(U.S. Navy, Chief Mass Communication Specialist Michael B. Watkins)

A soldier mans a security post in a remote combat outpost on the eastern edge of Khavejeh Molk, Afghanistan, 12 December 2010.
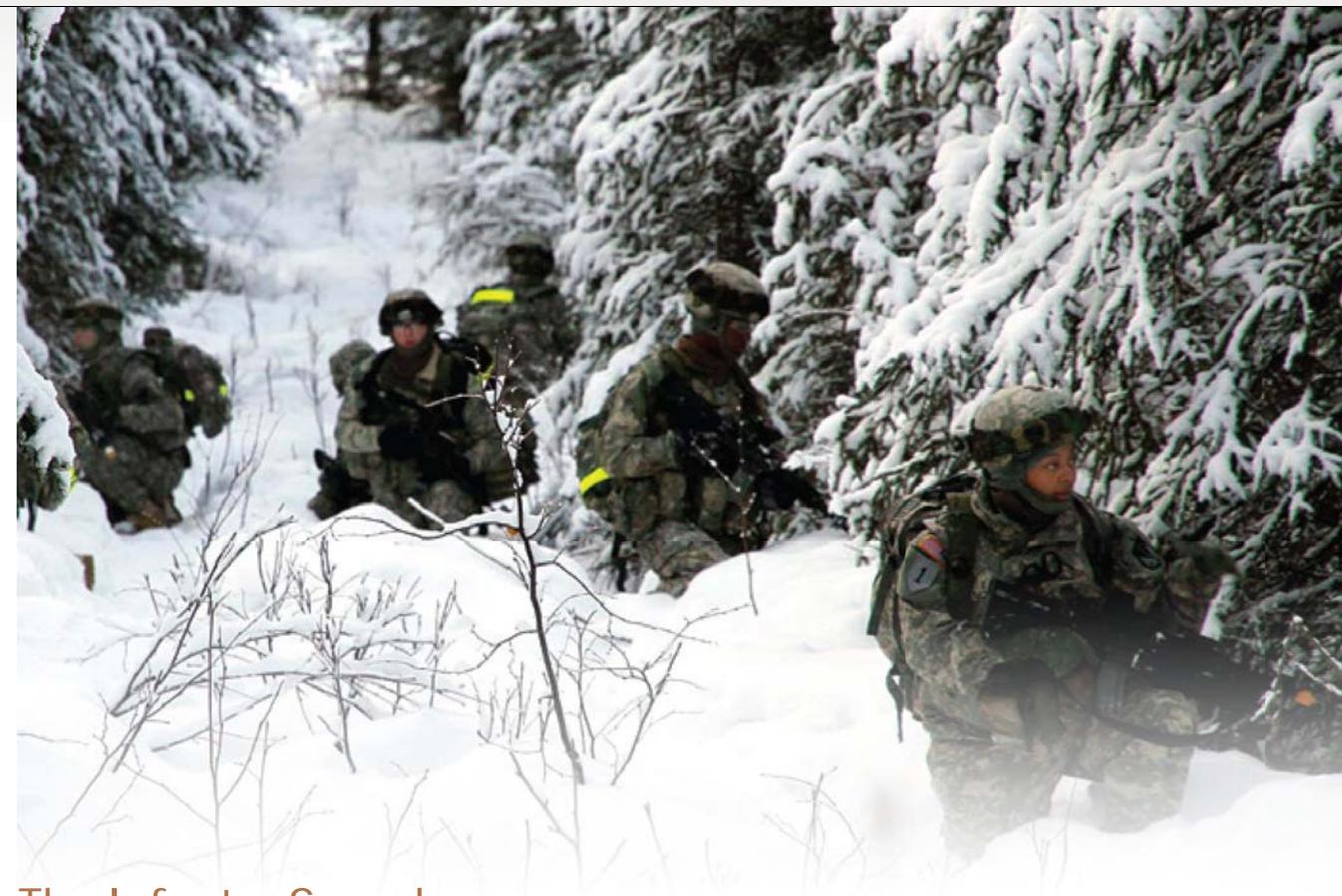
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Military Review

Featured Articles

The Infantry Squad: Decisive Force Now and in the Future

Major General Robert B. Brown, U.S. Army

Major General Robert B. Brown is the commander of the U.S. Army Maneuver Center of Excellence, Fort Benning, GA.

PHOTO: U.S. soldiers search for weapon caches and intelligence outside Joint Security Station Basra, Iraq, 23 July 2010. (U.S. Army photo by SPC Joshua E. Powell)

THE U.S. ARMY dismounted infantry squad is today's most decisive force on the battlefield, yet it lacks access to capabilities it could use to truly synchronize the total fight. Despite new soldier equipment and technological advances we deployed in Afghanistan and Iraq, squads operate in the same manner their predecessors did in Vietnam and Korea and during World War II. The infantry squad has been excluded from the technological development that provided combat overmatch for the remainder of our forces. The future infantry squad needs—

- Access to a complete mission-command and intelligence network.
- Organic and external on-demand feeds for situational awareness.
- Reduced soldier load and robotic improvements.
- A design that includes the human dimension as a foundation.

In the Near Future

The vignette that follows describes how the infantry squad ought to operate in the battle space.

The 1st Squad, 3rd Platoon, is conducting a movement to contact in mountainous terrain as part of a platoon and company team mission. The squad's task is to destroy insurgent forces near a local village. Recent intelligence indicates the insurgents are using the village as a staging area for attacks on coalition forces. The terrain surrounding the village is unforgiving, forcing the squad to operate for long periods at high altitudes in varying temperatures. The steep terrain, moderate vegetation, and numerous villages nearby provide the insurgents valuable cover and concealment as well as significant standoff, enabling them to conduct effective ambushes.

Here is 1st Squad's context: an infantry squad, a tactical small unit, that the Army developed in a concerted effort to examine every aspect of squad dynamics and the missions and tasks it must be able to accomplish. These improvements went beyond enhancements in individual weapon, personal protection, optics, and basic communication platforms. The improvements were based on the combat-proven reality that *we must treat the infantry squad as the foundation of the decisive force*.

