish this by underwriting the well-intentioned mistakes of subordinate leaders to promote learning and build competence for future training repetitions and readiness for combat. It is the leader's objective to adjust the level of control

exerted to the lowest level to accomplish missions and maximize the natural strengths of the American soldier and their subordinate leaders.

Of the seven principles that underpin the Army's leadership approach to command and control, one deserves further examination—risk acceptance. Leaders' willingness to accept risk is fundamental to mission command. A common fear regarding risk acceptance is that a leader will be criticized or censured if the result of their acceptance of risk and employment of initiative comes up short. For our mission command approach to work, leaders must encourage subordinate leaders to use their initiative to achieve the commander's intent and to measure and accept risk when doing so.

In 1776, had Washington and his forces failed in crossing the Delaware River or at the Battle of Trenton, it would likely have accelerated the end of the Continental Army. However, their story would still serve as a good example for initiative and risk acceptance because all of the options were high risk. Despite a string of defeats, Washington saw an opportunity to gain a strategic advantage and disrupt British attempts to secure New Jersey. His new plan exploited the opportunities of surprise and enemy overconfidence. His choices were stark: (1) continue to march a weak and demoralized army and hope for a better opportunity, (2) cross the Delaware River and seize a strategic advantage, or (3) cross the Delaware River and fail. In this case, marching away to await a

Previous page: Gen. George S. Patton Jr. provides guidance to subordinate commanders during the military campaign for Sicily in 1943. (Photo courtesy of Foy S. McNaughton, *McNaughton Newspapers*)

Gen. Stephen J. Townsend, U.S. Army, commanding general of the U.S. Army Training and Doctrine Command, has led soldiers from the company to corps level and deployed in support of six major combat operations. His previous assignment was commanding general, Combined Joint Task Force–Operation Inherent Resolve and XVIII Airborne Corps.

Maj. Gen. Gary Brito, U.S. Army, is the commanding general of the U.S. Army Maneuver Center of Excellence. He previously served as the commanding general of the Joint Readiness Training Center and Fort Polk, Louisiana. He has deployed to both Iraq and Afghanistan.

Maj. Gen. Douglas C. Crissman, U.S. Army, director of the Mission Command Center of Excellence, has led soldiers in multinational, coalition, joint, and Army units and deployed in support of combat and peacekeeping operations in Iraq, Afghanistan, and the Sinai Peninsula.

Maj. Kelly McCoy, U.S. Army, is a strategist assigned to U.S. Army Training and Doctrine Command. He has led various planning teams in Army, joint, and interagency contexts. He has multiple deployments in support of combat operations in Iraq and Afghanistan.

Battle of Trenton (July 1975), painting, by Hugh Charles McBarron Jr. The painting depicts Gen. George Washington leading American revolutionary forces 25 December 1776 in a surprise attack against a Hessian mercenary garrison at Trenton, New Jersey. (Image courtesy of the U.S. Army Center of Military History)

better opportunity would have likely guaranteed a dismal end to the Revolutionary War. By accepting risk to gain an advantage over the adversary, Washington regained the initiative, boosted American morale, and began setting conditions for victory that would come almost five years later. Accepting risk requires a mindset that does not start on the battlefield. It is critical for commanders to seek opportunities to accept risk in both garrison and training. It is only then that you can practice risk acceptance and build it into the culture of your organization.

As we laid out in the first article of this series (*Military Review*, May-June 2019), the mission command approach has not yet taken root deeply enough in our Army's culture. Reinvigorating mission command by continuing to adapt leader development is one essential step. Leaders are personally responsible for their own self-development and for developing their subordinates, both directly and indirectly. Leaders read and study to expand their knowledge and prepare themselves for new operational environments and future leadership opportunities. Self-development

also improves the leaders' self-awareness and interpersonal skills necessary to establish developmental relationships with their subordinates. Direct leadership development is a continuous process that includes schooling, assignments, specific training opportunities (i.e., situational training exercises), coaching, and counseling. Indirect leadership development includes fostering a culture that promotes open dialog, critical thinking, initiative, risk taking, learning from failure, and leading by example.

Everything a leader does achieves two things—accomplishes the task at hand and provides an example for others. In that context, Dwight D. Eisenhower and George S. Patton Jr., as company- and field-grade

officers during the interwar years, frequently gathered in the evenings to discuss battle problems and solutions over drinks—vignettes we would call tactical decision games today. These sessions provided them and their peers with experiential learning repetitions and prepared them to execute their responsibility to develop their subordinates.

In 1962, the Army's Infantry School published a booklet of vignettes called *Basic Problems in Small-Unit Leadership.* Later, in 1975, Maj. Gen. Howard Stone, then commanding general of the 9th Infantry Division, commissioned a booklet of leadership development vignettes called *What Now, Lieutenant?* Both of these booklets served as great guides for direct leader development. They were easy to read and inexpensive, and yet highly effective tools for small-unit leaders to gain decision-making repetitions with problems similar to those they would likely encounter in garrison, training, or combat. These approaches remain relevant today.

Also, there is no shortage of historical or fictional vignettes to drive leadership development discussions. For example, the Army's Center for Army Lessons Learned (CALL) maintains a growing collection of tactical, moral, and ethical vignettes relevant to today and the future fight. The study of military history can also further a leader's ability to "what if" their way through military problems and expand their appreciation for decision-making and solutions. One example of a historical case study for such a purpose is *Experience Gained in Combat Against Soviet Infantry* (see page 12 for links to the four items discussed above).

Mission command is the Army's approach to command and control of Army forces whether in garrison, during training, or while deployed for operations around the world. Its principles of competence, mutual trust, mission orders, commander's intent, shared understanding, disciplined initiative, and risk acceptance require judgment in application in each specific context. Good leaders practice mission command daily, continuously applying its principles during everything their units do in order to maximize the repetitions essential for making the principles second nature to everyone on the team. They balance self-confidence and humility to develop and empower subordinates' decision-making and initiative to accomplish the commander's intent. They foster a willingness to accept risk to gain an advantage over the enemy and accomplish the mission. At every echelon, leading by mission command requires a significant investment of leader's time and self-study to develop themselves and their subordinates.

Mission command is the only way to lead a winning Army. All of us have the professional responsibility to reinvigorate this approach now, or the Army will not be ready to fight the way we must to win the next first battle. ■

This article was previous published as a Military Review *online exclusive in May 2019. The next part of this article series will focus on training for mission command.*

Military Review *thanks Russell "Rusty" Rafferty, Reference Librarian, Classified Services, Ike Skelton Combined Arms Research Library, Fort Leavenworth, for his special efforts to find and make available the three training booklets referenced on page 12 that are discussed in the text of this article.*

Notes

Epigraph. William C. Meadows, *The Comanche Code Talkers of World War II* (Austin, TX: University of Texas Press, 2004), 141. There are different versions of the reputed quote by Brig. Gen. Theodore Roosevelt Jr. as he conferred with his staff and commanders regarding what to do after U.S. forces had landed at the wrong location on Utah Beach. The one quoted here was provided by an eye-witness present at the meeting, Comanche Code Talker Larry Saupitty, the driver-radio operator for Roosevelt.

1. David Hackett Fischer, *Washington's Crossing* (New York: Oxford University Press, 2004), 208.

2. Center of Military History (CMH), *Utah Beach to Cherbourg (6-27 June 1944)* (1948; repr., Washington, DC: CMH, 1990), 45–47, accessed 20 May 2019, https://history.army.mil/html/books/100/100-12/CMH_Pub_100-12.pdf; William M. Hammond, *Normandy: The U.S. Army Campaigns of World War II* (Washington, DC: CMH, 1994), 27–28, accessed 20 May 2019, https://history.army.mil/html/books/072/72-18/CMH_Pub_72-18.pdf.

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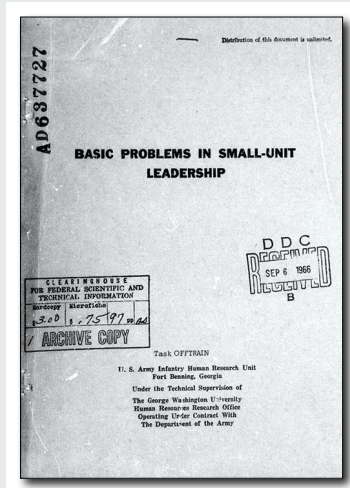
Republished in 1965 (originally published in 1962), *Basic Problems in Small-Unit Leadership* by T. O. Jacobs may be found at https://www.armyupress.army.mil/Online-Publications/New-Extended-Battlefield/#small-unit.
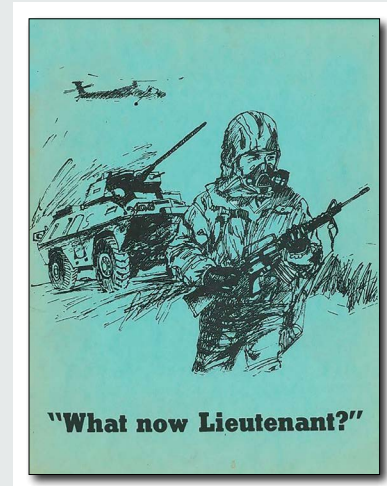
Published in 1975, *What now Lieutenant?* was commissioned by Maj. Gen. Howard F. Stone and may be found at https://www.armyupress.army.mil/Online-Publications/New-Extended-Battlefield/#what-now.
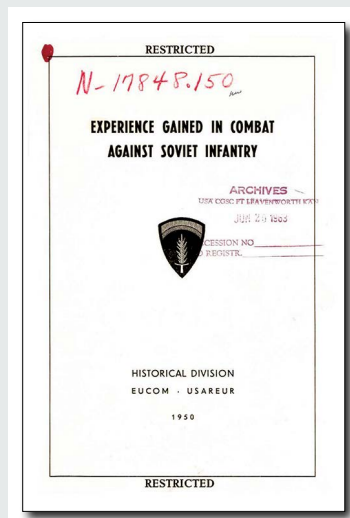
Published in 1950, *Experience Gained in Combat Against Soviet Infantry* by the Historical Division of U.S. European Command and U.S. Army Europe provides historical vignettes describing combat against Soviet soldiers during World War II. To view this document, visit https://www.armyupress.army.mil/Online-Publications/New-Extended-Battlefield/#experience.

To view the Center for Army Lessons Learned website, visit https://usacac.army.mil/organizations/mccoe/call.

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FOR YOUR INFORMATION

Foreign Military Studies Office
OEWATCH
Foreign News & Perspectives of the Operational Environment

OE (Operational Environment) Watch is an online informational product of the Foreign Military Studies Office (FMSO) at Fort Leavenworth, Kansas. Information is collected from open sources, analyzed, and discussed in short articles by regional and linguistic experts. The May 2019 edition of OE Watch provides seventy articles covering various regional developments of security concern that are ongoing or emerging in more than twenty-six countries. Among many others, this edition features short articles analyzing recent developments in and perspectives from the point of view of Russia,

Azerbaijan, Kyrgyzstan, and Estonia. Additionally, it provides numerous articles discussing a wide variety of topics related to the ongoing expansion of Chinese military capabilities. Other topics of particular salience include discussions of Iran's activities in the Middle East, developments of note among African nations, and numerous articles discussing Latin America, especially in regard to those in the Andean Ridge area affected by the ongoing Venezuelan crisis. To view the May 2019 edition of OE Watch, please visit the FMSO website at https://community.apan.org/wg/tradoc-g2/fmso/.

Risky Business

Commercial Support for Large-Scale Ground Combat Operations

Maj. Gen. Rodney D. Fogg, U.S. Army
Lt. Col. William C. Latham Jr., U.S. Army, Retired

Commanders never have enough resources. Successful commanders deploy their limited resources with care, accepting and managing risks where appropriate. While acknowledging the inherent risk of military operations, Army doctrine urges commanders to "assess and mitigate risk continuously."[1]

The U.S. Army's continuing reliance on commercial support poses one such risk. While the Army has always employed contracted capabilities in support of military operations, the scope of that support has increased dramatically in the past twenty-five years. As an example, contractors now outnumber American military personnel operating in the United States Central Command area of operations.[2]

In part, this reliance on commercial support reflects geopolitical considerations such as legislative force caps and host-nation limitations on American military personnel operating within their borders. In addition, commanders frequently rely on commercial support because acquiring services and commodities in theater costs far less than transporting that capability from the continental United States.[3]

The Army's force structure also fosters dependence on commercial support. Not surprisingly, the expanding role of contract support parallels corresponding reductions in the Army's organic sustainment capabilities and the transfer of many sustainment units to the reserve component.[4] These transfers reflect

Afghan security forces inspect the site of a suicide car bomb 19 November 2014 at the gate of Green Village compound, a large fortified complex where many international contractors live and work in Kabul, Afghanistan. This was one of many explosions to rock the Afghan capital around that time. (Photo by Shah Marai, Agence France-Presse)

a series of decisions by senior leaders to accept risk within the sustainment mission set, partly because commercial support can and has mitigated that risk during recent operations.[5]

Preparing for the Next War

The next twenty years, however, present different and far more dangerous challenges. The Army has spent much of the past two decades fighting insurgents in places like Fallujah, Iraq, and Helmand Province, Afghanistan. Meanwhile, our international competitors—and potential adversaries—have invested heavily in emerging technologies that are reducing our technological advantages, expanding the modern battlefield, and changing the nature of conflict.[6]

Emerging military concepts argue that America faces "an ever more lethal and disruptive battlefield, combined across domains, and conducted at increasing speed and reach—from close combat, throughout overseas theaters, and reaching to our homeland."[7] The Army's chief of staff has compared this type of conflict to battles fought during World War II, including the deadly beaches of Iwo Jima, while doctrinal publications have invoked the bloody fighting at Kasserine Pass in Africa and the Huertgen Forest in Northern Europe.[8]

Similar to those seen during World War II, large-scale ground combat operations (LSGCO) will feature more casualties, a higher operational tempo, and greater demand for supplies and equipment. To meet these challenges, the Army is rebalancing its force structure and updating its capstone sustainment doctrine, Field Manual (FM) 4-0, *Sustainment Operations*, to improve the velocity, precision, and survivability of future sustainment operations.[9]

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Lt. Col. William C. Latham Jr., U.S. Army, retired, directs the United States Training and Doctrine Command Capability Manager's Office for Operational Contract Support at Fort Lee, Virginia. He holds a BA from Georgetown University and an MA from the University of Alaska, Fairbanks.

Contractors Are Not Going Away

These improvements will provide commanders with more organic sustainment capability, especially in the forward area. However, they will not eliminate the need for commercial support. Existing gaps in the Army's fuel distribution, unit mobility, and maintenance capabilities will require several years to reduce, and the recalibration of capabilities between active and reserve components will take even longer to address. In the meantime, the Army will continue to rely on commercial support to fill these logistical support gaps.

Unfortunately, most Army exercises and professional military education courses pay little attention to these challenges. As a result, deploying units rarely learn about operational contract support (OCS) until their arrival in theater.[10]

Contractors will play an especially critical role in shaping operations, when Army service component commands depend heavily on the Logistics Civil Augmentation Program (LOGCAP) and other external support contracts to open ports, establish intermediate staging bases, and execute the reception, staging, and onward movement of arriving units. As operations develop, most uniformed sustainment capabilities will deploy forward to support the corps headquarters, divisions, and brigades engaged in direct combat, leaving an enormous joint security area dependent on contractors to operate the theater distribution network and provide communications, security, and base life support.[11]

The importance and complexity of commercial support requires careful planning and integration ahead of time, and effective oversight during execution. As part of the planning process, commanders should anticipate the probability of contractor casualties, especially forward of the corps rear boundary. Within the joint security area (JSA), contractors will face threats from enemy long-range fires, weapons of mass destruction, sabotage, and attacks by special operations units, paramilitary groups, and criminal networks. Moreover, enemy activity in other domains, such as cyberattacks, may limit the availability, feasibility, or effectiveness of commercial support at a critical point. Commanders need to understand these risks, properly integrate considerations for contractor support into planning, and take appropriate steps to manage them.[12]

Field service representatives (FSRs) operating forward of the corps rear boundary will face the greatest

Sgt. 1st Class Rodney Lissade, the Defense Logistics Agency (DLA) representative for the 3rd Infantry Division Resolute Support Sustainment Brigade (RSSB), and Mark Davis, a transportation security technician with Fluor (a subcontractor of DLA), discuss plans to move fuel trucks 22 November 2017 at the National Afghan Trucking yard, Bagram Airfield (BAF), Afghanistan. Through the combined efforts of RSSB soldiers, civilian contractors, and security personnel, fuel is brought onto BAF to be used by the post or distributed throughout the Combined Joint Operations Area–Afghanistan. (Photo by Spc. Elizabeth White, U.S. Army)

risk during LSGCO, and commanders must ensure these contractors are trained and equipped to survive within close proximity to the enemy. At the same time, senior Army leaders and policy makers should reexamine both the financial cost and the operational risk associated with our current reliance on contracted logistical support (CLS). The threats to contractors in the JSA will be less intense but no less lethal, as enemy forces seek to disrupt logistical facilities, communications networks, and critical infrastructure.[13]

Risk 1: Contractor Availability

American military forces currently have access to commercial support on a global scale. For a variety of reasons, however, that support may not be available during early phases of a LSGCO. A host-nation decision to nationalize its industries, for example, could deprive U.S. forces of commercial support in the midst of a deployment. Additionally, adversaries may use both lethal and nonlethal means to undermine commercial support, such as an attack on port facilities, that could damage critical infrastructure while discouraging host-nation support for U.S. military operations.

Separately, a potential enemy could arrange contracts with key vendors within a specific region, thus denying a needed capability to U.S. forces.[14]

These scenarios are not without precedents. During World War II, for example, Australian stevedores went on strike during the height of the Pacific campaign, forcing American commanders to employ their own personnel to load and unload ships at Australian ports. More recently, Kellogg Brown and Root (KBR) suspended convoy operations in Iraq in April 2004 due to Shiite militia attacks along the main supply route between Kuwait and Baghdad.[15]

Wounded contractors from the United States and other countries, injured during a 2 December 2011 suicide attack on a military installation in Logar Province, are assisted by soldiers of the 125th Brigade Support Battalion medical company surgical team of Task Force Mustang in Forward Operating Base Shank in eastern Afghanistan. (Photo by Umit Bektas, Reuters)

Risk 2: Long-Range Fires

During LSGCO, enemy long-range fires pose the most significant threat to contractors in the JSA. According to FM 3-0, *Operations,* many of our adversaries now have the ability to employ precision fires from long-range rocket launchers, cruise and ballistic missiles, and weapons of mass destruction. These weapons will target not only maneuver forces but also sustainment activities and mission command networks that depend on contracted support personnel and equipment.[16]

Consequently, though the joint force commander will prioritize the destruction of enemy long-range fires capabilities, U.S. and Allied forces, and the contractors supporting them, must conduct survivability operations in the JSA to mitigate enemy threats.[17] These steps include the construction and hardening of protective positions, dispersion of assets, and employment of camouflage and concealment. In addition, these elements will employ operational security measures to minimize thermal and electronic signatures.

Nevertheless, such efforts may reduce, but cannot eliminate, the threat from enemy fires. The increased risk will add significantly to the cost of providing commercial support while placing an additional burden on commanders to provide security and oversight of contractors operating within the JSA. Because every Army warfighting function relies directly or indirectly on commercial support, the second- and third-order impacts of enemy attacks on contractors will significantly degrade operations.[18]

Risk 3: Field Service Representatives in Harm's Way

In LSGCO, most American casualties would occur in forward areas, where enemy direct and indirect fires will produce devastating effects. The Army's multi-domain operations concept predicts the "weight of fire produced by standard multiple rocket launchers and cannon artillery employed in mass present the greatest danger

to friendly ground forces, which can be destroyed before closing with enemy maneuver forces."[19]

To survive, fight, and win on this chaotic battlefield, the Army relies heavily on CLS to maintain the readiness of its many technically advanced systems. In accordance with their contracts, FSRs routinely deploy with Army combat forces to repair and maintain critical equipment such as mission command and theater air defense systems. Their presence within these formations creates a double-edged sword, allowing contractors the protection afforded by the units' own security measures while exposing them to the significantly increased risks associated with proximity to the enemy.[20]

Owing to the increased sophistication and lethality of the next war, FSRs face a much greater risk than other contractors and thus demand more resources and attention from the commanders obliged to protect them. Given current Army force structure and the requirement for CLS, eliminating reliance on FSRs does not provide a feasible solution. At best, Army leaders may restrict FSRs to the division or corps rear area while incorporating force protection for contractors as a training objective at combat training centers. Meanwhile, we should reduce operational risk by continuing efforts to reduce CLS requirements for new and updated systems.

Risk 4: Outsourcing Operations to Consolidate Gains

By definition, Army formations conduct operations to consolidate gains in those areas where large-scale ground combat operations have ceased. The transition to consolidation of gains, however, reflects a change in the scale of combat operations, not necessarily a change in their lethality.[21]

Operations to consolidate gains combine security and stability tasks in a manner sufficiently decisive to achieve national strategic aims. Their execution, however, depends on the unit's ability to establish and sustain security. Furthermore, planning for these operations should assume enemy forces will use every available means to protract conflict. In short, consolidation of gains requires carefully planned combined arms operations employing maneuver forces to locate and destroy both conventional and unconventional forces within a designated area.[22]

Contract support for these operations will depend entirely on the level of security within the area of operations. As U.S. forces and their coalition partners improve security and begin transitioning toward stability tasks, commanders may accept additional risk by introducing contracted capabilities to support U.S. military requirements and to perform designated stability and reconstruction tasks. Nevertheless, as noted above, contractors are exceptionally vulnerable to enemy attack. Depending on theater guidance, commanders may need to implement additional force protection measures to ensure the safety and continuity of contracted support.

Risk 5: Who's in Charge?

To fight LSGCO, the Army will depend heavily on its own commercial support as well as the contracted capabilities of coalition partners, other governmental agencies, and Department of Defense enablers such as the U.S. Transportation Command and the Defense Logistics Agency. Current policy and doctrine oblige the combatant commander to plan, integrate, and synchronize that contracted support while incorporating contractors within the theater security plans.[23]

In turn, the combatant commander may delegate portions of that responsibility, including coordination of contracting support, to the Army service component command (ASCC), which has doctrinal responsibility for setting the theater. A theater sustainment command will support this mission by coordinating sustainment functions, including those provided by contractors, across the area of responsibility. Subordinate units, such as contracting support brigades and Army field support brigades, provide additional support in terms of managing contractors, monitoring performance, and enforcing policies within theater.[24]

As the senior Army headquarters, the ASCC must synchronize the many functions necessary to integrate contracted support within the operational concept. Partly due to Department of Defense-mandated limitations on the size of headquarters, current ASCC tables of organization and equipment fail to provide a dedicated OCS planning capability, causing some ASCC headquarters to rely heavily on the OCS branch within the theater sustainment command to perform those functions.[25]

This approach fails to address the many OCS issues outside the sustainment realm, such as vendor vetting, policies for arming contractors, and construction

requirements. In addition, the ASCC staff may not fully integrate OCS planning considerations across staff functions if a subordinate headquarters performs the majority of OCS planning activities. During combat, the delegation of OCS planning responsibility limits the senior mission commander's situational awareness of emerging threats, a contributing factor during the previously mentioned attacks on KBR convoys in April 2004.[26]

Separately, the contracting support brigade and the Army field support brigade perform critical roles but have limited capacity to monitor contractor activities, restricting their ability to ensure senior commanders have the information necessary to make informed decisions regarding the risk to contractors in a LSGCO environment. Ultimately, the commander directly responsible for contractors operating in his or her sector requires timely and accurate information to make an informed risk assessment.[27]

Conclusion

We cannot wish away the considerable risk posed by our dependence on OCS. The Army has reshaped its force structure several times in the past two decades, but each reorganization relied on contracted capabilities to fill critical gaps. The current structure continues to accept risk by assuming that commercial support will provide timely and responsive support for future military operations.[28]

The emerging capabilities of our near-peer competitors increase the danger of that assumption. To help future commanders mitigate risk, we should rebalance capabilities between active and reserve forces, reduce our reliance on FSRs, expand OCS content within professional military education and collective training, and provide operational headquarters with the capability to plan, integrate, and manage operational contract support for LSGCO. ■

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Maj. David Hilling, executive officer of 3rd Brigade Combat Team, 10th Mountain Division, and Maj. Richard Juten, the brigade operations officer, discuss operations April 2019 during a training rotation at the Joint Readiness Training Center, Fort Polk, Louisiana. (Photo provided by author)

Putting the Fight Back in the Staff

Lt. Col. Matthew T. Archambault, U.S. Army

B rigades come to the Joint Readiness Training Center (JRTC) to fight and win. Everyone knows that. A brigade combat team's (BCT) purpose, its raison d'etre, is to fight and win. And in training to fight and win, much learning occurs as

brigades compete against the world-class opposing force at JRTC as well as in exercises at the Army's other combat training centers (CTCs). This article will focus on ten common shortcomings derived from lessons learned at JRTC (depicted in figure 1, page 24) that

span not only warfighting functions but also component parts of a brigade's ability to conduct mission command. These are provided to help units prepare for their experience at a CTC.

Among those observations, failure to integrate external units or conduct rehearsals of critical capabilities in reception, staging, onward movement, and integration undermines the technical means brigades have for mission command and misses an opportunity for team building with those external units. Additionally, the failure to move from conceptual planning to detailed planning as well as failing to synchronize the full effects of BCT combat power due to ineffective time management precludes accomplishment of mission orders. However, though these individual shortcomings adversely affect a BCT's ability to fight and win, they are largely symptomatic of a larger problem that this article attempts to address: *brigade staffs are not arriving trained and ready to fight.*

Fighting as a Team

Before arriving at a CTC, brigade staffs must know how to fight as teams rather than as collections of individuals doing stove piped staff work. Successful brigades organize their staffs to enable disciplined initiative by

- placing the most seasoned members at "points of friction," where it is most likely that key decisions will be required at critical times and expected events,
- ensuring individual and collective staff training has been methodically and iteratively conducted prior to arrival to facilitate the development of a level of trust that will ensure a cohesive team during the CTC experience, and
- developing among staff members in all capacities the required attitude—the tenacity to deal flexibly and effectively with an ever-changing scenario against an oftentimes unpredictable and frustrating peer enemy.

Success at JRTC, as in war, can only result by seeing things as they are, not as one might wish them to be. This is the primary mission of the staff. The BCT staff exists to provide this clarity of perception to the commander and to ensure that the commander can focus on the most important decisions without getting bogged down in those that are more mundane that can be handled by others.

When to Take Action

Knowing is not enough; a response is often required. Many tactical operation centers (TOCs) display signs that read, "Who else needs to know?" Implicit in those signs is action must follow. However, observations at JRTC suggest that staffs often do not understand what actions are necessary when faced with new information or changing circumstances. A common scene in a brigade TOC is as follows:

> RADIO-TELEPHONE OPERATOR (RTO): Attention in the TOC!
> COLLECTIVE PERSONNEL IN THE TOC: Attention in the TOC!
> RTO: Unmanned aerial surveillance (UAS) spots two T-80 tanks at grid Alpha Lima one-four-seven-five, nine-eight-six-five.
> COLLECTIVE PERSONNEL IN THE TOC: Alpha Lima one-four-seven-five, nine-eight-six-five.

And that's it, the TOC battle drill completes.

However, there are a myriad of actions that such information should necessitate. Compare the above to a more successful TOC scene:

> RTO: Attention in the TOC!
> COLLECTIVE PERSONNEL IN THE TOC: Attention in the TOC!
> RTO: UAS spots two T-80 tanks at grid Alpha Lima one-four-seven-five, nine-eight-six-five.
> CHIEF OF OPERATIONS (CHOPS): Roger, are they stationary?
> RTO: Sir, I don't know.
> CHOPS: Call him back. Battle captain, plot that grid on the analog map. S2, why haven't you dropped an icon on the Joint Battle Command-Platform? Where are those tanks? Fires, what do we have available right now to

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shoot those tanks? Aren't they on our high priority target list?

FIRES NONCOMMISSIONED OFFICER: Roger, sir. They are on the high priority target list. Recommend Joint Task Force 21's 155 mm guns and save our own. We've only four guns left in Charlie battery.

Unfortunately, the sense of staff urgency that the second scenario depicts above is not commonly observed at JRTC. And if we are being honest, the first scene sounds remarkably like the staff reaction in Afghanistan or Iraq when a patrol found an improvised explosive device (IED) along a highway. Sure, there was risk, but the threat was not dynamic and a response was not time sensitive. Additionally, there were likely a myriad of other competing events demanding the attention of staff primaries off the TOC floor that were deemed a higher risk than discovery of a stationary IED because the relatively routine discovery of an IED or the report of a single-rocket attack does not ordinarily threaten in a significant way the existence of the brigade. After hundreds of such events, commonly experienced over the course of the last decade and a half, TOCs changed to where they were no longer hubs of integrating information. As a consequence, seasoned primary officers capable of acting on information in a high threat and extremely dynamic operational environment migrated off the TOC floor; they have yet to return.

Essential Role of Primary Staff Officers

In the highly dynamic environments proffered at the CTCs, the role of primary staff officers is to act decisively and with initiative on the TOC floor in response to emerging developments. To do the staff primaries, those on the TOC floor, must have the technical and tactical acumen to anticipate where

Brigade combat teams in the decisive action training environment at the Joint Readiness Training Center…

1. Do not integrate external units, nor conduct through precombat inspections and rehearsals of critical capabilities in reception, staging, onward movement, and integration

2. Struggle to move from conceptual planning to detailed planning

3. Do not have efficient, agile, or survivable mission command nodes capable of executing command post functions

4. Fail to define and maintain the common operational picture (COP) and to maintain the COP in both analog and digital form

5. Fail to synchronize the full effects of brigade combat team combat power due to ineffective time management

6. Do not conduct effective reconnaissance and security operations

7. Do not proactively plan, coordinate, and employ joint fires with the mass or responsiveness required to achieve desired effects

8. Fail to develop and rehearse a detailed plan for large-scale medical evacuation of casualties

9. Are ill-prepared to conduct military operations in a chemical, biological, radiological, and nuclear environment

10. Struggle to distribute bulk commodities in a contested environment

(Figure by author)

Figure 1. Top Ten Common Brigade Command Team Shortcomings

and when they must be in order to help make the key decisions required when information arrives revealing emerging issues.

Referring again to the second scene provided above, most would agree that the staff response was far better than the first. The primary difference is attributable to the difference in staff member

experience. Field grade officers on staff have a minimum of eleven years of experience. In contrast, their assistants, regardless of how talented they are, have far less. Such staff experience is essential for successful decision-making by primaries; they understand the ramifications of a particular event or piece of information and know the appropriate actions to take in response. As a result, a major is more likely to hear another field grade officer communicate an observation and reflexively act or respond with the impact to his or her functional area than officers of more junior rank and experience.

Additionally, NCOs-in-charge may have even more experience than the primary staff officers. However, those individuals are also often not found on the TOC floor where they could provide the benefit of their experience to the decision-making process. Instead, they are distracted by having to manage their respective cells or warfighting functions.

Brigades need a commonly understood system for managing where primary staff officers go throughout the battle. The staff needs to be a team, not just a collection of warfighting function cells. Basketball provides a useful metaphor for fluidity of action by a staff when compared to its set piece counterparts of football and baseball. While a basketball coach or point guard may occasionally call a time out to direct offensive or defensive plays for specific situations, the team members usually run the team system and call plays while actually playing the game. They seamlessly adjust to each other and react cohesively and in unison to the actions of their equally dynamic opponents. Experience with each other enables them to move the ball adroitly past their opponents, perhaps with a no-look pass or an alley-oop from one teammate to another that has anticipated the pass due to experience playing together.

In such fluid environments, individual talent is useful, but only experience practicing as a team allows teammates to play fluidly and cohesively together in a game. Having experienced primary staff officers in the current operations section and on the TOC floor makes it possible to have the Army equivalent of the no-look pass. Confidence in a high level of staff member competence decreases the burden on the CHOPS, who can then focus on priority concerns in recognition that other important details are being

competently handled by other staff members. An aspirational scene follows:

RTO: Attention in the TOC!

COLLECTIVE PERSONNEL IN THE TOC: Attention in the TOC!

RTO: UAS spots two T-80 tanks at grid Alpha Lima one-four-seven-five, nine-eight-six-five.

S2: What?

CHOPS: Is that important? Battle captain, plot it on the map.

BATTLE CAPTAIN: Already done, sir.

S2: It is important because it might indicate the 1711 is further forward than we anticipated. Assistant S2, check the latest reports from the division.

CHOPS: Do we want to shoot them?

FIRE SUPPORT OFFICER: Not with our organic guns. We currently don't have anything flying that can kill them.

CHOPS: Call the joint task force. See if we can get any immediate support.

BATTLE CAPTAIN: Sir, that grid is less than a click from Assassin Battalion.

CHOPS: Roger. Notify them of what we've observed so they can take necessary precautions. Also, call the cavalry squadron and let them know some enemy got through the screen line.

S2: We might need to develop a branch plan and develop some courses of action for the boss to consider.

CHOPS: Agreed. I'll pull the executive officer out of the logistics synchronization meeting. Battle captain, send the S3 a message on the Joint Battle Command-Platform so he and the commander are aware of what we're doing and what he can expect when he gets back.

Incorporating Risk into Decision-Making

The third scenario describes primary staff officers working on the TOC floor, hearing information enter the TOC, reacting to that information based on their understanding of the plan, and having a conversation with other staff primaries about contemplated actions

that implicitly incorporate prudent consideration of risk. In comparison, the first scene depicted the only field grade officer, the CHOPS, recording information and not adequately acting on it. The result in the first scene was a brigade that did not accurately or adequately evaluate, or even perceive, risk related to the new information, and so missed an opportunity to synchronize operations in a timely fashion to neutralize the threat and mitigate the risk.

The ability to perceive risk is critical to modifying behavior. If someone standing in front of you indicates he or she is going to strike you from the motion of his or her arms, you will likely defend yourself or move, or a combination of both. Similarly, brigades know when they are in a decisive-action environment, and no one has to tell them that an opposing brigade tactical group represents a higher risk than a single static IED. Responding to a static IED requires limited synchronization of actions or requirements for higher-level approval. Moreover, battle drills and well-developed checklists for the staff for relatively routine events alleviate adopting a crisis mindset for every emerging event and the necessity for field grades to remain on the TOC floor to make every decision. Conversely, they highlight when, where, and under what conditions the presence of an experienced primary staff officer is necessary in the TOC to make critical decisions. For example, in reacting to something like the appearance of maneuvering enemy armor, a battle captain or the CHOPS cannot ordinarily authorize an F-16 to drop a bomb.

Other Risk Factors

Experienced staffs will have acquired sensitivity to the fact that risk does not arise only from external threats. For example, look at the brigade itself and the friendly force information requirements. Failure to anticipate the significance of a loss of key engineer assets or of units becoming critically short on Class I (food, rations, and water) or Class III (petroleum, oils, and lubricants) is just as much risk to winning the fight as successful actions by the enemy. As such issues emerge, the staff must make adjustments expeditiously.

To illustrate, the reader is invited to replay the scenarios above with information arriving in the TOC depicting the brigade's combat power as deficient or not compatible with the plan. To effectively deal with emerging factors, a rise of perceived risk demands

a parallel rise in synchronization, not only in lethal actions but also in actions to manage resources and internal adjustments. Figure 2 (on page 27) illustrates the linear relationship between increasing perceived risk and a unit's increasing attempts at synchronization.

Since the resources available to deal with all situations that arise are finite, a loss of combat power in one battalion will adversely affect not only its own ability to accomplish its mission but also the brigade's main effort. The ability to perceive and anticipate risk starts with the staff's ability to understand the plan at the level of detail that facilitates initiative.

Successful brigades place their experienced leaders at points of friction—places and times where critical decisions must be made and staff actions must be synchronized. Two critical friction points that potentially impede the staff and decision-making process exist for the brigade command post: the TOC floor and the plans tent. Just as the point guard of a basketball team does not remain static at the top of the court, primary staff officers cannot always remain in one place or another. However, the answer does not have to be either-or. The individuals most capable of discussing and developing a plan are the same people who are capable of managing the fight on the TOC floor. The solution is to organize the staff in order to allow the movement of primary staff officers to where they are most needed. This implies assistants, NCOs-in-charge, and soldiers must know what to do and how to do it when they are required to stand in the gap left by the primary staff officer's absence.

Dynamics of the TOC

Heretofore, we have discussed the TOC broadly. At this point, we will examine in more detail the functioning of the TOC. As noted, leaders operating as primary staff on the TOC floor are generally assigned there because they have the ability to clearly see the reality facing the brigade and the experience to react appropriately to that reality. In situations of dire and less-than-dire straits, the primary staff officer's focus is on the action or crisis of the moment.

The 1997 version of Field Manual 101-5, *Staff Organization and Operations*, called this "monitoring": "measuring, analyzing, and reporting performance to compute or otherwise identify variance from the plan or its assumptions, and to forecast change."[1] The idea is not completely synonymous with battle tracking but it is

High

Decentralized; reliance upon subordinate leaders

Low

Centralized; key leaders make decisions

Low　　　　　　　　　　　　　　　　　　　**High**

Need for synchronization

Perceived risk

Locations of decision-making

(Figure by author)
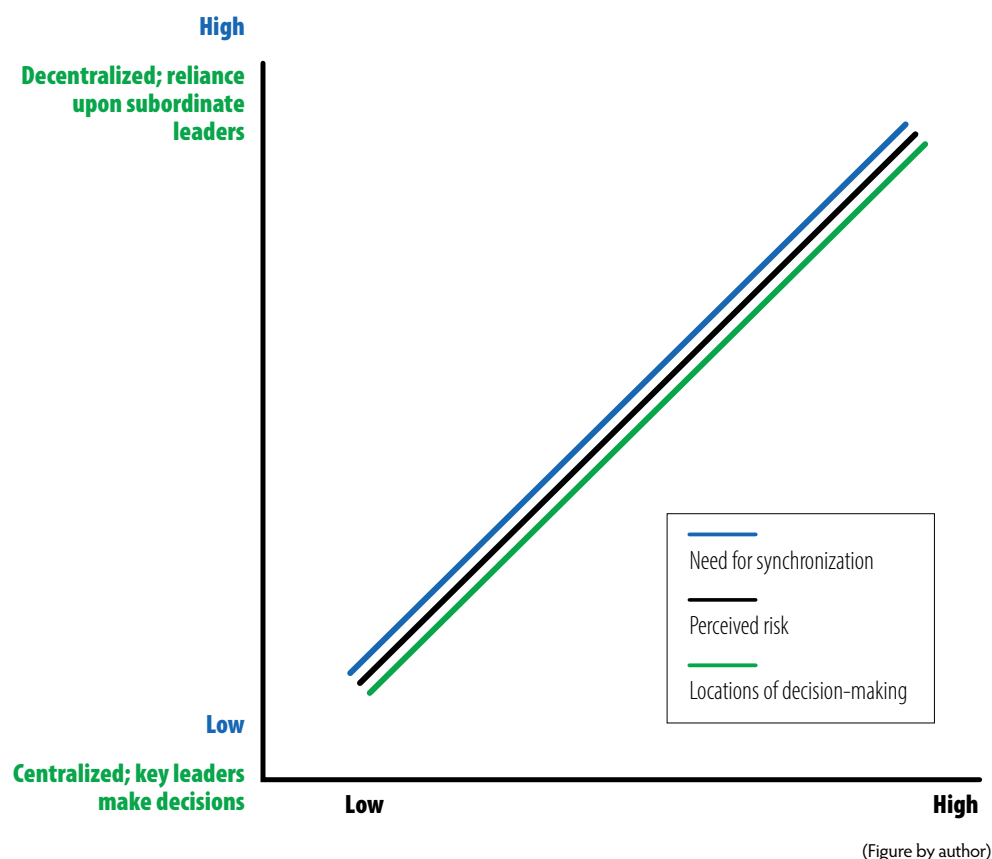
Figure 2. Risk Relationship with Demand for Synchronization

close enough. The primary staff officer then funnels that into his or her running estimate. The aggregate of the primary staff officer's running estimates comprises the much spoken of, and the much misunderstood, common operational picture (COP), which is not, despite mythology, a Joint Battle Command-Platform screen or map board.[2] Rather, the COP is the aggregate of running estimates from the staff. The map board with the disposition of friendly forces is only part of the running estimate belonging to the S-3 (movement and maneuver).