First, before this squad leaves the line of departure, the squad leader does what good squad leaders have always done: he conducts a rehearsal. However, this rehearsal is different from those in the past. This squad leader has tools at his disposal that previous generations did not.

This squad leader carries his battle command hand-held device, the centerpiece for situational awareness for the infantry squad. The device integrates soldiers into the network and provides connectivity laterally and vertically. The squad leader is able to pull the most recent satellite images and 3-D mapping programs from the network and download the most relevant human and signals intelligence from the company intelligence support team to develop a better picture of the terrain and environment. He accesses recent historical records of enemy activities for pattern analysis and to determine probable hot spots. From this, he develops a detailed plan, and because of improvements in surveillance and detection, he can analyze his mission and its probable contingencies thoroughly and execute detailed rehearsals.

Members of 1st Squad are all on the network. They see what he sees. Their input is much more informed and informative in the planning phase and more valuable. The squad leader shows team leaders and squad members the terrain's complexity and primary and alternate routes through it by conducting a map reconnaissance and rehearsal along with the standard rehearsal of concept, the "ROC drill." On-demand network access enables the squad leader and his soldiers to fly the mission from various perspectives during the rehearsal.

The platoon leader coordinates with the company commander to obtain combat engineer terrain analysis to confirm the squad's planning. The platoon leader takes the refined squad planning and refines his platoon order so the company commander can approve the best bottom-up plans.

The ability to visualize the battle space before movement enables the squad leader to plan logistics and determine the squad's tactical load. He instructs his team leaders on the load plan and designates equipment to carry or load into the squad's semi-autonomous load-carrying system, which reduces mobility constraints and increases agility.

The squad leader conducts his precombat checks and rehearsals, back-briefs the platoon leader, and then receives the order to step off on the mission. He coordinates with the platoon to deconflict the squad's suite of ground and air sensors, and integrates the squad's organic sensors with those of the company, battalion, brigade, and theater to create an unblinking eye that enables the squad to observe the battle space beyond small arms contact range. This "unblinking eye" is not a new concept, but it now provides company, battalion, brigade, and division live feeds on demand to the soldiers at the tip of the spear.

Several kilometers into the movement, a sensor alerts the squad leader of movement ahead. Previously, the squad leader ordered soldiers to investigate such alerts; today, he has several other options. He chooses to launch his own short-term, quick-look airborne sensor. Unfortunately, due to the thick vegetation and hilly terrain, he is unable to get the fidelity he needs, so he directs the Bravo Team leader to retrieve an unmanned ground combat vehicle from the squad's semi-autonomous, load-carrying system.

A squad member moves the vehicle toward the suspected enemy position and confirms that a four-man enemy force is waiting in ambush along a ridge overlooking the squad's direction of movement. Armed with this new intelligence, the squad leader develops a plan for a hasty attack and distributes it to his team leaders over the network. Meanwhile, the information is transmitted to the platoon and quickly converted into an indirect fire request.

The company command post receives the request and issues a call for fire request. Equipped with the exact location of 1st Squad and the enemy forces, the company commander requests precision mortar system fire from the battalion. The battalion forwards the data to troops in contact and to the brigade and re-tasks a supporting air weapons team to support the platoon.

While this coordination is ongoing at echelons above the squad, the squad leader maneuvers to a position where he can place direct fire on the enemy. Once the squad is in place, he coordinates with the platoon leader who initiates the precision-guided mortar fire mission, allowing the squad to place controlled, effective direct fires onto the enemy position.

> *The network provides the squad leader the ability to refine graphic control measures and distribute the updates efficiently throughout the formation.*

As the surviving insurgents withdraw from the position, target handoff is conducted to allow the air weapons team to complete the destruction of the enemy. The network simplifies and expedites the deconfliction of fires by allowing the air weapons team to "see" friendly unit locations.

With the enemy forces now killed or captured, the squad leader conducts sensitive site exploitation and uses the network to transmit images and biometrics through his platoon leader to the company intelligence support teams for further analysis. In the end, we have turned the tables on what most likely would have been an effective enemy ambush requiring the commitment of additional squads from the platoon.

First Squad regroups and continues its mission, maneuvering over the ridge to within visual range of its final objective, the village. The squad leader continues using his suite of sensors to assess the situation in the village, and communicates with the platoon leader to update situational awareness throughout the entire company team. The recent firefight has alerted the enemy to the squad's presence, and soon the unblinking eye detects enemy activity on the rooftops of several buildings near the entrance into the village.

The squad leader uses his handheld device to see the enemy preparing to defend the safe haven. The platoon leader tasks the squad to seize a foothold in the village. The company commander tasks adjacent platoons to establish blocking positions isolating the village.

The network provides the squad leader the ability to refine graphic control measures and distribute the updates efficiently throughout the formation. The squad's access to the network enables efficient fires planning, mitigates risk at all levels, and provides faster access to precision fires and fires clearance. The integrated network capability ensures situational awareness for 1st Squad, the rest of the platoon, and mounted elements maneuvering into their blocking positions.

The movement to contact has changed to a deliberate attack in a matter of minutes based on network connectivity and the ability to pull intelligence from sources once only available to battalions and brigades.

The squad leader maintains overwatch as teams rotate to the squad's semi-autonomous load-carrying system to pick up urban breaching equipment and reconfigure their loads for an urban attack.

The squad leader then dispatches several unmanned ground vehicles to reconnoiter possible routes into the village. Meanwhile, members of his squad nominate targets as they observe them.

A close air support aircraft outfitted to send and receive ground-based data checks in overhead and is immediately fed the current location of friendly and enemy forces. The aircraft is prepared to assist if the joint fires observer requests it to do so. It also feeds reports from its sensors to the squad leader to support the reconnaissance effort. The company fire support officer receives all the nominated targets and updates the fire support plan.

We have seized the initiative through the integrated use of technology, training, and information. Because of surveillance domination, the unit has begun the attack instead of reacting to enemy contact.

This scenario may seem futuristic, but it is the key to the success of the dismounted infantry squad, as the foundation of the decisive force on the battlefield. The technology exists today, yet dismounted soldiers in the fight cannot fulfill this potential because they do not have access to what they need to make the critical decisions described here.