Doctrine is clear about the importance of the COP and its role in maintaining shared understanding. An assistant staff officer will not maintain the running estimate to the same level of fidelity as the primary staff officer. If the assistant is delegated primary responsibility for running estimate, shared understanding will suffer. However, primary staff officers cannot remain on the TOC floor indefinitely, and they must leave for fighter management reasons and to plan.

Consequently, managing talent—deliberately organizing the staff in a manner that takes into consideration individual talent and relative experience—becomes paramount.

The Plans Tent

The common observation from the plans tent closely resembles deficiencies observed on the TOC floor. Where assistants or staff officers with limited or insufficient experience show up for planning to represent a warfighting function, their contributions to detailed planning will inevitably be unsatisfactory and insufficient. The result will be that the lead planner will be compelled to be highly directive in the process and overconsumed in closely reviewing and synchronizing minute details of the plan.

Recall the basketball analogy. The brigade staff needs to be a team that arrives at JRTC already capable of self-synchronizing. The frequently observed JRTC shortcoming noted in unit evaluations that reads, "struggles to move from conceptual to detailed planning" occurs most often because the individuals planning do not get to the proper level of detail during planning time frames allowed. Often, that is not their fault. They are simply unprepared in terms of staff organization and experience to use the limited time optimally. This does not imply the captains or assistants should endure more classes or training. Rather, it is meant to suggest putting the most-qualified individual available in one of the two friction points (the plans tent) and assuming (prudent) risk on the TOC floor for the eight hours it should take to conduct the military decision-making process (MDMP). That is, the primary staff officer goes to the plans tent with a copy

of the latest running estimate to participate in planning. The assistants in the TOC mind the gaps with instructions to (a) continue to update the running estimate and (b) immediately inform the primary of updates. The arrangement of primary staff officers in such a manner affords the brigade the greatest chance to identify risk and synchronize efforts in a timely manner.

Staff Officer Relationships

One additional step is necessary: raising the awareness and understanding of the junior leaders. Leaders with twenty years or more in the Army may recall information flow prior to the proliferation of laptops and network access. Information arrived at the TOC either by field manual, radio, or courier; control was simple.

In contrast, today, every soldier on staff has a laptop and multiple means of receiving information. Information may not arrive directly to the TOC but may be funneled into a warfighting function cell instead. The challenge is then raising each soldier's understanding of the plan briefed at the operation order in order to sensitize him or her on what is vital information that needs to be conveyed to the TOC. For example, the intelligence analysts must understand the obstacle plan the brigade intends to use for their defense. The logisticians need to understand what is on the critical asset list and the defended asset list.

Two things occur as leaders share this information with their subordinates. First, they are provided an opportunity of contributing to the team should they come across information that puts the plan at risk. And second, it prepares them for assuming positions of greater responsibility. Leaders must note that there is a difference between being told what to do and understanding what to do.

Talent Management

Sharing information and actively integrating the staff into a team should not just happen during mission execution. Brigades must deliberately organize their staffs to manage the talent available. Talent is finite even apart from the delineation between primary staff officers and their assistants. Using a football term, brigades need to adopt a depth chart analysis approach for managing their leaders.

Once properly organized with primary staff officers leading on the TOC floor and in the plans tent, staffs need repetitive opportunities sharing information to refine the staff's standard operating procedures. This staff training glide path is just as important as training plans for companies, troops, and batteries. To this end, the brigade's leaders must place their home-station training into proper context and manage their expectation with the experiences awaiting them at any CTC.

There is a reason CTCs exist. Nowhere else can a brigade find a training environment as realistic and challenging as combat. Regardless of the resources a division commits to a home-station culminating training event (CTE), they cannot stress a brigade and create enough risk that demands synchronization and a decentralized reliance upon subordinate leaders. That is not to say brigade leaders cannot take the opportunity to emphasize issues discussed above. But without a free-thinking, peer threat; a dedicated set of observer-controller/trainers (OC/Ts); and an operations group focused on managing conditions in the environment, the brigade will not feel the effects necessary to maximize training objectives.

Training objectives are paramount at JRTC. The OC/Ts focus on safety and the brigade's training objectives. The entire apparatus of OC/Ts and an operations group focus on collecting data against metrics relative to the training objectives. JRTC's intent is to create an unbiased understanding of how the brigade is doing and to help the brigade see itself.

Based on conditions and empirical evidence, rotational design, and the day-by-day corporate understanding of those training objectives, an operations group decides when to stop the brigade and conduct an after action review. Unlike situational training exercise lanes or former rotational designs, brigades are not told, "OK, defend." Instead, brigades conduct reception, staging, onward movement, and integration into a designated area of operations. They then receive an order to "attack" or "defend" by Joint Task Force 21 and identify when they need to transition. If they are attacking, they need to know where they would like to defend because the unwritten law of combat is that if one is not attacking then one is defending.

As a matter of standard operating procedure, the operations group will not place the brigade on key terrain. Moreover, the opposing force will not allow, if they can help it, the brigade to take that key terrain. If the brigade's attack fails, the brigade must identify

Professional experience (years)

0   5   10   15   20   25

Brigade commander

Field grades

Staff captains

Understanding and visualization

Mission orders/products

Feedback loops and fully energized staffs capable of receiving bottom-up refinement and making adjustments in accordance with commander's guidance

Describing—mission analysis brief/course-of-action development brief

Describing/directing—operations order/combined arms rehearsal

Risk to shared understanding

Describing—Green tab huddles

Understanding and visualization

Battalion commander

Field grades

Staff captains

Describing—mission analysis brief/course-of-action development brief

Describing/directing—operations order/combined arms rehearsal

Company commanders

Problem
Larger and more complicated than a brigade commander can solve alone;
requires fully energized staffs.

(Figure by author)

Figure 3. Risk from Unprepared Staffs

this in time to make adjustments to their defensive planning. If the brigade's defense is not completely successful (i.e., the opposing force seizes key terrain uncomfortably close to or within the brigade lines), the brigade must manage the transition to the offense.

In dealing with the dynamic unfolding events described above, commanders assume great risk with inexperienced or inadequately organized staffs. It is not an uncommon observation that commanders, as a result of frustrations with their staff, try to manage and fight through their subordinate commanders. However, the problems and speed in which events unfold are usually more complicated than a commander can handle on his or her own. In the absence of a

well-trained and well-rehearsed staff, commanders assume unnecessary risk (see figure 3) by undercutting their own ability to create shared understanding with the consequent ability to react to problems.[3]

As brigades face the friction of deploying to JRTC, responding to a new higher headquarters, fighting on new terrain, dealing with unrelenting timelines, and confronting the continuous onslaught of a determined and capable enemy, they can easily succumb to the boiling frog syndrome if they do not have a staff fully integrated into the fight.[4] Inured in a system they validated in their division-enabled brigade CTE, they respond with surprise. Brigades often remark, "I'm surprised at how long it took to do things (like planning,

Soldiers assigned to 4th Battalion, 6th Infantry Regiment, 3rd Brigade Combat Team, 1st Armored Division, conduct a map combined arms rehearsal 16 April 2016 at the National Training Center, Fort Irwin, California. (Photo by Spc. Austin M. Riel, U.S. Army)

movements, CP [command post] transitions)." The brigade does not do MDMP any slower at JRTC than it did at home station, but it may be conducting the MDMP while in mission-oriented protective posture level two, which means implementing protective measures when the likelihood of a chemical and/or biological attack is possible. Or it may have to relocate CPs in the middle of MDMP due to opposition force air assets locating their TOCs and firing rockets at them. Or they may have more uncertainty in their running estimates because the enemy compromised communications within the brigade and not all units made the communications security jump.

Surprise is common, but what is important is the brigade's reaction to surprise. According to Tzvi Lanir from Tel Aviv University's Center for Strategic Studies, there are two choices, situational and fundamental.[5] The first option results essentially in trying harder. Do what we have been doing but do it better. The second option, fundamental learning, is to change "how" and "what" we have been doing, which is very hard. The system and understanding you arrive at JRTC with comes with investment, and perhaps ego.

The "try harder" response often leads to frustration within the brigade because it does not solve the problem. Brigades do not come to JRTC with an apathetic attitude, and when their ideas and what they validated at their CTE are not working, they get frustrated. They vent some frustration at the OC/Ts. Defensive routines and blaming external stimuli is normal.[6] Training objectives remain paramount though, and OC/Ts strive, based on their observations, to help the brigade see itself so it might make necessary changes.

JRTC manages the conditions of chaos circling the brigade so that it does not come apart at the seams but stays at that tenuous point; then, it coaches as necessary. One of the most significant aspects of managing the chaos is not providing the brigade everything it needs. Constraints and resource shortfalls are critical aspects of risk. To do otherwise would suppress

disorder and deprive an opportunity for fundamental learning because having all the resources they want would mean they could manage within their current system and understanding of combat.[7]

If frustration consumes the brigade, they will not focus on fundamental learning.[8] Senior mentors—division commanders or assistant division commanders—play a significant role in helping guide OC/Ts and operations group, and in ensuring frustration does not consume the brigade. They know the chain of command better. Listening to OC/T observations, providing guidance for coaching brigade leadership, and providing reinforcing fires through engagements with the brigade during the training exercise, the senior mentor helps focus the brigade on fundamental learning.

The most crucial lesson being learned at JRTC is that the staff needs to be fully actualized in the brigade fight and demonstrate a savage tenacity, no different from their companies, troops, and batteries, even in the face of adversity. As noted previously, this adversity is more than simple weather conditions; it includes threats to their very existence in the form of chemical attacks, indirect fire, enemy air attacks, and direct assaults upon the TOC. Jumping (relocating) a CP is exhausting and a risk to maintaining shared understanding, but it is an essential survival function staffs must master to be effective. Managing the staff's organization (and effectiveness) through the process of jumping CPs requires deliberate planning.

Recommendations and Conclusion

William James in *The Moral Equivalent of War* wrote, "It may even reasonably be said that the intensely sharp competitive preparation for war … is the real war, permanent, unceasing; and that the battles are only a sort of public verification of the mastery gained during the 'peace' interval."[9] The biggest resource shortfall threatening a brigade's training glide path for the war at JRTC is time. The staff must have

just as an important place in the training calendar as the live-fire schedule. Recommendations for brigades coming to JRTC are as follow:

1. Organize the staff and develop a standard operating procedure that moves the primary staff officers back and forth in a deliberate effort between the TOC and plans tent, the two most significant areas of friction a brigade staff faces.
2. Provide adequate individual training for staff members. Individual training is the foundation for collective training; the tenet is as true for the staff as it is for squads, platoons, and companies.
3. Develop a training glide path just as sacrosanct as the live-fire glide path that ensures not only soldier proficiency with their equipment and in their military operational specialty but also collectively as a staff: current operations, plans, and administrative logistics operation centers.
4. Provide repetitive training opportunities for staffs to practice MDMP; this is essential. It is not enough to do MDMP at the Leader Training Program and during the CTE.
5. Place the brigade CTE into its proper perspective. Divisions provide brigades the best opportunity to be ready for JRTC by enabling a tough and realistic CTE. Leverage the CTE to validate concepts of CP transitions, ensure mission command systems are ready, and exploit another repetition at visualization through full MDMP.

The staff is the last entity within brigades still suffering from a counterterrorism mindset or a counterinsurgency hangover.[10] Successful brigades organize their staff to enable disciplined initiative by placing the most seasoned members at points of friction, ensure individual and collective staff training to facilitate trust (and by extension a cohesive team), and develop a savage tenacity in the face of an ever-changing environment and peer enemy. Those are the brigades that come closest to getting 100 percent of the brigade staff to do 100 percent of the work. ∎

Notes

1. Field Manual 101-5, *Staff Organization and Operations* (Washington, DC: U.S. Government Printing Office, 31 May 1997), 6-3.
2. Matthew T. Archambault, "Good COP, Bad COP," *JRTC Newsletter* (2nd Quarter, 2019), accessed 25 April 2019, https://www.milsuite.mil/book/groups/jrtc-operations-group/content?filterID=-contentstatus%5Bpublished%5D~category%5Bnewsletters%5D (login required).

Military Review

BOOK REVIEW PROGRAM

The *Military Review* book review program allows reviewers to read books of interest to military professionals—often before book publication—and then present their thoughts on the Army University Press website. The reviewer then retains the book. Read our latest book reviews at https://www.armyupress.army.mil/Journals/Military-Review/MR-Book-Reviews/.

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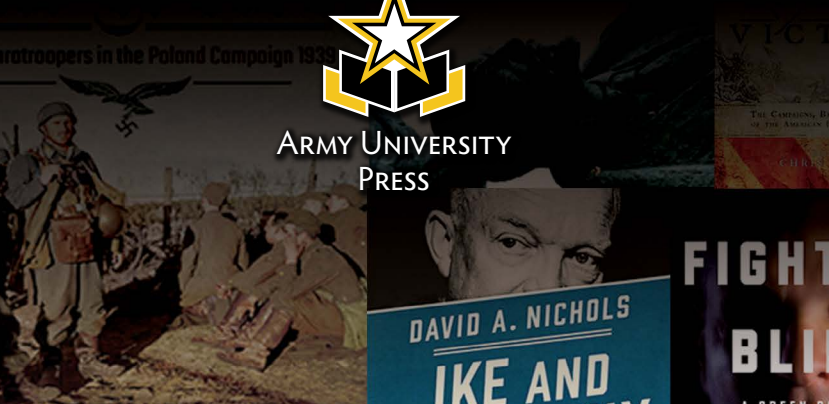
3. Matthew T. Archambault, "The Three Generation Dilemma," *Military Review* Online Exclusive (June 2018), last updated 29 June 2018, accessed 10 April 2019, https://www.armyupress.army.mil/Journals/Military-Review/Online-Exclusive/2018-OLE/Jun/Three-Generation-Dilemma/. We adapted the graphic to better highlight the area of risk assumed by the commander for bypassing his or her staff.

4. Wikipedia, s.v. "boiling frog," last modified 28 March 2019, 16:33, accessed 27 March 2019, https://en.wikipedia.org/wiki/Boiling_frog. "The premise is that if a frog is put suddenly into boiling water, it will jump out, but if the frog is put in tepid water which is then brought to a boil slowly, it will not perceive the danger and will be cooked to death."

5. Tzvi Lanir, *Fundamental Surprise: The National Intelligence Crisis* (Tel Aviv, Israel: Center for Strategic Studies, 1983), 24.

6. Ibid., 25.

7. Ibid., 120 and 281.

8. Antoine Bousquet, *The Scientific Way of Warfare: Order and Chaos on the Battlefields of Modernity* (New York: Columbia University Press, 2009), 176.

9. William James, "The Moral Equivalent of War," accessed 27 March 2019, http://www.uky.edu/~eushe2/Pajares/moral.html.

10. Gail A. Curley and Paul E. Golden Jr., "Back to the Basics: The Law of Armed Conflict and the Corrupting Influence of the Counterterrorism Experience," *Army Lawyer* (September/October 2018): 23, accessed 27 March 2019, https://tjaglcspublic.army.mil/back-to-basics.

Multi-Domain Information Operations and the Brigade Combat Team

Lessons from Cyber Blitz 2018

Maj. John P. Rodriguez, U.S. Army

Multi-domain operations is the Army's new future fighting concept, but what does this mean for the brigade combat team (BCT)? Cyber Blitz 2018 attempted to answer this question with a focus on identifying how a BCT integrates cyberspace operations, electronic warfare (EW), intelligence, and information operations (IO) to conduct operations across multiple domains, the electromagnetic spectrum (EMS), and the information environment against a regional peer.[1] Cyber Blitz demonstrated

the promise of BCT-level multi-domain operations. However, it also showed that the Army must ensure the proper doctrine and staff organization to reap the full benefit of multi-domain operations. The perceived divide between IO and cyber-electromagnetic activities (CEMA) is a major unresolved challenge. Many participants did not embrace the doctrinal view that IO functions as the integrator and synchronizer of information-related capabilities (IRCs), including CEMA, to affect an adversary's decision-making. A narrow focus on CEMA and a limited view of IO could increase stovepipes and prevent synchronized multi-domain operations. One solution to make BCT multi-domain operations more effective is to restore the IO officer position on the brigade staff and place more emphasis on the role of IO as an integrator at brigade level.

Multi-Domain Operations

The U.S. Army in Multi-Domain Operations 2028, released on 6 December 2018, describes the Army's concept for how to win future wars against near-peer competitors.[2] According to the "Summary of the 2018 National Defense Strategy," the joint force faces a more complex security environment "defined by rapid technological change, [and] challenges from adversaries in every operating domain."[3] Gen. Joseph Dunford, the chairman of the Joint Chiefs of Staff, wrote that "the U.S. military's long-held competitive advantage has eroded" as adversaries have adapted to counter U.S. capabilities.[4] The central idea behind multi-domain operations is that Army formations, as part of the joint force, must be able to fight across all domains (land, maritime, air, space, and cyberspace), the EMS, and the information environment. Due to resource constraints and more dangerous adversaries, Army formations must maximize every capability, synchronize operations across domains, and mass at the decisive point to win future battles.

The Army must field formations at various echelons capable of operating across multiple domains. The Army cannot allow multi-domain convergence to occur only at the corps level or above. General purpose Army maneuver units must also be able to fight in a multi-domain fashion to win against near-peer threats. Even if higher echelons retain control of some national-level assets, select multi-domain capabilities must be pushed downward. More importantly, units at the tactical edge must be thinking in multi-domain terms so they can appropriately plan for outside support just as BCTs incorporate air assets into planning.

Cyber Blitz 2018

Through Cyber Blitz, which is a series of experiments co-led by the Communications-Electronics Research, Development and Engineering Center (CERDEC) and the Cyber Center of Excellence, the Army is bringing multi-domain operations to the tactical level. The experiments inform how the Army can employ CEMA and IO across the full spectrum of Army doctrine, organization, training, material, leadership and education, personnel, facilities, and policy.[5] CERDEC conducted Cyber Blitz 2018 at Fort Dix, New Jersey, over three weeks in September 2018.

Cyber Blitz adapted the decisive action training environment used in other Army training environments. CERDEC modified the scenario to increase adversary cyberspace and EW capabilities as well as to adapt the scenario to Fort Dix terrain. The scenario was set in 2025 to test emerging technologies, some still in research and development, and to experiment with force design updates and delegation of authorities. The experiment occurred in the friendly nation of Atropia, which was suffering from a separatist insurgency. Ariana, a neighboring country, supported the separatists and threatened to intervene with conventional forces. Most participants were familiar with the decisive action training environment scenario, which allowed them to focus on the CEMA and IO aspects of the scenario during Cyber Blitz.

The 3rd Infantry Brigade (Patriot Brigade) Combat Team of the 10th Mountain Division provided the core of the forces for Cyber Blitz. The brigade formed an organic EW platoon by consolidating EW personnel from throughout the brigade to test a force design update. Additional personnel attached to the brigade rounded out the signal staff and the EW

platoon. An IO officer and a cyberspace planner also augmented the brigade staff.

The primary external support to the brigade was the expeditionary cyber team (ECT), which contained both offensive cyberspace operations (OCO) and defensive cyberspace operations personnel as well as an IO planner. The ECT had the capability to conduct remote operations and close target reconnaissance. The division retained operational control of the ECT during the experiment. However, the brigade was able to request cyberspace effects from the ECT through the division. The ECT conducted multiple missions for both the division and the brigade throughout Cyber Blitz.

The experiment almost entirely simulated maneuver forces while primarily conducting CEMA activities live with supplemental simulations. The ECT conducted cyberspace operations live on networks simulating the global internet and the brigade Secret Internet Protocol Router Network. CERDEC emplaced a range of emitters simulating enemy, friendly, and neutral emissions on various Fort Dix ranges. This allowed the EW teams to detect, characterize, geolocate, and jam a variety of signals.

The brigade's mission was to secure the area of operations (AO) and defeat enemy conventional forces to protect an adjacent unit AO.[6] The brigade's scheme of maneuver began with an air assault to secure an airfield and was followed by the buildup of combat power via air landing. After this, the brigade planned to secure key infrastructure in the sector and establish a defense.

The experiment planners dictated the scheme of maneuver, and the staff did not have to conduct detailed planning for the movements of the maneuver battalions. This simplified the task facing the brigade staff and freed them to focus on integrating CEMA into their maneuver plan. The brigade also planned to defend against enemy multi-domain operations. The brigade staff conducted an abbreviated military decision-making process during the first week of Cyber Blitz. The deputy brigade commander directed the staff to include CEMA and IO to the maximum extent possible.

The brigade possessed multiple IRCs, but the organization of the staff split the IRCs between various sections (see figure, page 36). The brigade EW officer, a captain, served as the brigade's CEMA chief and an EW warrant officer and master sergeant supported her. The cyberspace planner attached to the brigade nominally worked for the CEMA chief. The attached IO major led a separate IO section including a civil affairs (CA) captain and a psychological operations (PSYOP) sergeant first class, who respectively planned operations for the CA and PSYOP elements notionally attached to the brigade. The brigade public affairs officer was also part of the IO section for all practical purposes. Additionally, the IO section assumed responsibility for deception and operational security (OPSEC) planning.

Dividing IRCs into two separate sections made integration more difficult. The brigade treated the IO section and CEMA section as separate but equal entities. This meant CEMA and IO equities only formally converged at the brigade operations officer (S-3), creating a situation ripe for fragmented and disjointed planning. Therefore, the IO officer worked through the S-3 to develop overarching IO concepts of support to nest CEMA efforts with other IRCs. Fortunately for the S-3, the nature of Cyber Blitz, with its dictated scheme of maneuver, allowed him the time to focus on incorporating CEMA and other IRCs into the plan. The IO officer was also able to exert influence over the CEMA section due to his or her rank and experience despite having no formal authority over the section.

Information Operations at Cyber Blitz

The brigade successfully integrated and synchronized IRCs to support its scheme of maneuver throughout Cyber Blitz. Beyond individually supporting the scheme of maneuver, the brigade's IRCs often worked together in a mutually supportive manner achieving synergy. During an early phase of the operation, the IRCs focused on supporting an air assault. Later, when the enemy launched a powerful attack with both conventional and insurgent forces, a preplanned multi-IRC response delayed the attack and added friction into enemy mission command networks.

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Deputy brigade commander
O5

Personal staff

Staff judge advocate
O3

Public affairs officer
O4

Intelligence (S2)
O4

Operations (S3)
O4

Signal (S6)
O4

Brigade intelligence support element
W2

Brigade aviation element
W2

Fires
W3

Cyber-electromagnetic activities
O3

Information operations
O4

Cyber
O3

Electronic warfare
W2/E8

Civil affairs
O3

Military information support operations
E7

(Figure by author)

Figure. Cyber Blitz Brigade Headquarters Organization

Initially, IO focused on supporting the brigade's decisive operation, an air assault to seize the airfield at Objective Desoto, located in the eastern portion of the AO. The deputy brigade commander sought to prevent the enemy from massing combat power against the air assault since it would take multiple lifts to get the whole assault force on the objective. The IO officer used OPSEC as the construct to synchronize the IRCs. The overarching concept was to protect the timing and location of the air assault. Ideally, this would cause the enemy to misallocate forces, but at a minimum, the goal was to disrupt enemy decision-making to prevent the enemy from massing combat power against the air assault.

The IO concept had two overlapping phases. The first phase was a feint to make the adversary believe the main friendly attack was occurring in the western portion of the AO. This required multiple mutually reinforcing elements. An airfield was located just outside the brigade's western boundary, which provided a realistic objective for the feint. There were also suitable landing zones in the vicinity of the false objective. EW, PSYOP, and OCO forces supported the feint. In addition to disrupting enemy communications, OCO delivered military information support operations (MISO) messages. This allowed

PSYOP forces to influence broader target audiences and reinforce MISO messages delivered with other means. The feint did not give the enemy a windfall; instead, it presented the enemy with many different pieces that pointed to the decoy landing zone. The PSYOP planner also attempted to use EW platforms to deliver MISO messages, which was initially unsuccessful. In a later phase of the experiment, EW and PSYOP overcame these hurdles and did disseminate MISO messages with EW capabilities. EW also provided effects in the EMS to produce a signature consistent with an air assault and to degrade enemy collection assets and communication links that could discover or report on the feint.

The second phase was direct support of the actual air assault. Both EW and OCO attempted to disrupt enemy command and control on the objective and along the air corridor. The effects were overlapping to provide redundancy. This proved fortunate because some capabilities were unable to achieve the desired effects. However, staff swiftly communicated the setback, and other assets achieved the desired effects. The results were seamless for the assault force.

The enemy began a multi-domain attack during a later phase of the operation that stressed the brigade's

defenses. The enemy initiated insurgent attacks and popular uprisings as an enemy motorized rifle brigade began advancing. Enemy unmanned aerial systems and electronic attack platforms supported the advance and degraded friendly mission command. The enemy also attempted to disrupt critical infrastructure with OCO. This presented the brigade with multiple dilemmas. The situation became dire when enemy OCO penetrated the brigade network as enemy forces began to pressure the brigade's screen line.

The brigade executed a preplanned IO counterattack to delay the enemy advance. This allowed the signal staff to reestablish the network and the infantry battalions to finish preparing their defensive positions. The counterattack began with OCO against enemy mission command networks. OCO corrupted the integrity of the enemy systems and delivered MISO content. This induced friction into enemy decision-making, and the confusion caused the enemy to make mistakes. PSYOP elements exploited the enemy blunders with additional MISO messages to degrade cohesion and increase rifts between enemy conventional and insurgent forces. OCO continued attacking the mission command network and delivering MISO messages for the rest of battle.

Information Operations Lessons from Cyber Blitz 2018: The Good

The two most important lessons from Cyber Blitz 2018 are the importance of information operations to conduct multi-domain operations at the BCT level and how an antiquated view of IO impedes unified multi-domain operations. The brigade's operations were much more effective because the staff integrated and synchronized all available IRCs to affect the enemy's decision-making. The BCT faced a multi-domain threat throughout Cyber Blitz and responded in a multi-domain manner. The brigade achieved speed because it could plan and execute operations without always relying on outside support. However, this success occurred in spite of the brigade's staff organization and the framing of IO's role in the experiment.

During the air assault, the IO concept of support served to provide unity of effort across the IRCs allowing the brigade to mass effects. The IO approach ensured the IRCs were mutually supporting and identified opportunities for IRCs to collaborate, such as OCO and EW delivery of MISO messages. This presented the

enemy with a more complex challenge and prevented the piecemeal employment of IRCs. The feint presented observables in multiple ways, including the EMS and social media, which targeted various conduits to enemy decision-makers. The feint was more likely to convince the decision-makers because it used diverse observables.

The brigade's counterattack created more friction for the enemy because it combined OCO and PSYOP. A purely OCO attack on enemy command networks would have had limited effects because it would have been a singular execution. Instead, the brigade's actions continued for the remainder of the fight as OCO continued delivering MISO messages. Additional MISO executions, not exclusively delivered by OCO, extended the duration of the effects and exploited every opportunity provided by enemy missteps. Furthermore, this counterattack was critical because it occurred at a decisive point in the battle. The brigade identified the enemy mission command network as a high payoff target during mission analysis and the ECT gained access early in the battle. The deputy brigade commander held this capability in reserve so he could use it for maximum effect. His patience carried risks because the ECT could have lost access in the interim, but in this case, it paid off.

The Bad

The biggest obstacle to effective IO during Cyber Blitz was that many participants and observers did not embrace the doctrinal definition of IO. Joint Publication 3-13, *Information Operations*, defines information operations as "the integrated employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision-making of adversaries and potential adversaries while protecting our own."[7] Many did not view IO as an overarching function that integrated all IRCs including CEMA. Instead, they treated IO as something separate and distinct from CEMA. While the new multi-domain operations concept advocates changing IO to information environment operations, it still emphasizes IO/information environment operations' role of synchronizing IRCs to achieve effects.[8]

The framing of the experiment reinforced the separation between CEMA and IO. The problem statement for the experiment was "how does an IBCT with external support in 2025 integrate cyberspace, electronic warfare, intelligence, space, and information operations to gain

and maintain the advantage in multi-domain operations against a regional peer?"[9] The brigade leadership had limited IO or CEMA experience, so this phrasing shaped how they approached their task. Their initial inclination was to ask in turn what each cyberspace operations, EW, and IO could do to support a phase of the operation. This approach increases the risk of disjointed approaches that do not mass effects on the enemy.

Many participants seemed to believe IO focuses solely on themes and messages. This leads to pushing IO to concentrate on social media and publicly available information, which, while important, are not the only spaces IO should operate in. The old concept of inform-and-influence activities, which specifically mentioned themes and messages in its definition, may explain this belief.[10] This is a very human-centric approach drawing lessons from the last seventeen years of counterinsurgency operations. But IO must also focus on enemy mission command networks as the joint force focuses more on great power competition.

A reduced view of IO's role means the onus to integrate the IRCs falls on the S-3 if the IO officer in not empowered to do so. In Cyber Blitz, the organization of the staff meant the S-3 was officially fulfilling the IO officer's primary duty of integrating and synchronizing the IRCs. If the experiment had not dictated the scheme of maneuver, the requirement to coordinate both traditional fire and maneuver and IRCs likely would have overwhelmed the S-3. This would degrade synergy and result in diminished effects on the enemy. However, even if Army leaders embrace an expansive role for the IO function, the S-3 will still be the integrator since the Army no longer authorizes an IO officer on the brigade staff.

The Way Ahead

The brigade's multi-domain operations would have been much less successful without the attached IO officer. Even though in Cyber Blitz the S-3 had more bandwidth than usual to focus on integrating IRCs, this was no substitute for a trained IO officer. The IO officer's perspective on IO led him to fight to overcome the stovepipes between the IRCs. The cyberspace and EW planners were incredibly busy and focused on the detailed planning of their individual efforts. Successful EW and OCO require this concentration but also expecting IRC planners to develop a holistic IO plan to support the scheme of maneuver is impractical. However, the brigade would

have missed many opportunities to multiply the effect of operations without a unified concept. The IO officer also ensured the incorporation of OPSEC and deception into planning. These are critical IRCs and can be great approaches to frame an integrated IO plan.

The Army should consider putting an IO officer back in the BCT. As brigades gain more IRCs and cyberspace operations increase supporting echelons below corps, the importance of an IO planner in the BCT will grow. Providing an OPSEC- and deception-trained IO officer will also ensure the routine incorporation of OPSEC and deception into operations. A BCT that does not plan for multi-domain OPSEC will increasingly be vulnerable against near-peer adversaries with advanced collection capabilities.

A division IO officer, or one in an ECT, is no substitute for an IO officer within the brigade. It is ideal to incorporate IO into military decision-making processes from the start and the best way is an IO officer on staff. A division IO officer will likely only have an opportunity to inject ideas late in the decision-making process when path dependency may have already set in. Similarly, the IO planner in the ECT was ineffective at influencing BCT plans during Cyber Blitz. Mission command relies upon trust to speed decision-making and ensure we seize and retain the initiative. Unfortunately, it is very difficult for brigade leadership to trust a planner outside their organization, especially if they are using capabilities new to brigade leadership.

An IO officer should lead a consolidated information warfare section within the S-3. The information warfare section could plan cyberspace operations, EW, MISO, OPSEC, and deception. Instead of a discreet CEMA section, an IO section consolidates IRC planners under one field grade officer who reports directly to the S-3. The brigade public affairs officer is an exception and should remain on the personal staff to maintain credibility with the press and public. Combined Joint Task Force–Horn of Africa successfully used a similar staff organization by having all primary IRCs, including CEMA, fall under the IO directorate except CA and public affairs. This greatly increased the unity of effort.

Regularly attaching Army Reserve and National Guard IO officers to BCTs is another solution if manpower constraints prevent adding an active duty IO officer. Reservists could supplement BCTs during deployments. This would mitigate the tendency to

Maj. Alex J. Duffy, 3rd Brigade Combat Team, 10th Mountain Division operations officer (*right*), and Capt. Jacob M. Allen, assistant operations officer, use a map overlaid with operational graphics to back-up digital mission command systems and provide redundancy 17 September 2018 during Cyber Blitz 2018 at Joint Base McGuire-Dix-Lakehurst, New Jersey. This alternate method to battle track temporarily became the primary method when an enemy cyberattack knocked the digital systems off-line. (Photo courtesy of U.S. Army Communications-Electronics Research, Development and Engineering Center [CERDEC])

misuse IO planners and saddle them with additional duties unrelated to IO in garrison. Ideally, the reservists would also support the BCTs at combat readiness center rotations in addition to deployments so units could train as they would fight. However, it could place a strain on reservists to support month-long training center rotations habitually while already attending many schools and supporting numerous exercises in addition to regular deployments. Relying on reservists to fill this gap could further stress the force and be impractical.

Conclusion

The Army must embrace IO's integration function to institutionalize the Patriot Brigade's success at Cyber Blitz 2018. Cyber Blitz demonstrated that, while new equipment and organizations are necessary to enable BCT multi-domain operations, without the proper doctrine and staff organization, these capabilities will not be used to their full potential. It also showed how an IO officer on the brigade staff can drastically improve the brigade's effectiveness. The Army cannot accept piecemeal employment of IRCs and a divide between CEMA and IO. The U.S. military "has no preordained right to victory," and we must relentlessly improve our capabilities to win the multi-domain battles of tomorrow.[11] ∎

FUTURE WARFARE WRITING PROGRAM

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Military Review calls for short works of fiction for inclusion in the Army University Press Future Warfare Writing Program (FWWP) for 2019. The purpose of this program is to solicit serious contemplation of possible future scenarios through the medium of fiction in order to anticipate future security requirements. As a result, well-written works of fiction in short-story format with new and fresh insights into the character of possible future martial conflicts and domestic unrest are of special interest. Detailed guidance related to the character of such fiction together with submission guidelines can be found at https://www.armyupress.army.mil/Special-Topics/Future-Warfare-Writing-Program/Future-Warfare-Writing-Program-Submission-Guidelines/. To read previously published FWWP submissions, visit https://www.armyupress.army.mil/Special-Topics/Future-Warfare-Writing-Program/.

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Return of Ground-Based Electronic Warfare Platforms and Force Structure

Maj. Morgan J. Spring-Glace, U.S. Army

The U.S. military is not achieving overmatch against the Russian military, as Timothy Bonds of the RAND Corporation testified to the House Armed Services Committee's Subcommittee on Tactical Air and Land Forces in 2017. The testimony cited Russian capability modernization and force availability as the contributors to losing overmatch. Of the capability modernization,

Bonds specified new systems or improvements to existing systems among tanks, artillery, fixed- and rotary-wing aircraft, sophisticated and tiered air defense networks, long-range missiles, and cyberspace and electromagnetic warfare capabilities.[1]

Most of these capabilities also reside in the current force of the U.S. Army, and modernization efforts are ongoing to mitigate disparities. However, some capabilities,

most notably electronic warfare (EW), specifically electronic attack (EA), were culled from the U.S. Army between the end of the Cold War and the building of the BCT-centric Army for Iraq and Afghanistan. While the Army retains some of its EW capability in the form of signals intelligence (SIGINT, also known as EW support), EA systems such as the AN/MLQ-34 TACJAM and the AN/TLQ-17A TRAFFIC JAM were taken out of the inventory with no replacement, and formations dedicated to providing functional support to combat brigades and divisions were inactivated. These drawdowns were made under the assumption that Army forces can rely on their joint partners for EA capabilities. However, Field Manual 3-0, *Operations*, and Training and Doctrine Command Pamphlet 525-3-8, *U.S. Army Concept: Multi-Domain Combined Arms Operations at Echelons Above Brigade 2025-2045*, state that all domains will be contested, and the Army cannot continuously rely on joint partners when faced with peer and near-peer competitors such as Russia or China, both of which are capable of challenging U.S. air and electromagnetic superiority.[2] Since the bulk of current U.S. EA capability resides in the U.S. Air Force and the U.S. Navy, and Chinese and Russian capability contests the other services' ability to support Army forces, how can the Army reliably benefit from EA capability? One answer is that the U.S. Army must bring back ground-based EA and deception platforms, and requisite force structure. This is necessary to mitigate the gap in overmatch that U.S. Army forces are currently facing.

Peer Adversary Electronic Warfare Capability

Russia, China, Iran, and North Korea possess peer or near-peer military capability, and other states possess aspects of that level of threat. To understand the gap between U.S. EA capability and peer adversaries, we will primarily examine Russia.

Russia is able to integrate cyberspace and EW capabilities across the tactical, operational, and strategic

levels. At the strategic and operational levels, Russia has organized five total EW brigades, with two EW brigades in its Western Military District. This allocation is only from the Russian Ground Forces (RGF) and does not include the Russian navy and air force EW units.[3] Operational and strategic RGF EW forces seek to confuse and deceive opposing force military decision-makers at all levels. This is achieved by combining cyberspace and information warfare capabilities while also protecting operational-level assets and preventing access to an area of conflict by integrating air defense capability as part of an anti-access/area-denial strategy.[4] Each RGF EW brigade consists of four EW battalions, which can accomplish operational and strategic tasks or support smaller RGF units such as divisions or lower.[5]

At the tactical level, the RGF maneuver brigades have an EW company, an unmanned aircraft systems (UAS) company, and an intelligence support platoon (see figure, page 43).[6] Within an EW company are twelve vehicle-mounted EW platforms and fifteen man-portable jammers staffed with approximately one hundred personnel.[7] Each of the truck-mounted jammers have a different function, and the RGF EW company provides an array of communications, radar, and other jamming capabilities to the brigade commander. Each RGF EW company can electronically locate targets; jam and disrupt high frequency, very-high frequency, and ultra-high frequency communications; and jam, disrupt, or deceive GPS, to include mimicking GPS location/timing and other disruptions to UAS common data link, which can compromise or hijack most UAS.[8] They can jam ground, airborne, and maritime radars up to a range of three hundred kilometers and introduce false targets. RGF EW systems can also jam various aircraft navigation systems for manned and unmanned platforms.[9] Some systems can defeat proximity fuses in rockets and artillery or jam S-, X- and Ku-band radars, which includes U.S. Army artillery-locating and air defense radars, and airborne platforms such as the airborne warning and control system as well as radar-guided missiles.[10]

The Russian military has a long history of successful use of EW, whether disrupting and neutralizing sensors and communications or pairing SIGINT to artillery systems. During the initial phases of the Russian invasion of Georgia, the Russian air force lost five aircraft to Georgian air defense systems until the RGF deployed ground-based jamming platforms.[11]

Russian ground forces electronic warfare company

Radar and intelligence support platoons and unmanned aerial vehicle company
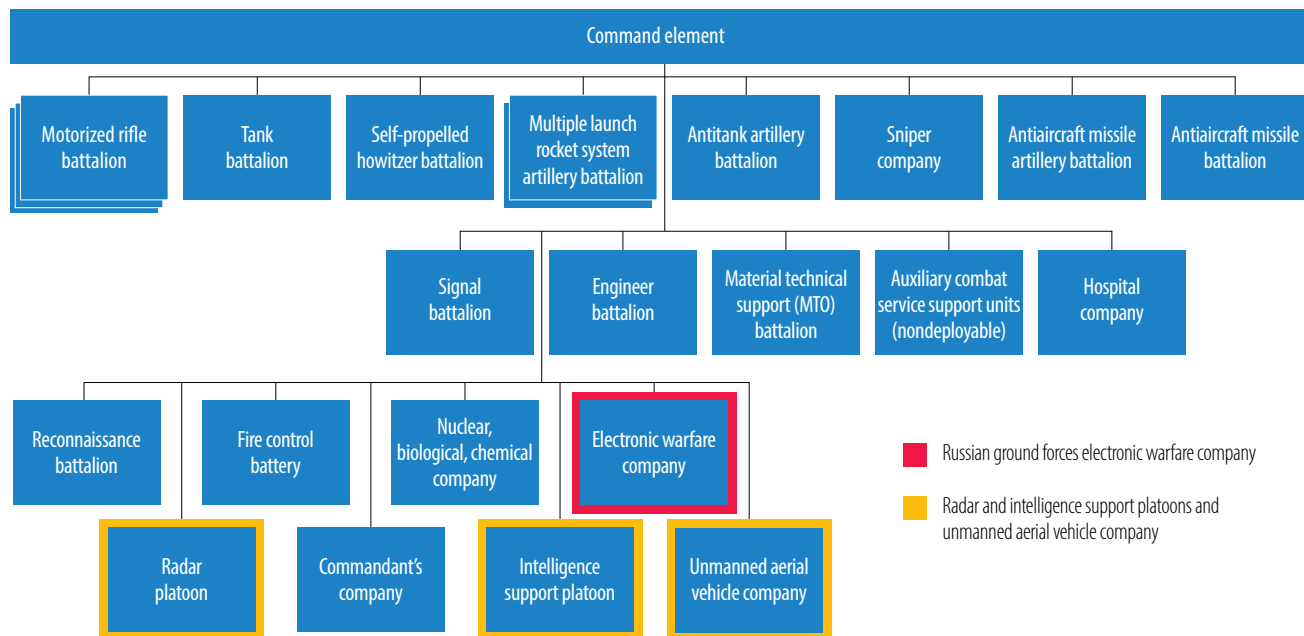
(Original figure by Roger N. McDermott; adapted by author)

Figure. Russian Ground Forces Motorized Rifle Brigade Structure

In 2014, Russian-backed Ukrainian separatists benefitted from Russian EW as demonstrated by the successful disruption of Ukrainian military UAS and proximity-fused Ukrainian artillery munitions at various ranges between 1 km and 30 km for ground forces and up to 240 km for Ukrainian air systems.[12] Additionally, Ukrainian military communications were significantly disrupted by multiple EW systems deployed for interlocking, mixed-system jamming and EW support coverage, aiding both EW and artillery.[13] In Syria, the Russians deployed the Krasukha-4 jamming system, leading to the successful jamming of U.S. communications and sensors. According to Gen. Raymond Thomas, former commander of U.S. Special Operations Command, Syria became "the most aggressive electromagnetic environment in the world."[14]

U.S. Electronic Warfare Capability

Unlike the Russian military, which retained and modernized its EW and EA capabilities, the U.S. Army culled a number of capabilities and formations, to include EA and EW formations, to build the modular Army. As a result, the Army became reliant on joint partners for a number of capabilities to include EA.