The Squad as the Foundation of the Decisive Force of the Future

Despite technological developments and millions of procurement dollars spent to increase soldier lethality and protection, today's infantry squad is still limited in its capabilities as a formation in close combat. It still fights with a line-of-sight voice radio link to the outside world and with paper maps and global positioning systems.

Once a squad moves dismounted from its base or platform, its information and situational awareness decays at a rapid pace. Current capabilities and training do not allow the squad to maintain a cognitive presence to maneuver to a position of advantage and use indirect, rotary wing, or fixed wing fires on the enemy.

On the other hand, if the squad has network linkages to brigade combat team-level assets, it becomes the dominant force on the decentralized battlefield and improves decisiveness throughout the hierarchy of command. The squad needs to share situational awareness with mounted elements, fires elements, supporting air elements, and higher headquarters. The squad is integral to developing the situation and can close with and destroy the enemy.

Network the Dismounts!

To truly become the dominant ground force, we must provide the same capabilities to dismounted elements at the lowest levels that we provide to our mounted forces, headquarters, and supporting organizations.

Over the last 60 years, technological advances, doctrine, and training have given U.S. forces unprecedented dominance in the air and on the sea. Our capabilities overmatch in land-based high intensity conflict has helped produce lopsided victories such as Operation Desert Storm and the initial phases of Operation Iraqi Freedom. Our networked joint force has demonstrated unmatched capabilities. Dominance in all fights is what we want; in decentralized operations, we never want to place our squads in a fair fight. Squads should have the same advantages that our mounted forces use to achieve overmatch.

Operations in Iraq and Afghanistan have revealed seams in our high intensity conflict capabilities. Nonstate actors blending in with the civilian populace have had some success in exploiting these seams to negate advantages that have made us the world's preeminent military force.

Counterinsurgency operations place dismounted forces in a com-

(U.S. Air Force photo by SrA Sean Martin, Kandahar Provincial Reconstruction Team)

A soldier equipped with modern technologies scans his area at the Dahla Dam, Kandahar Province, Afghanistan, 20 September 2011.

(Photo: SGT Giancarlo Casem)

Robots such as TALON allow warfighters to clear routes quickly without having to wait for explosive ordnance disposal teams. Here a TALON robot inspects a suspected improvised explosive device.

plex environment to find, fix, and finish the enemy, but due to a lack of connectivity, squads cannot take advantage of our advances in reconnaissance and surveillance platforms, aviation support, precision fires (such as the Excalibur munitions), and intelligence collaboration. Unless we bring dismounted infantry squads into the network and provide them on-demand access to the same tools that air, sea, and mounted warriors have, we deprive ourselves of combat overmatch at the tip of the spear.

How far down do we push the network capability? Some would say to the company commander level; others say to the platoon leader or squad leader level. However, the truth is, the network needs to be available at the individual soldier level.

Some worry that a tactical squad radio full of chatter will drown out leaders or overwhelm soldiers with information, but today's soldiers do not view the information coming to them over the network as overload. Soldiers are comfortable with digital connectivity in a way an earlier generation of soldiers were comfortable fighting shoulder-to-shoulder with their buddies. This generation of soldiers stays connected socially via Facebook, Twitter, and text messages and is more comfortable with a smart phone than a radio. Some young soldiers have smart phones with hundreds of applications on them. They do not run all the applications simultaneously; they filter and prioritize them. Realistic training using the blended training model (incorporating repetition and live, virtual, constructive gaming) can easily train soldiers to deal with information on the network.

Seizing the Initiative

Ten years of conflict have taught us the need to initiate contact with the enemy. Most of our hostile fire engagements in Iraq and Afghanistan have been responses to enemy attacks (direct fire, improvised explosive device [IED] fires, and suicide attacks). This puts us at a tactical disadvantage.

Our squads must fight to regain the initiative. This paradigm has been an accepted way of life for our soldiers, dating from the "search and destroy" doctrine of Vietnam. We have done a good job of protecting soldiers and modifying our tactics, techniques, and procedures to help them better survive initial contact with the enemy. However, we have failed to provide units with sensor systems that can detect the enemy presence before they engage. A networked squad with a robust sensor capability can detect a pending ambush, save lives, and greatly increase combat effectiveness.

The Army has made great advances in equipping units with tools to provide a common operating picture, but unfortunately, these are limited to ground-vehicle-centric platforms, static command and control facilities, and airframes. Once a leader dismounts from these platforms, he loses Blue Force Tracker, common ground viewers, access to unit databases, updated situation reports, and time-sensitive information. Once on the ground, the squad essentially unplugs from the network and reverts to paper map and voice radio mode. Once the squad leader unplugs from the network, he has degraded his squad's situational understanding and that of all units supporting it.

We have equipped soldiers in an ad hoc manner too many times in our history, creating challenges in interoperability, soldier load, and overlapping capabilities. Fortunately, the Program Executive Office-Soldier process currently looks at the individual soldier as a system to equip him in a holistic fashion. The Army is moving in the right direction in updating soldier equipment, but the institution needs to do more. We need to view the

…the network needs to be available at the individual soldier level.

small unit as the foundation of the decisive force and the soldier as a component of that system. We must realize there is no single silver bullet that will propel us forward, only a series of small developments conceived from holistic solutions.

Company commanders are now in charge of a battle space that battalion commanders were responsible for 10 years ago. In Iraq recently, a single company operated as the sole ground force in Najaf Province (population 1.6 million). Approximately 100 U.S. soldiers conducted daily operations in an area that once required multiple battalions. It follows that squad and section leaders need the tools for combat overmatch on such battlefields. This reasoning is not to imply that a company will control the field with the same level of effectiveness as a battalion, but by infusing information rapidly down to the lowest maneuver force (the infantry squad), we empower the company to orient combat power at the right time and place to achieve overmatch in the larger battle space.