The Army retained SIGINT capability, which is designed to provide SIGINT to brigade combat teams (BCTs). The Army's experience with improvised explosive devices in Iraq and Afghanistan prompted the fielding of counter remote-controlled improvised explosive devices and counter remote-controlled EW devices, protecting a single ground patrol from radio-controlled improvised explosive device threats.[15] The Army also equipped rotary-wing aircraft with aircraft survivability equipment as a countermeasure to shoulder-fired surface-to-air missiles.[16] Though counter remote-controlled EW devices and aircraft survivability systems are EA systems, they are defensive in nature, as each system's purpose is to protect an asset. When the Army needs to offensively employ EA to disrupt enemy communications, neutralize sensors, or conduct electronic deception, the Army is reliant on its joint partners.

On the other hand, the U.S. Marine Corps

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Ground radio-electronic suppression module 1RL257E Krasukha-4 26 August 2015 at MAKS-2015 international aviation and space salon in the Moscow Region. The Krasukha-4 was reportedly used successfully in Syria to jam adversary communications to include those of U.S. and coalition forces. (Photo by Vitaly V. Kuzmin, www.vitalykuzmin.net)

has two ground-based EW systems, the AN/ULQ-19(V)2 EA set and the AN/MLQ-36 mobile EW support system. While the AN/MLQ-36 is an electronic support system and the AN/ULQ-19 is an EA system, the U.S. Marine Corps has less than nine EA platoons organized into three radio battalions.[17] However, this is meant to support the three Marine expeditionary forces and lacks the capacity to provide ground-based EA to the joint force. All other U.S. military EA assets, such as the Navy and U.S. Marine Corps EA-18 Growler aircraft or the U.S. Air Force EC-130H Compass Call, are airborne platforms. This refers back to the earlier statement that U.S. forces cannot guarantee air superiority and naval access to support ground forces in future conflicts.[18] So, the shortage in ground-based EW, specifically, is ground-based EA capability.

There is some movement on bringing back ground-based EW in the Army, such as the U.S. Army Europe efforts to field systems to EW personnel in BCTs and similar programs and initiatives to provide EA capability and bolster ES capability, which provide vehicle-mounted, man-portable, rotary-wing-mounted, and UAS-mounted systems.[19] Other efforts include

the Army bolstering cyberspace-electromagnetic activities staff to plan and synchronize EW operations within corps, divisions, and BCTs, which is also necessary to deconflict EW with communications and SIGINT.[20] The Army is also considering creating synergy between EW and SIGINT by using a common EW/SIGINT platform.[21]

However, the Army must take great care when implementing a solution for EW capability so that SIGINT and EW do not struggle over resources. While the Army can save money by fielding one vehicle to serve both SIGINT and EA interests (the terrestrial layer system), the formations should be kept separate so that one does not subsume the other. Matching our peer threat's capacity would require a company-sized organization in each combat brigade, manned and equipped for EA and separate from SIGINT capability and capacity within

the brigade. Even though the Army's new terrestrial layer system is a multipurpose, ground-based SIGINT/EA platform, when it comes down to troops-to-task, it can still only handle either EA or SIGINT at any given time.[22] While one jammer cannot neutralize another (though multiple jammers can use their direction-finding capabilities to locate a threat jammer and destroy it with artillery), threat overmatch in this context is the threat's ability to disrupt and neutralize communications and sensors without U.S. capability or capacity to do the same, granting significant advantage to the enemy. The U.S. Army does not benefit from matching system versus system; however, the U.S. Army will benefit from having the capacity to disrupt or neutralize more threat communications and sensors than the threat can affect or detect. Given the RGF combat brigade has three artillery battalions compared to one artillery battalion in a U.S. BCT, it behooves a U.S. BCT to disrupt or neutralize threat fires communication networks and sensors, which would require a dedicated EA formation in addition to separate ground-based SIGINT assets within each BCT.[23]

Conclusion

U.S. Army forces are currently facing overmatch gaps against peer or near-peer threats such as China and Russia. Creating EW platoons in military intelligence companies within BCTs and EW companies in expeditionary military intelligence brigades implies that the Army will have less EA capacity than its adversaries, such as the RGF with an EW company in each combat brigade, not to mention the EW brigades organized under the military districts.[24] This leaves the U.S. Army at a disparity of EA capability and capacity. Achieving a more advantageous ratio of U.S. ground-based EA forces and systems could involve creating EW companies within BCTs or separate EW battalions and brigades assigned to divisions or corps. While the projected force structure and systems will somewhat mitigate the overmatch, the Army cannot continuously rely on joint partners when faced with peer and near-peer competitors like Russia or China, who are capable of challenging U.S. air and electromagnetic superiority.[25] ∎

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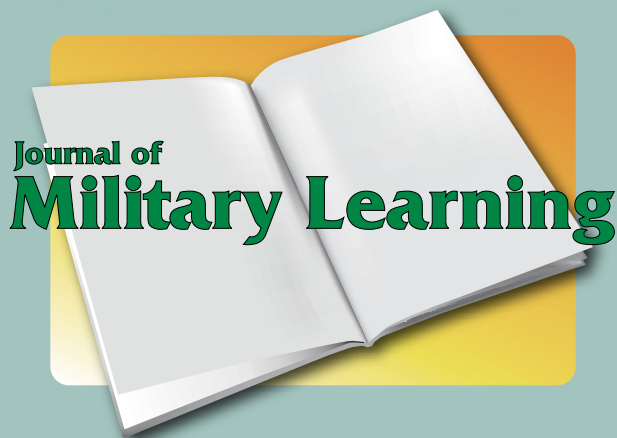
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Of Strong Men and Straw Men

Appraising Post-Coup Political Developments

Jonathan Powell, PhD

Recent years have seen a rise in scholarly attention afforded to coups d'état. Though perhaps strange at first glance, given coups have become increasingly rare in the world, the reasons for this renewed focus on coups readily become apparent. First, a number of high-quality publicly available datasets have been released, allowing interested researchers to study not just coups but also their connection to a range of other issues such as civil war, repression, economic growth, and democratization. Second, the utilization of these data sources has led to what might at first appearance be seen as odd claims, such as a purported association between the occurrences of coups and subsequent democratic transitions. Traditionally seen as inherently antidemocratic, recent studies by authors such as Clayton Thyne, Jonathan Powell, Nikolay Marinov, and Hein Goemans suggesting otherwise have solicited swift reactions.[1]

Retired ambassadors Linda Thomas-Greenfield and D. Bruce Wharton weigh in on this debate with their article on the aftermath of Zimbabwe's 2017 coup titled "Zimbabwe's Coup: Net Gain or No Gain?," recently published in *Military Review*.[2] Their article discusses the lack of democratic process seen under Zimbabwe President Emmerson Mnangagwa's regime, and they tackle a range of issues including a debate about what might be referred to as "good coups" or "democratic coups." Though sharing the primary sympathies of the authors, their discussion of the relevant academic literature and specific cases is at times in need of clarification.

The aim of this article is to give a fuller appraisal of these dynamics. A review of the literature and data indicate that Thomas-Greenfield and Wharton overstate the prospects for democratization claimed in prior literature, understate how frequently democratization occurs following coups, and treat a number of non-coup cases as if they represent coups. Though fully agreeing with the need to view coups skeptically, a more comprehensive appraisal of the historical record is essential to eventually understand how to influence more positive post-coup political trajectories.

Revisiting Scholarship

A range of recent assessments in both academic and popular outlets have attempted to assess the likelihood of democratization after military coups. Thomas-Greenfield and Wharton incorporate two of these: (1) Ozan Varol's book *The Democratic Coup d'État* and (2) Thyne and Powell's article "Coup d'état or Coup d'Autocracy: How Coups Impact Democratization, 1950-2008."[3] While the former relies on numerous anecdotes whose generalizability may be uncertain, the latter attempts to investigate broad empirical trends using publicly available global data. Given the replicability of the Thyne and Powell study, this article will focus on the latter.

Though the theme of Thyne and Powell's article is prominently featured in Thomas-Greenfield's and Wharton's, their coverage of the article is ultimately limited to a single quote from the abstract. Specifically, the abstract notes that "coups promote democratization, particularly among states that are least likely to democratize otherwise."[4] The authors provide no other context for this quote, including a discussion as to how the authors reached this conclusion. Devoid of context, the description of the article and its more general findings are misleading.

First, the quote is specifically in reference to what would be expected to happen in the absence of a coup. In other words, without being removed via a coup, dictators are very, very unlikely to democratize. If the dictator is overthrown in a coup, democratization is still very unlikely, but the probability is significantly higher than if a coup did not occur. This does not mean that democracy would ever be an expected outcome. In contrast to the image of being naively supportive of coups, Thyne and Powell take multiple steps to temper optimism. Most directly relevant to Zimbabwe, they briefly comment on economist Paul Collier's *Washington Post* opinion piece, "Let Us Now Praise Coups."[5] Collier observes the dire consequences of autocratic misrule, specifically former President Robert Mugabe's leadership in Zimbabwe, and argues that coups are "unguided missiles," but "there is still something to be said for them" and that they are the "best hope of suffering citizens." In contrast, Thyne and Powell directly challenge

Sidi Ould Cheikh Abdallahi votes 25 March 2007 at a polling center in Nouakchott, Mauritania, in the first presidential election following a 2005 military coup that overthrew former military dictator Maaouya Ould Sid'Ahmed Taya. Abdallahi was elected president but was overthrown in 2008 by another military coup, having run afoul of the military by introducing measures that were perceived as promoting Islamist policies. (Photo by Georges Gobet, Agence France-Presse)

their power." They also note that coups "are bad for democratic stability" and should not "be fomented or celebrated," as doing so would be "reckless."[6]

Second, Thyne and Powell provide quite explicit descriptions of how unlikely democratization is. The article's two tables, which reported their results and analyses, suggest that the probability of democratization goes from .005 in the absence of a recent coup to .010 in the presence of a recent coup. This is hardly suggestive of the widespread "democratizing impulse" among coup leaders inferred by Thomas-Greenfield and Wharton, and prior academic literature does little to suggest there should be one. Even if the probabilities reported by Thyne and Powell were far higher, the idea of a democratizing impulse would not be supported. As Thyne and Powell identify with the "good" case of Portugal's 1974 coup,

and go against Collier's suggestion that we should "praise coups." Instead, they point to coups as the cause of "a plethora of societal ills" and further draw attention to "cases where coup leaders chose to personalize the regime" and to history being "unfortunately replete with examples of coup leaders who chose to consolidate

which is briefly described below, democratization was not even a goal of the plotters.

Third, Thomas-Greenfield and Wharton drastically understate how common democratization is after coups. They suggest "Portugal's 1974 coup, Turkey's coup in 1960, and, perhaps, Ghana's coup in 1979 each

Table 1. Post-Coup Political Trajectories

Coups data set	Polity IV	The Rulers, Elections, and Irregular Governance DataSet (REIGN)	Cheibub, Gandhi, and Vreeland (CGV)	Geddes, Wright, and Frantz (GWF)
Powell and Thyne	21/144 15% (6%)	25/167 15% (7%)	27/147 18% (7%)	21/140 15% (6%)
Goemans et al.	21/172 12% (5%)	21/146 14% (8%)	24/133 18% (8%)	18/129 14% (7%)
Center for Systemic Peace	18/145 12% (6%)	18/152 12% (7%)	22/146 15% (7%)	17/136 13% (7%)
Cline Center for Democracy	20/136 15% (6%)	23/147 16% (7%)	25/140 18% (7%)	24/138 17% (6%)

(Table by author)

Table 2. Post-Coup Political Trajectories in the Post-Cold War Period

Coups data set	Polity IV	The Rulers, Elections, and Irregular Governance DataSet (REIGN)	Cheibub, Gandhi, and Vreeland (CGV)	Geddes, Wright, and Frantz (GWF)
Powell and Thyne	6/20 30% (10%)	11/28 39% (10%)	4/19 21% (8%)	8/17 47% (11%)
Goemans et al.	7/17 41% (10%)	13/25 52% (12%)	4/16 25% (9%)	9/17 53% (12%)
Center for Systemic Peace	4/17 24% (10%)	7/22 32% (11%)	2/16 13% (9%)	5/13 38% (12%)
Cline Center for Democracy	4/15 27% (11%)	8/20 40% (11%)	4/18 22% (9%)	8/18 44% (12%)

(Table by author)

seem to have led to stronger democracies," but "three positive examples out of more than 450 coups or attempted coups is poor evidence of the efficacy of coups in advancing democratic governance."[7] Though perhaps rare, recent decades have seen scores of democratic transitions, and according to a range of independent data efforts on classifying either coups or regime type, there are in fact dozens of cases of transitions in the aftermath of coups. This point will be revisited below.

Fourth, it is important to clarify how different leaders have entered office, as different methods of regime change are often conflated. Thomas-Greenfield and Wharton, for example, lament a lack of democratic progress after presumed coups when a coup was not actually responsible for the leader coming to power. In Djibouti, for example, President Ismaïl Omar Guelleh entered office not through a coup but after the resignation

of Djibouti's first president, Hassan Gouled Aptidon, his uncle. Ugandan President Yoweri Museveni, meanwhile, came to power via the Ugandan Bush War. Denis Sassou-Nguesso, president of the Republic of the Congo, similarly came to power via the Republic of the Congo's civil war (with no small role played by Angolan troops). The same can be

distinction, as some cases of democratization see the experiment quickly fail.

For example, Mauritania transitioned to a democracy soon after the 2005 coup that removed long-tenured military dictator Maaouya Ould Sid'Ahmed Taya.[9] However, the transition soon failed, with the freely elected president Sidi Ould Cheikh Abdallahi being removed

> "Coups and civil wars are different types of actions that leave different types of legacies, particularly when it comes to challenges for democratization."

said for Chadian President Idriss Déby, who though accused of an occasional coup plot during his time in the Chadian armed forces, ultimately overthrew President Hissène Habré via an insurgency (with no small assistance from Libya).

This is not merely a semantic distinction. Coups and civil wars are different types of actions that leave different types of legacies, particularly when it comes to challenges for democratization. Given the far higher costs of removing leaders through civil war, including years of substantial financial and infrastructural devastation, loss of human life, and pronounced displacement of people, it is not surprising that countries virtually never democratize after leaders are removed through civil wars. If Thomas-Greenfield and Wharton do not see a democratizing impulse in leaders like Museveni, Sassou-Nguesso, and Déby, a logical explanation is that there is nothing in historical record or academic literature that suggests they should.

How Common Is Democratization?

To put this discussion in perspective, data drawn from a number of publicly available sources are depicted in table 1 (on page 50).[8] The rows include four different efforts to classify coups, and the columns include four different efforts to classify democracy. This provides sixteen combinations of independently collected data, ensuring that any apparent trend is not driven by the selection of any data source in particular. The data looks at where there was (or was not) a coup in a given year, then considers whether the country was a democracy three years later. This is an important

in a subsequent coup after less than two years in power.[10] Since Mauritania did not remain a democracy through the third year, it would not be captured as a transition. Three years allows ample time to organize an election in most cases, but some post-coup transitions take longer. The coup against Paraguay's President Alfredo Stroessner, for example, was clearly a major event for the country's democratic transition. However, since the transition was not captured as complete within three years, it would not qualify as a transition in the data. In short, the data presented in the tables is a modest assessment of how common post-coup transitions are.

Table 1 provides the full time frame after 1950. The first set of numbers reflects the number of transitions observed and the number of coups in each of the sixteen samples. The first percentage refers to the rate at which coup cases were democracies three years later. The percentage reported in parentheses refers to the democratization rate seen when there was not a coup in the sample. So for a sample of cases that use the Powell and Thyne coup dataset and the Polity IV regime data, a project from the Center for Systemic Peace that evaluates a range of democratic and authoritarian traits across polities globally, 144 coups saw twenty-one transitions (a

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15 percent rate), while autocracies democratized at a rate of 6 percent in the absence of a coup.

Looking across the various datasets, two trends are apparent. First, there are far more than three cases of transitions. Second, since 1950 coups have seen democracy follow around 15 percent of the time (+/- 3 percent). Third, this rate is invariably higher than the rate seen in the absence of coups, usually over two times higher.

Even a skeptical take on Thyne and Powell's paper authored by George Derpanopoulos, Erica Frantz, Barbara Geddes, and Joseph Wright, titled "Are Coups Good for Democracy?" acknowledged that 40 percent of coups against dictatorships in the post–Cold War era result in democratic transitions.[11] Though still a minority outcome, this is an extraordinary rate, especially considering the otherwise dire circumstances that coups often accompany, circumstances not usually conducive to democratic transitions. Table 2 (on page 50) repeats the process for coups that have occurred since 1990. The post–Cold War period has seen far higher democratization rates in a general sense but has seen rates become particularly high after coups. The comparative rareness of coups over recent decades limits the ability to draw substantial inferences from this; however, the likelihood of democratization appears to be three to four times higher when coups occur.

Accurately Informing Debate and Policy

Coups should always be viewed with skepticism, even when toppling dictators and despite whatever flowery things coup leaders say in order to avoid the ire of domestic or international actors. A bizarre trend after the removal of Mugabe was observers taking Maj. Gen. Sibusiso Moyo's word when he appeared on television to announce the Zimbabwean coup. Moyo claimed "this is not a military takeover of government" but rather a way "to pacify a degenerating political, social, and economic situation."[12] His words were quite typical of a coup, including those that would see the rise of notorious dictators, such as former Ugandan President Idi Amin's statement: "Mine will be purely a caretaker administration, pending an early return to civilian rule."[13] However, a healthy suspicion of coup plotters should be accompanied by an objective understanding of their legacies. Not taking an objective look at the data distracts from and prevents answering the far more important question of

how policy can be informed to help the people of countries suffering through coups avoid succumbing to the many ills that have afflicted countless post-coup polities.

As shown above, the reality is that democratic transitions are an outcome that is probably far more common than most people expect. However, we simply do not know *why* this is the case, and the academic literature specifically questions the roles of coups themselves. The theory of Thyne and Powell, for example, points to coups as "windows of opportunity," but it is the need for post-coup legitimation and the reactions of the international community that would prompt a transition. In other words, the transition is less about the coup and more about how different actors influence the subsequent political trajectory. In their aforementioned study, Nikolay Marinov and Hein Goemans make a similar argument regarding foreign aid by arguing that the increased conditionality seen in the post–Cold War world incentivizes coup leaders to allow elections. In Thyne and Powell's subsequent paper with Sarah Parrott and Emily VanMeter, titled "Even Generals Need Friends: How Domestic International Reactions to Coups Influence Regime Survival," they find that hostile reactions from both domestic and international actors can force post-coup governments to step down more quickly.[14]

Other studies have pointed to important domestic challenges for transitions, including obstacles posed by military interest, public demand for democracy, wealth and other aspects of economic development and interdependence, and the legacies of single-party rule.[15] What all of these studies suggest is that Zimbabwe's pre-coup conditions would have made it a very difficult case for democratization from the outset. This challenge was made even more difficult after so many actors in the international community effectively pretended a coup had not occurred.[16] Instead of treating Mugabe's removal as an opportunity to leverage meaningful political change, the post-coup regime was treated with a business-as-usual mentality. It is perhaps unsurprising, then, that post-coup politics in the country have in fact been business-as-usual.

Closing Remarks

Democracy is not an accident. Though democratic transitions can sometimes come about unintentionally or after what might be referred to as "dumb luck," there are a number of important dynamics that ultimately

shape post-coup trajectories. Nor is democracy a given outcome following the removal of a dictator. Though oppressed peoples and members of the international community may sometimes celebrate an autocrat's ousting, the reality is that the event merely represents an opportunity. Seizing that opportunity and realizing the empowerment of the masses in a stable electoral regime, however, requires overcoming a range of legacies, the commitment of innumerable actors, and policy informed by a careful evaluation of prior events and efforts to promote democratization. Providing an accurate appraisal of that record, then, is crucial. ∎

Notes

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The Cost of Tolerating Toxic Behaviors in the Department of Defense Workplace

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There is significant anecdotal evidence of toxic behaviors of leaders in the U.S. military. Although the effects of toxic leadership, abusive supervision, bullying, and incivility are well-researched in the civilian sector, the military departments have not conducted empirical research among their members. However, a few individual military members have taken the initiative to conduct research, the results of which suggest significant prevalence and adverse effects of toxic leadership.[1] The persistent costs associated with toxic leadership are significant due to the fact that behaviors tend to fall under the threshold of legal action, organizations and their members tend to tolerate it and endure it for an extended time, and it is not addressed until it reaches a level of high adverse impact. The typical response of the military departments once a leader has been clearly identified as toxic and counterproductive is dismissal from service. This practice provides a decisive and easy response to assign blame but ignores the pervasiveness of toxic behaviors in spite of research that indicates toxic behaviors occur and toxic leaders exist because the organizational culture empowers them.[2]

Various types of counterproductive behaviors in the workplace such as incivility, bullying, harassment, abusive supervision, and toxic leadership have been empirically associated with a variety of effects, including degraded physical and mental health, employee turnover, absenteeism, suicide, and decreased performance. These counterproductive behaviors and their effects contradict ethical standards of leadership and have a significant adverse impact on military readiness, which is directly related to then Secretary of Defense James Mattis's memorandums to all Department of Defense (DOD) personnel titled "Ethical Standards for All Personnel" and "Ethics Sentinels." In the latter, he stated, "We must all set the example, rejecting any sense of personal entitlement to privilege or benefit, never abusing our position or looking the other way when something is wrong."[3] Toxic leadership and tolerance of it are ethical issues that public leaders and government organizations have a moral obligation to confront to ensure the effective and efficient use of public resources.[4]

Some private-sector studies have attempted to calculate the costs associated with these counterproductive behaviors and their effects.[5] An organization or institution and its members react to toxic behaviors much like an organism reacts to poisonous toxins—with degraded abilities to process nutrients, reproduce, flourish, and produce. Therefore, the purpose of this article is to present a method for calculating the cost of toxic behaviors in the DOD in order to demonstrate its pervasiveness and the high cost of tolerating it.

Although a detailed description of toxic leadership is beyond the scope of this article and has been defined elsewhere extensively, a brief description is in order to establish context. The term *toxic leadership* does not describe the run-of-the-mill mean boss. A toxic leader is characterized by a pattern of counterproductive, abusive, and uncivil behaviors, including

- shaming (the exercise of humiliation, sarcasm, potshots, or mistake-pointing with the intent of reducing another's self-worth),
- passive hostility (the use of passive-aggressive behavior with the intent of directing one's anger inappropriately),
- team sabotage (meddling with the intent to either establish one's personal power base or make the team less productive),
- an apparent lack of regard and compassion for the welfare of subordinates,
- an interpersonal style that has a negative impact on organizational climate, and
- the perception that the superior is getting ahead at team member expense.[6]

A toxic leader is not necessarily the stereotypical screamer but more often appears to be a pleasant and talented individual who has subtle ways of degrading and exploiting others for personal gain and takes pleasure in doing so.

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(Original graphic created by macrovector, www.freepik.com; graphic adapted by Arin Burgess, *Military Review*)

Attempting to calculate the cost of toxic leadership presents several challenges. First, although there is an abundance of anecdotal evidence of toxic leadership, there is a dearth of research on the prevalence of toxic leadership within the DOD, limiting the ability to conduct an exact cost estimate and leading the author to rely somewhat on

> "A toxic leader is not necessarily the stereotypical screamer but more often appears to be a pleasant and talented individual who has subtle ways of degrading and exploiting others for personal gain and takes pleasure in doing so.

private sector research. Additionally, calculating the cost in terms of time and money is difficult since military and civilian employees work a variety of hours during the day and throughout the year. Some work more than eight hours a day and some take more days of leave than others. Also, calculating the average hourly wage of DOD military and civilian employees is a challenge due to the variety of pay scales and the number of people in each grade or rank. Therefore, for simplicity, this article will make assumptions about the prevalence of toxic behaviors, average annual income, and average hourly wages.

Method

The following model provides a five-step process used by the author to determine the costs of organizational toxicity to the military. The results appear to bring to light the astonishingly high price of toxic leadership.

Step 1: Determine the prevalence. The first step in calculating the cost of organizational toxicity is to determine the percentage of personnel who will experience toxicity in an organization. In other words, what is the likelihood that an employee will become a target? A search of databases revealed no specific research on the prevalence of toxicity in the DOD. This, in and of itself, is an issue that needs to be addressed and researched using models developed by Mitchell Kusy, Elizabeth Holloway, Christine Pearson, and Christine Porath.[7] Research among civilian organizations in the United States suggests that between 10 and 16 percent of U.S. workers experience workplace aggression.[8] Another study indicates the

rate of bullying within the U.S. workplace is 10 percent but could be as high as 30-50 percent.[9] The 2007 National Government Ethics Survey found 23 percent of employees observed abusive behavior in the workplace, a figure that is consistent with the private sector.[10] In the 2010 Center for Army Leadership Annual Survey of Army Leadership (CASAL), approximately 20 percent of respondents identified their leader as toxic.[11] And recently, the Global Business Ethics Survey found that 21 percent of private sector employees observed abusive behavior, of which, 24 percent demonstrated a persistent pattern; 63 percent was perpetrated by first line, middle, and senior leaders; and 58 percent was considered severe or very severe.[12] Additionally, in 2015, twenty-eight thousand of the ninety thousand charges (nearly one-third) that the Equal Employment Opportunity Commission received related to the private sector and state or local government workplaces were of harassment in some form, often on the basis of sex, age, disability, national origin, and religion.[13] In the federal sector, 43 percent of complaints were of harassment. Clear differences between DOD and civilian workplaces such as culture, values, structure, power and authority, interpersonal relationships, mission, and reporting systems affect the prevalence of toxicity. Under federal guidelines, harassment is primarily directed against a specific characteristic of the targeted person, which is not always the case regarding toxic leadership. Another factor that influences the prevalence is the impact on witnesses to abuse, who may not be the target who submits a complaint but nevertheless is affected to a similar degree.[14] Therefore, considering these factors, and in the absence of definitive research of toxicity in the DOD, this model will estimate that 10 percent of DOD personnel experience toxicity. Granted, depending on the culture and the patterns of behavior of leaders, some organizations will experience more toxicity than others. Nevertheless, organizations can use 10 percent as a general guideline in estimating the cost of toxic behavior.

Step 2: Calculate the number of personnel who experience toxicity. The second step is to calculate the number of personnel who experience toxicity in a year by multiplying the estimated percentage of prevalence and the total number of personnel in an organization. In order to conduct a sample calculation, let us use a notional DOD organization consisting of a mix of one thousand military and civilian employees. Using our guideline of 10 percent, one hundred employees would experience toxic behaviors.

Step 3: Calculate the average hourly wage of employees. The average hourly wage per employee is needed in order to calculate the monetary waste of certain effects of toxic behaviors on personnel. Ideally, an organization would calculate the average hourly wage by dividing its total compensation budget by the total number of employees and then by the total number of annual work hours (52 weeks x 40 hours = 2080 work hours).

The average annual wage of federal employees is approximately $89,000.[15] The average annual wage of DOD civilians is about $78,000.[16] The average annual pay for the U.S. Army is estimated at $57,000; for the U.S. Air Force is $59,000; for the U.S. Navy is $63,000; and for the U.S. Marine Corps is $48,000.[17] For the purpose of this model, assume that the average annual wage of all military and civilian personnel in the DOD is $50,000. Considering a forty-hour work week, the average wage per hour would be $50,000 divided by 2,080 hours (40 hours x 52 weeks) or $24 per hour. Although employees do not work a full fifty-two weeks, for consistency this model uses fifty-two weeks since not all military and civilian members use the twenty-four to twenty-eight days of paid leave they earn per year.

Step 4: Calculate the percentage of effects. Step four involves calculating the effects of toxicity experienced by personnel, based on the number of people affected. Based on their research on incivility, Pearson and Porath estimate that 53 percent of personnel lose work time worrying about past and present interactions with the toxic person, 28 percent lose work time avoiding the toxic person, 37 percent experience a decline in their commitment to the organization, 22 percent intentionally reduce their effort, 10 percent intentionally decrease their time at work, 46 percent think about changing jobs, and 12 percent actually change jobs.[18] In a recent survey of toxic leadership among military and federal government employees, based on being affected by a toxic leader at least twice a week, 58.2 percent said they avoided the toxic leader, 51.6

percent worried about interaction, 2.2 percent experienced increased absenteeism, 43.9 percent discussed the toxicity with a coworker, 51.1 percent discussed it with a family member, 15.4 percent experienced increased physical health issues, and 17 percent experienced increased mental health issues.[19] For the purposes of the model, the following percentages will be used to calculate the number of people affected in specific ways: worry—50 percent, avoidance—58 percent, absenteeism—2.2 percent, talking with coworkers—44 percent, physical health—15 percent, and mental health—1 percent. Based on these percentages, and as a result of experiencing toxic behaviors, out of one hundred employees, fifty worry, fifty-eight practice avoidance, two practice absenteeism, forty-four talk with coworkers, fifteen have physical issues, and seventeen develop mental health issues.

Step 5: Calculate the cost. Step five involves calculating the costs to the organization of each of these effects, as determined by the number of employees affected in specific ways, the number of hours lost due to toxicity, and the average hourly wage. In Kenneth Williams's survey of military and federal employees, participants stated that, on a weekly basis, they spent 2.51 hours avoiding the toxic leader, 3.66 hours worrying, 3.23 hours talking with coworkers about the toxic leader, 1.78 hours talking with a family member, and 1 hour absent from work (slightly over 30 minutes at physical health appointments and slightly less than 30 minutes at mental health appointments) for a total of 15.95 hours per week.[20]

Cost of worrying. Based on our calculations in step four, 50 employees spend 3.66 hours a week worrying for a total of 9,516 hours annually, which at $24 per hour results in a cost of $228,750.

Cost of avoidance. The cost of avoidance would be 58 employees x 2.51 hours per week for 52 weeks at $24 per hour, which is $181,975.

Conversations with coworkers. The cost of conversation among employees about toxic behaviors would be 44 employees x 3.23 hours per week for 52 weeks at $24 per hour, which is $177,650.

Cost of absenteeism. The cost of absenteeism would be 2 employees x 1 hour per week for 52 weeks at $24 per hour, which amounts to $2,750.

Costs of physical and mental health. Fifteen employees x 30 minutes per week for 52 weeks for a total of 390 hours annually at $24 per hour, which is $9,375, and add to this the cost of medical care. The average annual salary for a

Table 1. Toxic Behavior Cost Calculation of Hypothetical One-Thousand Member Organization

Prevalence	10%		
Number of personnel who experience toxic behaviors	100		
Hourly wage	$24		
Annual salary	$50,000		
Annual work hours (40 hours/week x 52 weeks)	2,080		
Cost of effects	**Number of employees**	**Hours per week**	**Cost**
Lost time worrying (50%)	50	3.66	$228,750
Lost time avoiding toxic person (58%)	58	2.51	$181,975
Lost time talking with other employees (44%)	44	3.23	$177,650
Absenteeism (2.2%)	2	1.00	$2,750
Physical health issues (15%)	15	0.50	$9,375
Mental health issues (17%)	17	0.50	$10,625
Physician ($76 per hour)	15	0.50	$29,640
Mental health provider ($76 per hour)	17	0.50	$33,592
Replacement costs	**Number of employees**	**Cost per employee**	**Cost**
Departed as a target (25% of affected)	25	$75,000	$1,875,000
Departed as a witness (20% of affected)	20	$75,000	$1,500,000
	Number affected*	**Lost man hours**	**Cost****
Total annual cost of toxicity	**218**	**140,695**	**$4,049,357**

(Table by author. *Includes employees affected in multiple ways. **Does not include costs due to (1) degraded performance resulting from decreased commitment, motivation, and innovation; (2) lost time for managing toxic employees; and (3) lost time for investigations [Inspector general, legal, equal opportunity office, and equal employment opportunity office])

physician is $159,000 for an hourly wage of about $76 x 390 hours, which is $29,640. Seventeen employees x 30 minutes per week for 52 weeks for a total of 442 hours annually at $24 per hour, which is $10,625. Add to this the cost of a mental health provider, whose average annual salary is about $159,000 or $76 per hour for 442 hours, which is $33,592. Note that these calculations do not include medication, testing, and other support services. The estimated total cost of physical and mental health care due to toxic behaviors is $83,232.

Table 2. Toxic Behavior Cost Calculation of U.S. Army (Military and Civilian Population 719,607*)

Prevalence	10%		
Number of personnel who experience toxic behaviors	71,961		
Hourly wage	$24		
Annual salary	$50,000		
Annual work hours (40 hours/week x 52 weeks)	2,080		
Cost of effects	**Number of employees**	**Hours per week**	**Cost**
Lost time worrying (50%)	35,980	3.66	$164,610,101.25
Lost time avoiding toxic person (58%)	41,737	2.51	$130,950,483.83
Lost time talking with other employees (44%)	31,663	3.23	$127,838,183.55
Absenteeism (2.2%)	1,583	1.00	$1,978,919.25
Physical health issues (15%)	10,794	0.50	$6,746,315.63
Mental health issues (17%)	12,233	0.50	$7,645,824.38
Physician ($76 per hour)	10,794	0.50	$21,329,151.43
Mental health provider ($76 per hour)	12,233	0.50	$24,173,038.34
Replacement costs	**Number of employees**	**Cost per employee**	**Cost**
Departed as a target (25% of affected)	17,990	$75,000	$1,349,263,125
Departed as a witness (20% of affected)	14,392	$75,000	$1,079,410,500
	Number affected**	**Lost man hours**	**Cost*****
Total annual cost of toxicity	**157,018**	**101,245,366**	**$2,913,945,642.70**

(Table by author. *Defense Manpower Data Center as of 30 September 2018. **Includes employees affected in multiple ways. ***Does not include costs due to (1) degraded performance resulting from decreased commitment, motivation, and innovation; (2) lost time for managing toxic employees; and (3) lost time for investigations [Inspector general, legal, equal opportunity office, and equal employment opportunity office])

Replacement costs of departing employees. Research indicates that 25 percent of bullied team members and 20 percent of witnesses to bullying depart an organization.[21] In order to calculate the replacement costs of departed employees, first calculate the cost of replacing the average team member, which would include recruiting, interviewing, onboarding, and training. The process of accessioning new service members and providing continuing professional development is quite expensive and difficult to determine. One study suggests that replacement costs

Table 3. Toxic Behavior Cost Calculation of U.S. Navy (Military and Civilian Population 521,098*)

Prevalence	10%		
Number of personnel who experience toxic behaviors	52,110		
Hourly wage	$24		
Annual salary	$50,000		
Annual work hours (40 hours/week x 52 weeks)	2,080		
Cost of effects	**Number of employees**	**Hours per week**	**Cost**
Lost time worrying (50%)	26,928	3.66	$119,201,168
Lost time avoiding toxic person (58%)	30,224	2.51	$94,826,809
Lost time talking with other employees (44%)	22,928	3.23	$92,573,060
Absenteeism (2.2%)	1,146	1.00	$1,433,020
Physical health issues (15%)	7,816	0.50	$4,885,294
Mental health issues (17%)	8,859	0.50	$5,536,666
Physician ($76 per hour)	7,816	0.50	$15,445,345
Mental health provider ($76 per hour)	8,859	0.50	$17,504,724
Replacement costs	**Number of employees**	**Cost per employee**	**Cost**
Departed as a target (25% of affected)	13,027	$75,000	$977,058,750
Departed as a witness (20% of affected)	10,422	$75,000	$781,647,000
	Number affected**	**Lost man hours**	**Cost*****
Total annual cost of toxicity	**113,704**	**73,316,071**	**$2,110,111,834**

(Table by author. *Defense Manpower Data Center as of 30 September 2018. **Includes employees affected in multiple ways. ***Does not include costs due to (1) degraded performance resulting from decreased commitment, motivation, and innovation; (2) lost time for managing toxic employees; and (3) lost time for investigations [Inspector general, legal, equal opportunity office, and equal employment opportunity office])

for jobs paying $30,000 to $75,000 are about 16 percent of the salary while high-paying jobs cost up to 213 percent of the salary.[22] The military departments should conduct a detailed analysis of replacing members who separate. For the purposes of our hypothetical example, a general guideline for replacement cost is 1.5 times the departing team members' annual salary.[23] The replacement cost for each departing employee is obtained by multiplying the average annual salary of $50,000 by 1.5, which is $75,000. The number of employees who depart due to being direct

Table 4. Toxic Behavior Cost Calculation of U.S. Air Force (Military and Civilian Population 489,958*)

Prevalence	10%		
Number of personnel who experience toxic behaviors	48,996		
Hourly wage	$24		
Annual salary	$50,000		
Annual work hours (40 hours/week x 52 weeks)	2,080		
Cost of effects	**Number of employees**	**Hours per week**	**Cost**
Lost time worrying (50%)	24,498	3.66	$112,077,893
Lost time avoiding toxic person (58%)	28,418	2.51	$89,160,107
Lost time talking with other employees (44%)	21,558	3.23	$87,041,039
Absenteeism (2.2%)	1,078	1.00	$1,347,385
Physical health issues (15%)	7,349	0.50	$4,593,356
Mental health issues (17%)	8,329	0.50	$5,205,804
Physician ($76 per hour)	7,349	0.50	$14,522,355
Mental health provider ($76 per hour)	8,329	0.50	$16,458,669
Replacement costs	**Number of employees**	**Cost per employee**	**Cost**
Departed as a target (25% of affected)	12,249	$75,000	$918,671,250
Departed as a witness (20% of affected)	9,799	$75,000	$734,937,000
	Number affected**	**Lost man hours**	**Cost*****
Total annual cost of toxicity	**106,909**	**68,934,817**	**$1,984,014,857**

(Table by author. *Defense Manpower Data Center as of 30 September 2018. **Includes employees affected in multiple ways. ***Does not include costs due to (1) degraded performance resulting from decreased commitment, motivation, and innovation; (2) lost time for managing toxic employees; and (3) lost time for investigations [Inspector general, legal, equal opportunity office, and equal employment opportunity office])

targets of toxic behaviors is 125 (.25 x 100 = 25), and the number of employees who depart due to witnessing toxic behaviors is 100 (.20 x 100 = 20) for a total number of 45 employees who depart due to toxicity. Hypothetically, considering a 1,000-member organization, the cost to

replace departed members would be 45 employees x $75,000, which equals $3,375,000.