Resourcing Squads as the Foundation of the Decisive Force

Currently, less than 10 percent of the Army's Fiscal Year (FY) 2012 equipping budget is dedicated to maneuver. Funding for soldier programs, as a percentage of total Army budget resources, grew from under 1 percent in FY 2003 to approximately 2.5 percent in FY 2007. By FY 2009, it had dropped to under 1.5 percent, and the FY 2011 budget requests reflect this same level. Our Army must recognize the continued strategic contribution of soldiers and improve their resource allocation. We need to dedicate more resources to the development of the squad, to include organizational changes, leader development frameworks, training facility upgrades, and training methodologies. The process of enabling squads must remain competitive for resources with the Joint Strike Fighter, unmanned combat air vehicles, the fifth generation fighter, the Ford-class aircraft carrier, and the littoral combat ship.

The Army should treat the squad as a system during the acquisition process and synchronize the methods it uses to develop equipment for it. Under the Army's current system, over 466 programs deal with some aspect of improving the squad, but they are disjointed. Some of them lack the proper

champion due to vague application goals or a lesser-known Program Executive Office. A holistic view of the squad and the ability to prioritize weapons programs for it would remedy these issues.

The squad may be more strategic than any other system in the overall force today. When we position an aircraft carrier off the coast, we are employing an aspect of national power to achieve a desired end state, but the decision to put boots on the ground is a much more strategically fraught decision than the positioning or even use of air and sea power. Air and sea power remain vital to achieving our national objectives, but ground forces are seen as exercising our Nation's commitment to force change and limit the enemy's freedom of maneuver. Employing ground forces is a strategically binding decision in a way air and sea power is not.

The Maneuver Center of Excellence is currently in the process of developing capabilities requirements

The Army should treat the squad as a system during the acquisition process…

for the squad as a formation. This should not simply be a Maneuver Center of Excellence project to develop the squad, but instead, a collaborative effort involving other centers of excellence, the operating force, industry, and academia. In the end, the issue is bigger than the squad.

Capability Requirements

Some of the themes we need to explore and develop further follow.

Surveillance domination. The squad needs access to what retired Major General Robert Scales describes as an "unblinking eye"—a *squad-organic or enabled reconnaissance and surveillance capability*. In the current fight, a squad leader may have situational awareness of events in his area of operations. Surveillance domination goes beyond that to access a vast network of sensors at all levels that provide critical information about areas the squad has yet to patrol—sensors that detect movement, allow soldiers to see into

U.S. soldiers and Afghan border police stand guard outside the Wesh Boys High School, Spin Boldak District, Kandahar Province, Afghanistan, 12 June 2011.

of influence, locations of significant enemy activity, key infrastructure support operations, and the status of local security forces on his map. A knowledge center available at his command can increase his ability to see changes in his environment quickly.

Company, platoon, and squad interaction with the company intelligence support team can produce rapid information dissemination and rapid decision making. We need to create an immersive training environment so that our junior leaders can experience decision making challenges when lives are not at stake.

buildings, and amplify sound (by active and passive means). We then need to tie all these feeds into a comprehensive network that we can synchronize to create the truly "unblinking eye." The squad leader alone cannot do this; he has near-term stimuli to answer to. Enhancing the abilities of the company intelligence support team to make it capable of analysis, and feeding it down to the squad, provides that information most crucial to the squad.

Close combat supremacy. Squads must maintain their ability to close with and destroy the enemy. This means using lightweight, durable, and easy to use equipment. Maintaining the ability to defeat the enemy becomes complex only when restrictions apply to the fight and put the squad in a bind. A network link provides intelligence on the enemy and the capability to make quick decisions and apply combat power at the right place and time. The network is the materiel solution, but leader development at all levels is necessary to truly enable the squad to be a decisive force against the enemy. In an asymmetric fight, squad decisiveness could mean placing lethal effects into an enemy strongpoint—or could include coordinating humanitarian assistance quickly to gain a civil victory.

Cognitive presence. Providing a link to Tier 2 and 3 facilities in an austere environment will give small unit leaders a better understanding of the environment. Creating the ability to turn the company intelligence support team into a knowledge center for all company assets allows leaders to understand all facets of the zone. Acting alone, a leader cannot maintain spheres

Sustained unit proficiency through training; squad combat training center. As we equip the squad, we need to focus on developing and refining its members' skills using a blended training model of live, virtual, constructive, gaming, and immersive training. The squad must be able to use all the equipment it will use in wartime during simulations and training. Immersion in various environments and the integration of a live opposing force along with simulations will help create the complex environment squads will face. We should test all levels of command simultaneously to sustain the use of all enablers at the point of the spear. This training model needs to be available anywhere, not just for predeployment but also during deployment.

Mobility (soldier's load). Rather than adding more equipment to the squad, the Army should add capabilities while finding efficiencies through multiple-use devices, innovative power generation, robotic load-carrying vehicles, and exoskeletons that allow soldiers to carry more equipment.

We must also place more emphasis on breaching mine and wire obstacles, IED detection, and complex urban breaching capabilities. Maintaining mobility in the fight involves more than the ability to cross a danger area quickly. The speed and the distance that a squad can send and receive information enables it to maintain the initiative in its area.

We need to continue to reduce the load we burden the squad with; we must examine everything from

protection to ammunition, weapons, and equipment. Initially, we may make the most progress in the continued development of battery technology and alternate energy solutions.

Survivability and countermobility. Defense is a tactical unit core competency. We need to reexamine the dismounted infantry squad's capability to set up obstacles, dig fighting positions, and establish engagement areas. Today, the entrenching tool (e-tool) is still the primary means a soldier has to dig fighting positions and emplace obstacles. In 1959, the U.S. Army envisioned that the "soldier of tomorrow" would be equipped with explosive "fox-hole diggers" instead of e-tools to rapidly establish a fighting position. Now, 52 years later, the soldier of today is no better prepared to build a survivability position than his predecessors were in 1959, or his great-grandfathers were in 1918. There has to be a better way for our squads to increase their survivability in a defense.