The combined total cost of toxic behaviors in a hypothetical 1,000-employee organization would amount to $4,049,357 and 140,695 lost work hours, as

Table 5. Toxic Behavior Cost Calculation of U.S. Marine Corps (Military and Civilian Population 203,167*)

Prevalence	10%		
Number of personnel who experience toxic behaviors	20,317		
Hourly wage	$24		
Annual salary	$50,000		
Annual work hours (40 hours/week x 52 weeks)	2,080		

Cost of effects	**Number of employees**	**Hours per week**	**Cost**
Lost time worrying (50%)	10,158	3.66	$46,474,451
Lost time avoiding toxic person (58%)	11,784	2.51	$36,971,315
Lost time talking with other employees (44%)	8,939	3.23	$36,092,618
Absenteeism (2.2%)	447	1.00	$558,709
Physical health issues (15%)	3,048	0.50	$1,904,691
Mental health issues (17%)	3,454	0.50	$2,158,649
Physician ($76 per hour)	3,048	0.50	$6,021,870
Mental health provider ($76 per hour)	3,454	0.50	$6,824,786

Replacement costs	**Number of employees**	**Cost per employee**	**Cost**
Departed as a target (25% of affected)	5,079	$75,000	$380,938,125
Departed as a witness (20% of affected)	4,063	$75,000	$304,750,500

	Number affected**	**Lost man hours**	**Cost*****
Total annual cost of toxicity	**44,331**	**28,584,654**	**$822,695,714**

(Table by author. *Defense Manpower Data Center, as of 30 September 2018. **Includes employees affected in multiple ways. ***Does not include costs due to (1) degraded performance resulting from decreased commitment, motivation, and innovation; (2) lost time for managing toxic employees; and (3) lost time for investigations [inspector general, legal, Equal Opportunity, and Equal Employment Opportunity])

detailed in table 1 (on page 58). Notice that this calculation does not include the cost of diminished performance due to sleep loss, increased stress, and decreased motivation, commitment, innovation, and performance. Nor does it include the time and resources required for leaders to manage toxic employees, for inspectors general and investigating officers to conduct inquiries, and for legal services and equal opportunity advisers to provide support.

Applying this model to the military departments and to the specific DOD members reveals some staggering costs, as

Table 6. Toxic Behavior Cost Calculation of Department of Defense Proper (Population 110,170*)

Prevalence	10%		
Number of personnel who experience toxic behaviors	11,017		
Hourly wage	$24		
Annual salary	$50,000		
Annual work hours (40 hours/week x 52 weeks)	2,080		

Cost of effects	**Number of employees**	**Hours per week**	**Cost**
Lost time worrying (50%)	5,509	3.66	$25,201,388
Lost time avoiding toxic person (58%)	6,390	2.51	$20,048,186
Lost time talking with other employees (44%)	4,847	3.23	$19,571,701
Absenteeism (2.2%)	242	1.00	$302,968
Physical health issues (15%)	1,653	0.50	$1,032,844
Mental health issues (17%)	1,873	0.50	$1,170,556
Physician ($76 per hour)	1,653	0.50	$3,265,439
Mental health provider ($76 per hour)	1,873	0.50	$3,700,831

Replacement costs	**Number of employees**	**Cost per employee**	**Cost**
Departed as a target (25% of affected)	2,754	$75,000	$206,568,750
Departed as a witness (20% of affected)	2,203	$75,000	$165,255,000

	Number affected**	**Lost man hours**	**Cost****
Total annual cost of toxicity	**24,039**	**15,500,408**	**$446,117,661**

(Table by author. *Defense Manpower Data Center, as of 30 September 2018. **Includes employees affected in multiple ways. ***Does not include costs due to (1) degraded performance resulting from decreased commitment, motivation, and innovation; (2) lost time for managing toxic employees; and (3) lost time for investigations [inspector general, legal, Equal Opportunity, and Equal Employment Opportunity])

detailed in tables 2 thru 6 (on pages 59–63). Using 2016 personnel numbers, the total costs estimated by the model are: U.S. Army, $2,913,945,643; U.S. Navy, $2,110,111,834; U.S. Air Force, $1,984,014,857; U.S. Marine Corps, $822,695,714; and DOD, $446,117,661 for a total cost of $8,276,885,708.

Conclusions

The cumulative effect of toxic leadership is costly, in both opportunity costs, such as wasted time and degraded performance, and in actual costs to the budget, such as increased medical expenditures. At first glance, the

estimated costs appear astronomical and unbelievable. While the model is not without some fault and assumptions may not be exact, one thing is clear—the costs of the effects of toxic behavior add up. Upon further examination, considering the daily abuse, bullying, incivility, and degrading behavior that toxic leaders perpetrate on their targets, the model and the costs are at least close to accurate and may actually be underestimated. Consider that most toxic behaviors fall under the threshold for legal action and that the behaviors continue for a long duration until they become so obvious that supervisors finally take action.[24] For the sake of argument, even if the prevalence of toxic leadership was 5 percent or the average annual salary was $40,000, the calculation would still result in a significant cost. The model suggests, first, that a toxic leader has a significant effect on the organization and, second, that the effects of toxic leadership extend far beyond the toxic leader and continue even when he or she is dismissed, indicating an underlying, systemic, cultural, and organizational disease. The cumulative effect of toxic leadership amounts to a significant cost and waste of time, resources, money, and members.

Some may argue that the costs of weak leaders are just as significant and that harsh leadership is required in order to accomplish the mission. While it is true that leaders on both extremes of weakness and toxicity

sabotage performance and create waste, the focus of this article is on the costs of toxic leadership and the recommendation is that leaders who balance respectful engagement with firm accountability create the conditions for the best performance.

Overlooked coping behaviors are significant. Lost time due to worry, avoidance, and "watercooler talk," although often considered harmless and a sign of individual weakness, is highly costly. When the targets of a toxic leader voice their concerns or file a grievance, they are often dismissed or marginalized as disgruntled complainers or weak members. Then, as performance declines, the leader blames the victim rather than recognizing the toxic conditions that he or she created.[25] However, as the model indicates, these coping behaviors result in significant opportunity costs to the organization in time, money, and productivity.

Toxic leadership is unhealthy. Toxic behaviors add a significant drain on an already overburdened health care system. The model is consistent with research that associates degraded physical and mental health with toxic leadership. These costs are unnecessary and are preventable by addressing toxic leadership and promoting

healthy leadership. Leadership that is respectful, humble, and compassionate promotes the healthy conditions for members to thrive not just survive. Whereas a toxic leader degrades, abuses, and exploits others for personal gain, a healthy leader respects, nurtures, and empowers team and organizational success. The benefits of a healthy leader are increased physical and mental health, reducing the demands on the health care system.

Toxic leadership degrades recruiting and retention. A substantial percentage of targets and witnesses of toxic leadership choose to separate from the military due to their experiences of serving under a toxic leader. This puts a strain on retention of trained and experienced members and therefore a strain on recruiting, which is very expensive. In 2002, the cost of a new U.S. Marine Corps service member was $44,887, which included recruiting costs of advertising, college funds, and enlistment bonuses at $6,539; training costs of uniforms, equipment, laundry, and meals at $1,614; training at $301; pay, allowances, clothing, and moving expenses at $19,973; ammunition at $787; and drill instructors, trainers, and support staff at $15,674.[26] The cost of accessioning enlisted personnel of other branches of the military is similar. Also, in 2002, the cost of an officer graduating from the United States Military Academy was $340,000.[27] Certainly, the costs of accessioning service members have increased in sixteen years. The DOD's tolerance of toxic leadership and hostile working conditions gives the appearance that low retention rates are of little concern, that there will always be an endless supply of qualified recruits who can be enticed to enlist with college funds and enlistment bonuses. The reality is the key recruiting demographic, ages seventeen to twenty-four years are becoming increasingly unqualified for military service. Officers leave due to zero defects and risk aversion that suppresses innovation and talent.[28] Toxic leaders play a significant role in creating this oppressive environment. In the future, the DOD will most likely face significant challenges in recruiting quality candidates due to these factors, as well as the tension between increasing recruiting costs and modernizing the military. Although in recent years the DOD budget has been increasing, the current increases for the purpose of modernization does not mean funding is unlimited,

but the military must use its funding efficiently. Due to a strong civilian job market, the supply of qualified candidates is decreasing at a faster rate than the military is downsizing.[29] Additionally, it seems both ethical and prudent to address toxic leadership—to provide our military and its members with the most effective leaders and to prevent waste of resources.

In addition to the loss of targets and witnesses to toxic leadership, there is a high cost of dismissing and replacing toxic leaders. The military has invested greatly in the development of leaders, providing education and training. Most often, toxic leaders are highly skilled and provide needed abilities and experience. By simply dismissing a toxic leader, the military loses a valuable team member. While dismissal may be necessary in some cases, the military must weigh the costs and benefits of either dismissal or retention.

Recommendations

The waste of resources due to toxic leadership suggested by this article indicates that the DOD could reap significant savings by addressing toxic leadership and improving the quality of leadership among its members. An obvious, initial recommendation is for the DOD to conduct a comprehensive empirical study of toxic leadership among its members to determine its extent and impact. Reducing the prevalence of toxic leadership would result in decreasing the waste of resources—time, money, and personnel. Several authors and researchers have indicated the need for a comprehensive approach to addressing toxic behaviors.[30] Interventions include individual, small group, and organizational character development, leadership training, and culture change.

Leader training and development. The means of addressing toxic, counterproductive leadership cannot be limited to punishment, removal, and dismissal nor individualistic character development. Leaders need skills in demonstrating and promoting respect among team members. Leader training at all levels of professional military education should incorporate empirically validated methods of reinforcing a culture of respect, humility, compassion, and selfless service. Leader development must involve instruction in creating the conditions for empowering members and eliminating constraints and barriers. Leaders must be skilled in responding effectively to complaints and in reinforcing a culture of respect in small groups and teams in which all members are valued, and no one is exploited or degraded for personal gain.

(Original graphic created by macrovector, www.freepik.com; graphic adapted by Arin Burgess, *Military Review*)

Leader assessment. Supervisors tend to give attention to the results of subordinates, ignoring the manner in which the results are obtained. The bias toward accomplishing the mission results in a leader receiving an exemplary performance evaluation that leads to promotion and advancement. Since toxic leaders are experts in appearances, they tend to benefit from the biased performance evaluation system. Supervisory leaders need skills in identifying toxic behaviors, confronting subordinates, and coaching soldiers in healthy leadership.

Much research and anecdotal evidence indicate that toxic leaders demonstrated toxic behaviors early in their careers. Targets and witnesses often state, "Everyone knew what he or she was like as a lieutenant (or captain, or major, etc.)." Given that patterns of toxic behavior are exhibited early in a career, supervisors need to initiate developmental intervention to prune disrespectful and abusive behaviors. Leader development and assessment should not be limited to technical, tactical, and operational skills but also respectful treatment in leading the team to get results. This course correction needs to occur long before toxic behavior escalates to the point that it requires dismissal and loss of expertise.

Organizational culture and policies. Not only are supervisors' results biased, but there is also an organizational cultural bias toward achieving results, thereby resulting in a cultural tolerance of toxic behavior. As long as the mission is accomplished and the behavior is not extreme, toxic behavior is sometimes tacitly condoned as an acceptable element of a tough military. This tolerance allows toxic leaders to "fly under the radar." However, this tolerance ignores the corrosive effects of toxic leadership on resources and performance. There is a difference between a tough leader who prepares members for the demands of the mission and an abusive boss who exploits members for personal gain and pleasure. The purpose of the military departments' core values is to clarify expectations and behaviors as a means of addressing toxic leadership. The military departments need to reinforce a culture that truly reflects the highest standards of values-based behavior. This means that members not only refrain from disrespecting each other but that they also demonstrate the highest respect for each other; that they not only give the appearance of selfless service as they pursue personal benefits but that they also serve to empower others' success, even if they receive nothing in return; and that they also hold each other accountable. Additionally, the DOD needs to institutionalize a performance evaluation system that includes assessment of a leader's personal practice of core values, especially his or her ability to reinforce respectful engagement among team members.

The DOD needs to give serious attention to the quality of both the practice of leadership and the leaders in its ranks. It cannot assume that leaders know how to treat others with dignity and respect and how to reinforce those values in their organizations. It cannot continue to tolerate, dismiss, or ignore toxic behaviors and the resulting cost. While toxic leaders are often personally highly skilled, talented, and productive, they tax the self-esteem and commitment of the members of their teams placing at risk team performance and security. The high costs and waste demonstrated by this model indicate a significant adverse impact on the safety of the force and the security of the nation. Therefore, by tolerating toxic leaders and failing to employ interventions, the DOD places personnel, as well as the mission, at risk. Force protection and national security require that the U.S. military develop, promote, and provide leaders who obtain results but in ways that treat others with dignity and respect and facilitate trust. ∎

The views expressed in this article are those of the author and are not an official policy or position of the National Defense University, the Department of Defense, or the U.S. government.

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A Constructive Leader Training Program Designed to Rapidly Increase Unit Training Readiness

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During his 2018 State of the Union Address, President Donald Trump directed the secretary of defense "to reexamine military detention policy and keep open the detention facilities at Guantanamo Bay."[1] That brief statement precipitated executive-level orders mandating assessments for the transition of Joint Task Force Guantanamo (JTF GTMO) from an expeditionary to an enduring mission: "Joint Task Force Guantanamo conducts the

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safe, humane, and legal detention operations; collects, analyzes, and reports intelligence; and provides support for legal and administrative proceedings to protect the United States and its interests."[2] The unit operates in one of the most complex operational environments (OE) in existence due to tremendous international and political scrutiny.

JTF GTMO has existed since 2001. It consists mainly of U.S. Army reserve component units rotating through U.S. Naval Station Guantanamo Bay (NSGB) on a yearly basis. Soldiers belonging to the Arizona Army National Guard's 850th Military Police Battalion (850 MP BN) arrived at NSGB only a few days after the president's speech. 850 MP BN comprised JTF GTMO's principal subordinate staff and, thus, found themselves immediately responsible for the preponderance of planning required to transition JTF GTMO to an enduring mission.

Though new to the physical environment, 850 MP BN was already intimately familiar with JTF GTMO's complexity prior to arriving at NSGB. This was due to granular study of JTF GTMO's OE initiated during a constructive leader training program (LTP) at the outset of their mobilization training life cycle (see figure 1, page 70). Modeled similarly to LTPs facilitated at combat training centers, the LTP methodology described in this article is specifically designed to speed reserve component mission proficiency by

U.S. Army Reserve soldiers from 422 Military Police (MP) Company, Bakersfield, California, conduct riot control training March 2018 at Fort Bliss, Texas, in preparation for their Joint Task Force Guantanamo detention operations mission. (Photo by Staff Sgt. Ryan Sarjent, U.S. Army)

closely replicating experiences that units can expect to encounter during their deployments. This is achieved by constructing an environment that closely replicates the deployment OE's dynamic nature, then presenting deploying units with relevant multilayered problems currently challenging mission success in that OE. Using this methodology, 850 MP BN confidently applied the operational art they practiced throughout their training process and crafted innovative solutions to problems containing strategic consequences for JTF GTMO's long-term mission success.

Mobilization Training Progression

Field Manual (FM) 7-0, *Train to Win in a Complex World,* mandates that regular Army and reserve component units conduct progressive training paths when preparing for mobilizations. In contrast to regular Army unit long-range training plans that span only one year, FM 7-0 states that "Reserve Component unit training horizons typically span five years."[3] In

reality, reserve component unit mobilization training plans are often initiated at a multi-component joint assessment, which occurs approximately one year prior to a unit's deployment. Thus, unlike regular Army units that can leverage all 365 days of a year to prepare for deployments, reserve component units that cannot train full-time only receive about seventy-five preparation days in the same training year.

As depicted in figure 1 (on page 70), reserve component unit mobilization training plans normally progress through a premobilization training period and a postmobilization training period. The progression begins with individual- and leader-level training tasks conducted during the premobilization period and culminates with collective tasks conducted during
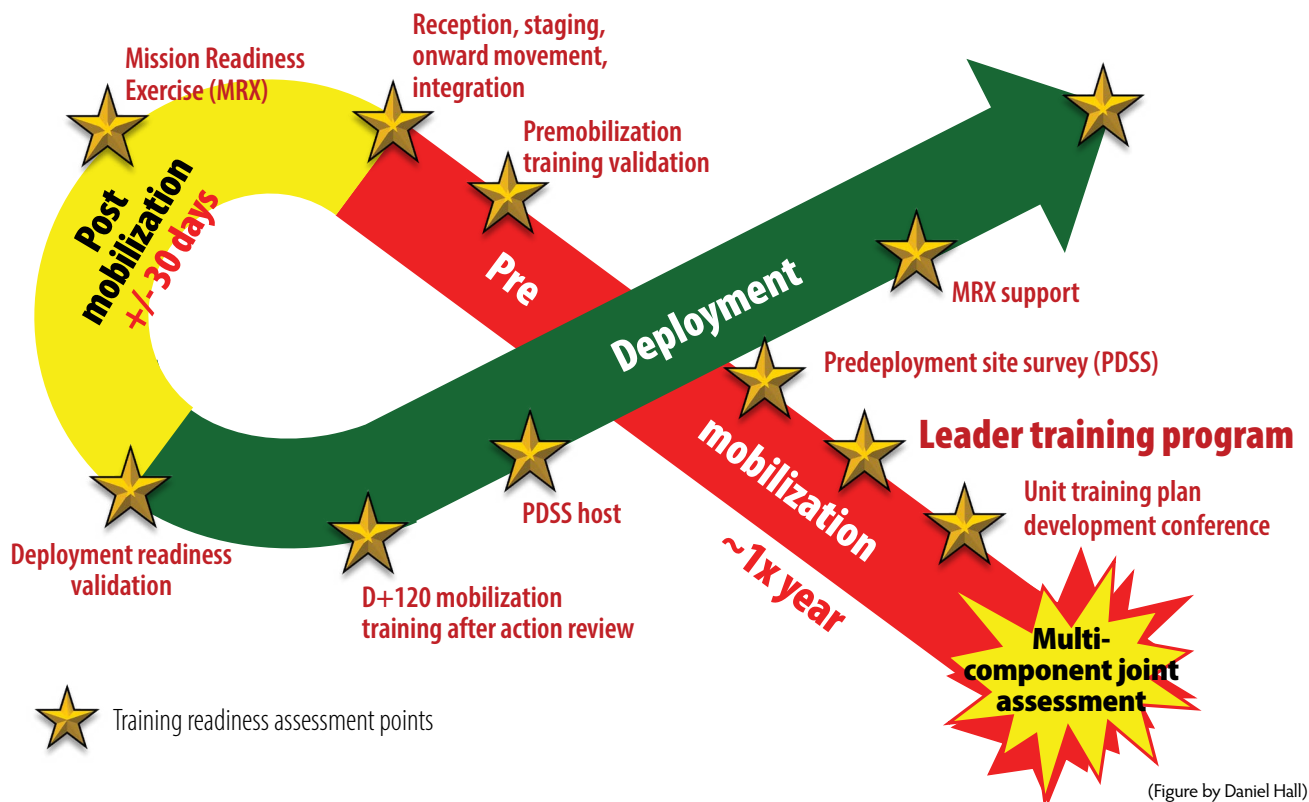
Figure 1. Depiction of the Mobilization Training Life Cycle

the postmobilization period.[4] For simplicity purposes, this article links the two periods into one mobilization training life cycle since both are tightly coupled.

First Army is responsible for implementing the U.S. Army Total Force Policy, which is the integration of the two Army reserve components with the regular Army to create a single force.[5] First Army is therefore uniquely qualified at providing combatant commanders with reserve component units capable of succeeding in complex environments. First Army accomplishes this by assigning training support battalions to assist reserve component units with achieving increased stages of task proficiency throughout their mobilization training life cycle. Training support battalions like 3rd Battalion, 362nd Armored Regiment (3-362 AR), are responsible for providing training events that mitigate resource impediments that can seriously hamper unit deployment readiness. Given this perspective, 3-362 AR developed a constructive LTP that occurs early in the premobilization period and is designed to establish a band of training excellence spanning a unit's entire

mobilization training progression to help alleviate resource limitations.

Leader Training Program Design

The LTP is designed to offset reserve component unit resource challenges by detailing deployment mission requirements early in the training process. Extremely condensed horizons necessitate training strategies that concentrate unit focus on core competencies aimed at dramatically increasing an organization's intellectual capital. Accordingly, the LTP serves as the seminal event that fuels a unit's rapid attainment of increased proficiency throughout their mobilization training life cycle. The LTP's end state is a baseline of experience and knowledge that facilitates unit ability to demonstrate high degrees of training proficiency during a rigorous mission rehearsal exercise (MRX), the culminating venue where deployment readiness is validated.

The training process begins with a multi-component joint assessment, where training support battalions

assist units with thoughtfully narrowing mission essential tasks (MET) to only those that precisely align with their assigned deployment mission. According to FM 7-0, this approach provides battle focus for the mobilization training progression, which best mitigates severe time constraints.[6] The LTP further narrows focus by identifying key prerequisite tasks that set conditions for overall MET proficiency. For example, 850 MP BN's deployment mission prescribed three METs with twelve supporting collective tasks. MET assessments resulted in the identification of two prerequisite tasks deemed fundamental for establishing the unit's training foundation: (1) develop running estimates and (2) perform staff administrative functions. Accordingly, these two tasks served as 850 MP BN's primary skill-based training objectives during their LTP. The 850 MP BN's LTP also incorporated contextual-based training objectives such as building the team, OE immersion, and knowledge management system development to spark shared understanding across the entire staff of the complex dynamics affecting JTF GTMO's mission (see figure 2, on page 72).

Given that LTPs are typically five-day events, the focused approach on palatable sets of clearly defined objectives allows training audiences to quickly digest and internalize desired learning outcomes. Thus, the LTP design promotes long-term

U.S. Army Reserve soldiers from 422 Military Police (MP) Company, Bakersfield, California, conduct forced cell extraction training March 2018 at Fort Bliss, Texas, in preparation for their Joint Task Force Guantanamo detention operations mission. (Photo by Staff Sgt. Ryan Sarjent, U.S. Army)

Leader training program (LTP) training objectives:	OE introduction Receipt of mission Mission analysis	Mission analysis Mission analysis brief Military decision-making process (MDMP) step 1 after action review (AAR)	Course of action development Course of action brief MDMP step 2 AAR	Course of action analysis Course of action approval brief MDMP step 3 AAR	Combined arms rehearsal Final LTP AAR
1. Develop running estimates 2. Perform staff administrative functions 3. Build the team 4. Achieve operational environment (OE) understanding 5. Develop knowledge management systems 6. Identify areas of continued improvement between the LTP and the mission rehearsal exercise (MRX)	**Day 1**	**Day 2**	**Day 3**	**Day 4**	**Day 5**

(Figure by Daniel Hall)

Figure 2. 850th Military Police Battalion Leader Training Program Objectives
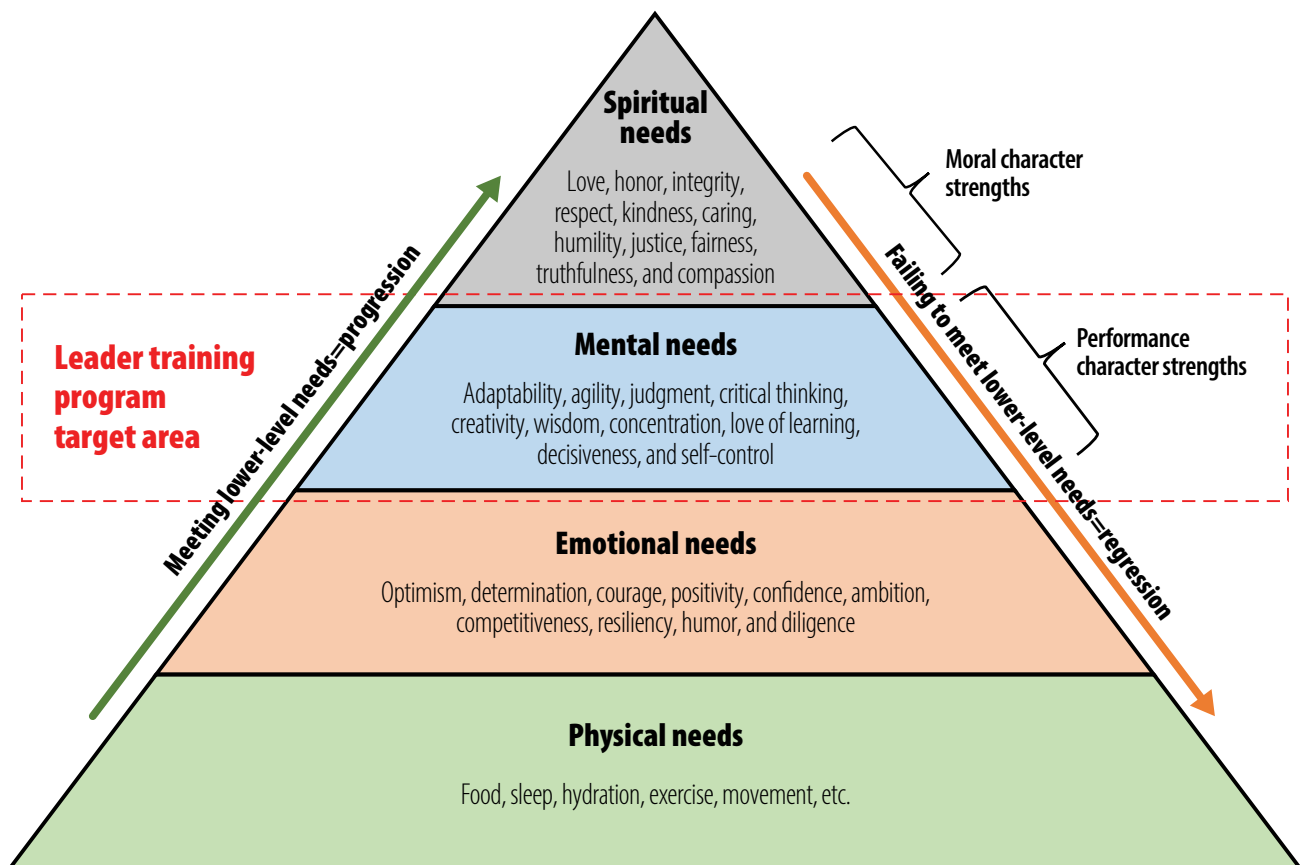
(Figure adapted by Daniel Hall based on The High Performance Pyramid by Jim Loehr and Tony Schwartz, "The Making of a Corporate Athlete" by *Harvard Business Review*, 2001)

Figure 3. Adaptation of High Performance Pyramid

Staff is committed at
achieving unit goals

Staff relationships are understood;
behavioral expectations established

Staff relationships are unclear;
power struggles may ensue

Individual roles and
responsibilities are unclear

Forming

Storming

Norming

Performing

Leader training program

Mission rehearsal exercise

(Figure adapted by Daniel Hall based on The Five Stages of Team Development by Bruce Tuckman)

Figure 4. Adaptation of Stages of Team Development

skill retention. This guards against task atrophy and supports continuous attainment of increased levels of MET proficiency as units proceed along their mobilization training life cycle.

Leader Training Program Approach

Reserve component units can struggle with getting officers and noncommissioned officers in professional education qualification courses due to the frequency of mobilizations.[7] This results in many staffs possessing only rudimentary knowledge of the operations process. The relative lack in organizational experience is another significant hurdle that reserve component units must quickly surmount when building deployment readiness. Therefore, it is imperative that training programs target cognitive development needs when attempting to speed a unit's acquisition of expertise (see figure 3, on page 72).[8]

With this challenge in mind, the LTP leverages fundamental learning and team-building theories to structure an educational approach that expedites unit

mission comprehension, operational art application skills, and procedural abilities. The following paragraphs briefly describe how each theory is applied during LTPs to help units transform into high performing organizations akin to 850 MP BN.

First and foremost, the LTP employs an andragogical approach to place the onus of learning on the training audience. Andragogy posits that adults encode lessons faster and at deeper levels when learning is self-directed.[9] The LTP adapts Malcolm Knowles's four core principles of andragogy, or adult learning theory, to cultivate meaningful learning experiences:[10]

(1) Adult learners need to know why lessons are important to them. The LTP presents training audiences with relevant problems affecting the OE in which they will operate. For example, 850 MP BN was presented with real-time problems that encumber JTF GTMO's transition to a permanent mission. Introduction of pertinent problems compels learners to realize they have personal stake at identifying potential solutions to real dilemmas early in the training

process. This results in commanders taking responsibility for their unit's learning.

(2) Adult learners will self-direct their learning experience if appropriate information is available. The LTP provides a database of real-world information that immerses units into the multilayer dynamics affecting the OE in which they will operate. Training audiences sift through gigabytes of actual orders, maps, force flow charts, facility capabilities, etc., to achieve detailed OE context. This constructive method allows units to attain organizational clarity.

(3) Adult learners rely on mental models formed from previous experiences to process new information. The LTP employs doctrinal concepts as a common language to enable training audiences to leverage collective experiences when fusing unfamiliar data into usable information. The military decision-making process is emphasized as the central doctrinal process because it offers training audiences a familiar analytical model with which to steer their efforts at producing logical analysis while attempting to generate plausible solutions.

(4) Adult learners need help overcoming inhibitions about learning new material. The mental energy required to comprehend sophisticated and multilayered challenges existing within an OE is daunting. Accordingly, the LTP is conducted in a collegial setting where people are encouraged to explore, question, and create. Though the LTP's objectives are outcomes based, the outcomes are not measured in frequency of right answers or the formulation of perfect solutions. The LTP is process oriented and values the training audience's honest attempt to apply lesson merits toward their organization's growth and maturation.

Second, it is well documented that timely corrective feedback is essential for effective learning.[11] Consider the detriment to a soldier's marksmanship accuracy if he or she does not receive timely feedback on target hits while at a rifle range. Appropriately, frequent periods of calculated feedback is the LTP's key approach to ensuring learners internalize correct lessons while the training is still fresh in their minds. Doctrinally referred to as after action reviews, 3-362 AR concentrates feedback on every warfighting function's application of the military decision-making process immediately following the conclusion of each major step. Trainers shrewdly employ the Socratic method to elicit self-discovered lessons from the training audience. This reflective technique promotes active participation, which further leads to enriched learning.[12]

Finally, FM 7-0 states, "Teamwork is the essence of how the Army operates."[13] Consequently, the LTP relies heavily on Bruce Tuckman's stages of team development to help units efficiently transform into high-performing organizations.[14] Due to manning constraints, it is common for reserve component units to receive people well after the mobilization training process has already begun. Unfortunately, the LTP is often the first training event in which all unit personnel are assembled. This is yet another severe resource

Joint Task Force Guantanamo Detention Operations Complex June 2018 at Guantánamo Bay, Cuba. (Photo by Maj. Patrick Martel, U.S. Army)

constraint that units must quickly overcome and, thus, necessitates team building as one of the LTP's top contextual-based training objectives.

It is important to note that Tuckman's developmental stages are not rigid.[15] This means sequential graduation into each stage is not a precondition for teams to progress into other stages (see figure 4, on page 73).[16] Therefore, given its collegial atmosphere, the LTP seeks to help units form and to begin norming early in their training progression. The intended consequence is units are formed prior to arriving at postmobilization training so they "storm and finalize norms" (a term from adult education theory) during the MRX where stress, pressure, and friction are applied. As in 850 MP BN's case, the desired outcome is units understand how to perform their mission and are ready to do so immediately upon arriving at their deployment location.

Leader Training Program Efficacy

To date, 3-362 AR has facilitated over a dozen constructive LTP events. When presented with the program's concept, commanders instantly realize the LTP's value for preparing their units for success and immediately opt to include the event early in their premobilization training plan. Though this article highlights 850 MP BN's detention operations mission at JTF GTMO as its primary example, 3-362 AR also successfully facilitated constructive LTPs for units deploying on security force advisory missions with the Ukrainian armed forces as part of Joint Multinational Training Group–Ukraine, demonstrating that the constructive LTP's methodology is extremely effective at setting conditions for the rapid increase of unit training readiness regardless of mission type.

Perhaps the program's best characteristic is commanders do not need external entities such as 3-362 AR to facilitate LTPs for their units. A firm doctrinal understanding of training plan development and thoughtful employment of the concepts described within this article are the base ingredients required to train operations processes that rapidly increase readiness. Regardless of who provides the training, the final analysis of the LTP's efficacy suggests units that conduct an LTP are more ready to achieve success during MRXs and subsequent deployments than those who do not.

Conclusion

Reserve component units ready to deploy and proficiently execute operations that achieve combatant commander goals are essential for the Army's success. Unlike active duty units that can leverage 365 days to prepare for deployments, reserve component units may only receive as few as seventy-five preparation days in the same training year. Limited time, lack of

organizational experience, and manning constraints are among the chief resource shortfalls that can significantly hinder unit preparatory efforts.

Consequently, reserve component units must quickly overcome these deficits to build readiness. 3-362 AR developed a constructive LTP to assist units with rapidly increasing readiness. Conducted at the beginning of the mobilization training life cycle, the LTP serves as the seminal event that enables units to continually attain higher degrees of proficiency as they progress through the training process. This is achieved by closely simulating the OE to which a unit will deploy and replicating experiences that the unit can expect to encounter during its deployment.

Furthermore, fundamental learning and team-building concepts are expertly employed during the LTP to support unit ability to execute prerequisite tasks that lead to overall MET proficiency. Feedback collected during numerous after action reviews at the completion of mobilization training life cycle events supports the LTP's value at increasing training readiness. Units like 850 MP BN embody the LTP's efficacy at preparing organizations for mission success. ■

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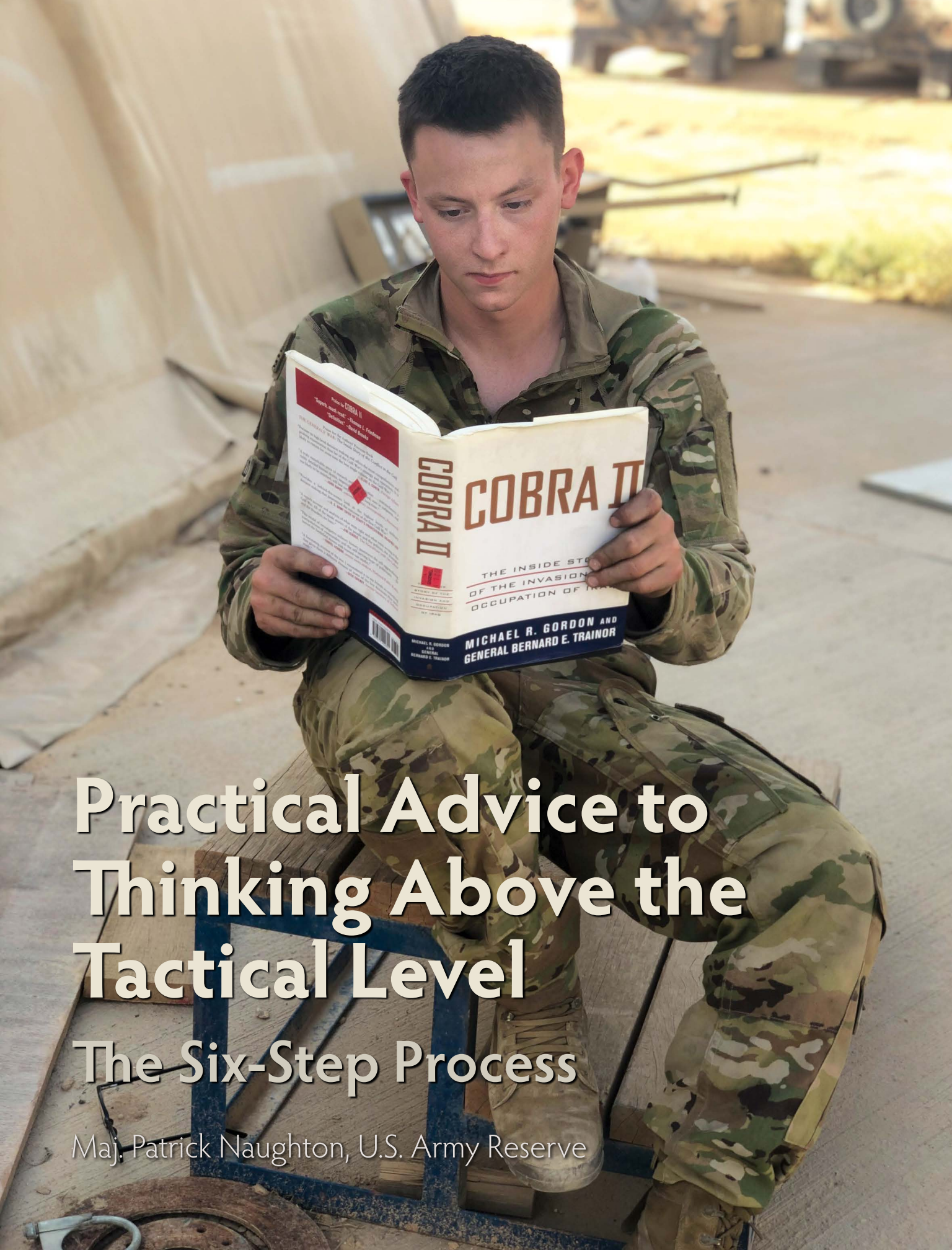
Practical Advice to Thinking Above the Tactical Level

The Six-Step Process

Maj. Patrick Naughton, U.S. Army Reserve

The United States Army consistently declares that as leaders gain experience at the tactical level they must eventually become operational and strategic thinkers. It is an evolution that seems easy to accomplish; however, there is no clear definition of how to do this from a practical standpoint. A plethora of operational and strategic concepts, doctrine, and definitions are introduced through one's service and professional military education (PME). The explanations used to define these ideas differ by branch and classical or modern military theorist. To further complicate this understanding, the lexicon of military concepts and terms has also entered every aspect of civilian life and business. All of this can be overwhelming and daunting to any leader who aims to think and function above the tactical level.

The intent of this article is not to provide conclusive definitions and descriptions of key terms and theories as much already exists across a wide spectrum of venues to address this that the reader may research independently. Rather, this article presents six practical techniques of self-development upon which military leaders may build a solid bedrock of knowledge and confidence before expanding above the tactical level (see figure 1).

The goal of becoming an intuitive and visionary operational and strategic intellectual starts with understanding the basics of the profession of arms. This is becoming ever more important as the world shifts back to an era of great power competition and the Army continues to anticipate possible future conflict through the prism of the multi-domain operations (MDO) concept. The six practical techniques that build off each other are: (1) leveraging the self-development training domain, (2) understanding doctrinal terms and definitions, (3) recognizing the conflict continuum and range of military operations (ROMO), (4) appreciating the difference between science and art, (5) becoming familiar with systems approaches and models, and (6) adopting a process of comprehension to aid with thinking above the tactical level. Performing these six practical steps will assist with making the transition to operational thought, which in turn will make it easier to cultivate strategic thought in the future. Only after fully grasping these six areas will one possess the basic knowledge necessary to be comfortable and confident enough to progress by studying more complicated operational and strategic themes.

1. Leverage the self-development training domain
2. Understand doctrinal terms and definitions
3. Recognize the conflict continuum and range of military operations
4. Appreciate the difference between science and art
5. Become familiar with systems approaches and models
6. Adopt a process of comprehension to aid with thinking above the tactical level

(Figure by author)

Figure 1. The Six-Step Process to Thinking Above the Tactical Level

Step One: Leverage the Self-Development Training Domain

The first step to thinking above the tactical level is to accept that this responsibility rests with the

individual. The Army develops leaders via three training domains: institutional, operational, and self-development. The institutional domain is accomplished through the various levels of PME that all must attend. The operational is attained by the practical experiences that leaders gain through deployments, field exercises, and serving in key positions. Self-development bridges the gap between the other two domains by deepening and expanding the breadth and depth of one's knowledge. Ironically, it is the easiest domain to develop, yet often the most ignored.[1]

To truly expand beyond thinking only at the tactical level, leaders must aggressively pursue their own self-development. Counting solely on the institutional and operational domains to accomplish this will not suffice. While these two domains are effective at building great leaders, they are not sufficient for the development of the type of operational and strategic intellectual acumen that is desired in the military profession.

There are several ways to conduct this self-development. The traditional approach typically suggested is reading, especially of military history. To aid with this, key Army leaders have traditionally issued reading lists aimed at developing leaders who are

capable of thinking and operating above the tactical level. Gen. Mark A. Milley, the chief of the Army Staff, has challenged soldiers to "read these books and to discuss, debate, and think critically about the ideas they contain."[2] Exploring this traditional route and the suggested literature will greatly assist with self-development efforts.

As mentioned, reading and studying military history have also been traditionally touted as the main topic for soldiers to study for self-development. Renowned British historian Sir Michael Howard argues that the study of military history will enable one to "understand the nature of war and its part in shaping society, but also directly improve the officer's competence."[3]

However, while this is a sagacious statement, solely reading books on military reading lists may not take into account generational differences and the fact that some soldiers simply do not learn through reading alone. Studies have shown that millennials—the age group born from 1981 to 2004 that makes up today's junior- and mid-level leaders—learn differently than previous generations. Rather than learning via one traditional method such as reading, they prefer curricula that offer variety and incorporate multimedia options.[4]

Some Hollywood movies such as the recent World War I film *Journey's End* offer brilliant lessons for military leaders. When combined with historical readings, these movies can provide a unique multimedia approach in the self-development domain when learning to think above the tactical level. (Image used with permission from Fluidity Films/Lionsgate)

Fortunately, there is no shortage of nontraditional possibilities for leaders attempting to learn how to think above the tactical level. Reading partnered with online videos, documentaries, and even Hollywood movies, offers a solid and enhanced multifaceted platform for self-development. One example of online content is found with TED (Technology, Entertainment, and Design) talks. These short and often poignant presentations are given by a variety of leaders worldwide and offer numerous lessons on operational and strategic thought.[5] Another option is viewing documentaries. Gone are the days of dry and poorly made products in this medium; today's streaming services offer countless well-made choices on every conflict in world history. Lastly, even select Hollywood movies can aid with learning, the latest example being the 2017 World War I movie *Journey's End*.[6] When partnered with a history book on the conflict, the film offers brilliant lessons on flawed strategies, how they trickled down to the tactical level, and the effect this had on leaders.

Embracing the self-development domain is the first step toward developing a solid bedrock of knowledge and confidence to think above the tactical level. The above combined approach to learning is merely suggestive, as the options available are exhaustive. If desired, studying military history via a combination of traditional and multimedia platforms will develop the critical and analytical skills necessary to operate at higher levels.

Step Two: Understand Doctrinal Terms and Definitions

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In the 1987 cult classic film *The Princess Bride,* hero Inigo Montoya indiscreetly tells his pompous boss who repeatedly uses the word "inconceivable" for every situation, "You keep using that word. I do not think it means what you think it means."[7] This is applicable to step two of the process: understanding doctrinal terms and definitions. Words mean something; if one does not properly utilize the basic terms that are in the daily lexicon of the Army, they will never be able to progress to the convoluted muddle of theories and meanings that exist at operational and strategic levels.

Two works of reference exist to aid with this understanding. The first is the recently updated *Department of Defense Dictionary of Military and Associated Terms*, which provides definitions and standardization to doctrinal terminology for the joint force.[8] The second is Army Doctrine Publication (ADP) 1-02, *Terms and Military Symbols*, a guiding document for military symbols and, like the Department of Defense dictionary, provides definitions of Army vocabulary.[9] These extremely helpful, yet often overlooked publications, for the most part, mirror each other, though there are some differences.

Leaders who misuse words, like Inigo Montoya's boss, instantly lose credibility with their listeners, especially their peers and superiors. To prevent this, and as part of a self-development program, one might begin each morning by reading two to five definitions from the aforementioned documents. (Each definition includes a reference to a manual that can be researched further for more information.) The proper understanding and use of military terms forms a strong internal library of references as one enters the realm of complex operational and strategic definitions. More importantly, the proper understanding and articulation of terms increases confidence in public speaking, especially when communicating with senior leaders. Step two is important, as it will help not only lay the foundation for clear communications with other military professionals but will also foster self-confidence and air of authority as a professional who knows of what he or she speaks; leaders must master the basic terms and definitions used in their profession if they are ever to rise above the tactical level.

Step Three: Recognize the Conflict Continuum and Range of Military Operations

Since 2017, the Army has championed the multi-domain battle concept across the force. However, reflective of the nature of conflict, Gen. Stephen Townsend, commander of the United States Army Training and Doctrine Command, realized that the

word "battle" restricted the conversation about activity in the multi-domain environment to a strictly warfighting focus, stifling the concept's development. Consequently, he replaced the word *battle* with *operations* to expand the concept into multi-domain

continuum. As the most recent *National Security Strategy* notes, our adversaries recognize that the United States "often views the world in binary terms, with states being either 'at peace' or 'at war,' when it is actually an arena of continuous competition."[12]

Peace ←——— Conflict continuum ———→ **War**

Large-scale combat operations

Crisis response and limited contingency operations

Range of military operations

Military engagement, security cooperation, and deterrence
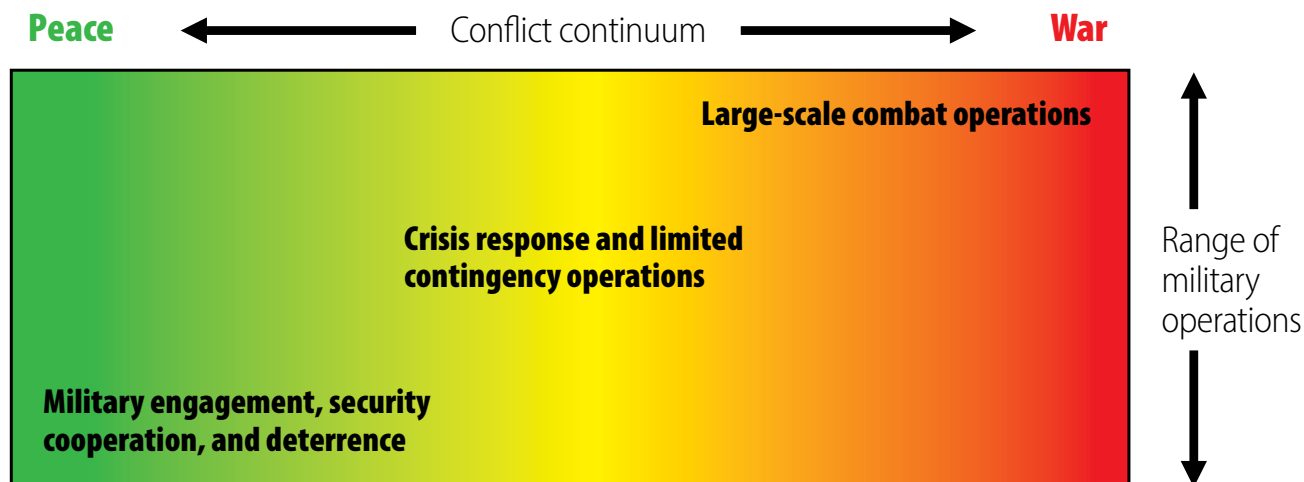
(Based on original graphic from Field Manual 3-0, *Operations*)

Figure 2. The Conflict Continuum and the Range of Military Operations

operations (MDO), which is a term more reflective of the modern operational environment.[10] Townsend's actions are a fitting example of step three: recognizing the conflict continuum and ROMO, which provides the azimuth for developing the skills necessary to think above the tactical level in order to recognize that war is an extremely complex and multifaceted topic that includes more than just military activities (see figure 2).

Field Manual 3-0, *Operations*, mirrors the joint concept of the conflict continuum and ROMO model to describe hostilities. The model ranges from the high-end of large-scale combat operations (LSCO) and war to various low-end scenarios across the ROMO that include peace.[11] To successfully operate above the tactical level, leaders must accept that the term *war* is extremely constrictive and not reflective of conflict in the modern era. When one solely uses the word war to describe hostilities, it tends to drive the listener to immediately think of LSCOs and restricts the thought process to just functioning at that level. When in reality, war is much more complex and can include numerous scenarios from across the ROMO simultaneously throughout the conflict

The threat of possible LSCOs due to the rise of rival strategic great powers is evident and has not been seen since the Cold War. However, most hostilities today are labeled as irregular or hybrid warfare and simmer in the middle of the conflict continuum. As the *National Security Strategy* declares, U.S. competitors have become "adept at operating below the threshold of open military conflict and at the edges of international law."[13]

These types of events are often grouped within an area known as the Gray Zone because they occur in a range above peace and below LSCOs. Despite numerous examples from military history, today's military operational and strategic leaders struggle with understanding this zone. As modern-day strategist Dr. Antulio J. Echevarria II explains, a new thought process must be adopted by leaders—one that "must account for more than just the use of kinetic military force during wartime, and it must accommodate more than just the goal of dominating an adversary through decisive operations."[14] The sooner a leader can recognize the complexity of conflict, the sooner they can remove the restrictive notions that the simplistic term *war* encourages.

Moreover, conflict is not limited to military actions alone. As Echevarria contends, when examining nonkinetic scenarios in the Gray Zone, all instruments of national power— diplomatic, information, military, and economic (DIME)—must be leveraged and coordinated. The United States must also orchestrate efforts "with those of its allies and strategic partners. In some cases, it must also take into account the activities of nongovernmental and intergovernmental organizations."[15] For any situation across the ROMO, the U.S. Army cannot go it alone and needs a whole of government approach to achieve objectives. This will require robust interorganizational cooperation from all entities employed throughout the DIME. As British Prime Minister Winston Churchill stated, "There is only one thing worse than fighting with allies, and that is fighting without them!"[16]

Having a firm grasp of doctrinal terms and examples from military history, all learned through self-development, will assist in understanding the intricacies of conflict. Step three decrees that leaders must recognize that conflict is inherently complex, chaotic, multifaceted, and not restricted to military efforts alone. Comprehending and embracing this fact will allow a leader to move beyond the tactical emphasis of seeking decisive military focused engagements toward understanding how DIME and interorganizational cooperation contribute to success at the operational and strategic levels.

Step Four: Appreciate the Difference between Science and Art

The difference between science and art is one of the most complicated concepts to grasp. Both terms are used freely though they are mostly used when discussing operational art, science of control, and art of command— all of which are defined in Army and joint doctrine. Perhaps the Germans prior to World War II describe it best in the doctrine that guided their actions throughout the conflict. The opening sentence of the 1934 German army manual for unit command, *Truppenführung*, states, "War is an art, a free and creative activity founded on scientific principles."[17] Step four in developing the ability to think above the tactical level is appreciating that conflict consists of both science and art.

The science of control is defined as the "systems and procedures used to improve the commander's understanding and support accomplishing missions."[18] Science is the more quantifiable and data

driven aspect during planning. For example, calculating the gallons of fuel it takes to move a brigade combat team a certain distance and all the practical planning considerations that go into that equation. It also speaks to sets of established guiding systems, procedures, and principles that will be discussed in step five. Skill in the science of conflict is often developed via practical experience gained during field exercises, assignments, and deployments.

In contrast, art is defined by both Army and joint doctrine as being driven by a cognitive approach to planning.[19] It speaks to the reasoning, judgment, creativity, and mental abilities of leaders. Unlike science, art is more abstract and difficult to identify or define. As President Dwight Eisenhower declared at the 1958 Republican National Committee Breakfast regarding the mathematical odds of Republicans winning in various states and districts, "These calculations overlook the decisive element: What counts is not necessarily the size of the dog in the fight—it's the size of the fight in the dog."[20] As Eisenhower recognized from his wartime experience, science is not adequate enough to predict conflict; sometimes the unappreciated can be pivotal. Like science, ability in art can be gained from practical experience; however, true proficiency in this area comes from self-development. Military history gives endless lessons in command and operational art and its effect on conflict that can be gleaned through its study.

While this is a simplified view of these subjects, this is all that is required at first. As noted in the *Truppenführung*, conflict requires a strong cognitive ability that rests on scientific military principles. Balancing both art and science at the operational and strategic levels of thought can be challenging. Simply recognizing that a difference exists, they complement each other, and experience can be gained throughout all the training domains is vital for tactical leaders to understand before proceeding further. Step four of the process is the appreciation of the difference between science and art, which then opens the door to further study of the concept.

Step Five: Become Familiar with Systems Approaches and Models

Army leaders spend the first half of their careers being exposed to systems approaches and models of thought. This starts with troop leading procedures and then progresses to five-paragraph operations

orders and the military decision-making process. Due to this, leaders are comfortable with constructed approaches that provide a structure to follow. As they begin to progress above the tactical level, they will encounter a slew of systems and models to aid with operational and strategic understanding and to comprehend art and science. To name just a few, these

the processes and frameworks as a way to achieve scientific answers that provide output-based facts and evidence. Confining one's thought process to established systems and models prevents critical and creative thinking. These constructs serve as a method to approach operational and strategic thought and to differentiate science and art, not as a crutch that restricts you to one mode of thinking.

As discussed earlier, to effectively communicate and function at the operational and strategic levels, one must have a solid foundation in doctrinal terms. Step five builds on this by adding the requirement to become familiar with systems approaches and models. Conflict is a chaotic human endeavor; these constructs
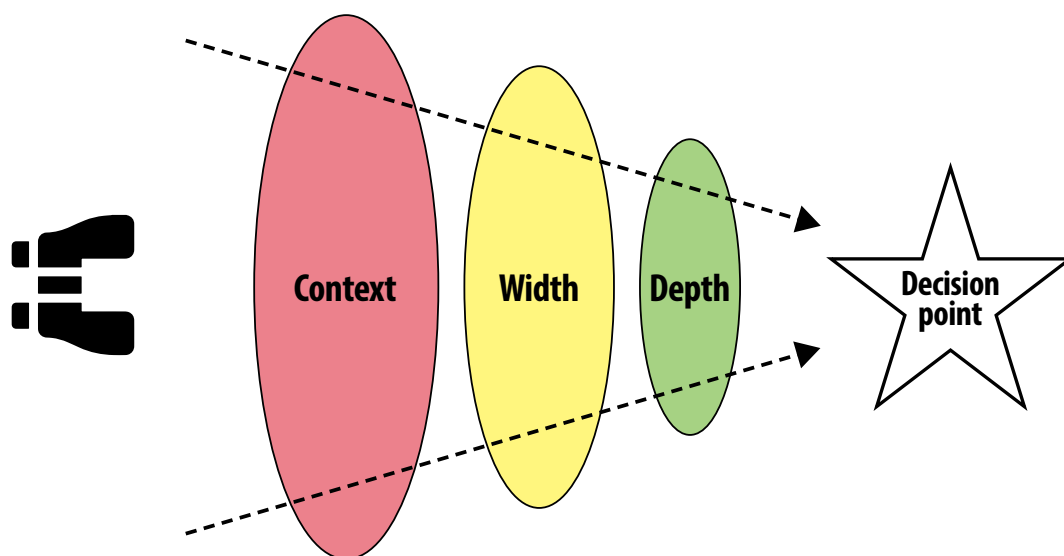
(Figure by author)

Figure 3. Context, Width, Depth: A Process of Comprehension for Thinking above the Tactical Level

constructs include the warfighting functions, mission and operational variables, numerous principles and tenants, and DIME. Step five is to become familiar with these concepts.

Conflict is far too chaotic to be reduced to any single organizational framework that can be applied to all situations. Remember, at its core, conflict is always a human endeavor, and as such, cannot be forced neatly into categories.[21] Operational or strategic systems and models are not set formulas, they simply offer a method to address the complexity of the subject in a coherent manner. Additionally, since all leaders were raised on these models, they also serve to organize and communicate operational and strategic messages to a larger audience.

No single system or model should be used to approach topics above the tactical level; rather, they can all be used to varying degrees to understand complex scenarios. In addition, one should avoid thinking about

serve to assist in organizing one's understanding of what is occurring but cannot provide scientific facts to act on. Utilizing the self-development domain through a regime of study will aid with seeing beyond the borders of these models and forming linkages between them, the conflict continuum, ROMO, and science and art.

Step Six: Adopt a Process of Comprehension to Aid with Thinking above the Tactical Level

The last step toward thinking above the tactical level is the adoption of a process of comprehension. Approaches toward this are as numerous as the various systems and models already discussed. Some, such as the Army design methodology, can be extremely complicated, overwhelming, and time consuming. Regardless of what processes are adopted, in order to assist with thinking above the tactical

level, a military leader must have a frame of reference that he or she can repeatedly rely on and exercise throughout his or her career.

To illustrate one possible process of comprehension, the historical framework of Sir Michael Howard is worth exploring. To truly understand historical lessons, he advises that one should study the topic via width, depth, and context.[22] Using a slight variation on this concept, the methodology is reordered to context, width, and depth. When presented with a tactical dilemma, too often military leaders do the opposite. They react and attack the issue in depth, rather than first taking a brief pause to understand the context and width in which the tactical issue is occurring. This, of course, results in decision-making in a vortex that overlooks the possible operational and strategic implications of that decision.

Simply executing this three-step mental exercise will greatly aid with thinking beyond the tactical level in every situation. It does not need to be a lengthy process or take away from decisive action; leaders just need to take a moment to quickly frame their thought process to appreciate the context, width, and depth of the situation before acting (see figure 3, page 83). This brief mental exercise will help prevent hasty direct and tactical decisions that can result in unforeseen negative operational and strategic consequences.

Step six of the process builds on everything executed thus far. The context, width, depth model is just one suggestion and is not a magic formula. It does, however, provide a good practical start point in developing the ability to think above tactics and connect to the operational and strategic levels. Many other comprehension models exist; it is up to the individual to explore them and determine which one works best. Regardless of which process is used, leaders must adopt a process of comprehension that allows for a brief mental pause before tactical decisions.

Conclusion

Becoming an effective operational and strategic thinker is not an exclusive club that only a select few can join. Nor is it solely the result of the best military academies, PME, or mentorship by established leaders in the field. As noted by British Field Marshal Sir William Slim in World War II, the two best operational and strategic "high-class" planners who ever worked for him were an academic from Oxford and an American National Guardsman.[23] "They were both of them absolutely first class," Slim wrote in *Military Review*, "And you must have high-class planners."[24]

Through the self-development domain, one can become an effective operator above the tactical level; and though the six-step practical process to building a foundational understanding and confidence to think above the tactical level may seem overly simplistic, failure to have a solid grasp of the topics mentioned will result in one being completely overwhelmed when trying to study operational and strategic theories. The six-step process assists with building a holistic view of our multidimensional world, conflict, and all of its influencers. With the multitude of operational and strategic concepts, doctrine, and definitions that exist, the six-step practical outline and the knowledge base it provides will assist in navigating through these complex topics.

In addition, those who follow the six steps will be enabled to better read and comprehend operational and strategic narratives that are issued from higher echelons or civilian theorists. These narratives are important because they often form the commander's intent and translate and feed into the commander's guidance, military end states, and termination criteria. By not understanding the subject matter established through the self-development domain discussed in these narratives, leaders will be ineffective in forming linkages and translating written guidance into action.

Finally, in today's era of rising great powers, "a number of complicating factors have arisen, including mass armies, qualitatively diverse means of combat, highly sophisticated technology, very deep columns, the difficulty of deployment into combat formation, and a complex supporting rear."[25] This statement, written in 1936 by Russian Brigade Commander Georgii Samoilovich Isserson, one of the fathers of modern-day operational thought, predicted what future conflict would look like with surprising accuracy. His prediction in the interwar years can easily be overlaid with modern MDO theories. Isserson further realized that to understand the complexities of possible future LSCO, one must disregard frameworks that claim to produce concrete results; rather, leaders must understand them through a general theoretical context

assisted by science.[26] Today, his assessment is still valid and recognizable as the blend and balance between the comprehension and appreciation of art and science at the operational and strategic levels of war.

Possessing the basic knowledge necessary to be comfortable and confident at the tactical level allows one to progress toward studying more complicated operational and strategic themes. However, the six-step practical techniques to think above the tactical level—leverage the self-development training domain, understand doctrinal terms and definitions,

recognize the conflict continuum and ROMO, appreciate the difference between science and art, become familiar with systems approaches and models, and adopt a process of comprehension that works for the individual—will assist leaders in making the transition to operational thought. This, in turn, will make it easier to then move toward understanding strategic concepts. This becomes especially important as the Army prepares to operate in today's contemporary environment of great power competition and possible LSCOs within the MDO concept. ■

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Popular political cartoon of "Uncle Sam" promulgated on many Russian social media sites. (Image used with permission by Vitaly Podvitski, http://www.podvitski.ru/index.php)

How the Russian Media Portrays the U.S. Military

Maj. Ray Finch, U.S. Army, Retired

This article focuses on how today's Russian media portrays the U.S. military. The thesis is relatively straightforward. Over the past decade, the Kremlin-sponsored Russian media have inundated the Russian information space with an anti-American message, particularly anything associated with the U.S. military. They have created a narrative built around the assertion that the United States has been using

all of its resources (military, economic, diplomatic, information, etc.) to prevent Russia from regaining its superpower status. Since Russian military personnel are subject to this same anti-American information diet, the Kremlin's anti-U.S. propaganda campaign has transformed the U.S. military into the primary enemy for the Russian soldier. This article will review some Russian sources of anti-American propaganda and

consider a handful of implications that may stem from this negative portrayal.

During the last Russian presidential election (March 2018), members of the Russian military overwhelmingly supported President Vladimir Putin. Indeed, the official news agency Interfax reported that nearly three thousand Russian military personnel in Syria voted unanimously for Putin.[1] Minister of Defence of the Russian Federation Gen. Sergei Shoigu further claimed that, overall, military "personnel showed high civic activity and demonstrated unconditional support for the incumbent Russian president, Supreme Commander-in-Chief Vladimir Putin, with 89.7 percent of the servicemen and members of their families voting for him."[2] While it is unclear how Shoigu procured this information, there is no question that Putin is genuinely popular among those in uniform.

The military's admiration for Putin appears to be well-founded. Over the past decade, the Kremlin leadership has worked diligently both in modernizing the armed forces and in restoring the status and reputation of military personnel (see sidebar).[3] As defenders of the Russian state, soldiers have been returned to their revered pedestal. The Kremlin has been largely able to transform the discredited image of the Russian soldier, which had developed after the collapse of the Union of Soviet Socialist Republics (USSR), into that of proud and professional "polite green man."[4]

Alongside the general improvements for military personnel in living conditions, pay, training facilities, and equipment, the Kremlin leadership has worked overtime to create a narrative that places primary importance upon the readiness of the country's armed forces. A critical part of this narrative is the notion that Russia is increasingly surrounded by enemies who are not only working to prevent the country from restoring its superpower status but also have aggressive designs against it.[5] This fear of foreign aggression not only elevates the stature of the Russian military but also tends to dampen domestic concerns regarding the Kremlin's unique form of "sovereign democracy."[6] There remains a key linkage

Some of the over thirteen thousand personnel marching in the military parade 9 May 2018 that marked the seventy-third anniversary of Victory in the 1941–45 Great Patriotic War at the Red Square in Moscow. (Photo courtesy of the Office of the President of Russia)

The Life of a Russian Soldier

Overall living conditions for military personnel have improved since the latest round of reforms, which began in 2008. Officer and contractor pay is largely competitive with other government agencies. Living conditions for one-year draftees (e.g., barracks, food, uniforms, etc.) have become better. The waiting list for adequate housing for military officers has finally shrunk to manageable levels. Discipline within the ranks has improved, and there are far fewer reported cases of hazing. The military continues to develop a noncommissioned officers' corps to provide training expertise, discipline, and continuity within the contract and draftee ranks.

While a one year conscription period is still a requirement for Russian men (ages eighteen to twenty-seven), the Kremlin has enacted legislation that provides incentives for some young Russian men to fulfill their military obligation while enrolled in college. Select college students will gain credit for military service by working on projects related to the country's defense industry. Legislation has also been introduced whereby future government service and the right to travel abroad are contingent upon completing some form of military service. This legislation and the improved living conditions for conscripts have helped to both reduce draft evasion and increase the appeal of military service.

There have been similar improvements in the realm of military equipment and training facilities. Significant funding has been allocated toward modernizing everything from the soldier's basic kit to advanced weapon systems. Russia continues to develop modern combined arms training facilities where military personnel can test the latest tactics and equipment in a realistic training environment. The confusion after the 2008 reform of the military's education system (where nearly 75 percent of the military schools were closed or consolidated) has subsided, and the reorganization has resulted in greater efficiency and less redundancy. Overall command and control is now exercised by a massive new national military control center in Moscow. On paper at least (and on the virtual screens of the new control center in Moscow), there is much greater unity of effort among the various Russian security forces (e.g., Ministry of Internal Affairs, Federal Security Service, Emergency Ministry, etc.). For a more detailed examination of changes to the Russian military under Putin, see *Vladimir Putin and the Russian Military*, available at https://community.apan.org/wg/tradoc-g2/fmso/m/fmso-monographs/200392. **–Author**

Vladimir Putin meets with heads of Russian print media and news agencies in the editorial office of the *Komsomolskaya Pravda* newspaper in Moscow prior to the 13 January 2018 Russian Press Day. (Photo courtesy of the Office of the President of Russia)

between maintaining domestic political legitimacy and the Kremlin's aggrieved foreign policy narrative. In this narrative, the United States and its military in particular are featured as the paramount adversaries.

Evidence of this negative American portrayal was drawn from both traditional media and from various individual Russian social media sites. It is important to note that since mid-2014, Russian active duty personnel have been forbidden from maintaining a social media presence. Since then, the Russian Ministry of Defence has enacted policies that greatly restrict information flow on social media sites among individual service members. As such, this article relies on the views of Russian journalists who cover military affairs, experts and pundits, retirees, and those not subject to Kremlin media restrictions. It also does not examine non-Russian media sources that requote interesting communications in which Russians express opinions of the American military outside of the negative narrative.[7]

Brief Historical Background

Over the past several years, the Kremlin leadership has rewritten the narrative surrounding the collapse of the USSR and what transpired in Russia during the chaotic 1990s.[8] Instead of seeing the collapse and

difficult transition to a new state as the result of a failed political and economic system, the Kremlin emphasizes the nefarious role that the United States played in weakening Russia. In its modern rendition, the United States conspired to bring down the USSR and then continued to humiliate and exploit a weakened Russia during the painful decade of the 1990s. From the Kremlin's perspective, the United States had adopted a unilateral approach toward global security, believing that it could act with impunity wherever it wanted. This sense of humiliation and resentment toward the United States formed the nucleus of the Kremlin's chronicle of recent history.[9] Whether expanding the North Atlantic Treaty Organization (NATO), sponsoring "color revolutions," or continuing plans to enhance European defense (e.g., ballistic missile defense systems), Kremlin propaganda has been built around numerous historical examples that illustrate the need to defend Russia from this same American threat.[10]

One key event occurred just prior to Putin's rise in the Kremlin. Against a background of Russian economic collapse and political paralysis, the United States and other NATO countries began offensive military operations (without a United Nations resolution) against Serbia in March 1999. The argument that Western forces were trying to halt Serbian aggression against ethnic Albanians in Kosovo carried little weight in Moscow. Russians

Dmitry Kiselyov, head of the Kremlin's Rossiya Segodnya news agency and a chief Russian propagandist, projects an image of a nuclear mushroom cloud and boasts of Russia's ability to turn the United States into "radioactive dust." (Screenshot of Russia 1 news broadcast via Mirovich, Maxsim. "Как люди превращаются в пропагандистов" [How people are transformed into propagandists], 6 February 2019, https://maxim-nm.livejournal.com/479126.html)

bemoaned this unilateral use of air power against their Serb-Orthodox brothers. For the Russian leadership, this was a cold slap in the face, perhaps best personified by Russian Prime Minister Yevgeny Primakov's decision to turn his Washington-bound plane around in midair when notified that NATO had started bombing Serb targets.[11] This conflict would prove to be a watershed in Russia's later foreign and military policy, proving to the Kremlin leadership that Russian concerns would only be heeded if backed by strong and combat-ready military forces.[12]

Control over the Media

One of Putin's first priorities was regaining control over the major media outlets in Russia, and, over the past decade, he has exploited the strategic heights of the

Russian information sphere to transmit an anti-American/anti-Western message. Today, nearly all of the major Russian television, radio, and newspaper outlets are under indirect Kremlin control.[13] The most important sector is television, where upward of 90 percent of Russians still receive some portion of their news.[14] But it also includes the major press outlets: ITAR-TASS and RIA Novosti, which are the rough equivalents to Associated Press and Reuters.

The Kremlin has also developed a robust presence on the internet and within major Russian social media sites. The result is a multivector approach, harnessing everything from morning talk shows to evening newscasts, from pop stars to venerable academics, from blogs to Twitter accounts, from blockbuster movies to special documentaries—all continually hammering home, in the widest variety of formats—the Kremlin-approved message. For those who have electricity and are plugged in to the Kremlin's media, there is the potential for total media saturation. Nor is this crude propaganda. The Kremlin has invested considerable resources into transforming their portion of the Russian information space into a slick, entertaining, often informative landscape that appeals to both young and old.[15]

Besides using their daily news programs to pound this message home, over the past decade, the Kremlin-sponsored media have developed an untold number of talk shows where "experts" discuss and explain what is *really* happening in the news.[16] These programs are an interesting mix of propaganda, analysis, entertainment, and discussion, and they are designed more to incite emotions and provoke indignation than to inform. Watching these programs, one might believe that Russians enjoy complete freedom of speech; watch for a longer period and one will discover that the Kremlin's message is merely strengthened under the guise of open debate. Not surprisingly, the United

Figure 1. Opinion Poll about Russia's Top Enemies, May 2017

States and its purported "wicked designs" against Russia is a favorite topic of discussion. They have also developed similar programs that address and expound upon general military topics, with the United States and NATO usually depicted as the primary threats.[17] Figure 1 reflects the effectiveness of this messaging.

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To reiterate, the Kremlin does not just employ the media to get its message across. It has created an all-encompassing, many-layered strategy that includes using the Russian Orthodox Church, the Academy of Sciences, nongovernmental organizations, the school system, Russian businesses, think-tanks, international conferences, modern movies, popular songs, and militarized youth groups, all designed to transmit and reinforce the Kremlin's anti-Western rhetoric.[18]

The Russian Military and Social Media

As of mid-2019, the internet in Russia is still largely free of government control, but there are worrying signs.[19] Recent statistics claim the upward of 75 percent of the Russian population are to some degree connected to digital communication.[20] While there have been attempts over the past several years to limit what Russians can post on the web and access on various internet platforms, they are still able to access most sites. Internet anonymity is a different story.[21] Over the past few years, there have been a number of high-profile cases where individual Russian internet users have posted information that the government deemed as harming the country's national security.[22] The prosecution of these cases has made most Russians wary of posting anything that may be used against them.

This openness toward internet usage and social media does not apply to Russian military personnel. Up until Russia's armed aggression against Ukraine in early 2014, Russian military personnel were avid users of various social media sites (e.g., VKontake, Odnoklassniki, Facebook, etc.). This usage came to an abrupt halt after

foreign researchers were able to demonstrate that Russian soldiers were indeed involved in the fighting in southeast Ukraine, especially after the downing of Malaysia Airlines Flight 17 in mid-July 2014. Thanks to photos and other data posted by Russian military personnel, it was clear that Russian forces were actively involved in the fighting and were partially responsible for the tragedy behind the destruction of the aircraft.[23]

Gauging the Pulse of the Russian Military

While information gleaned from social media sites used by Russian military personnel has largely dried up, there are still a number of other sources that can be exploited to gauge what military personnel are thinking. Besides the sites sponsored by the Russian Ministry of Defence (e.g., Zvezda TV and *Krasnaya Zvezda* newspaper), there are a number of military-themed programs on major Russian media, as well as websites, blogs, and publications that reflect current Russian military thinking.[24] A considerable portion of the information contained in this paper is derived from these sources.

One source in particular, the Komsomolskaya Pravda Radio program, *Voennoye Review* (Military Review), provides a good example of current Russian military attitudes.[25] This hour-long program airs nationwide, Monday through Friday, and is hosted by two retired Russian army colonels, Viktor Baranets and Mikhail Tymoshenko.[26] It usually consists of a short introduction on a military-related topic with the remainder of the program devoted to answering questions from the call-in audience. Occasionally, they will host senior military personnel who will also answer questions from the call-in audience. As this program is recorded live, it often captures the raw sentiments of both the hosts and the audience.

Unlike most official Russian sources, Barenets and Tymoshenko have no problem expressing their open disdain and scorn toward the United States and its military. Not only do they constantly repeat the Kremlin's assertion that Washington is intent upon preventing Russia from recovering its superpower status, but, in nearly every episode, they also find grounds to disparage how the United States conducts military operations.[27] While this particular radio program might not be all that influential within the Russian information space, it may accurately reflect popular sentiments (to include those in the Russian armed forces) toward the U.S. military.

There is likely a generation factor among Russian military personnel and how they view the American military. The older generation who were influenced by Soviet propaganda may be more inclined to embrace the current Kremlin rhetoric. Even though some of these more senior military personnel may see through the current Kremlin propaganda, to speak out could have negative career consequences. While younger military members have been exposed to the same anti-American, patriotic onslaught of past decade, they may be more

An example of a meme circulated on Russian social media sites that compares U.S. and Russian soldiers stationed in combat zones. Lower caption: "One of these (U.S. soldier) needs to be fed, dressed, armed, paid, etc. …, while for the other (Russian soldier), it's enough to give an order to 'move out' and he fulfills it at any cost." (Image courtesy of Elena Zayulina, В Северном Причерноморье [In the Northern Pontic], Нокки и я [Knock and me], 11 November 2016, http://mariantas.ru/v-severnom-prichernomore/)

proficient in relying upon other, less tendentious media sources. Indeed, recent survey data suggests that Russian youth, while claiming to be "patriotic," are increasingly unwilling to make a genuine sacrifice for their country.[28] However, once a young Russian enters the military, the information diet may change his or her perspective.

The American Military as Portrayed in Russian Media

For the past few years, the United States has been portrayed in the Russian media as the primary source

of much of the world's instability. According to Kremlin-sponsored pundits, the United States deliberately sows unrest (often under the guise of liberal democracy promotion) to maintain its global hegemony.[29] After its presumed victory at the end of the Cold War, the United States assumed the role of the "indispensable nation," disregarding the global security structures built after World War II. According to Russian commentators, because the United States controls the global money supply, Washington has been able to convert its economic advantage into sheer military power.[30]

The Kremlin leadership often points out the wide discrepancy between how much the United States spends on the military compared to the rest of the world.[31] They see a direct nexus between dominant U.S. military power and the status of the U.S. dollar as the global reserve currency.[32]

Against their aggrieved historical backdrop, the American military has been portrayed in a negative light within the Russian media. According to commentators like Baranets, Russian military leaders are aware that the United States spends considerably more on its military. They use this discrepancy to lobby for additional funding, while at the same time asserting that defense expenditures are not the only barometer of combat readiness (see figure 2). A key theme within much of the Russian information space is the belief that given their long history of repelling foreign invaders, Russia has experience, wisdom, and truth on their side. These Russian leaders would agree with Napoleon who suggested, "In war, moral power is to physical as three parts out of four."[33] A recent study by Global Firepower has suggested that despite Russia's much smaller defense budget, it is nearly as powerful (militarily) as the United States.[34]
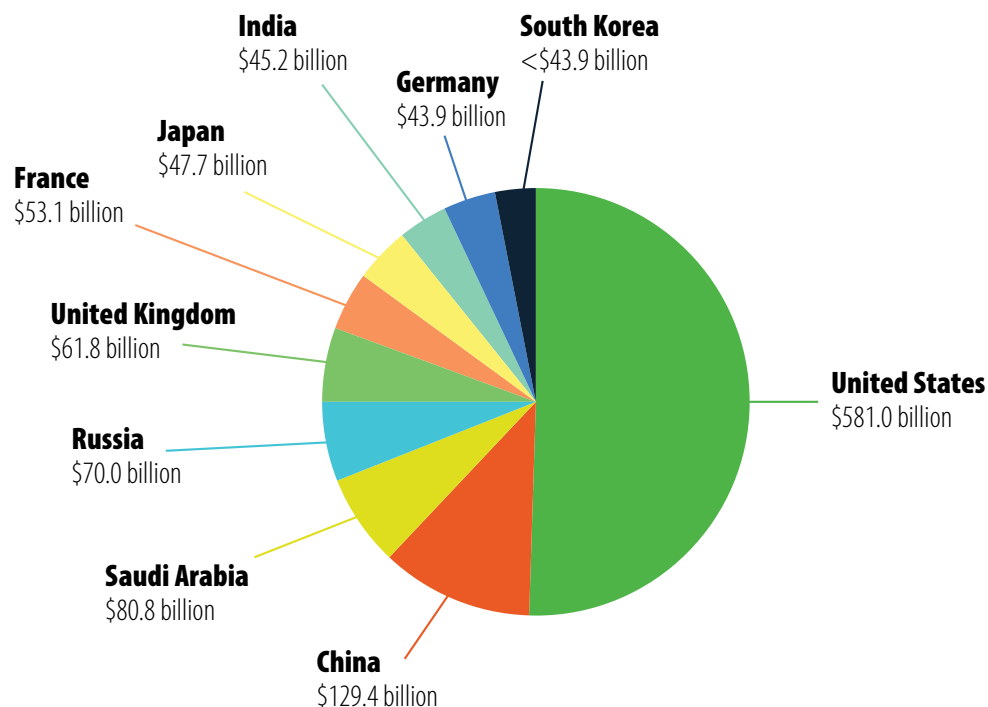
Modified version of original figure by Der Statistiker via Wikimedia Commons. (Data source: International Institute for Strategic Studies, 23 July 2015)

Figure 2. Military Expenditures by Country in 2014

While the Russian soldier may be impressed with images and videos of drone strikes and some of the other high-tech U.S. arsenal, he or she is likely less overwhelmed with American military strategy. The Russian media have portrayed U.S. operations in Iraq, Afghanistan, Libya, Syria, and elsewhere largely as failures, where the United States has only exacerbated problems in these countries.[35] Every botched American operation, every errant missile strike, every case of torture or criminality perpetrated by U.S. military members, and every scandal or leak that reflects poorly on U.S. Armed Forces receives the widest possible exposure within the Russian media.[36] The Kremlin's narrative highlights both the seemingly lack of a comprehensive military strategy and what they consider as the hypocrisy of promoting American democracy via military power.[37]

The American military is often portrayed as being over concerned with safety and political correctness, while being soft and dependent upon a huge logistical tail.[38] The American soldier is depicted as unwilling to fight if he or she is not supplied with all the comforts of home.[39] At the official level, Russia remains a very

traditional, conservative country, and the population of which regards gender equality, gay rights, and women in combat positions as both weak and decadent.[40] The Russians have coined a derogatory slang term for American soldiers, "пиндосы" [pindosy], using it to mock and belittle Americans in uniform.[41]

The superiority of Russian weapon systems is also a popular topic within the Russian media.[42] The media are constantly claiming that Russian modern, conventional weapon systems "have no analogy in the West."[43] The same braggadocio exists in the nuclear realm. Over the past few years, the Russian media have repeatedly reminded their audience of the country's ability to transform the United States into a parking lot or as the head of Rossiya Segodnya news agency Dmitry Kiselyov put it, "radioactive dust."[44]

Implications for the Russian Soldier

Perhaps the first and most important implication is the belief among Russian soldiers that their country is already at war.[45] Some in the West want to draw a clear distinction between war and peace. The current Kremlin leadership does not see this divide.[46] The message it has portrayed over the past several years is that Russia has been engaged in a defensive "war" against the West/United

States, which remains intent upon preventing Russia from regaining its superpower status. Using economic, information, diplomatic, and other means, the Russian soldiers believe that their country has already been "attacked" by the West/United States.[47] Having repeatedly been taught that Russia is engaged in a defensive struggle

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A world aching for peace & stability can no longer afford NATO

John Wight has written for a variety of newspapers and websites, including the Independent, Morning Star, Huffington Post, Counterpunch, London Progressive Journal, and Foreign Policy Journal.

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British army armoured vehicles Warrior at the Spring Storm military drill near Sillamae, Estonia May 7, 2019 © REUTERS/Ints Kalnins

Among the most prominent current practitioners of the propaganda devices discussed in the adjoining article is RT (formerly named Russia Today), a sophisticated Russian-government-funded international television network that has been developed to convey globally Russian propaganda infused in news bulletins, documentaries, and other conventional Western-style television programming to audiences outside of Russia. As such, it provides both television programming and internet content in multiple languages, including German, French, Arabic, Spanish, and English. Though posing as a legitimate news outlet, RT's official Russian-government sponsorship is poorly concealed, as its twenty-four-hour per day programming is both relentless in its anti-American and anti-Western orientation as well as in its overt advocacy of Russian-government policy objectives. RT's editor in chief has reportedly asserted that RT programming is synchronized to support the Russian army and Russian Ministry of Defence in its effort to wage information war against the West. (Screenshot from RT website, https://www.rt.com/op-ed/459407-nato-russia-libya-peace/)

against U.S./Western aggression, they honestly believe that theirs is a just struggle and that truth and righteousness are on the Russian side.