The human dimension (soldier's touch). Human beings are essentially social animals who are more comfortable in groups. Human connections comfort us in times of stress and strengthen us in times of danger. How do we replicate that "human touch" over a network to reduce feelings of isolation on the battlefield? The simple answer is to maintain voice communication while integrating the network, but this can be a complex problem. It may even involve augmented reality icons showing other members of the squad when necessary, for example, if someone is behind a wall, building, or other obstacle. Greater understanding of the human dimension suggests training our leaders and organizations in how to think instead of what to think. This will increase the units' abilities to accomplish the mission through mission command and will reduce the risk of micro-management. Immersive training capabilities at the infantry squad level require repeated rehearsals and simulations using the same systems in garrison as when deployed.

We must also prepare our leaders of the future with the best institutional training before they join their units by increasing our student load capability in Ranger School and providing more opportunities for Infantry, Armor, Engineer, and Field Artillery leaders to attend the best leader development training our Army has to offer.

Lethality. The ability to find, fix, and finish the enemy is paramount to any tactical formation. We must maintain it and improve upon it. The squad's weapons must complement each other and give the squad the capability to use both precision direct fires and devastating area fires. Ammunition should kill or incapacitate an armored enemy as well as an insurgent without body armor. We must also maintain and improve the squad's capability to deliver high-explosive counter-defilade fires against an entrenched enemy.

Protection. Although the goal of the unblinking eye is to allow the squad to make first contact, it must maintain the ability to survive first contact and maneuver in a hostile environment. This includes the capability to defeat chemical, biological, radiological, and nuclear threats without degrading mobility and lethality. The squad must also be able to defend against small-arms fire and shrapnel. Protection must complement mobility, not hinder it.

Power and energy. Batteries are and will be an obstacle to overcome. Each component of the squad comes with its own type of battery, its own power draw, and its own logistical requirement. We should use a holistic approach to solve these power and energy challenges. Battery commonality is a start. We might focus on kinetic energy converters, the use of isotopes, and other innovative power generation means to provide the energy for the squad's technology in an austere environment. When we connect the infantry squad to the network, we must provide it with the power to stay connected without overloading it with batteries.

Shape the Future

We are at a critical point in our history. It would be easy to maintain our status quo and recover after 10 years of conflict as we look to gain efficiencies and draw down overseas commitments. We cannot afford to do this. If current events are any indication of future conflicts, the future will be turbulent. Dwight D. Eisenhower said, "Neither a wise nor a brave man lies down on the tracks of history to wait for the train of the future to run over him." Now is our time to shape the future. Our infantry squads are decisive now. We will have failed them unless they are decisive and dominant in the future! *MR*

A Resource Constrained Environment: A Primer to Thinking About Force Structure Change

Major Jeremy Gray, U.S. Army, and Rickey Smith

And I must tell you, when it comes to predicting the nature and location of our next military engagements, since Vietnam, our record has been perfect. We have never once gotten it right, from the Mayaguez to Grenada, Panama, Somalia, the Balkans, Haiti, Kuwait, Iraq, and more—we had no idea a year before any of these missions that we would be so engaged.

—Secretary of Defense Robert Gates, 25 February 2011

In the past, such as after the Vietnam War, our government applied cuts to defense across the board, resulting in a force that was undersized and underfunded relative to its missions and responsibilities. This process has historically led to outcomes that weaken rather than strengthen our national security—and which ultimately cost our Nation more when it must quickly rearm to confront new threats. I am determined not to repeat the mistakes of the past.

—Secretary of Defense Leon Panetta, 3 August 2011

Major Jeremy Gray is a strategist at the Army Capabilities Integration Center-Forward in Arlington, VA. He has served in diverse planning and policy positions on the Joint Staff, the Headquarters Department of the Army Staff, and in support of Operation Enduring Freedom and Operation Unified Response. He holds an MPM from Georgetown University and an M.S. in strategic intelligence from the National Defense Intelligence College.

Rickey Smith is the director for the Army Capabilities Integration Center-Forward in Arlington, VA. He served as the chief of staff for the Army's Modularity Task Force that led to the most extensive reorganization of Army combat forces since World War II. Mr. Smith holds a B.S. in business administration from Middle Tennessee State University, an M.B.A. from Tennessee Technological University, and an M.S. in national security strategy from the National Defense University.

PHOTO: A team mans a bazooka at the Battle of Osan. (U.S. Army)

THE FALL AND WINTER of 2011-2012 will bring dynamic change to the Army through two interrelated items: the results of the Comprehensive Strategy Review—directed by President Obama[1]—and the initial implementation of significant budgetary cuts to the Department of Defense.[2] Secretary Panetta stated that in the past "our government applied cuts to defense across the board resulting in a force that was undersized and underfunded relative to its missions. . . . I am determined not to repeat the mistakes of the past."[3] The secretary's statement can serve as a clarion call, or it can be seen as a harbinger of doom. Budget reductions will likely hit the Army harder than the other services given the anticipated reduction of Overseas Contingency Operations funding as well as base budget.

The obvious budgetary target within the Army is force structure. Force structure costs generate large budget obligations and, therefore, provide a quick way to reduce long-term costs. However, the anticipated reduction in end strength also provides the opportunity to transform the Army to accomplish mission requirements at best value. In short, the Army will need to make force structure decisions informed by cost versus benefit valuations. These

valuations for future requirements will require assumptions, which can increase risk. As such, a continuous review of assumptions and risks must underpin the decisions made en route to a best-value force. Failure to do so increases the probability of developing a lean, but ultimately wrong, force for the security environment. A disciplined, fact-based, and objective approach—a logic framework— should inform the perpetual decisions affecting future Army force shaping and sizing options.

There are several considerations in thinking about force structure. Foremost are projections of the mission sets the forces must accomplish. Second are assumptions about the resources available across time to develop the force for the projected mission set. Third are the shaping aspects of force design and force mix. These aspects are not binary variables, but sliding scales, which in combination provide a descriptive framework of the optimal force structure for the expected missions within resource limitations. In reaching an optimal force structure, requisite trade-offs leave differences between the Army's assigned missions and its resources. Within these "deltas," planners identify risk and consider mitigations. Therefore, risk identification and associated mitigation strategies make up the fourth consideration for force structure. Finally, there are common assertions that may cloud development and critical assessment of proposed force structure solutions, and addressing those factors is important.

Force Structure Purpose

What is the force supposed to be able to do? This is the overriding question for force development and warrants a simple defense policy answer, but discerning current expectations is less clear. The president of the United States-directed comprehensive strategy review will likely add clarity once released. There are clear indications for a smaller Army as Iraq and Afghanistan draw down, but whether the expectations for the Army will change or if it will continue to do the same with less is uncertain.

While the results of the comprehensive strategy review are due by year's end, the government has not announced a date for the release of the results. However, congressional programming information requirements will likely force the Army to plan the future force in the absence of a clear, publicly stated, and politically accepted expectation of Army capaci-

ties and capabilities. With reelection considerations increasing as Fiscal Year 2012 progresses, the ambiguity may increase.

In the absence of clarity of purpose, the resources available will disproportionally drive decisions, thereby increasing an ends and means disconnect in the national security strategy. While currently unclear, definitive budget parameters will likely emerge ahead of Department of Defense (DOD) clarification of Army mission expectations. Given this situation, force structure discussions will anchor on the means portion of the equation guided by an interpretation of the DOD and national projected or assumed ends. Former Secretary of the Navy Sean O'Keefe reiterates this point. "If there is no strategic framework . . . [t]he process takes over. . . . [I]t is going to be the programmers and bean counters driving the train to meet a number."[4] In essence, a transition from a "resource informed" strategy to a "resource determined" strategy.

Effect of Resources Available

Given less room to hedge against a greater range of potential futures, a resource determined strategy drives a tighter reliance on accurate predictions of the future. However, as former Secretary of Defense Gates stated in his February 2011 speech at the U.S. Military Academy, "When it comes to predicting the nature and location of our next military engagements, since Vietnam, our record has been perfect. We have never once gotten it right[.]"[5] Therefore, adaptability, the ability to contend with differences from the anticipated future, becomes a hedging strategy within the future force structure. Ideally, a tighter budget would push decisions toward an adaptable force. However, perhaps counterintuitively, the force may become more specialized to achieve a specific and limited mission set more efficiently.

An adaptable force requires a measure of liquidity. Units within an extremely lean force will reflect a more specialized approach, by design or *de facto,* thereby reducing possible hedging strategies for alternate futures and increasing potentially adverse affects if wrong. In other words, tighter budgets may drive an "all-in" force structure bet on a predicted future, unless hedging mechanisms are built in. Finding an acceptable balance between adaptability and specificity must underpin force structure decisions.

Force Structure Aspects

Determining force structure is analogous to trying to build an aircraft in flight. There are physical aspects of flight to account for to ensure actual flight: lift, thrust, gravity, and drag. Gravity is the constant constraint while one manipulates the other three aspects to overcome it. Based on the manipulation of these aspects, an aircraft design emerges to meet the builder's needs.

The challenge with force structure is that continual decisions are required to meet current demands and shifting resources, while the force evolves over time. Evolving the force is a response to continuous reassessment and adjustment of assumptions about the future. Known and new missions, as well as shifting resource availability, affect change. In response, manipulation over time affects the evolution of force structure in four key aspects:

- Geographic alignment.
- Density.
- Design.
- The supporting force readiness model.

Each aspect is a sliding scale. *Geographic alignment* refers to the balance between global and regional alignment. *Density* refers to the balance between organic and pooled forces. *Design* refers to the balance between specialized and general purpose forces. The *force readiness model* is a balance between tiered and cyclic readiness. These aspects provide adjustment points to create an optimal Army force structure.

Geographic Alignment: Global and Regional Balance

The balance between globally available and regionally focused or assigned forces reflects force adaptability for hedging and the force specificity for anticipated contingencies.

Globally employable forces provide flexibility to respond globally at the expense of regional expertise. Global forces prepare to conduct missions in any environment and anticipate being incorporated into multiple regional contingency plans. As such, they lack expertise for missions in a particular region's cultural or geographic environment. However, they do provide a hedge against the uncertainty of future mission locations.

Regionally aligning forces enables units to focus on the cultural and geographic challenges within an area. These forces train and focus on contingency plans within the region. Regionally aligned forces are more likely to develop relationships with partner nations based on repeated engagements supporting a combatant commander's theater campaign plan. While regionally aligned forces provide a level of expertise for a region, they lack preparedness for extra-regional missions. A mix of global and regional forces can mitigate some of the identified weaknesses in each.

Density: Organic and Pooled Balance

The balance between organic and pooled forces reflects the optimum level of unit autonomy—the lowest level of independent operation. For instance, the Army in 2003 made the decision to provide unit autonomy to brigade combat teams (BCTs) rather than divisions. This decision made some division enablers organic to the BCT and pooled the remainder for more efficient employment across the Army through task organization. The balance between organic and pooled moved from division to brigade.

The expected mission set drives the optimal balance. An analogy similar to one attributed to General Peter Schoomaker, former Army Chief of Staff, illustrates this point. Picture organic divisions as $100 bills, modular BCTs as $20 bills, and the pooled forces represent denominations from one penny to a $10 bill. With the appropriate balance between organic and pooled forces, the Army can resource a combatant command's bill with close to exact change. With the organic division structure, all amounts owed were paid from $100 bills and the left over change was difficult to use. With the modular BCT, the spare change problem remains, but there is less spare change to waste. The table provides a historical look at the Army's shift in density over time to meet its expected mission set.