The prevalent mood in Soviet society after World War II could be summed up as "do everything possible to avoid another war."[48] That generation had experienced the full horror of modern conflict, and even after the USSR attained superpower status, Soviet society understood that war should be avoided at all costs. In contrast, this sentiment may no longer be prevalent, particularly among the younger generation, who have been taught that war is a viable option.[49] Believing that their country is now under threat from the United States, these young Russians are increasingly prepared to take up arms to fight against the "enemy."

Over the past decade, young Russians have been exposed to a persistent media message that claims their country has been under attack from the West, and the United States in particular.[50] A portion of these young Russians now wear military uniforms and are prepared to challenge U.S. claims of hegemony (the Pentagon map dividing the world up into American military districts drives Russians crazy).[51] They regard the American military as the primary threat and are increasingly ready to defend their country's interests.

It is not so much that the Russian soldier regards the United States as an enemy, as the growing belief that in a conflict between Russia and the United States/NATO, Russia would prevail.[52] Up to the highest levels, Russian military personnel may have fallen victim to believing their own propaganda as to the superiority of their military power. Recent poll results suggest that, in a conflict between Russia and the United States/NATO, Russian military personnel believe they would prove victorious. This bellicosity is ever present in the Russian media, where they assert that Russia is increasingly ready for a fight. This growing confidence in their military strength could lead to greater risk taking and, ultimately, could have catastrophic consequences for both countries.[53]

Implications for the U.S. Military

The U.S. military has already begun to recalibrate and adjust to an increased threat from the Russian military and the Kremlin's associated information operations. This increased focus on measures to thwart possible Russian aggression needs to be balanced by both an awareness of escalatory dangers and a willingness to cooperate where security interests align. U.S. military personnel should understand that their Russian counterparts' global narrative is far different from their own. Where Americans might refer to "democracy promotion" or "concern for human rights," a Russian would see naked aggression or geopolitical maneuvering. U.S. military personnel should understand that their Russian counterparts question U.S. claims of global dominance and will not be intimidated by threats of "shock and awe."

Should top-level relations between Russia and the United States improve, it is conceivable that the U.S. military will not be portrayed as an adversary. Given the Kremlin's indirect control over the major Russian media, they could be directed to adopt a more balanced and objective approach toward today's "enemy." This agility in changing the prominent Kremlin narrative was on display after Turkish forces downed a Russian aircraft that had briefly violated Turkish airspace in November 2015. Prior to this incident, Turkey and Russia had enjoyed decent relations. The Russian media quickly transformed the image of the Turkish leadership into a cabal of backstabbing cowards. Russia broke off many relations with Turkey (to include tourism) and levied economic sanctions. However, less than a year later, after the Turkish leadership apologized for the incident, the Russian media rhetoric toward Turkey quickly regained its balance.[54] Such a media transformation might occur if Moscow and Washington were to improve relations.

Nevertheless, despite economic challenges, there are currently no signs that the Kremlin leadership has modified its strategic objectives of weakening the United States and NATO. Employing the same rigor and many of the same tools it has used in influencing the mind of its own citizens, the Kremlin remains determined to debilitate the American/Western belief in democracy and the rule of law. The success of the Kremlin's endeavor will depend not only on developing a realistic strategy to defend against Russian information operations but to a large degree on how well the citizens of the United States and other Western countries can live up to the democratic values they profess. This is doubly true for those who are called upon to defend these values. ∎

Notes

1. "100% российских военных в Сирии проголосовали за Путина" [100% of Russian soldiers in Syria voted for Putin], Interfax, 19 March 2018, accessed 30 April 2019, http://www.interfax.ru/elections2018/604226.

2. "Шойгу заявил, что почти 90% военных и членов их семей проголосовали за Путина" [Shoygu announced that almost 90% of the military and their families voted for Putin], TASS, 20 March 2018, accessed 30 April 2019, http://tass.ru/armiya-i-opk/5047699.

3. Ray Finch, "Vladimir Putin and the Russian Military," *South Central Review* 35, no. 1 (Spring 2018): 48–73.

4. "Polite green man" is the moniker developed by the Russian media to describe Russian military personnel during and after the annexation of Crimea.

5. The Russian Ministry of Defence published the results of an undated poll on its website, where over 75 percent of the military personnel surveyed believed that their country was under threat from other countries. See Russian Ministry of Defence, "Опросы: Министерство Обороны Российской Федерации" [Poll: Ministry of Defence Russian Federation], Наука [Science], accessed 5 May 2019, http://ens.mil.ru/science/socio-logical_center/actual.htm; for a more general survey of the entire Russian population regarding threat awareness, see "Если завтра война: опрос показал, какой военной угрозы боятся россияне" [If tomorrow is war: Poll shows which countries Russians fear military threat], *Apostrophe* (website), 28 June 2017, accessed 30 April 2019, https://apostrophe.ua/news/world/ex-ussr/2017-06-28/esli-zavtra-voyna-opros-pokazal-kakoy-voennoy-ugrozyi-boyatsya-rossiyane-/100079.

6. It is impractical to discuss genuine democratic procedures and high-level government corruption when the American "enemy" is at the gate. The term "sovereign democracy" was coined by Kremlin presidential aide Vladislav Surkov in 2006. Generally speaking, it refers to the notion that Russia has a unique form of democracy that is largely managed by the Kremlin elite. To this day, the Kremlin leadership remains wary of the revolutionary concept that the power of the state is derived from the consent of the governed.

7. Thomas Gibbens-Neff, "How a 4-Hour Battle Between Russian Mercenaries and U.S. Commandos Unfolded in Syria," *New York Times* (website), 24 May 2018, accessed 30 April 2019, https://www.nytimes.com/2018/05/24/world/middleeast/american-commandos-russian-merce-naries-syria.html. Some have suggested that the 7 February 2018 U.S. air attack on Russian mercenaries near the Syrian town of Deir al-Zour once again impressed upon the Russians the formidable military dominance of the United States. While U.S. air assets were able to pummel these targets with impunity, the mission would have likely been much more difficult had regular Russian forces been involved.

8. Antiwestern sentiment within Russia stretches back centuries, but for a good portion of the current generation of political and military leaders, their formative experience was spent in the declining years of the Soviet Union. Much of today's propaganda is built on the anti-American sentiments of the Cold War.

9. Our hypothetical Russian soldier would have been born about this time, and his family likely experienced the economic distress, criminality, and confusion that stemmed from the Soviet Union's collapse and transition to a new state.

10. "Russian National Security Strategy, December 2015 – Full-Text Translation," Instituto Español de Estudios Estratégicos, accessed 2 May 2019, http://www.ieee.es/Galerias/fichero/OtrasPublicaciones/Internacio-nal/2016/Russian-National-Security-Strategy-31Dec2015.pdf. While the Kremlin has not yet formally proclaimed the United States as an "enemy," it has certainly exploited Russian media to create this impression. In its latest national security strategy (2015), the Kremlin identifies NATO as a threat to Russian security. In the current Kremlin calculus, NATO is merely a front organization for continued American aggression.

11. Richard C. Paddock, "Primakov Does U-Turn Over Atlantic, Heads Home," *Los Angeles Times* (website), 24 March 1999, accessed 30 April 2019, http://articles.latimes.com/1999/mar/24/news/mn-20482. While many Americans have forgotten about what occurred in Kosovo in 1999, the topic has remained at the forefront in Russian military thinking. The attempt by Russian forces to seize the airport in Pristina has been enshrined as an early example of the necessity of using armed forces to protect the country's interests.

12. For a thorough examination of the current Kremlin leadership's grievances against America, see Michael Kirk et al., "Part Two," 1 November 2017, in *Putin's Revenge*, podcast, Public Broadcasting Service, accessed 2 May 2019, https://www.pbs.org/wgbh/frontline/film/putins-revenge/.

13. There have been numerous, in-depth studies that describe the Kremlin's control over the Russian media. For a brief sampling, see Katherine Ognyanova, "Careful What You Say: Media Control in Putin's Russia – Implications for Online Content," *International Journal of E-Politics* 1, no. 2 (2010): 1–15; Peter Pomerantsev, "Russia: A Postmodern Dictatorship?," Transitions Lecture Series (London: Legatum Institute, October 2013), accessed 2 May 2019, https://li.com/wp-content/uploads/2019/03/pomer-ansev1_russia_imr_web_final.pdf; "The Russian Media Landscape," *Russian Analytical Digest*, no. 123 (21 February 2013), https://www.files.ethz.ch/isn/160446/Russian_Analytical_Digest_123.pdf.

14. *Media Consumption in Russia: Key Trends* (Moscow: Deloitte CIS Research Centre, January 2016), accessed 2 May 2019, https://www2.deloitte.com/content/dam/Deloitte/ru/Documents/technology-media-telecommu-nications/media-consumption-in-russia-2015-en.pdf.

15. Presidential Decree No. 203, "About the Strategy for the Development of the Information in the Russian Federation for 2017–2030," 9 May 2017, accessed 2 May 2019, http://kremlin.ru/acts/bank/41919. In May 2017, the Kremlin published its information strategy, titled *The Strategy for the Development of Information Society in the Russian Federation for 2017–2030*. It is filled with all sorts of enthusiastic rhetoric on the need to transform Russia into a "knowledge-based" country. There is no mention of the state-use of propaganda.

16. The list of these programs is long and continues to expand/transform. Some of the most popular include Воскресный вечер с Владимиром Соловьёвым [Sunday evening with Vladimir Soloviev], http://vsoloviev.ru/sunday/; *Pravo Znat* [Right to know], http://www.tvc.ru/channel/brand/id/1756/show/episodes; *Moment Istiniy* [Moment of truth], https://mo-ment-istini.com/; and право голоса [Pravo Golosa; Right to speak], http://www.tvc.ru/channel/brand/id/36/show/episodes.

17. Again, the list is long and ever-changing, and besides the Zvezda television station dedicated to covering military topics, there are programs like *Armeiskiy Magazine* [Army Magazine], *Voennoye Taina* [Military Secret], *Genstab* [General Staff], *Voennoye Review* [Military Review], and *Voennaya Programma A. Slatkova* [A. Slatkov's Military Program].

18. Much has been recently written about Russia's use of "soft-power" tools. For one study, see Antoaneta Dimitrova et al., "The Elements of Russian Soft-Power: Channels, Tools, and Actors Promoting Russian Influence in Eastern Partnership Countries" (working paper, EU and Eastern Partnership Countries: An Inside-Out Analysis and Strategic Assessment [EU-STRAT], Berlin, July 2017), accessed 2 May 2019, http://eu-strat.eu/wp-content/uploads/2017/07/WP4.pdf.

19. The Kremlin has been moving toward greater control over the internet; see, for instance, Dmitriy Shestoperov and Natalya Korchenkova,

"Суверенный рунет набирает скорость" [Sovereign Russian internet is gathering speed], *Kommersant Online*, 18 January 2019, accessed 30 April 2019, https://www.kommersant.ru/doc/3855920.

20. Eliza Mills and Lizzie O'Leary, "4 Things to Know about Russian Internet Usage," Marketplace, 13 April 2018, accessed 30 April 2019, https://www.marketplace.org/2018/04/13/tech/4-things-know-about-russian-internet-usage.

21. Ksenia Idrisova, "Explainer: What is Russia's New VPN Law All About?," BBC News, 1 November 2017, accessed 30 April 2019, http://www.bbc.com/news/technology-41829726.

22. Robert Coalson and Dmitry Volchek, "Russian Youth Pays Price for Speaking out over Ukraine," RadioFreeEurope/RadioLiberty, 12 June 2015, accessed 30 April 2019, https://www.rferl.org/a/russia-youth-anti-war-ukraine-persecution/27069023.html.

23. Much has been written about this topic; see, for instance, Halya Coynash, "Russia Cracks Down on Soldiers' Social Media Pages that Expose Russian War Crimes in Ukraine," Human Rights in Ukraine, 26 February 2018, accessed 30 April 2019, http://khpg.org/en/index.php?id=1518543609.

24. For a brief sampling of Russian websites that deal with military topics, see Zvezda TV (http://www.tvzvezda.ru/); newspapers—*Krasnaya Zvezda* (http://www.redstar.ru/), *Nezavisimoye Voyennoye Obozreniye* (http://nvo.ng.ru/), and *Voyenno-Promyshlennyy Kuryer* (http://vpk-news.ru/); and military—Interfax News (http://www.militarynews.ru/).

25. *Voennoye Review* [Military Review] with Col. (retired) Viktor Baranetz, KP Radio, https://www.kp.ru/radio/radio-boronetz/.

26. Viktor Baranetz and Mikhail Tymoshenko both served in the Soviet and then Russian military. Baranetz served as a military journalist and the author was unable to find Tymoshenko's military specialty. For some period, Baranetz served as a "trusted envoy" for Putin.

27. This topic surfaces in nearly every episode. For a complete archive of the program, see KP Radio, https://www.kp.ru/radio/radio-boronetz/. For a typical example where Baranetz disparages the U.S. military, listen to the first ten minutes of this episode, "In the United States, They Were Terribly Upset That 'Tomahawks' Got into Russia" [in Russian], KP Radio, 28 April 2018, accessed 2 May 2019, https://www.kp.ru/radio/26825.7/3862383/.

28. "Патриотизм уже не в моде? Молодёжь не хочет 'умирать за Усманова и Абрамовича'" [Is patriotism out of fashion? Young people do not want 'to die for Usmanov and Abramovich'], *Noviye Izvestiya*, 9 January 2018, accessed 30 April 2019, https://newizv.ru/article/general/09-01-2018/patriotizm-uzhe-ne-mode-molodezh-ne-hochet-umirat-za-usmanova-i-abramovicha.

29. In the current prevalent Kremlin realpolitik propaganda, "democracy" is a mere façade for U.S. big business and elite interests. Thus, according to the Kremlin's calculus, the various "color" revolutions of the past decade had little or nothing with advancing the cause of democracy in places like Ukraine, Georgia, Kyrgyzstan, and Egypt but rather spreading chaos so the United States can maintain its global dominance. For an example of how the Kremlin transmits this message to its people, see Igor Panarin, "Как противостоять Информационной войне против России" [How to stop the information war against Russia], YouTube video, posted by "Polit Russia," 12 October 2016, accessed 30 April 2019, https://www.youtube.com/watch?v=fhN7karyrtg&index=2&list=PLA884F3D85B86B355.

30. One popular Russian pundit, Nikolai Starikov, has created a complete modern global history, where the United States plays the role of primary villain. According to Starikov, the United States planned the collapse of the USSR and since then has maintained a controlling presence within the Kremlin, primarily through its economic (dollar) influence. A few years ago, the rants and writings of Starikov were popular only on the fringe in Russia. Today, he has become a very popular unofficial spokesperson for the Kremlin. Besides his frequent appearances on television and radio,

Starikov maintains a robust internet presence. See, for instance, his blog at http://nstarikov.ru/. For Starikov's explanation as to how the dollar became the global reserve currency, see his book, *Ruble Nationalization: The Way to Russia's Freedom* (Saint Petersburg, Russia: Piter Press, 2007). For the specific Starikov quote regarding how the United States has used its control over the dollar to increase its military might, see Nikolai Starikov, "Стариков: Как доллар США стал главной мировой валютой" [Starikov: How the U.S. dollar became the global reserve currency], YouTube video, posted by *Narodniy Sobor*, 1 November 2011, 8:10–9:20, accessed 6 May 2019, https://www.youtube.com/watch?v=zQgWPjW8-us.

31. See, for instance, "Шойгу сравнил военные бюджеты России и стран НАТО" [Shoigu compares Russia's military budget with that of NATO], Lenta.ru, 22 December 2017, accessed 2 May 2019, https://lenta.ru/news/2017/12/22/def_budget/.

32. For a more detailed look at how the Kremlin views the United States' use of its economic power, see Ray Finch, "The Kremlin's Economic Checkmate Maneuver," *Problems of Post Communism* 62, no. 3 (7 May 2015), https://www.tandfonline.com/doi/abs/10.1080/10758216.2015.1022392.

33. Napoleon Bonaparte, "10 Napoleon Bonaparte Quotes in Context," Shannon Selin: Imagining the Bounds of History, 24 October 2018, accessed 6 May 2019, https://shannonselin.com/2014/08/10-napoleon-bonaparte-quotes-context/. See also Vladimir Putin, "Послание Президента Федеральному Собранию" [The president's message to the Federal Assembly] (speech, Central Exhibition Hall "Manege," Moscow, 1 March 2018), accessed 30 April 2019, http://www.kremlin.ru/events/president/news/56957. On 1 March 2018, during his address to the Federal Assembly, Putin spent the second half of his speech reviewing new Russian weapons that would guarantee the country's defense and sovereignty. After completing his video-assisted description of these weapon systems, he went on to talk about a Russian pilot who had recently been killed in Syria. Rather than being captured alive, Maj. Roman Filipov blew himself up, along with several of his would-be captors. Putin remarked that while Russian weapons were important, "No country could produce an officer like Major Filipov," and that these men are the ultimate guarantors of Russian freedom.

34. According to Global Firepower, in 2018, the United States and Russia held the top two positions with regard to military firepower, with the difference measured in mere fractions. See "2019 Military Strength Ranking," Global Firepower, accessed 2 May 2019, https://www.globalfirepower.com/countries-listing.asp.

35. Not surprisingly, this is a favorite topic on the Kremlin mouthpiece RT, which now broadcasts in thirty-one different countries. For an example, see Alexander Bovdunov, "Американцы ищут повод для нанесения удара: как США могут использовать иракский опыт в Сирии" [Americans seek a pretext to strike: How the United States is using its Iraqi experience in Syria], RT, 20 March 2018, accessed 2 May 2019, https://russian.rt.com/world/article/494011-irak-vtorzhenie-itogi-siriya.

36. A quick Google search, under the heading "Американские военные преступления" [American military crimes] comes up with nearly nine million hits and over six hundred thousand videos. For a typical example, watch the video from the Russian program "Military Secret," which catalogs American military crimes committed in Iraq. See Igor Khokhlov, "Преступления американских военных в Ираке" [Crimes committed by the American military in Iraq], YouTube video, posted by "ElectronicEnglishRu," 22 January 2011, accessed 2 May 2019, https://www.youtube.com/watch?v=U8xkKyl82_Q.

37. This is a favorite theme of Russia's foreign minister, Sergei Lavrov, and is shared widely among the Russian media. For an example, see "Московский 'майдан' — мечта Вашингтона: зачем США нужна «цветная революция» в России" [A Moscow 'maidan'–Washington's dream: Why the U.S. needs a color revolution in Russia], Rambler,

1 July 2017, accessed 2 May 2019, https://news.rambler.ru/politics/37291195-moskovskiy-maydan-mechta-vashingtona-zachem-ssha-nuzhna-tsvetnaya-revolyutsiya-v-rossii/.

38. For a typical example of this sentiment, see Anatoly Matviichuk, "Миф об армии США" [The myth of the U.S. Army], *Soldati Rossiye* [Soldiers of Russia], no. 1-3 (2011), accessed 2 May 2019, http://www.soldatru.ru/read.php?id=1307.

39. America's general dysfunction (crime, school-shootings, obesity rates, education decline, racial tensions, etc.) is a common refrain on Russian talk shows. As a military reflects the country it purports to defend, many Russian military analysts suggest that these same dysfunctions plague the U.S. Armed Forces. See, for instance, Anton Mardasov and Alexander Sitnikov, "Америка и Россия: чей солдат лучше" [America and Russia: Whose soldier is better], *Svobodnaya Pressa* (website), 2 July 2015, accessed 30 April 2019, http://svpressa.ru/war21/article/126479/#mc-container; for a more detailed account, see Matviichuk, "Миф об армии США."

40. Baranetz and Tymoshenko had a field day when certain U.S. sources claimed that there were at least fifteen thousand transgender troops serving in the U.S. military. See KP Radio, https://www.kp.ru/radio/radio-boronetz/; for additional background, see John Riley, "Russian State Media Mocks U.S. Military's 'Tranny Troops,'" Metro Weekly, 2 January 2018, accessed 2 May 2019, https://www.metroweekly.com/2018/01/russian-state-media-mocks-u-s-military-allowing-transgender-enlistees/.

41. The exact etymology of the term "pindosy" is not clear, but it is widely used in Russian slang as a derogative term for Americans, especially U.S. military personnel. For a more thorough examination as to the root and usage of this term, see Wikipedia, s.v. "Pindos" [in Russian], last updated 8 November 2018, 16:29, accessed 2 May 2019, https://ru.wikipedia.org/wiki/%D0%9F%D0%B8%D0%BD%D0%B4%D0%BE%D1%81.

42. Over the past few years, articles asserting the superiority of Russian weapon systems have appeared every month or so. It a favorite topic among Russian military journalists. For example, see "США признали беззащитность перед оружием России" [The U.S. recognizes its lack of defense against Russian weapons], Pravda.ru, 27 March 2018, accessed 2 May 2019, https://www.pravda.ru/news/world/27-03-2018/1377911-USA-0/.

43. "Путин рассказал о новейших видах российского вооружения" [Putin spoke about the latest types of Russian weapons], RIA Novosti, 1 March 2018, accessed 6 May 2019, https://ria.ru/20180301/1515566394.html.

44. Considered as one of the top Kremlin propagandists on Russian TV, Dmitry Kiselev made the threat about how Russia could transform the United States into "radioactive dust" on his weekly news program on 17 March 2014. For a video clip of his remarks, see "Russia Can Turn the United States into a Radioactive Desert, Vesti Weeks, Dmitry Kiselev, March 16, 2014" [in Russian], YouTube video, posted by "Евгений Фоос," 16 March 2014, accessed 2 May 2019, https://www.youtube.com/watch?v=q1V3Mh3JCH0.

45. This is a very popular topic in Russia today, both within traditional and social media. Someone even created a website cataloging the current preparations for the "Third World War." For a typical example of this type of reporting, see "The Third World War Is Inevitable, but Will Avoid Direct Confrontation," interview by Konstantine Sivkov, *Komsomolskaya Pravda* (website), https://www.kp.ru/best/msk/no_peace_no_war/page389596.html.

46. Perhaps the most influential article on this topic was written by Russia's current chief of the general staff back in 2013. See Valery Gerasimov, "Tsennost' nauki v predvidenii," *Voyenno Promyshlennyy Kuryer* (website), 26 February 2013, accessed 2 May 2019, http://vpk-news.ru/articles/14632.

47. There are a number of Russian sites dedicated to covering the "Third World War," where the consensus is that the fighting has already started. See, for instance, Русское Агентство Новостей [Russian News Agency], which touts itself as the "Information Agency of the Russian Public Movement 'Revival of the Golden age,'" and which has a special rubric titled "Новости: Третья мировая война" [News of the Third World War], новости.ru-an.info/третья-мировая-война/; see also "Третья Мировая Война: военно-политический обозрение" [Third World War: Military-political review], http://3mv.ru/publ/1. The topic remains popular throughout both traditional and digital media. For a recent newspaper article on the topic, see Mikhail Rostovsky, "Третья мировая война просто так" [The Third World War is just like this], *Moskovskij Komsomolets* (website), 12 April 2018, accessed 2 May 2019, http://www.mk.ru/politics/2018/04/12/tretya-mirovaya-voyna-prosto-tak.html.

48. After enduring the horrors of World War II, the prominent sentiment in Soviet society could be summed up as "Лишь бы не было войны" (anything is preferable to war).

49. See the long interview dealing with the rise of militarism in Russia today with one of Russia's best pollsters (and sociologist) Lev Gudkov, "ХОТЯТ ЛИ РУССКИЕ ВОЙНЫ?" [Do Russians want wars to happen?], Levada Center, 30 May 2016, accessed 2 May 2019, https://www.levada.ru/2016/05/30/hotyat-li-russkie-vojny-2/. For full audio and transcription of the interview (in Russian), see Sergey Medvedev, "Do Russians Want War?" [in Russian], Radio Liberty, 4 May 2016, accessed 2 May 2019, https://www.svoboda.org/a/27716179.html.

50. This is a favorite topic on Russian newscasts, newspapers, and talk shows, as well as on Russian social media sites. For a recent example, see the article from Anton Fokin, "США готовят для России войну-наказание" [The U.S. is preparing a punishing war against Russia], *Komsomolskaya Pravda* (website), 9 January 2018, accessed 2 May 2019, https://www.kp.ru/daily/26776/3810846/; or watch this video from the popular talk show program *60 Minutes* on Russia's primary TV station, ORT: "США готовятся к войне с Россией" [The U.S. is preparing for war with Russia], YouTube video, posted by "Politics Russia – Ukraine," 22 January 2018, accessed 30 April 2019, https://www.youtube.com/watch?v=vz6aDctQwwo.

51. This is one of Baranetz's favorite whipping points on his radio program. For an example, listen to "What to Expect from Ukraine after the Delivery of 'Javelins' from the USA?" [in Russian], KP Radio, 10 May 2018, accessed 2 May 2019, https://www.kp.ru/radio/26827.4/3866474/.

52. See the 2015 poll results from the independent polling center, "Threats from the West," Levada Center press release, 10 June 2015, accessed 2 May 2019, https://www.levada.ru/en/2015/06/10/threats-from-the-west/. "Армии России и США сопоставимы по мощи, считают военные эксперты" [Military experts regard the armies of Russia and the U.S. to be equally powerful], RIA Novosti, 31 August 2017, accessed 30 April 2019, https://ria.ru/defense_safety/20170831/1501466227.html.

53. The current Kremlin narrative stresses Russia's "defensive" policies. In their rendition, the country is defending against U.S. aggression. For a recent example of this, see Gevorg Mirzayan, "Если русские действительно спартанцы, а США — Афины: кто победит" [If the Russians are really Spartans, and the United States is Athens: Who will win], RIA Novosti, 19 December 2017, accessed 2 May 2019, https://ria.ru/analytics/20171219/1511200732.html.

54. Alec Luhn and Ian Black, "Erdoğan Has Apologised for Downing of Russian Jet, Kremlin Says," *The Guardian* (website), 27 June 2016, accessed 2 May 2019, https://www.theguardian.com/world/2016/jun/27/kremlin-says-erdogan-apologises-russian-jet-turkish.

Incompatibility and Divorce of Institutions

Civil-Military Conflict in the Reserve Officers' Training Corps' Departure from Yale during the Vietnam War

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The President's Ad Hoc Committee on the Reserve Officers' Training Corps (ROTC) at Yale University released a confidential memorandum to its president, Kingman Brewster Jr., on 29 April 1969. This report extensively outlined Yale's ROTC curriculum and listed possible administrative actions concerning the program's future.[1] At the time, the document stated that Yale's Army and Naval ROTC consortium hosted over 211 students—of whom 147 were Yale undergraduates.[2] By 1972, however, the official number of ROTC participants turned to zero. Since its inception in 1701, Yale graduated the Navy's first flying ace, taught the Nation's first spy, and inaugurated the first U.S. Naval Air Reserve unit.[3] What prompted a school with such a long and rich military history to renegotiate its relationship with the Department of Defense (DOD)? What ensued following the sudden separation of American colleges like Yale and the Armed Forces?

To many historians, the answer to why ROTC left college campuses like Yale is simple: antiwar sentiments.

This article, however, argues how unrelated, preexisting sources of tension between Yale and the military functioned as the primary reasons behind ROTC's expulsion. In other words, the exodus of ROTC from Yale did not stem from the single-handed efforts of antiwar protesters. Rather, the program lost its place on campus due to lobbying efforts by various demographics that had already found ROTC's academic status and creed contrary to their interests. Faculty frustration over the excessive promotion of ROTC's academic standing, religious perspectives, and the timing of Brewster's reforms all factored in the decision to remove ROTC. The abolishment of ROTC in 1972 until its return to Yale's campus in 2012 narrates an untold story—one that exposes motivations disguised by the fervor of the American antiwar movement.[4] The story of Yale's relationship with ROTC during the 1960s captures misunderstanding and misperception. Its event informs us about the mutual divorce between the military and higher education, and the contemporary legacy of ROTC's bans in institutions, especially those of the Ivy League. In effect, the Yale

Reserve Officers' Training Corps artillery instruction takes place during World War II at Yale University in New Haven, Connecticut. (Photo courtesy of the *Yale Alumni Magazine*)

ROTC debate gives us new understanding into a conflict surrounding a military program so significant that its presence aggravated a wide polarization in communities during and after the Vietnam War.

Background on ROTC

In order to disaggregate the key figures and groups that influenced the debate over ROTC, one must examine the prewar era when ROTC thrived and its existence was unquestioned. ROTC began under the premise of training college-aged men in preparation for a U.S. entrance into World War I. Congress legislated ROTC officially through the 1916 National Defense Act, and by 1918, over 135 colleges hosted an elementary ROTC unit.[5] Unlike today's modern-day voluntary program, ROTC, at the time, required all physically eligible males

to participate in a two-year mandatory capacity. Upon completion, there existed no obligation to continue or commission into the National Guard or the military reserves. At the conclusion of World War I, bureaucrats viewed ROTC as an immediate success that warranted further expansion. In its infancy, ROTC excited college administrators for several reasons. The initiative bestowed physical exercise benefits to its students, taught ethics, and instructed discipline. To clarify, the central purpose of ROTC was to familiarize American males to the military environment—not to aim for the

recruitment of career officers. From the program's foundation, the military understood and predicted that the majority of college undergraduates who commissioned never planned on creating a military career for themselves. Yet, after high praise for ROTC-commissioned officers in World War II, the DOD advocated for more sponsorship of ROTC units and the establishment of more host universities. By 1955, ROTC reached 355 colleges in all of the United States along with the territory of Puerto Rico.[6] In that period, the U.S. Navy also began to generously bestow merit-based scholarships to promising college students under the Holloway Plan in 1954. With the codification of the Holloway Plan across all branches through the ROTC Revitalization Act of 1964, ROTC transformed into its modern version that appealed to all sides.[7] In exchange for their tuition being paid, the cadet or midshipman served five years after graduation with their respective branch. Hosting universities received cash from the government, and the merit scholarships minimized the need for schools to provide financial aid to ROTC students. There seemed to be no losers with the ROTC commissioning program.

Entering the 1960s, Yale watched their healthy ROTC relationship with the DOD start to waver. By 1968, several campuses already experienced major protest movements ignited by the first teach-in at the University of Michigan.[8] For Yale, during this era, all eyes focused on what appeared to be a living embodiment of an oppressive military structure: the ROTC program. In the eyes of antiwar protesters, the existence of ROTC precluded any end to the unpopular war. A "Memorandum from Army ROTC to the Harvard University Committee on Educational Policy" stated that 45 percent of all active duty officers at the time were commissioned through ROTC. The same memo also stated that 85 percent of the U.S. Army's second lieutenants were ROTC graduates.[9] Evidently, the report detailed the Army's reliance on ROTC to draw its manpower. In fact, this dependence demonstrated by the Army was very visible and public in knowledge. Thus, antiwar protesters hoped to eliminate ROTC to cut off the human resource flow that sustained the war effort.[10] Gradually, the antiwar pressure became a legitimate predicament and an unsettling issue for Brewster and the Yale Corporation. However, for various subgroups on campus, the movement symbolized a chance, or rather a glowing opportunity, to challenge ROTC's presence. ROTC's sudden vulnerability galvanized and emboldened the university's faculty on campus to express their complaints.

Yale Faculty Discontent

For a long time, the officer commissioning program infuriated Yale professors. In their perspective, the university granted academic titles to ROTC military instructors freely without consideration of academic standards. W. E. D. Stokes Jr. would write to Brewster in a personal letter stating how Yale faculty appeared irritated because a lieutenant (junior grade) could teach as an assistant professor with only a Bachelor of Arts degree.[11] Indeed, since ROTC's establishment at Yale, military officers were designated with titles usually implying a role or authority associated with a professorship. This was frequent practice in all universities and even in other Ivy League ROTC units. At Cornell University, military officers received titles like "professor of military programs" while at Princeton University, the administration granted ROTC staff a generous title of "visiting lecturers."[12] These conferred names infuriated faculty who believed that the significance of their hard-worked doctorate degrees and research were, to some extent, parodied by military officers who hardly rendered the same reverence for their titles. In addition, members of the Yale faculty like R. A. McConnell complained that these ROTC military instructors demonstrated no visible allegiance to the university: that their first priorities lay with the DOD—a professional community seen strictly indifferent to the activities of Yale.[13] The professors were somewhat correct with their assessment of loyalties. After all, the DOD—not the university—paid the salaries of their active-duty personnel stationed at ROTC units.[14] Yale also did not

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Rev. John E. Brooks, SJ (*top center*), dean of the College of the Holy Cross, addresses both protesters and defenders of the Reserve Officers' Training Corps (ROTC) program in May 1970 in Worcester, Massachusetts. Demonstrations against ROTC at Holy Cross came to a head in May 1970 when students gathered on consecutive nights outside the Air Force ROTC building. (Photo courtesy of the U.S. Naval Institute)

For example, Harvard University designated its ROTC program as the Center for Military Studies.[15] These designations predicated the idea, to the dismay of professors, that their universities treated ROTC as an academic program equal to any other department. Alternatively, the placement of ROTC on a valued pedestal further dishonored academia by promoting an "extra-curricular" to a field of study. In fact, Dr. Arthur W. Galston, chairman of the Course of Study Committee, compared ROTC to an a cappella group and proclaimed, "ROTC is like singing in the Whiffenpoofs—a perfectly fine activity, but one that we don't think merits any academic standing."[16] Concurring with Galston were 159 faculty members. Drilling and marching in uniform contested the integrity of what defined an academic activity. In signature, Galston and his colleagues expressed that the retraction of professor-rank titles served to rectify past mistakes by the university. Yet the faculty desired more than just the strip of academic titles from ROTC instructors; they desired the disaccreditation of all ROTC courses.

have the power in choosing the military officers delegated to ROTC unit; the DOD kept that responsibility. Therefore, professors believed to some degree that Yale overrated its military instructors and that ROTC stole the school's attention away from its devoted faculty base.

What further insulted the faculty at Yale, including the rest of the Ivy League, was that the university recognized ROTC branches as academic departments.

In the minds of professors, ROTC's unearned academic reputation based itself off of its rudimentary material. Galston stated in his interview with the *New York Times* that Yale juniors preoccupied themselves with military science courses at the expense of intellectually

invigorating seminars. For one, classes such as Leadership or Small-Unit Tactics and Communication seemed rather elementary and unfit for college education.[17] The names of these ROTC courses affirmed their assumptions that ROTC failed to provide any intellectual stimulation. Galston complained that courses titled Pre-Camped Orientation, and Drill and Command failed to convince him why such classes supplemented a Yale education.[18] The literature and opinions of Galston resonated with the faculty. Another concern rose as a result of how the military externally controlled courses taught in a Yale classroom. The DOD decided the textbooks were supplementing the courses—books that seemingly left little room for tolerance. For example, the faculty emphasized how particular ROTC textbooks appeared to inoculate simplistic, nationalistic doctrines and one-mindedness. William Ebenstein's *Two Ways of Life: The Communist Challenge to Democracy* became a cited example of the program's ability to brainwash and counter liberal ideals.[19] If anything, what caused more distrust between the faculty and the DOD was how ROTC imposed restrictions on fields of studies. According to professors that interviewed Navy ROTC (NROTC) midshipmen, the Navy prohibited their scholarship recipients from selecting preprofessional majors (e.g., agriculture, predental, premedical, etc.). In their contract with a NROTC unit, midshipmen also agreed to not choose majors relevant to the arts such as drama and dramatics or music. The Navy generally discouraged anthropology and religion as well because of their unforeseeable application out in the fleet. Hence, the faculty insisted that the restriction of majors contradicted Yale's holistic vision of a liberal arts education for its undergraduates. The faculty's petition for the DOD to amend its contracts in allowing free selection of majors placed Naval Service Training Command in a difficult position. Changing the prohibition of certain majors was infeasible and impractical because the Department of the Navy would need to then enact this reform across all units nationwide—not just in Yale. Moreover, if put into action, the Navy's bureaucracy made it hard to meet the harsh deadline that Yale requested.

The Beginning of the End for Yale ROTC

The dismantling of Yale's ROTC accreditation started and terminated with the efforts of Galston and the faculty. The faculty drew up a committee report and subsequently voted for the disaccreditation of all ROTC-affiliated courses by a majority of 116–28.[20] Most of the dissenting votes were casted by ROTC staff—incidentally present. The faculty vote only symbolized a recommendation as the power to implement academic policies lay with the president. However, the landslide outcome convinced Brewster and the Yale Corporation to disaccredit the program 1 February 1969.[21] His official public announcement in an Alumni Day speech three weeks later that left Yale veterans horrified and prowar supporters disappointed. Brewster emphasized that disaccreditation of ROTC did not mean abolishment. However, his rhetoric already initiated the collapse of ROTC at Yale because the DOD viewed the program's disaccreditation indicative of the school's desire to not host a detachment. Thus, the DOD did not reinstate the program at Yale following the decision. The mutual divorce became apparent quickly. In fact, the Navy reviewed Yale's admissions record for the class of 1973 and analyzed the results as an implicit confirmation of their separation. Brewster shared a letter to Vice Adm. Charles K. Duncan (chief of Naval Personnel) that detailed the admissions status of applicants whose NROTC principal first-choice was Yale. Yale rejected twenty-six of the thirty-three NROTC applicants, wait-listed one student, and accepted only six candidates.[22] This 18 percent acceptance rate among NROTC applicants greatly contrasted from previous years and noticeably differed from the overall acceptance rate to the university. To put this into perspective, Yale's acceptance rate a decade later, in 1979, was still hovering above 27.3 percent—almost ten points higher.[23] By all accounts, the faculty did not intend to remove ROTC or to banish the program. They only sought to negotiate ROTC's academic status and relegate professorship titles; to that end, they succeeded. Therefore, the eventual eradication of ROTC was not a concern to most, and perhaps it was even thought by some to surpass initial objectives.

Reaction and Dismay

ROTC's existence and elevated status offended academia, but to the public, the university's stance against ROTC seemed purely political and linked to the antiwar movement. In fact, the Pentagon was flustered when Yale and other Ivy League campuses began to

Defense Secretary Ash Carter administers the oath of office to Air Force and Naval ROTC students 23 May 2016 during a commissioning ceremony at Yale University in New Haven, Connecticut. (Photo by Senior Master Sgt. Adrian Cadiz, U.S. Air Force)

hesitate in renewing ROTC contracts because the DOD realized that antiwar convictions touched its once untouchable recruitment base. Misinterpretation occurred on both sides. Correspondence between Brewster and the DOD indicates that the former World War II naval aviator wanted the Pentagon to know that Yale's reconsideration of ROTC solely stemmed from its flawed academic model—not because of the Vietnam War. If Brewster and the Ivy League genuinely acknowledged ROTC issue with that intention, then the Pentagon miscomprehended their language. In the DOD's viewpoint, the letters demonstrated a reluctance to communicate that antiwar pressures forced the university's decision. Roger T. Kelley, assistant secretary of defense for manpower and reserve affairs, talked to the press and delineated the future of ROTC program, explicating that the rationale for ROTC's removal spawned from antiwar feelings. In response to a journalist's question about why he thought ROTC was the center of attacks, he said that "ROTC is the most military thing on campus and therefore the thing they first ought to destroy."[24] Not only did the Pentagon interpret the issue as strictly political but also so did much of the alumni base as well. William F. Buckley Jr., an influential conservative talk show host and commentator who wrote an op-ed lambasting the distasteful hypocritical nature of the argument against ROTC, said,

> If he desires to drill with a master sergeant, or to otherwise satisfy reserve officer training requirements, what business is it of the busybodies on campus, who prate academic freedom—while designing a curriculum geared to their own neurotic lusts?[25]

Buckley's words gave voice to what most conservatives felt about the decision: that the move to disrespect ROTC emerged from a clear political agenda. For Yale's conservative alumni, the faculty's contentions against ROTC's educational model served as an excuse for professors to retain greater power over a liberal

curriculum. Even, an incensed Republican congressman, New Jersey's John E. Hunt, announced that he and his staff called an investigation into cutting federal research grants to Yale as a result of disaccreditation.[26] Buckley's circulated article and the outrage from conservative alumni transformed ROTC debate into a political question and construed the conflict as an antiwar decision. Due to Buckley's op-ed and the alumni who wrote personal reprieves to the president's office, the academic argument quickly became irrelevant and perceived as a collusive ploy by liberal-minded individuals.

The media, various alumni, and the military all perceived academia's criticism of ROTC as a clever antiwar justification for ROTC's departure. The DOD lamented the loss of ROTC in many Ivy League institutions, but the scale of ROTC's pushback was grossly exaggerated and misadvertised by newspapers. According to Assistant Secretary Kelley, only 3 percent of ROTC units nationwide experienced disruption. Only ten institutions including Yale dropped academic credit by 1970.[27] One might then ask why Yale's situation with ROTC was somewhat unique, isolated, and a first. In summary, Yale's identity as an institution catalyzed the program's death more than other universities. ROTC's departure accelerated at Yale because of smaller-scale reasons such as the school's demographic identity, coincidental timing of Brewster's reforms, and Christian influences.

Firstly, Yale's interest in ROTC diminished from the time of its founding. In a 1967 census that surveyed six Ivy League institutions, the Yale ROTC had the smallest enrollment size.[28] Demographically, Yale students hailed from mostly northeastern upper-middle class families, and they generally viewed the private sector and civilian job market as more lucrative and interesting than military service. This demographic contrasted from Princeton (which continued its ROTC relationship), where the majority of its student population had been southerners.[29] Yale's student population also facilitated Brewster's decision to discredit ROTC because the student population supported ROTC's abolition by a ratio of almost 2:1.[30]

ROTC's Conflict with Priorities and Faith

In 1969, Yale introduced coeducation. In exchanges with his administration, Brewster expressed that to implement such a massive change, the Yale Corporation needed to reallocate assets. In addition, Brewster ambitiously desired the erection of new buildings during his term such as the Yale Center for British Arts. When balancing the financial interests to reach the $55 million needed, Brewster possibly determined ROTC program expendable for the sake of coeducation.[31] In 1969, Yale's Naval Science Department coincidentally delivered a document to the president's office asking for an increase in budget. The staff requested more air conditioner units and for financial coverage of twenty distinguished visiting lecturers in connection to the courses—an overall expenditure increase in $1,625 to the already $26,500 outlaid to ROTC unit.[32] Paired with its budget increase, Brewster quite likely perceived ROTC as a nuisance or perhaps an obstacle to gender integration because it inconveniently siphoned money and now demanded more financial support.

The Vietnam War was also a difficult time for Catholics in Jesuit universities around the country because post-Vatican II reforms emphasized that the gearing of young Christians for war contradicted nonviolent values. In Catholic institutions like La Salle College and St. Joseph's College, Christian protesters lobbied against the maintenance of their Air Force ROTC units.[33] Simultaneous with the protests at La Salle, leaders of the religious community at Yale pushed back against ROTC in the 1960s. The post-Vatican II reforms that condemned any militaristic operation in conjunction with Christians reached Yale through William Sloane Coffin Jr. Before the administration started to examine ROTC issue more closely in 1969, Coffin—a prominent Yale chaplain from 1958 to 1973—expressed his grievances about the war openly. In contrast to previous chaplains, Coffin was unafraid in expressing political initiatives. He was an activist in many aspects, and he had convinced Williams College to ban its unruly fraternities during his time there and target ROTC programs.[34] He focused on the church's role in promoting draft resistance, in which any form of joining the war effort was to be stopped including ROTC. Coffin was an intriguing figure, a man who cherished the act of resisting ideology and indoctrination. He was part of the National Emergency Committee of Clergy Concerned about Vietnam and organized rallies across Ivy League universities to speak about civil disobedience.[35] In Warren Goldstein's

biographic portrayal of the chaplain, Coffin worked behind-the-scenes to entice voluntary resignation of ROTC. He served as a mediator who counseled students inundated with internal dilemmas. When one ROTC senior came to the chaplain and concluded that the war was immoral, Coffin congratulated him for his thinking and reflection.[36] Soft-spoken when he wanted to be, Coffin was a very likable figure. His influential role as the center of religious life at Yale made him become a go-to advisor and, therefore, capitalized on his reputation to dissuade many ROTC students, internally conflicted with faith and military service, from continuing. Coffin's philosophy and the church provided credence to the ethical arguments against ROTC. His charismatic personality and eloquent ability fueled ROTC's departure in a more implicit manner.

Conclusion

To conclude that antiwar rallies did not contribute to ROTC's disappearance is incorrect. The antiwar atmosphere had a substantial role in questioning ROTC, but there is a dichotomy between the role of antiwar protesters and anti-ROTC advocates. Without the encouragement for ROTC's dismissal from various anti-ROTC groups on campus, the training program would have continued unhindered. For the faculty, ROTC undermined academia's notion of titles and the definition of departments. ROTC's academic courses competed with classes and majors subsisted by Yale College—professors believed the courses to be threatened or disrespected by ROTC's prohibitions. Along with the academic issue, a collection of minor reasons quickened the end to ROTC. Religious leadership by Coffin trickled second thoughts through the ranks of ROTC cadets and midshipmen, young men already shaken and intimidated by the lack of support from the Yale Corporation. The combination of a student body already uninterested in military service and Brewster's coeducational reform catapulted ROTC into a weak position. What had been the true framework of reasons for ROTC's dismissal, however, was misinterpreted by the public. Still to this day, the American people understand the ROTC discussion as a politicized drama when in fact, its expulsion from Yale should be understood as a mainly apolitical academic conflict propelled and obscured by the tribulations of the Vietnam War. In essence, the Yale ROTC debate had ramifications for the military other than losing what was once an undoubtedly ROTC-friendly institution. Many national colleges and universities highly respected Yale's vision and closely followed the decisions of the administration eagerly to make sense of their own school's stance. In the days after Brewster's withdrawal of ROTC's academic credits, the Massachusetts Institute of Technology, the University of Montana, and Missouri State University, to name a few, immediately sent letters asking for memos and documents dictating the reasoning behind the president's decision.[37] After the university's announcement, the last class commissioned in Yale ROTC was in 1972. In May 1972, only ten or so students in the inactive ROTC program were completing drills by themselves without proper uniform in a run-down facility off campus.[38] What had represented an achievement and building stone for the university faded away for forty years until its return in 2012. The departure of ROTC left certain individuals bitter and others rejoicing. It narrates a story about a collection of sides—each wanting responsibility and justice for their causes—in a turbulent time. Uncovered, the Yale ROTC debate epitomizes an event in a war now presented in more light and now told with more truth. ∎

Notes

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12. "Ivy League College ROTC Census," 1967.

13. R. A. McConnell to Joseph I. Miller, 4 February 1969, Kingman Brewster Jr., President of Yale University, Records (RU 11), series I, box 178, folder 9, Manuscripts and Archives, Yale University Library.

14. Branford McCormick to Kingman Brewster Jr, 4 February 1969, Kingman Brewster Jr., President of Yale University, Records (RU 11), series I, box 178, folder 2, Manuscripts and Archives, Yale University Library.

15. "Ivy League College ROTC Census," 1967.

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38. McCoole, "ROTC at Yale."

Czech army Maj. Jiri "Jorge" Pazdera (*left center*) moves markers on the map of *Landpower*, a board game simulation exercise, 9 March 2018 as Maj. Adam Keller (*left*), Bangladeshi Maj. Tasnuva Tabassum (*right center*), and Maj. Zachary Labrayere (*right*) watch in a classroom at the U.S. Army Command and General Staff College at Fort Leavenworth, Kansas. *Landpower* underwent pilot testing to determine if it is a suitable replacement for the college's current computer-based simulations that take much longer to teach. (Photo by Capt. Charlie Dietz, U.S. Army)

Seeing the Elephant

Improving Leader Visualization Skills through Simple War Games

Lt. Col. Richard A. McConnell, DM, U.S. Army, Retired

Lt. Col. Mark T. Gerges, PhD, U.S. Army, Retired

It was six men of Indostan
To learning much inclined,
Who went to see the Elephant
(Though all of them were blind),
That each by observation
Might satisfy his mind.

The First approached the Elephant,
And happening to fall
Against his broad and sturdy side,
At once began to bawl:
"God bless me!—but the Elephant
Is very like a wall!"

The Second, feeling of the tusk,
Cried: "Ho!—what have we here
So very round and smooth and sharp?
To me 't is mighty clear
This wonder of an Elephant
Is very like a spear!"

—John Godfrey Saxe

The parable of the six blind men attempting to identify something unfamiliar is well known. As each touched part of the strange animal, each came away with a partial picture; and as the poem continues, another man sees the tail as a rope, or the leg as a tree, etc. The poem finally ends with, "Though each was partly in the right, / And all were in the wrong!"[1] Military planners have a similar problem—each has only an incomplete knowledge of the entire problem, and only by comparing notes across the staff can they attain sufficiently thorough understanding to accurately complete the staff analysis for the commander. The challenge for the U.S. Army is how to train the required visualization skills to process collected information and how to habituate service members to share their results to build a complete operational picture.

While Command and General Staff College (CGSC) faculty members have wrestled with the challenge of how to best educate students to improve their visualization and description skills, they have hit upon a return to simple role-playing board games as a low-cost and highly effective means to repetitively improve students' abilities. Examining the Center for Army Lessons Learned (CALL) publications from the past twenty years has revealed that implementing war-gaming as a training technique has been a systemic challenge during combat training center (CTC) rotations.[2] This challenge manifested itself in three ways: players skipped the war-game step altogether; if planners skipped the war game, then the combined arms rehearsal turned into a war game; or staffs conducted war games that resembled a rehearsal in that they did not contain an action, reaction, counteraction methodology. As the faculty scanned the CALL publications for insights, an unrelated event in a single staff group caught their attention. In the fall of 2013, CGSC students who played a simple role-playing board game for a history class, in this case Kriegsspiel (War Game), did a much better job at the war-gaming step of the military decision-making process (MDMP) in the tactics class, in particular in their ability to see (describe) the friendly situation.

To support the history class on German Field Marshal Helmet von Moltke the Elder and the German General Staff, the simulations department ran Kriegsspiel. Within one staff group, five students volunteered to play. Within the next few weeks, their tactics instructor noticed that this group was especially effective in the war-gaming step of MDMP—above the normal year-to-year performance that he was accustomed to seeing in similarly constituted classes. After reflecting on this anomaly, the faculty began to pose some questions: Was there a correlation between playing a simple war game such as Kriegsspiel and an improvement to the war-gaming step in MDMP; and if there was a correlation between the two with only five of sixteen students playing, what might be the effect if all sixteen students played the game? These questions prompted the faculty to design an experiment to examine the types of thinking that supported planning and how that thinking might mesh most effectively with the planning process.

Origin of Kriegsspiel

The original Prussian Kriegsspiel dates back to the early nineteenth century. Two Prussian officers, Lt. Georg Leopold von Reiswitz and later his son Georg Heinrich Rudolf von Reiswitz, developed and improved the game that used a grid system and scale unit markers. The original game system was heavily dependent on rules and tables to calculate the combat results. After having the game demonstrated to him, Prussian Chief of Staff Karl von Müffling was impressed, exclaiming, "This is not a game! This is training for war!"[3]

Later, in the 1870s, a more flexible alternative game known as "free" Kriegsspiel was developed that allowed for an umpire who could use his own experience together with a simplified rule system to calculate the results. With not much more than two topographical maps and some unit markers, umpires could rapidly calculate the combat results, allowing for less down time and freer action on the map.[4] The opposing players were placed in separate rooms, and the umpires moved back and forth between the rooms. Players could only see what they saw on an actual battlefield. If a commander placed himself on a hilltop, then his view of his own units as well as any enemy in range was increased. Likewise, a commander in a defile saw only those units in his immediate vicinity. Consequently, players were forced to deal with fragmentary information, to visualize what it meant, and then communicate their analysis of that information to fellow players and their commander. The game became so important for the Prussian, and later Imperial German, army, that every officer until 1918 played Kriegsspiel as part of their education.

The Experiment

Kriegsspiel itself is not critical; the value of war-gaming is not linked to any peculiar or unique features of any particular game. Instead, it is the overall board game concept that provides the player with ways to approach planning and problem solving. We chose Kriegsspiel for our experiment mainly because it was already readily available at CGSC and had low overhead cost in both set-up and time to play, usually three to four hours. But it could have been any similarly well-conceived war game. Our approach to selecting a war game also included another important consideration—Kriegsspiel was not on a computer.

Computer games by their nature take much of the requirement for individual mental calculation out of a competitive game, which is deceptively very appealing. However, overreliance on automation to do the thinking can lessen the requirement to think through the various courses of action for something as simple as estimating how far a unit can move based upon the options of terrain, for example, and ultimately decrease the benefits derived from playing the game.

The design of the board game, with students studying a standard scale map and developing the ability to think through the effects of time, space, and terrain while trying to maintain an accurate picture of friendly and enemy forces based upon spotty and incomplete information, was key. Other board games can provide a similar stimulus as long as they provide a partial picture of the information. (One outgrowth from our experience is that the Directorate of Simulation Education at CGSC is now working on exportable and low-cost board games for use.)

In the fall of 2016, seeing the apparent connection between

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playing Kriegsspiel and improved performance in MDMP, members of the faculty decided to conduct a rigorous test to see if there was in fact a correlation between the two. Two sections of students were selected to participate, a total of 111 officers. The test group consisted of thirty-two students who played a simple role-playing war game prior to the war-gaming step of MDMP. The other seventy-nine were the control group, which underwent the tactics instruction without modification.

To observe and conduct the test, faculty members unassociated with teaching these students were designated as research observers. The team had two active duty (one military intelligence and the other armor) and six retired Army officers of varied backgrounds to provide a mix of experience as they observed the students. The "bottom line" result was that the test group that played Kriegsspiel outperformed the control group in four ways. First, the test group saw (visualized) themselves more clearly than the control group (this concept will be discussed in more detail below during examination of the impact of war-gaming on visualization). Second, the test group was able to make choices based on their visualization with a higher level of confidence than the control group. Third, the test groups' war-gaming step of MDMP identified more threats and opportunities than the control group. And finally, the test group better incorporated their war-gaming discoveries into their plans.

In short, the test group with a single iteration of playing Kriegsspiel was more effective than the control group at "seeing the elephant." For a further explanation of the testing methodology and results, the research report for this study has been published by the Association for Business Simulation and Experiential Learning (ABSEL).[5]

Defining Effective Planning

What type of thinking is required for effective planning? The faculty, before designing an experiment to measure the effects of war-gaming, designed a theoretical model based upon the reflective process we had observed. The model was called the Cognitive Planning Domains (see figure 1). Through the cognitive planning domains, the faculty hoped to more accurately describe the types of

Cognitive planning domains

Lab

Factory

Art institute

Confluence of Science of Control and Art of Command
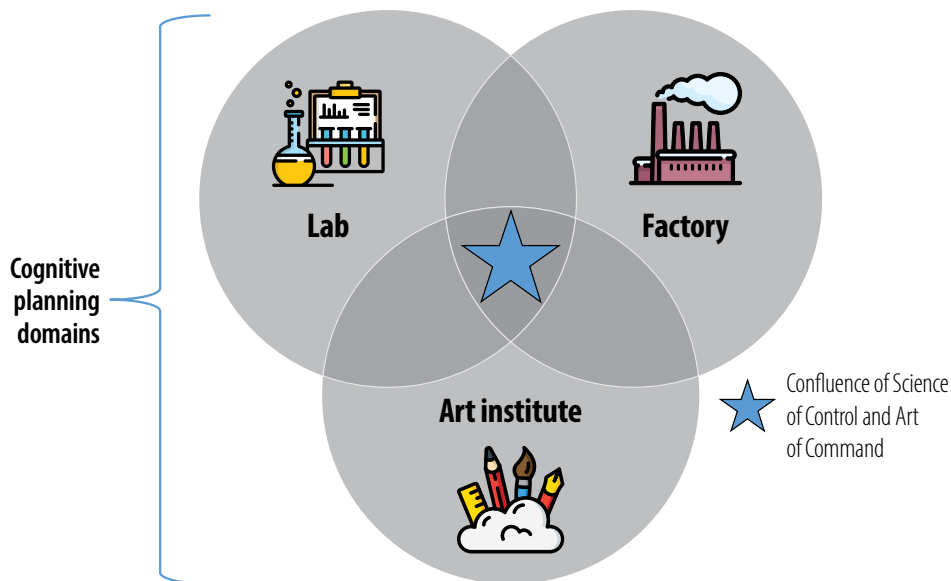
(Figure by author; icons by Freepik/Smashicons via www.flaticons.com)

Figure 1. The Cognitive Planning Domains

thinking in which planners engaged in order to produce complete and well-thought out plans. The three areas were labeled as the *factory*, the *laboratory*, and the *art institute*.[6]

In the factory, planners concern themselves with quickly synchronizing, integrating, and executing. In the laboratory, planners put on their white coats and begin mixing chemicals, concerning themselves with validity, relevance, and feasibility—this process takes more time than the factory. In the art institute, planners focus their efforts on using foresight, innovation, creativity, and imagination—this takes the longest of all cognitive domains. The area where these three cognitive domains intersect is called the confluence of the art of command and the science of control. By creating this theoretical model, the faculty members were able to gain understanding of a potential problem with the types of thinking that have dominated planning

processes over the last ten to fifteen years.

The problem appears two-fold. First, because of the urgency that dominates many operations, planners have found themselves primarily in the factory—the realm of the directed course of action. Second, because planners have emphasized the factory, the skills required for the laboratory and the art institute seem to have atrophied. This second problem may have an adverse effect on military leaders' ability to pass on the capability to balance the art of command and the science of control. Such concerns in the past have served as topics of great leader development discussions between generations of leaders within our military institution. One question that should be included in such future discussions is, "What is the purpose of our planning process?"

Faculty at CGSC often use this question as an informal poll among their students. Most junior leaders focus on outputs. For example, the purpose of MDMP is to create an order. However, if we acknowledge that many orders do not survive the first shot of combat, is that really the purpose of MDMP? Perhaps the purpose of our planning processes is to gain understanding so that—should our plans be overcome by events—the understanding gained by the

What do friendly and enemy forces have?
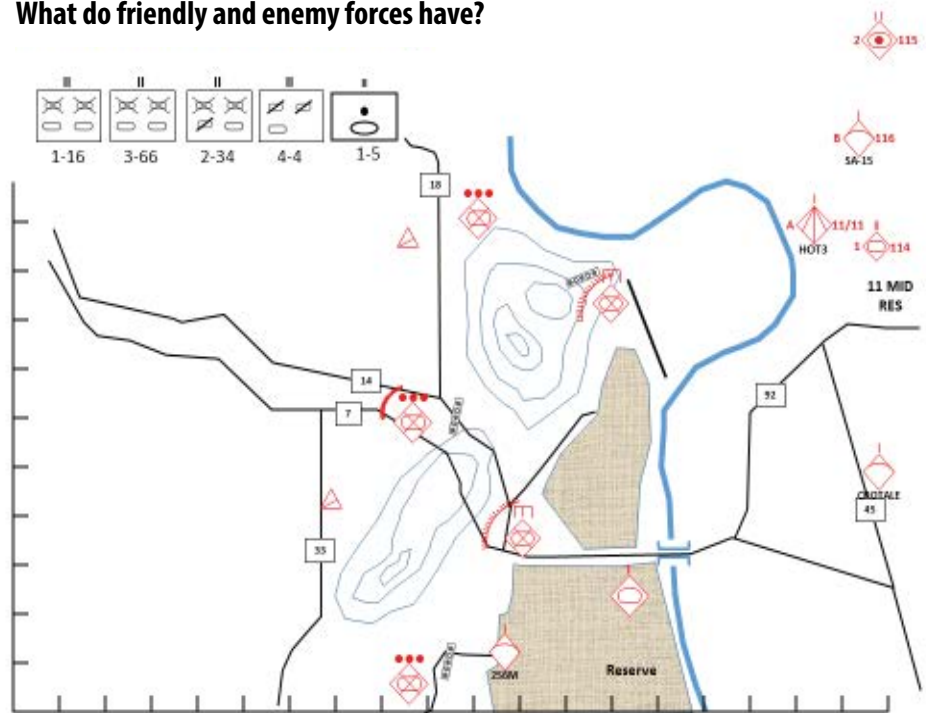
(Figure by author)

Figure 2. Course of Action Sketch One

How will friendly and enemy forces interact?
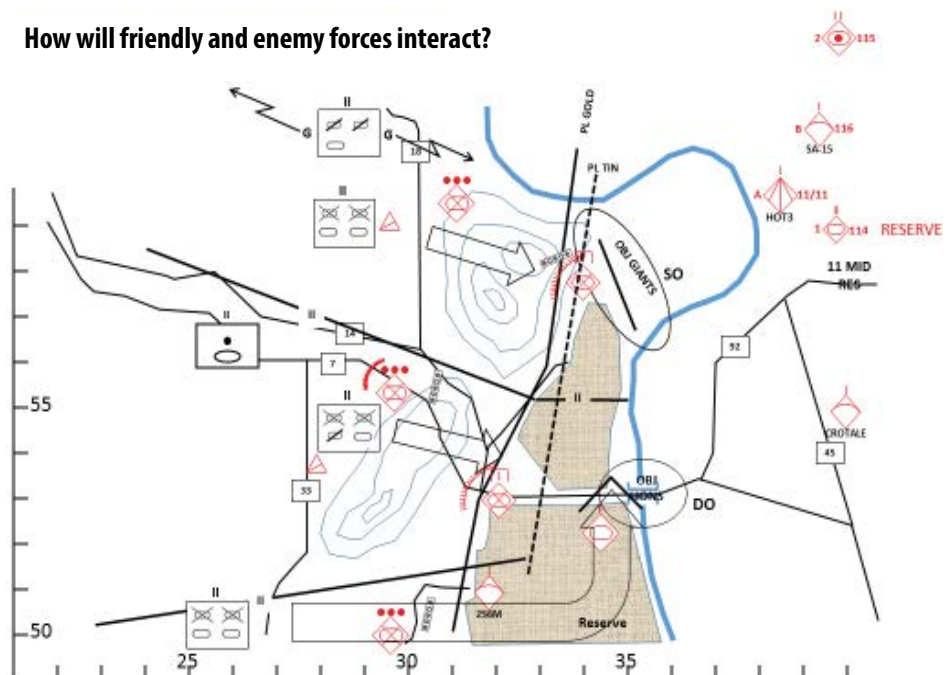
(Figure by author)

Figure 3. Course of Action Sketch Two

staff becomes the basis for future actions. Such discussions among the faculty conducting the research also spurred a desire to gain a better understanding about how leaders acquire awareness about their operational environments.

What We Learned about Simple Games and Visualization

How do leaders gain understanding of their operational environment? And what tools do they need to accomplish this task? One of the most important tools employed to gain understanding of the operational environment is the course of action sketch. As part of the study, students in the two groups were asked to recall what they had seen on a course of action sketch after studying it for only sixty seconds.

Figures 2 and 3 (on page 111) are the two course-of-action sketches displayed to the study participants for sixty seconds each. After studying the sketches, the students were asked a series of questions about what the friendly and enemy forces had, and how they might interact. The test group that played Kriegsspiel statistically significantly outperformed the control group in recalling what they had seen, particularly in regard to the locations of friendly units—in other words, they saw themselves better.[7] This finding was interesting when compared to the level of comfort the students felt when making visualization-based decisions.

Allowing for Individual Leadership Styles

Leaders arrive at decisions in ways unique to their personalities. Some leaders require evidence and analysis, and draw conclusions to make a decision.
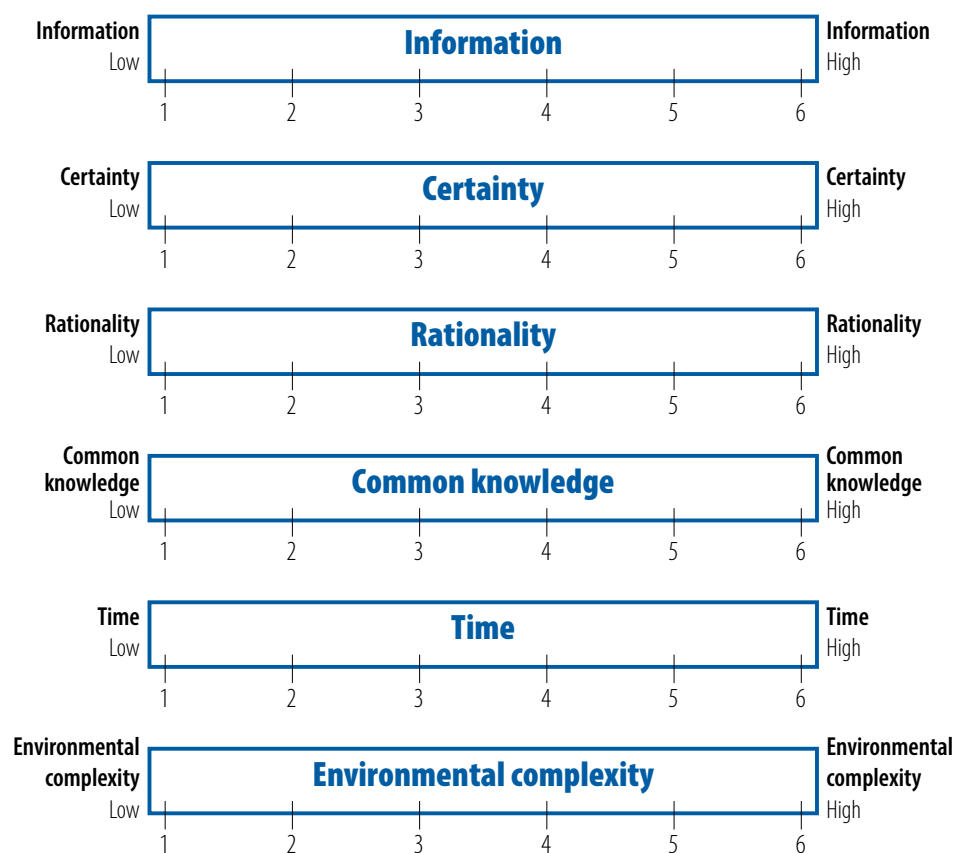
(Figure by author)

Figure 4. Game Theory Variable Effects on Decisions

Others intuitively arrive at a decision based on their own education and experience. In order to measure how leaders make decisions based on visualization, the research included a game theory instrument to measure the participants' comfort in making decisions grounded in visualization. For example, some leaders need a greater amount of certainty to become comfortable enough to make a decision.

Ranking that comfort level from one (low and with more ambiguous information) to six (requiring a high level of certainty and information) allowed the researchers to gain insight into the students' thinking.

After students had studied the sketches for sixty seconds and completed the visualization quiz, they were asked to rank their comfort level with the choices they made using the game theory instrument, ranking their certainty from one to six (see figure 4). In this second part of the visualization quiz, members of the test group who played Kriegsspiel recorded that they

Italian Army Maj. Stefano Catania (*right*) and U.S. Army Maj. Keith Weaver discuss potential locations for their troops as U.S. Army Maj. Colin Bair (*back left*) observes during a game of *Landpower* at the U.S. Army Command and General Staff College at Fort Leavenworth, Kansas. *Landpower*, a hex-and-map-based board game, was tested 9 to 15 March 2018 to evaluate its potential to replace or augment the current college's computer-based simulation that takes more time and manpower to operate. (Photo by Capt. Charlie Dietz, U.S. Army)

believed that what they were being asked fell in the realm of common knowledge at a statistically higher level than members of the control group.

Although not statistically significant, the test group outperformed the control group to a notable confidence level that they had enough information, certainty, rationality, and the knowledge that was common to them in part one of the quiz. When viewed through the lens of test versus control groups, the results were interesting in that the test group was more certain of their answers (see table, page 114).

How to Measure the Effectiveness of the War Game

The faculty counted discoveries of seizing opportunities and addressing threats and the ease with which each group incorporated these discoveries into their plans as measures of performance. To a statistically significant extent, the test group outperformed the non-Kriegsspiel control group by more readily seizing opportunities and addressing threats while integrating those discoveries into their plans.

These findings may not be surprising to many Army leaders, yet are significant because they appear to validate a traditional war-gaming methodology that had fallen in to disuse over time. By playing a simple role-playing board game such as Kriegsspiel for one four-hour iteration, planners improved their ability to see themselves, felt more comfortable making visualization choices, identified threats and opportunities, and incorporated the discovery into plans. All of these discoveries were statistically significant and surprised the faculty members conducting the study. We did not expect the results to be this

Table. Findings

Instruments	Statistical test conducted	Finding
Visualization quiz (recall)	Mann-Whitney-Wilcoxon Test	Test outperformed control seeing themselves (recall of friendly locations and actions) to a statistically significant extent. Although not statistically significant but notable, test group participants scored higher than the control group at visualizing certain aspects of the enemy such as types of units the enemy might have.
Visualization quiz (game theory variables)	One-tailed Mann-Whitney Test	Test outperformed control in confidence level for their decisions using the game theory variable of common knowledge. Although not statistically significant, it was notable that test group participants scored their experience higher than control for information, certainty, rationality, and common knowledge.
Faculty wargame observer survey	Friedman Test	Test out performed control to a statistically significant extent integrating multiple warfighting functions discovering threats and opportunities and integrated these discoveries into plans with greater ease.

(Table by author)

pronounced, and it led us to offer some observations about the planning process as employed by the military professionals.

What We Learned about Our Planning Process

As posed earlier, it is important for senior leaders to engage their subordinates about what the planning process is and what it does. If the purpose is to gain understanding that might be employed throughout the planning process but also through execution, then our beliefs about how our planning processes are designed is important. Such discussions might be made clearer by reflecting on the fluid nature of combat and thus the need for adaptive thinking during planning and execution cyclically. Such thinking can be illustrated by using the cognitive planning domains mentioned earlier (see figure 1, page 110).

For example, in the art institute, planners might develop their problem statement; in the laboratory, their courses of action (with war games stress-testing their courses of action); and in the factory, publish orders. If this process is cyclical, when might

planners and decision-makers reexamine their problem statement to determine if their experiences during execution might cause them to modify their understanding of the problem they should be solving?[8] How often do planners get to the orders production step of MDMP and never circle back to reexamine their initial problem statement to determine its relevance and, if relevant, if the problem had been solved? Or worse, how many planners never develop an initial problem statement incorporated into their assessment process that is iteratively examined in the light provided after execution?

These questions highlight that problem identification is only one of many ways our planning processes can be degraded. Often, leaders encourage planners to engage in the directed course of action due to time constraints. When they do, they may be missing a leader development opportunity. The directed course of action not only removes the depth and breadth of understanding that MDMP can provide but also the leader development aspect of teaching the next generation of planners how to balance the art of command with the science of control (see figure 1).

By examining our planning process through the lens of the cognitive planning domains, military professionals may find ways to not only improve the process but also the outcomes. For example, many planners intentionally skip steps in MDMP and justify it because of a lack of time, which may be counterproductive; if understanding is the main goal of this process, perhaps skipping steps cannot be justified. If leaders become totally dependent on the directed course of action, how will emerging leaders learn to balance the science of control with the art of command?

During the U.S. Civil War, combat was referred to as "seeing the elephant."[9] Many in today's Army have seen the elephant, and senior leaders need to prepare their subordinates for an uncertain future facing yet unknown opponents. Passing on to the next generation the ability to anticipate what is coming next through a balance of art and science might equip them to seize and maintain the initiative. Building visualization skills is the key to preparing emerging leaders for their turn at seeing the elephant.

Visualization is both an individual and a collective process. Our ability to visualize has a direct correlation to the quality of our plans and helps us anticipate some of the possibly unexpected events and then take steps to minimize their effects. Playing a simple role-playing war game like Kriegsspiel allows leaders a low cost and simple method of developing one set of skills necessary for successful planning as they develop their subordinate leaders. Of course, playing simple board games is not an answer in and of itself, but participating in them selectively allows soldiers to try a course of action, see the outcome, and then vary their next attempt, learning from each repetition to see what works. Low cost, simple to run, and able to support visualization, analog games could be part of the answer to preparing future leaders for uncertainty and ambiguity.

The question that commanders should answer is, if you could improve your unit leader's visualization skills through simple analog games, why wouldn't you? The functional area strategists attending CGSC have been introduced to Kriegsspiel and a variety of other simple board games that can be adapted for use in a variety of settings. They have a wealth of knowledge to help commanders improve their staff officers and noncommissioned officers. ■

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Notes

Epigraph. John Godfrey Saxe, "The Blind Men and the Elephant," in *The Poems of John Godfrey Saxe* (Boston: J. Osgood, 1872), 260.

1. Ibid.
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4. Jonathon Keats, "Let's Play War: Could War Games Replace the Real Thing?," Nautilus, 24 September 2015, accessed 28 September 2018, http://nautil.us/issue/28/2050/lets-play-war.

5. Richard McConnell et al., "The Effect of Simple Role-Playing Games on the Wargaming Step of the Military Decision Making Process (MDMP): A Mixed Methods Approach," *Developments in Business Simulation and Experimental Learning: Proceedings of the Annual ABSEL [Association for Business Simulation and Experiential Learning] Conference* 45 (2018), accessed 5 October 2018, https://journals.tdl.org/absel/index.php/absel/article/view/3200/3127.
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7. The findings described as "statistically significant" employed statistical tests indicating a 5 percent probability that the outcome was result of random chance. In other words, there was a 95 percent probability that this outcome indicated a replicable trend.
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9. Ibid.; Jonathan R. Allen, "Seeing the Elephant—How It Feels to Be Under Fire," The Civil War: Civil War History and Stories, accessed 28 September 2018, http://www.nellaware.com/blog/seeing-the-elephant.html.

A soldier from 123rd Brigade Support Battalion, 3rd Brigade Combat Team, 1st Armored Division, provides security 11 April 2016 during Decisive Action Rotation 16-05 at the National Training Center, Fort Irwin, California. (Photo by Pfc. Esmeralda Cervantes, U.S. Army)

The Maneuver Enhancement Brigade is the Support Area Command Post

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Chief Warrant Officer 3 Stephen R. Barber, U.S. Army

The Necessity of a Mission Command Node in the Support Area

The *Army Operating Concept: Win in a Complex World* describes how the Army will conduct Unified Land Operations as part of a joint force in support of unified action.[1] The complexities of tomorrow's operational environment may include contested domains and create conditions for overmatch. Multi-domain operations include peer and near-peer capabilities such as long-range artillery, integrated air defense, and counter unmanned aircraft systems technology.

In order for the Army to fight and win against this type of enemy, land component commands will need to plan and execute large-scale combat operations that include tactical tasks such as passage of lines and encirclement operations. These tactical tasks enable land component commands to secure objectives and seize key terrain throughout the operational framework, which includes the deep, close, support, and consolidation areas. As the division's maneuver brigades get further away from the line of departure, the bigger the support area and consolidation area becomes. For the division's maneuver brigades to maintain momentum, a dedicated mission command node is required to control and assess operations in the support and consolidation areas.

According to the recently released Field Manual (FM) 3-0, *Operations,* the support area is defined as the "portion of the commander's area of operations that is designated to facilitate the positioning, employment, and protection of base sustainment assets required to sustain, enable, and control operations."[2] The concept of preventing the enemy from disrupting friendly sustainment operations is not new. From ancient Roman times to today's fight, history has provided countless lessons learned on the importance of protecting and enabling sustainment operations. Furthermore, Army doctrine emphasizes sustainment as a shaping operation for generating and maintaining combat power through logistics, personnel services, and health service support.[3] An inability to synchronize and control operations in the support and consolidation areas significantly degrades operations occurring in the close and deep fight.

History of the Support Area

Dating back to the days of the War Department, the Army has redefined and modified its doctrinal battlefield geometry (now noncontiguous and nonlinear) and operational framework as potential threats have continued to modernize. As an expeditionary force, the Army continues its transformation today to remain ready to fight and win against peer and near-peer enemies in complex operational environments. As part of this transition, the area between the close and joint security area has undergone multiple name changes, though the concept has remained relatively the same. In the late 1980s, this aforementioned area was known as the rear area and designed to provide freedom of action and continuity of operations, logistics, and battle command.[4] By 2008, the terms "rear area" and "security area" were rescinded as the Army transitioned to the "support area" and eventually added the "consolidation area" (see figure 1, page 118).[5] Regardless of the name change, the concept of the corps and division's support areas has remained the same. The purpose is codified in FM 3-0 and is required to facilitate

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sustainment, security, and protection operations.[6]

The capacity to execute sustainment and protection operations in a division's support area varies in complexity, and depends on the scope and nature of the large-scale combat operation. For coordination and synchronization of support activities, the Army has been employing command posts since even before the 1940s, an enduring acknowledgment of the importance of structuring a forward headquarters that is capable of controlling and assessing operations.[7] Effective support area operations require some centralization of dedicated personnel, mission command information systems, and leadership. To meet the current need, FM 3-0 established the support area command post (SACP) for corps and division headquarters. However, the SACP is not resourced and must be formed from organic equipment and personnel from within the main and tactical command posts. The primary functions of an SACP include "planning and directing sustainment, terrain management, movement control, and area security."[8] With or without augmentation from a division staff, the Army already has a unit within its formations capable of performing these functions: a maneuver enhancement brigade (MEB).

As with other division command posts (main, tactical, early entry, mobile command group), the SACP provides the MEB with the facility and structure for exercising mission command in the support area. In close communication with the division's deputy commanding general for support (DCG-S), the MEB commander synchronizes processes and procedures through the alignment of personnel, equipment, information systems, and networks. Mission command is imperative for a division's support area as it has direct implications for shaping deep area operations for maneuver forces. As maneuver and fires elements advance, the consolidation area grows in size and is occupied by multiple sustainment and protection units, which include multiple sustainment brigades and a theater/expeditionary sustainment command. Depending on the task organization of a joint task force or combined joint forces land component command, these units may not have command and support relationships and thus will operate independently of each other. For this reason, the presence

CSA—Corps support area   DSA—Division deep area   MBA—Main battle area

(Figure from Field Manual 3-0, *Operations*)

Figure 1. Main Battle Area

of an MEB serving as the unifying mission command node in the support area is paramount.

Historical Context

A prime historical example on the importance of the support area is Operation Chromite, the Inchon landings during the Korean War. North Korean forces conducted a massive surprise attack in June 1950 against South Korean forces to secure Seoul, capture over 125,000 enemy prisoners of war, and forced remaining North Korean units to retreat north.[11]

Why Maneuver Enhancement Brigades?

The origins of MEBs date back to 2006 and were created to conduct operations in the support area.

> "The origins of the MEB's employment and design can be traced back to a period when the Army was focused on transforming to a modular force.

and U.S. forces. This onslaught forced South Korea and the United States south, where they established a perimeter along the Naktong River to defend the port at Pusan, which became known as the Pusan Perimeter.[9]

Gen. Douglas MacArthur was aware that the main effort of the North Korean army focused on operations along the Pusan Perimeter. The North Korean leadership did not believe that an amphibious assault along Inchon was possible due to the restrictive terrain. As a result, it failed to provide adequate security to communications and logistical lines of support. Due to this, MacArthur and his staff developed Operation Chromite, a plan designed to conduct an amphibious landing to attack the North Korean rear area at Inchon to destroy supply and communication lines while allied forces pushed north from the Pusan Perimeter.[10]

Chromite began on 14 September 1950 when naval gunfire engaged North Korean military forces at Inchon, and the following day, U.S. Marines landed at the Inchon waterfront to destroy any remaining North Korean defenders. Because the main North Korean focus was on the Pusan Perimeter, they were unable to conduct proper counterattacks to defend their rear area. Within four days, U.S. forces seized the Kimpo airfield, and by 20 September, they crossed the Han River and began attacking North Korean forces in Seoul. U.S. forces seized Seoul by 26 September and had cut off North Korea's supply and communication lines. North Korea's inability to properly defend communication and logistical lines in their rear area resulted in disastrous defeat. Chromite allowed allied

At one point, the Army had multiple MEBs as part of the active duty force. Today, there a total of nineteen MEBs within the Army, with sixteen residing in the Army National Guard and three in the Army Reserve.[12] Each MEB was originally commanded by a brigadier general; however, the commander's grade plate was downgraded to colonel by 2013.

The preponderance of today's nineteen MEBs have deployed in support of contingency operations within the Middle East and other theaters. Although MEBs only have a brigade support battalion and a network support company organically assigned to each, they are often augmented with myriad capabilities depending on the nature and scope of the mission and operational environment. This augmentation is similar to the augmentation provided to a division artillery commander and staff as needed such cannon and rocket battalions. In the case of MEBs, their added capabilities often include one or more battalions of engineers, military police, chemical, explosive ordinance disposal, air defense, civil affairs, and infantry (see figure 2, page 120).