Design: Specialized and General Purpose Balance

In general, the more mission specific a force design, the less adaptable the formation becomes. Specialized forces are designed for specific mission sets. They accomplish these tasks efficiently and effectively. For purposes other than these, specialized unit efficiency and effectiveness significantly decreases the more the new purpose differs from

Chronology	FS	History	Considerations
1776 to 1917	Regiment Based	From 1776 to 1917; the largest fixed units in the regular U.S. Army were regiments	With the exceptions of large wars like the Civil War, the primary purpose was securing the westward expansion of the United States as well as its territories and protectorates.
Civil War		States raised militia/volunteer regiments and the national governments provided ad hoc HQs over them.	Geographic Departments characterized "peace time" command structures above regiments. Distributed small-scale operations were the norm.
Spanish-American War		Major wars were viewed as exceptions and not the norm.	Divisions, Corps, and Armies characterized "war time" operational level command structures—large-scale war was considered the exception.
Post WWI	Division Based	As a world power, the U.S. organized for major wars as the primary normative function.	Primary Purpose: Preventing another world war and, if unsuccessful, preparing to fight a global scale war. Assumed that by preparing for large-scale war, forces could easily address lesser contingencies. Maintaining the "band of excellence" in Europe and Korea required a considerable personnel investment at all times and a robust TTHS (trainees, transients, holdees, and students) account for permanent change of station.
1917-2004		Army was division-based from 1917 to 2004.	
WWII		Over 55 Regimental Combat Teams were used in WWII.	Many theater and RC units were in the lowest readiness tiers for both personnel and equipment and were not ready without considerable time and resources.
Korea		4 Regimental Combat Teams were used during Korea.	
Vietnam		Seven separate brigades were flexibly employed in Vietnam, and in 1968 three were combined in theater to form the Americal Division.	Fixed divisions had difficulty controlling and/or supporting additional maneuver units without augmentation, especially if they were not of similar capabilities (e.g., Light Infantry Division augmented with a Heavy Brigade).
Grenada		Operations in Grenada, Panama, and even Desert Storm showed limitations to fixed divisions and the advantages of brigades.	Fixed divisions were permanently organized to meet the need for large-scale combat operations (e.g., organic provision of direct-support artillery, chemical defense, etc.).
Panama			
Desert Storm			Fixed divisions were still dependent on many non-organic assets found only at corps or higher (MEDEVAC, CH-47s, Patriot Missiles, EOD, etc.).
Late Cold War		By the end of the Cold War, between 1990 and 2003, most Western armies and even Russia completely converted from fixed-division structures to brigade-based structures.	Division Support Commands (DISCOMs) optimized only to support specific division, Corps Support Groups (CSGs)/Corps Support Commands (COSCOMs) optimized for corps support, Area Support Groups (ASGs)/Theater Support Commands (TSCs) optimized only for theater support.
1991-1995		Faced with deep end strength reductions, GEN Sullivan chose to keep ten RA divisions at the expense of all separate brigades by creating seven divisions of only two co-located brigades and one physically "separated brigade" without its complete slice of division troops.	Echelons above Division (EAD) support structures begin modularizing in the 1990s.

Seventeen different maneuver brigade types across the Army (e.g., Light ACR, ESB, etc.) not counting the Ranger Regiment.

Most Army requirements, especially post-Vietnam, were brigade-like, but were resourced from divisions, including unit rotations for Bosnia and Kosovo. |
| 2004-Current | Modular Brigade Based | Implemented Task Force Modularity recommendations beginning in 2004 to increase flexibility, agility, and a fungible structure to Operational Army. Grow the Army initiative and ARFORGEN applied during the same timeframe. | Primary purpose: provide constant supply of ready forces for long duration operations with a unit rotation policy.

Modularity and cyclic readiness eliminates tiered readiness—haves and have-nots to haves and will-haves.

Cyclic readiness and unit rotations reduced TTHS requirements.

Modular sustainment structure supports any echelon providing more tailored sustainment.

Brigade-sized units are tailored to specific operational situations. (Achieve strategic objectives at reduced personnel commitment.)

Brigade theater slice (approximately 10,000) is smaller than previous divisional slice (approximately 45,000 with three maneuver brigades.)

The composition of a combat force can task organize heavy, light, and Stryker brigades under any divisional or corps headquarters.

All units of the Army (AC and RC) enjoy high priority at some time during a rotation cycle. |

The Army's shift in density over time to meet its expected missions.

(U.S. Army)

MG Michael Kuehr, deputy commander for 8th United States Army, addresses attendees on behalf of GEN Walter Sharp, commanding general for United States Forces Korea, United Nations Command, Combined Forces Command, during the 58th Task Force Smith Commemoration on 10 July 2008.

the designed purpose. For instance, a civil affairs battalion, or even a water purification team, would struggle to accomplish missions outside of what its structure was designed to do. Some units are more specialized than others. The more specialized or unique the unit's design, the less fungible its mission set becomes.

General-purpose forces are designed to provide an acceptable solution to unforeseen circumstances. These forces are expected to more readily adapt through mission development on the ground or through training if given enough lead time. They provide an adaptable force that can hedge against uncertainty. Additionally, with appropriate training and support, the general-purpose forces can provide an added capacity not present in specialized units. A less specialized, more general-purpose formation like a field artillery battalion can adapt quickly to new mission sets, such as providing convoy security in Iraq. General-purpose force effectiveness in new specified

missions reflects time allowed to train before, and the time it spends executing, the new mission.

The Supporting Force Readiness Model: Tiered and Cyclic Balance

Force readiness models provide resourcing methodologies to address risk management. The balance between tiered and cyclic models must inform force structure to enable best value within acceptable risk. Tiered readiness refers to the designation of a hierarchy of priorities—certain units have resources to maintain the highest level of readiness while others receive resources according to their assigned tier of readiness. The top tier units deploy more often and with shorter time to prepare. If the contingency requires more than the top tier units, resourcing of lower tiered units increases to provide a steady flow of forces to reinforce the top tier units and meet the needs of the combatant commander.

In the past, the Reserve Component acted mainly as a strategic reserve residing in the lower tiers of readiness. The tiered approach is the most efficient force readiness method in situations where requirements rarely exceed the top tier's capability and capacity. However, the capability for significant unplanned mobilization is fundamental to increasing readiness in the lower tier units (when demand exceeds the supply of higher tiered formations). Rapid mobilization requires peacetime investment in systems for rapid accessions of personnel, training facility capacities, and industrial surge capacities.

The cost-benefit analysis of a readiness system based on the assumed ability for significant mobilization must include the costs of maintaining the infrastructure to achieve the requisite timelines. At a minimum, the analysis should recognize the risk, in terms of likelihood and potential consequences, of not making and maintaining mobilization investments.