According to FM 3-94, *Theater Army, Corps, and Division Operations*, the division often identifies and assigns the support area as the MEB's area of operation.[13] The added support area and maneuver support capabilities allow the MEB to cover the entirety of the division's support area (depending on the size) that is not already assigned to an adjacent or tenant unit.

As the MEB's higher headquarters, it is important for the division to resource the MEB with enough

capabilities to provide mission command of the entire support area, not just base clusters and main supply routes. The added maneuver capability serves as the MEB's tactical combat force (TCF) for close combat operations. The TCF allows the MEB to conduct limited offensive and defensive operations in the support area and the capability of defeating and area security operations in the division's support area.[16] These aforementioned tasks and responsibilities are consistent with historical doctrinal tasks that were assigned to the rear command post in FM 7-100-2, *Infantry Division Operations*.[17]

A MEB is resourced for main and tactical command posts. Between the two command posts, a MEB

Mi—Military intelligence   MP—Military police   NET—Network   SPT—Support   TCF—Tactical combat force
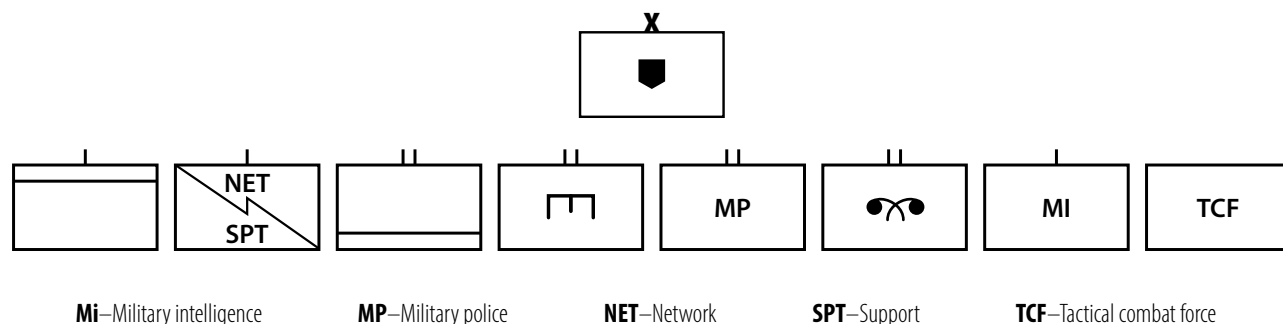
(Figure from Field Manual 3-81, *Maneuver Enhancement Brigade*)

Figure 2. Sample Maneuver Enhancement Brigade Organization

bypassed enemy units and special purpose forces. If a bypassed unit exceeds the TCF's capability, or if the enemy has established a level of control, the division can create consolidation areas and coordinate for additional maneuver capability through the time-phased force deployment data. Though the existence of the MEB does not predate the Global War on Terrorism, its purpose and capability are often misunderstood and therefore underutilized by commanders and senior leaders. Failure to properly resource a MEB degrades its operational reach and span of control in the support area. FM 3-0 describes a unit's operational reach as a "culminating point" and should be considered during mission analysis when determining resources based on mission requirements and the size of the area of operation.[14]

The origins of the MEB's employment and design can be traced back to a period when the Army was focused on transforming to a modular force.[15] The MEB's doctrinally tasks and responsibilities are defined in FM 3-81, *Maneuver Enhancement Brigade,* and FM 3-0, and include terrain management, information collection, movement control, protection operations (personnel recovery and base cluster defense),

typically consists of a current operations cell, area operation cell, intelligence cell, command and control information systems cell, plans cell, protection cell, fires cell, and sustainment cells (logistics, personnel, staff judge advocate, and medical); and is resourced with approximately two hundred soldiers.[18] The number and structure of the MEB closely resembles the rear area command post from the early 1990s. The MEB's assigned personnel and staff organization is designed to execute its doctrinal tasks of conducting support area operations and maneuver support. Whether referred to as the division rear area, security area, or the support area, the MEB was designed to serve as the mission command node.

As the SACP and mission command node for the support area, the MEB must integrate with the division in order to synchronize operations and lines of effort with the close and deep fight. The division's support area will typically have multiple tenant brigades that are supporting the operations across the operational framework. These tenant brigades will consist of company-level or above elements from combat aviation, field artillery, division artillery, sustainment, military police, and engineers. The

majority of these units are division enablers and have a command and support relationship with the division. These units do not, however, have a command and support relationship with the MEB. From a mission command perspective, this makes it difficult

and space between the support, close, and deep fight. Based on the MEB's key tasks within support area operations, the division's protection, sustainment, intelligence, information collection, and targeting working groups are among the most key to synchro-

> The *Army Operating Concept* characterizes tomorrow's potential harbingers of future conflict as Russia, China, Iran, and North Korea.

for a MEB to plan, control, and assess operations without the needed seniority or procedural control to do so. In addition to integrating the DCG-S into the SACP, the MEB's role and authority should be clearly articulated, communicated, and codified in the division's orders production process.

When possible, and at the discretion of the division commander, the division's DCG-S must operate out of the SACP in order to facilitate and reinforce the MEB's role as the division's support area mission command node. The permanent integration of the DCGS-S into the SACP has proven effective as observed during past warfighter exercises (WfX) (dating back to WfX 16-04) by the Mission Command Training Program and the Center for Army Lessons Learned. According to the FM 6-0, *Commander and Staff Organization and Operations*, the presence of the DCG-S in the SACP helps "control the execution of all division operations" and SACP roles and responsibilities should be codified in terms of a reference memorandum.[19] The integration of the DCG-S into the SACP, along with any additional needed resources from the division, allows the MEB to synchronize all warfighting functions across the three planning horizons (current operations, future operations, and plans). The MEB's ability to effectively operate the SACP as a mission command node for the division's support area is largely predicated on its ability to integrate into the division's battle rhythm events.

Integrating into the division's boards, bureaus, chairs, cells, and working groups (B2C2WGs) provides an increased shared understanding between the SACP and the main command post, and better allows for the synchronization of operations in time

nizing division operations. As an enabler and extension of the division, the MEB's B2C2WG participants represent the division's support area tasks and planning priorities by each warfighting function. Being an active participant and sometimes lead for the division's B2C2WGs allows for the MEB to exchange running estimates and provides the division commander with a common operational picture of the support area. This allows the MEB to leverage division processes, procedures, and resources such as intelligence collection platforms to enable support area operations. In his or her role within the SACP, the DCG-S assists the MEB during B2C2WGs and participates or chairs as required.

The Division is the Unit of Action in Decisive Action

Seventeen years of counterinsurgency operations and the Global War on Terrorism has influenced the Army force design and capabilities. To fight and win against transregional terrorist organizations, the Army formulated the brigade combat team as the Army's unit of action, sacrificing capability and capacity for modularity. Secretary of Defense and retired Marine Corps general James Mattis characterized the shift in force design as "strategic atrophy."[20]

The *Army Operating Concept* characterizes tomorrow's potential harbingers of future conflict as Russia, China, Iran, and North Korea.[21] In order to exploit temporary windows of opportunity in a contested fight against these regional and competing powers, land component commanders will heavily rely on the division as the primary unit of action in a decisive action operational environment. As the Army continues

(*Left to right*) Col. Mario Diaz, I Corps chief of staff; Brig. Gen. William Graham, I Corps deputy commanding general; Sgt. Maj. Victor Ballesteros, I Corps operations sergeant major; and Canadian Brig. Gen. Michel-Henri St-Louis, deputy commanding general for operations, receive a briefing on the current status of a battle simulation during Warfighter Exercise 19-1, a tactical command post exercise that was held 2–10 October 2018 at Joint Base Lewis-McChord, Washington. The authors of this article recommend integrating the deputy commanding general for support into the support area command post to "facilitate and reinforce the maneuver enhancement brigade's role as the division's support area mission command node." (Photo by Sgt. William Brown, U.S. Army [classified materials in this photo are blurred for security purposes])

to revolutionize AirLand Battle as multi-domain operations, the capabilities that the division and its enablers bring to joint forces will greatly assist with optimizing large-scale combat operations. As with the division's other organic enablers, the MEB needs to be part of the solution and division force design.

Each of the division's functional and multifunctional brigades offer unique capabilities to the land component commander. Combat aviation brigades provide reconnaissance, security (screen or guard), air assault, and air movement of troops. Division artillery (or a field artillery brigade) supports joint fires, counterfire, and reinforcing fires for brigade combat teams. The sustainment brigade delivers supplies, field services,

and sustainment maintenance. The fact that these brigades are organic to the division allows for the formation of habitual relationships, which entails a level of trust and increased opportunities for combined arms rehearsals. Though none of today's MEBs are part of the active-duty Army, the MEB's employment and planning would be optimized if it were permanently added as a division enabler. This would allow the MEB commander to establish a habitual relationship with the division commander and other brigade commanders. The MEB and the capabilities they bring should be viewed in the same manner as combat aviation, division artillery (or field artillery brigade), and sustainment brigades. As the Army's unit of action for

decisive action, divisions should not deploy in support of contingency operations without an attached MEB.

Examining the MEB through the Lens of Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities

Army Doctrine Publication 1-01, *Doctrine Primer*, describes Army doctrine as the "language of our profession" and is intended to provide all soldiers with the same fundamental principles.[22] In the case of the MEB, a gap in doctrine caused a misunderstanding across the Army on the role and purpose of the MEB. Prior to the publication of FM 3-94 in 2014, the last doctrinal publications for division operations was FM 71-100, *Division Operations*, in 1996.[23] This meant that there was an eighteen-year gap in doctrine for division operations. Since then, MEB specific doctrine was published with FM 3-81 and 3-90.31, *MEB Operations*, in 2014 and 2009, respectively.[24] As this article was written, the Combined Arms Doctrine Directorate is currently drafting Army Techniques Publication (ATP) 3-90.3 *Support and Consolidation Area Operations*, which will provide commanders and senior leaders with a common understanding of the MEB's role and responsibilities within the division's support area.[25]

ATP 3-90.3 will be a good compliment to ATP 3-94.2, *Deep Operations*, which was published in 2016, for synchronizing operations in a sometimes non-linear and noncontiguous operational framework.[26] However, though the newest release of FM 3-0 introduces the consolidation area, it fails to mention any new tasks associated with the area. ATP 3-90.3 will provide clarity on the difference in tasks assigned in the support area and the consolidation area.

A MEB is authorized many of the mission command information systems (MCIS, previously referred to as Army Battle Command Systems) that are used for battle tracking, running estimates, and functional processes by each warfighting function. A MEB's MCIS authorizations include the Command Post of the Future, Advanced Field Artillery Tactical Data System (AFATDS), Air and Missile Defense Workstation, Distributed Common Ground System-Army (DCGS-A), and the Tactical Airspace Integration System (TAIS).[27] The suite of

MCIS allow the MEB to control operations within the support area. For example, the presence of AFATDS and TAIS in the command post allows the MEB to synchronize the clearance of fires and airspace management process.

The presence of DCGS-A enables the SACP to synchronize intelligence operations between the deep, close, and support area fights; and also provides commanders and senior intelligence officers with a common understanding of the enemy composition, disposition, and strength. Collectively, MCIS allows each of the MEB's warfighting functions to integrate with division and adjacent units for achieving a common operational picture.

Commanders, staff, and planners at all levels need a better understanding of the roles and responsibilities of a MEB. This shared understanding is particularly important at the Army service component command, corps, and division echelon. From a leaders training perspective, this can be overcome through training and education within the institutional domain (Captains Career Course, Pre-Command Course, etc.) and professional military forums. This training, coupled with early staff integration through parallel and collaborative planning during the military decision-making process will ensure the MEB is employed as designed. Otherwise, the MEB will continue to be at risk of being misused in large-scale combat operations.

Posturing for Success and Exercising Mission Command during Warfighter Exercises

The WfXs provide echelons at corps and below to train on mission command in Unified Land Operations. There are five WfXs each fiscal year. Nine MEBs participated as a training audience in the past three fiscal years (FY 2016-18), consisting of fifteen possible WfXs. During the same time frame, fourteen MEBs participated as a response cell as either a corps or division enabler. Over the next three fiscal years (FY 2019-21), consisting of fifteen possible WfXs, eight MEBs will participate as a training audience and nineteen MEBs will participate as a response cell as either a corps or division enabler.

According to Training and Doctrine Command Regulation 350-50-3, *Mission Command Training Program*, response cells replicate subordinate units

in order to stimulate and interact with the training audience.[28] They do not represent a training audience nor are they a training audience themselves. When participating as a response cell, MEBs are unable to properly exercise mission command and the planning process with division in the same manner that they would as a training audience. For this reason, looking beyond fiscal year 2019, it would be optimal for MEBs to participate more as a training audience and less as a response cell. This would facilitate an opportunity for the Army to better understand MEBs and their role as the mission command node in the division's support area. ■

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Military Review

FOR YOUR INFORMATION

The *Jackson Journal* is a professional journal focused on leading and training soldiers in an initial military training (IMT) operating environment. The commanding general's intent behind the publication of the *Jackson Journal* is to improve organizational learning through the sharing of ideas, best practices, and lessons learned among all leaders at Fort Jackson, South Carolina. The *Jackson Journal* will serve as a platform for all IMT professionals to express their thoughts and concerns, start a dialogue, or simply gain a better understanding on a specific topic to improve their own professional development. To view the *Jackson Journal*, please visit http://www.jacksonjournal.org/. The most current edition, March 2019, may be found directly at http://www.jacksonjournal.org/issues/1904/index.html.

Information War 2022

Musings of a Senior Officer on Russian Information Warfare and Recent Events

Extract of foreword published by *Praxis: Journal of International Issues* in 2023

Spc. Thomas Sarsfield, U.S. Army

Today's generation of professionals grew up in an age of social connectedness. Everything they said, did, and typed, was immortalized by the camera on their phones and imprinted onto an enormous online record. But, because sometimes the story wasn't good enough for them with facts alone, disinformation through fake news websites gripped Western society and shaped its development from 2016 forward.

As was shown, a few silver-tongued wordsmiths and a solid team of social media bots buttressed by cash infusions to a friendly party could do more to influence an adversary's policies than traditional means of state interaction. The politically illiterate and misinformed, yet tech savvy electorate of many countries, found themselves increasingly falling prey to ostensibly independent yet fundamentally propagandistic "news" sites bankrolled primarily by the Russian government.[1] Indeed, a wave of fake news penetrated deeper and faster than real news.[2] One result was that by 2016 established traditional journalism behemoths, long the platforms for debate in American if not international society, were finding themselves on the losing side of an information insurgency that sought to sow social discord by undermining confidence in traditional news through fake news. One such

venerated institution, the *Washington Post*, in response to the dramatic rise and influence of fake news, once proclaimed on its website banner that "Democracy Dies in Darkness." By this it meant that the press's traditional role of watchdog over political policy makers was rapidly eroding because of the changed information environment that made discerning truth from fiction increasingly difficult. Though democracy hasn't died yet since then, it has nonetheless become extremely dysfunctional due primarily to the unmitigated chaos of the information environment.[3]

We saw this information chaos during the 2021 Berlin riots, when a series of provocative tweets about right-wing reactionary Adolf Aduederman being arrested by the German Federal Police rippled throughout German social media. Within an hour of the original tweet about Aduederman's arrest, thousands of Twitter accounts—many subscribed to each other to give the impression they were not fake accounts to unsuspecting readers—had retweeted it with "#FreierAduederman." Soon it was picked up by several alternative, right-wing online media outlets heavily funded by the state-owned Russian oil enterprise Gazprom.

His angry supporters took to the streets by the hundreds, chanting and throwing rocks outside of the

Bundestag. International audiences gawked at videos of armor-clad police tapping their riot shields with batons and hurling tear gas at demonstrators.

Despite numerous press statements and a public announcement from Chancellor Torsten Buchberger that Aduederman was not arrested, his conspicuous absence from social media only fueled suspicion and outrage. On the third day of unrest, a video purporting to show

Elsewhere, during the 2022 French elections, Russian intelligence agencies began a targeted social media campaign to turn out the vote among far-right voters. Much like the 2017 elections, the 2022 election saw poor voter turnout with slightly less than 50 percent of the eligible voting population going to the polls. However, among far-right voters, the turnout was 55.3 percent, leading to additional seats for the National Front.

> " Though democracy hasn't died yet since then, it has nonetheless become extremely dysfunctional due primarily to the unmitigated chaos of the information environment. "

Special Deployment Commandos raiding Aduederman's house days earlier incited hundreds more to pour into the streets of Berlin. Similar protests erupted in other cities, including Frankfurt and Bonn.

Yet Aduederman had not been arrested. In the early hours of August 29, 2021, he announced through Twitter that he was alive and well. He claimed that he had taken an "abrupt leave of absence" from social media to go camping because a "reputable informant" had tipped him off to the planned arrest. The video of Special Deployment Commandos purportedly raiding Aduederman's home days earlier was traced by the Bundespolizei to an internet protocol (IP) address originating in Russia, although the Russian government denied any involvement with the video's release.

It was later assessed that the Russian disinformation campaign did not occur independently. Instead, it was coordinated with other elements of subversive power. A highly classified intelligence assessment produced by Germany's domestic intelligence agency, the Federal Office for the Protection of the Constitution, concluded that agents from the Main Directorate of the General Staff of the Armed Forces of the Russian Federation, commonly known as the GRU, had been covertly deployed and embedded within both German far-right and far-left political groups. Their advice and assistance on the ground was invaluable to the organizers of far-right movements that demonstrated during Aduederman's purported detainment—as well as to the far-left groups who counter-protested.[4] It remains unknown at this time who leaked the report.

Notably, the Russian campaign had focused almost entirely on social media engagement, which it apparently concluded was the tool-of-choice to mobilize voters and sow discord.[5] This strategy emphasized a geo-cyber approach. Advertisements funded by Russian state-owned corporations through shell companies focused on far-right voters in districts with the best odds of success for far-right parties, while Facebook pages and Twitter accounts run by intelligence agencies generated sensational news accounts that focused on how key issues affected a particular community. Appropriately, there were also a spate of tweets and articles targeted at moderate and left-wing voters that questioned the value of an individual vote, to try to drive down turnout among those groups. Additionally, the emphasis on a bottom-up approach that relayed how a voter's own town or region was impacted by, say, immigration and then connected it to a broader theme of national, secular, or religious identity yielded impressive results.

An important aspect of this operation was coordination. The Russian government was careful to

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ensure that local narratives did not conflict with strategic narratives, while at the same time giving the lower echelons responsible for creating local products the space needed to be creative, timely, and relevant.

Though in the West, the psychological (PSYOP) forces of various nations attempted to counter such

> Indeed, by 2020, the Russian military had substantially reenvisioned the role of armed force in conflict all together, especially its relationship to information warfare.

efforts by performing what the U.S. military calls Military Information Support Operations (MISO), the United States and its allies were not prepared to respond to the Russian effort at the same scope or level of Russian sophistication.

Even now, MISO narrowly aims to achieve behavioral change through the use of information in order to support military and political objectives. As such, MISO doctrine remains an inadequate lens to assess the massive scope and reach of the Russian PSYOP capabilities that have emerged since 2016. Indeed, by 2020, the Russian military had substantially reenvisioned the role of armed force in conflict all together, especially its relationship to information warfare. While the United States continued to view MISO merely as a force multiplier of other actions, the Russians viewed other military actions as a force multiplier of psychological warfare. As early as 2014, Janis Berzins noted, "[T]he Russian view of modern warfare is based on the idea that the main battlespace is the mind and, as a result, new-generation wars are to be dominated by information and psychological warfare… ".[6]

So while the United States continued to view PSYOP in a secondary, support capacity, Russia apparently had concluded that the aim of modern war is to fundamentally alter the adversary's perspective, which means heavy emphasis on PSYOP in all realms of influence. Influence, as Berzins puts it, is "at the very center of [Russian] operational planning."[7]

As a result, by 2021 the United States and its NATO allies found it difficult to coordinate effective responses in a rapidly evolving information arena that broadly favored their adversaries. For example, whereas

Western penetration of adversary firewalls to effectively exploit social media websites like Weibo in China or VK in Russia was, and is, hampered by strong censorship measures by both the platform operators and government, in contrast, Western platforms—which were largely unregulated by firewalls and committed to free speech—enabled extensive foreign exploitation by the mass dissemination of subversive messages.[8]

Post-2022, our adversaries continue to be less susceptible to the strategies they themselves employ by virtue of the restrictive social and government structures that control information dissemination in their societies. Furthermore, despite being a powerful tool for information operations, Western MISO activities remain constrained by ethical concerns about "collateral information damage" from PSYOP information campaigns that potentially influence Western domestic populations in ways that continue to be interpreted as unethical, even illegal. Whereas traditional PSYOP tools such as pamphlets, radio broadcasts, and loudspeaker operations are limited in geographic scope, such limitations do not exist for online information, which cross national borders easily and have global reach. Anyone anywhere can access an open website like Facebook or Twitter and traverse its "digital terrain" with ease. Thus, concerns about how MISO operations affect American civilian perceptions, which are still factored into operational planning, have in a practical sense proven to be a great impediment. As a result, not only are we limited in what we are able to do by how our adversaries regulate their own websites, but also we are restricted by our own ethical commitment to shielding our population from messages intended to shape the behaviors of foreign audiences.

Furthermore, other challenges to the reliability and trustworthiness of information in the news have come to fruition since the last decade as rapid advances in technology have created new disinformation challenges. In 2016, a group of German and American researchers developed software that allowed them to manipulate

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people's faces in real time.[9] They demonstrated this concept by altering facial movements of former presidents George W. Bush, Donald Trump, Barack Obama, and also of Russian president Vladimir Putin as they were being interviewed on television in an effort to create false impressions of the body language reputedly depicted. This technology has been subsequently refined since that time and has advanced by voice replication software and Computer Generated Imagery—the same technology used to create spectacular effects in movies. Now fake interviews appearing online are virtually indistinguishable from real interviews. Only seasoned analysts can identify the microirregularities and parse fact from fiction in what is electronically depicted. From the growing difficulty in their ability to determine fact from fiction, by the late 2010s, the public had largely withdrawn their faith in expertise. These tools, which were routinely used within Russia against political dissidents, now are routinely deployed against activists and candidates across the world. The so-called "end of expertise," combined with other global trends such as the rise in identity politics and decline of social capital, has created exceedingly fertile ground for sowing dissent.[10]

Ironically, *The New York Times* subscription base grew considerably in 2017.[11] So too did the subscription numbers of the *Washington Post* and *The Economist* grow as well, both in America and Europe. However, information insurgents found that they didn't need to kill the mainstream media to win and achieve their influence objectives. Rather, information insurgents could attain objectives by disrupting on the fringes, identifying and manipulating the political radicals to vote in higher numbers, cause scenes, and sow social disorder. They even managed to disrupt within parties and movements by dredging up, seizing on, and sensationalizing reputedly unscrupulous past behavior of targeted persons to weaken support for a candidate during election cycles. Such "digital assassinations" were sometimes the work of remarkable investigative work by information insurgents who dug through the old social media accounts of potential targets, finding unseemly or embarrassing behavior and then resurrecting it for the world to see.

Other times a well-developed human intelligence network brought a long-forgotten video provided by an old associate of the target, captured years earlier and sitting on an old cell phone. But, in far too many cases, such reputed information was simply fabricated and subsequently amplified in a digitally constructed echo chamber, as was the case during the 2016 Lisa controversy in Germany.[12]

Interestingly, the online forum known as 4Chan has long been a source of open-source political deception and influence campaigns. Originally founded by a young man named Christopher Poole as an online forum to discuss Japanese culture and anime, 4Chan quickly morphed into a toxic blend of far-right politics, misogyny, and practical jokes. 4Chan users on the /b/ and /pol/ boards were known for their self-described "psyops" campaigns against communities or groups they deemed to be "libtard cucks."[13] Frequent targets included Reddit and Tumblr. A good example is the "O-K" hand sign scandal of 2018. 4Chan users began circulating posts online that alleged that the "W" formed by an "OK" hand sign represented "white power."[14] This provoked outrage across many groups online, who fell for the gag—thus reinforcing the belief that liberals were gullible or reactionary amongst conservatives who understood the prank's origins or otherwise believed the notion of the hand sign being racist to be ridiculous.

However, despite the disinformation campaign being called out by the Anti-Defamation League, the trick had real world consequences.[15] A Coast Guardsman was relieved from Hurricane Florence relief efforts after flashing an "O-K" hand sign on national television, which led many Twitter users and news outlets to allege that the Coast Guard harbored racists among its ranks.[16] This open-source disinformation campaign was so effective in part because the "O-K" sign was also associated with a cultural meme at the time, in which a person would trick another person into looking at their hand, which formed an "O," below the waist and say "Got 'Em!"[17] Thus, many who innocently flashed this sign on social media were unfairly castigated as racists. In one particularly unfortunate example, Alabama police officers were placed under investigation after a group of officers posed in a "Got 'Em!" picture.[18]

Although the laddish pranks of online tricksters were naively seen by some as benign, these sorts of native disinformation campaigns were amplified or taken advantage of by foreign agents. For instance, take the Crowley scandal that rocked the United Kingdom. In 2021, following a no-confidence vote in Her Majesty's Government over its handling of the United Kingdom's relationship with Europe, general parliamentary elections were triggered.

A reputed video of Conservative Party leader Robert Crowley exposing himself to clearly underage girls on the video chat website Omegle was posted on the 4Chan image board /pol/ two weeks before the May parliamentary elections. It quickly spread and was reported widely across several news agencies. The poor handling of the situation by the Conservative party led to sharp losses against the Labour party. However, following a criminal inquiry by Scotland Yard, it was discovered that the video was a "deep-fake" made by a small group of student left-wing Green Party activists. Irrespective, it was too late for Crowley and the Conservatives.

Additionally, despite not originating in Russia, the controversy was a golden opportunity for the Russians to exploit in further undermining Crowley's agenda in Europe. A staunch defense advocate, Crowley had endeavored to strengthen the United Kingdom's position in Europe. He voted to increase military spending, argued to station British service members in Poland, and planned to send British troops to advise and assist the Ukrainian army as prime minister if the Conservative Party won the general election. As the video gained traction, Russian social media accounts began to amplify the story and develop a narrative that casted the Conservative party as protecting pedophiles.

There are two lessons that should be drawn from the Crowley and 4Chan controversies. First, natural fissures in social cohesion can be widened by state actor intervention using disinformation techniques. Second, the challenge in combatting disinformation is not the lack of truthful information but rather the widespread proliferation and volume of disinformation. The Russian way of PSYOP seeks to cause paralysis through information discord. It often involves the use of techniques designed to saturate the target audience with false, often contradictory, information repeatedly. The veracity of the information is less important to a recipient than the number of times it is repeated. Thus, the tragic irony of the internet age is that despite citizens having access to a vast repository of information, the decentralized nature of the web in the West means that a nefarious agent has virtually unlimited ability to post whatever he or she so chooses.

This is now compounded by artificial intelligence, which can directly and indirectly act as disinformation force multipliers. As they have since the past decade, social media and web query platforms continue to have a strong financial incentive to keep users occupied on their sites for as long as possible. The longer a user is engaged, the more they see or click advertisements and thus the more money a company makes. Therefore, astonishingly sophisticated bots have been developed to analyze users and tailor their feeds to suit taste and interests. This can lead users to become trapped in a political echo chamber. Users click on videos or posts they like or agree with, leading the bot to continuously recommend videos that reinforce their beliefs in a bid to keep them engaged longer. As a result, it has become easy for a person to become trapped in a vortex of politically radical content that often spews disinformation. Repeated exposure to disinformation leads to belief in that disinformation, even if it is demonstrably false. There is often a snowball effect, too. A post, video, or article that is particularly sensational or salacious is more likely to be shared by users, leading to more users seeing that fake information and sharing it to their social networks.

Additionally, artificial intelligence is now used to refine disinformation in very threatening ways. As the mass of personal data online has grown, so too did the tools to analyze and make sense of that data. Advanced algorithms can sift through a person's online life, creating a psychological and political profile that is subsequently used in "micro-targeted" propaganda assaults.

Kremlin front organizations now have hundreds of ads, each tailored to a particular profile, that are "launched" at users based on their online behaviors.[19] This precision information assault is particularly dangerous. Disillusioned soldiers and diplomats, identified by their social media activity, are now at personal risk as never before of having their news feeds manipulated to magnify feelings of dissent. This creates a hospitable environment for foreign case officers to recruit spies and saboteurs. Furthermore, armed with data collected from social media platforms, actors can employ armies of "social bots" that aim to push narratives by pretending to be real people. These bots, coupled with human handlers, can "curate" content to mislead a target audience.

Although the U.S. Army routinely conducts military drills in Europe and rotates contingents of combat ready soldiers to potential hotspots like the Baltic States, its ability to engage in warfare stems not only from capability and posture but also domestic resolve. Though the president is authorized to deploy the military for up to ninety days by invoking the War Powers Resolution of 1973, the authority to declare war ultimately resides in

the democratically-elected Congress. Thus, malign actor states have taken to funding organizations that directly follow their instructions and promote their message, such as Chinese-funded cultural institutions that have become ubiquitous, indirectly supporting their information operations goals, such as movements advocating for isolationism or global retreat.

array of informational, military, diplomatic, and political strategies to defeat the enemy both before and during conflict. In countries like Latvia or Estonia, where the U.S. Army is most likely to engage not only with Russian conventional forces, but also irregular guerillas recruited from Russian-speaking minority populations, combatting Russian efforts to shape the

> " The responsibility lies first and foremost with the native governments of those nations that are threatened, which is influenced by a variety of cultural, political, and economic factors. "

In the eyes of our adversaries, undermining the domestic will to fight is now at least as important as deterring or defeating us militarily. The principle goal of such information operations (IO) strategy is to achieve the kind of practical result of the Vietnam War-era surprise Tet Offensive in 1968 (without actually conducting a Tet Offensive), which historically is seen as a turning point leading to loss of American popular support for that war. If in a similar manner Americans can be persuaded to doubt the importance of international treaty organizations, deterrence, and maintaining the rules-based global order, our country is considerably less likely to take actions that support those goals.

For example, from a Russian standpoint, making Americans doubt the value of sacrificing young eighteen- and nineteen-year-old soldiers to preserve the sovereignty of Lithuania may be almost as effective in achieving Russian goals as having the military capacity to threaten the physical sovereignty of Lithuania. Additionally, establishing satisfactory sociopolitical conditions can greatly reduce the length of or even prevent a conflict during an escalation sequence.

In other words, activity on the digital realm is a way of not only altering the human terrain in preparation for military operations but may be an effective and decisive military operation of itself. Disinformation, controversy manufacturing, inflaming social tensions, and keeping attention focused on divisive issues, are all means to weaken the internal resolve of a state's population or attack the integrity of the nation-state itself.

Since 2022, Russia has seemingly totally adopted the view that war is a total effort that encompasses an

human terrain is as important, if not more so, than military force that aims to deter, and also defeat military aggression. Yet efforts by the U.S. Army and diplomatic community to shape the human terrain are difficult to achieve at best. The responsibility lies first and foremost with the native governments of those nations that are threatened, which is influenced by a variety of cultural, political, and economic factors. For instance, 250,000 ethnic Russians continue to live in Latvia as "non-citizens." This gives many Latvian-Russians the feeling they are second class citizens, thus playing into victim narratives pushed by the Russian government. The U.S. Army cannot control Latvian citizenship policy, yet those policies inevitably aid Russian efforts to shape the human terrain in Latvia. Ultimately, the U.S. Army has to coordinate with local governments and the State Department to deploy narratives that do not conflict with the host nation's domestic political agenda—while at the same time ensuring that those same narratives are in keeping with the Army values.

If the printing press was the "seventh great power," as Napoleon once called it, and radio was indeed the "eighth great power," as Nazi propaganda minister Joseph Goebbels called it, then the internet today is the "ninth great power." Much like the printing press and radio before it, the internet has introduced a truly revolutionary new means of communicating information while also hastening its spread. And, just as the printing press spread social upheaval in revolutionary France and the radio helped the ascent of Nazism, the internet has already proved itself to be an immensely

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powerful tool for agents seeking to change the world for better, and often, for worse. Whether the West and their armies can ever master it for the purpose of protecting democracy in the face of subversive antidemocratic elements that have considerably more leeway in exploiting it for their aggressive political purposes as of this writing remains yet to be seen. ∎

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Lasers, Death Rays, and the Long, Strange Quest for the Ultimate Weapon
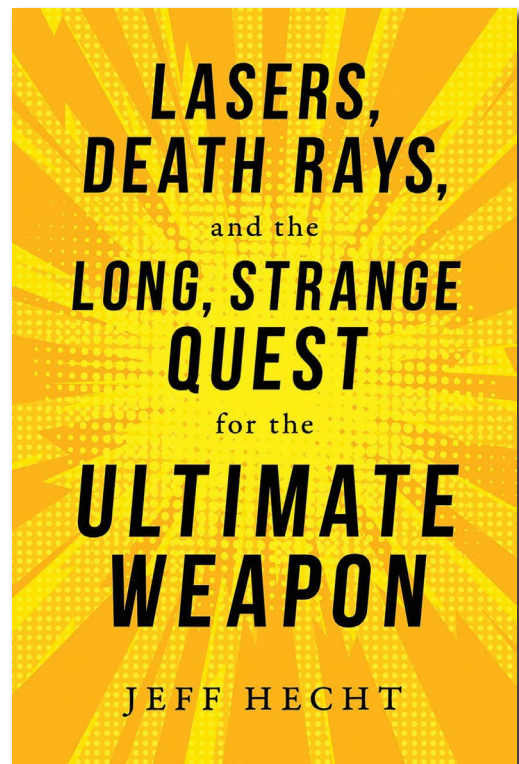
Edited by Jeff Hecht, Prometheus Books, Amherst, New York, 2019, 303 pages

Lt. Col. John H. Modinger, PhD, U.S. Air Force, Retired

Today, lightning fascinates us, just as it did the Greeks and others in the past who were mesmerized by its luminous, raw power. Though the ancients did not understand lightning, they almost certainly feared it. To many of them, it seemed an awesome force hurled down by annoyed gods at particular mortals. Among those observers, a few probably marveled at the idea of barraging enemies with bolts of similar intensity. Many, many centuries later, we now know the cause of lightning, yet we still remain in awe of it. Such an instantaneous power, were it to be controlled and focused, would

be a colossal leap in both offensive and defensive capabilities. Undoubtedly, that explains—or goes far in explaining—the tireless devotion of a stream of advocates and scientists in what they fervently believed might be "the ultimate weapon" in the form of a concentrated beam of light: a laser, as captured in the pages of Jeff Hecht's book, *Lasers, Death Rays, and the Long, Strange Quest for the Ultimate Weapon*.

Hecht takes us on a trek dating back a millennia, cataloging the determined efforts of a host of visionaries who saw in those bolts of energy the possibility of making war—as it existed then—obsolete in the face of a force

so powerful, instantaneous, and nimble. And that is what the lion's share of this book aims to chronicle, the quest for a laser weapon that could smite all comers and unleash unbelievable power in the hands of its master. Of course, the devil, as usual, is in the details. In the case of lasers (invented in 1960), the details really boiled down to cost, control, power, and transportability.

The concept of the laser, or "death ray," dazzled the imagination in science fiction books, radio programs, television shows, and movies long before any practical application emerged. Oftentimes, unbridled enthusiasm was a hallmark of the field, as was profligate spending. One could say the military was obsessed with the concept. Despite countless false starts, the dream of an ultimate weapon stubbornly persisted, propelling numerous physicists' and engineers' ambitions. Over the decades, since 1960, failures certainly outnumbered successes and proved costly. But faced with an existential threat, paranoia, and not much of an accounting leash, lasers continued to transfix military futurists, the promise potentially unlocked with the addition of just a few billion more dollars.

At the height of the Cold War, nuclear weapons carried aloft on intercontinental ballistic missiles (ICBMs) were able to hit their targets in thirty minutes or less; they represented an ultimate threat to humanity. Not surprisingly, a great interest in developing a laser strong enough to penetrate the casing around these ICBMs and render them inert was catalyzed and sustained. In effect, lasers could become the ultimate defensive weapon, trumping the nuclear bomb itself.

One of the elemental difficulties with laser weapons is the fact that targets move, sometimes several times the speed of sound and at a substantial distance. The author does well spelling out for the non-scientifically inclined among the readership important points about lasers designed as weapons. Drawing upon the ICBMs example again, Hecht reminds us that targets struck by a beam of light do not instantly explode; instead, a laser beam has to remain focused on the same, small surface area long enough (at least several seconds) to destroy the surface or components within. This was, in fact, the idea behind the Strategic Defense Initiative (SDI), or *Star Wars* concept, that was advocated by the Reagan administration beginning in 1983 and intended to swat down inbound Soviet missiles while transiting space en route to their targets. Of course, like so many projects before it, the ambitions outstripped the perfected science. SDI was canceled a decade later, but this had as much to do with the collapse of the Soviet Union as it did with the exorbitant cost. Another intriguing venue, the Airborne Laser System, held promise for dealing with limited launches by a rogue state. Unfortunately, it too was hobbled by logistical difficulties and eventually suffered the same fate as SDI.

Conversely, industrial lasers—where significant progress has been registered—burn holes in metal, slice human tissue, or actuate devices only inches away from the beam. Though early lasers proved too feeble to become actual weapons, they served as keys to unlock far greater accuracy in conventional weapons that, by default, increased the lethality of conventional munitions. But while little feasible progress was being made in converting light into a weapon, lasers were making enormous strides in nonmilitary venues, revolutionizing various industries (e.g., entertainment and communications, cutting tools, medicine). Ironically, steady progress in those areas has now led to insights and enhancements applicable to laser weapons that could potentially negate insurgent rockets and rogue missile launches.

All that said, along the bumpy path toward spending billions, many technical problems were, indeed, solved—sometimes replaced by others of a different character—and lasers became more potent, efficient, and portable. Beginning in 1995, the United States began collaborating with the Israeli government on the development of laser-based missile defense from ground vehicles. Given it did not involve space or aircraft, the project proved more workable. More recently, as one can see in numerous YouTube videos, laser beams can now annihilate small boats, drones, and vehicles. So maybe the future is bright for lasers in terms of weaponization, but, if the past is prelude, significant hurdles remain, not the least of which includes deployment of a workable and affordable system. One issue, the growing space debris problem in low-Earth orbit (and the constraints that

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entails), could conceivably be ameliorated, if not solved outright, through the application of laser technology at some point but only time will tell.

Hecht patiently sketches a backdrop of peculiar characters, wild and fantastical schemes, and the occasional, albeit super expensive and elaborate invention. As he does so, the painstaking evolution of laser technology emerges, at once both gnawingly frustrating and tantalizingly intriguing.

Hecht deserves credit for his compact attempt to shed light on a very technical subject. Notably, some of his chapters are more digestible than others, particularly the ones laden with acronyms galore and filled with jargon. It is clear Hecht revels in the absurdities and technicalities of the subject, having spent many years writing about it. Sometimes, though, his writing becomes untethered, almost giddy, and runs in an unnecessarily technically laden direction, making it a tough read for novices who are more interested in a survey of the whole rather than the fine details. Still, it is a worthy addition to any collection covering military innovation. ◼

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VETS IN ACTION

One hundred-year-old former Green Beret Polito "Paul" Olivas jumps tandem with skydiving instructor Richard Doppelmayer 29 August 2018 over Oahu's North Shore. Olivas, a thirty-year Army veteran who served during World War II, the Korean War, and Vietnam War, jumped into Normandy, France, during the Allies' 1944 D-Day invasion. (Photo courtesy of Skydive Hawaii via *Stars and Stripes*)

In commemoration of the seventy-fifth anniversary of the beginning of Operation Overlord (commonly known as D-Day), the Allied invasion of Normandy, *Military Review* highlights two veterans of World War II. Our World War II veterans are rapidly disappearing; the youngest of remaining men and women who fought are now in their late 80s. But take, for example, 101-year-old Ben Skardon and 100-year-old Polito "Paul" Olivas who are two of the many that help remind us why these men and women are often referred to as "the greatest generation."

Col. Ben Skardon, a 1938 graduate of Clemson University, World War II prisoner of war, and recipient of two Silver Stars, poses 17 March 2019 at the mile-8 marker of the Bataan Memorial Death March at White Sands Missile Range, New Mexico. Skardon is 101 years old and the only survivor of the actual death march to walk in the memorial march and now for the twelfth time. (Photo by Ken Scar, U.S. Army)