Cyclic readiness refers to building the highest readiness across all of the force, separated into temporal states of readiness. The next unit designated to deploy or respond to a contingency has the resource priority. Once a unit designated time or deployment ends, the unit returns to the lowest level of readiness and resourcing. Over time, the unit readiness and resources progressively increase in anticipation of the next designated time or deployment. The Reserve Component can also work on a more extended, but complimentary, readiness cycle. The higher the force requirement, the faster the units rotate through the cycle.

The cyclic approach is the most effective in producing a steady supply of forces for indefinite periods to contingencies in which policy dictates unit rotation (rather than individual rotation). However, this approach becomes an inefficient use of resources if high-readiness forces remain unemployed at peak readiness. When viewed from a cost-benefit perspective, the benefit must consider the committed mission as well as the "prevent and deter" mission.

Total Force Considerations

When discussing force structure, many leaders focus on the operational force in the Active Component. In projected fiscal and operational environments, considering the whole Army as a single entity is necessary. Consideration of the total force includes not only the Active and Reserve Components of the Army, but also thinking holistically about the generating and operational forces as a single entity across a continuum of mission sets. A smaller, resource-constrained Army will need to leverage all means to meet mission requirements with reduced resources. All efforts will increasingly require closer synchronization with solutions unencumbered by traditional perception of roles. When rethinking the total force, decision makers will need to account for the following realities:

● Statutory and treaty requirements for forces including theater assigned forces.

● Army support to other services and other joint, interagency, intergovernmental, and multinational (JIIM) requirements (e.g., providing protection and sustainment, as well as setting the theater for potential JIIM operations in the future).

● Force mix between the Reserve and Active Components.

● Political aspects of force structure changes in the Reserve Component.

● Force liquidity requirements, e.g., long-term, ad hoc joint and multinational headquarters; trainee, transient, holdees, and students (TTHS) account requirements; nondeployable soldiers; and individual boots on ground to dwell time ratios).

Risk

Force structure decisions must address the delta between the force structure and mission expectations in clear risk statements. Identifying, assessing, and mitigating risk are fundamental force structure outcomes. In the end, an articulation of the accepted risk should inform policy makers about the capability and capacity limitations of the revised force structure. An articulation of risk will shape advocacy in policy discussions and help determine the point at which it becomes unacceptable—a service threshold or red line for a particular mission. The taxonomy for the Chairman of the Joint Chiefs of Staff's risk assessment framework provides a common approach to characterize risk in terms of a range of operational, future challenge, force management, and institutional factors. It further characterizes risks by their likelihood and potential effect. Placing the Army's risk for force structure options within the chairman's framework offers a

method familiar to Defense policy makers, and it will help shape expectations and set the groundwork for the service contribution to the chairman's assessment once the force structure is chosen.

Common Assertions

We must now address three common assertions:

● Force structure determines training efficiency and leader mentorship.

● Additional special operations forces (SOF) can mitigate the disadvantages of having a smaller conventional force.

● Mobilization will always be rapid.

Force structure effects on mentorship and training. Within Army culture, many leaders see force structure as a way to address leadership and training issues. However, force design and force mix changes do not readily solve leader mentorship or training challenges. For instance, the current recognized challenges of leader mentorship and training may have more to do with operational tempo and base realignment than the lack of a division commander whose organizational structure includes organic brigades. In truth, even in the past division-centric force structure, over two-thirds of the Army was nondivisional and merely task organized within garrison. The nondivisional force moved toward more modular designs in the 1990s. Arguably, mentorship and training challenges are greater for current echelons-above-brigade forces because they routinely deploy at the team, detachment, and company level away from their home station task organization.

Leader mentorship is not solely a function of an organic command relationship. Leader development is an inherent responsibility at all command and leadership levels whether assigned, attached, or task organized. Effective mentorship results from the mentor and protégé seeking out and fostering an open, two-way, and enduring relationship. Mentorship frequently develops out of a leader development relationship. In fact, having a mentor outside the chain of command to allow free-flowing discussion can enhance mentorship. Regardless, neither force structure nor design provides the dominant variable for leader development or mentorship. The varying operational tempo most likely strains these informal relationships just as it does familial relationships.

As the operational tempo slows, the garrison task organizations will regain many organic attributes, both beneficial and detrimental.

There is little difference in training between organic divisions and forces task organized within garrison as operational tempo decreases. The longer the task organization is in place, the more it reflects organic attributes. One could argue, however, the constant rotation of units improves access to training facilities and materiel at a particular location. If all units deployed together from a single installation, the simultaneous training demands could overwhelm local facilities.

More special operations forces. The notion of increasing the number of SOF troops and units to mitigate a smaller conventional force is viable, to a point. For this assertion to be true, it must link to an appropriate strategy and must consider the method for developing SOF. Special operations forces primarily assess and select their members from experienced conventional forces. Drawing candidates from a comparatively large population pool enables a focus on quality. As the ratio between conventional forces and SOF decreases, the quality of personnel could decrease. The recent expansion of Army Special Forces, a subset within the SOF community, ushered in a method to expand the force pool by recruiting directly from the civilian populace. While this description is simplistic, the program produces Special Forces noncommissioned officers without any experience in the conventional force outside of initial entry training. Traditionally accessed candidates from the conventional force

The first U.S. ground troops to arrive in Korea debark from trains somewhere in South Korea, June 1950.

currently offset this method. Increased reliance on the direct accession approach could shape Special Forces in undesirable ways. One of the greatest lessons from the current conflicts is the realization in both communities of the complementary nature of conventional and special operations. Without a basic understanding of conventional forces, Special Forces limit their ability to work effectively with conventional forces and develop conventional forces in foreign militaries. Operations in Iraq and Afghanistan attest to the increase in effectiveness of special operations forces by judicious incorporation of conventional forces. A large enough conventional force pool enables the SOF maxim of "quality over quantity."

Rapid mobilization. A common assumption in most force structure reduction approaches includes the ability to rapidly mobilize and expand the force structure in time of war. There is a cost associated with this assumption that is not usually included—the cost of developing and maintaining the mobilization infrastructure.

Once the active Army began to expand incrementally after 11 September 2001, it took almost 10 years to grow by 80,000—including an increase in accession waivers and large retention bonuses. Growing an all-volunteer force takes time—even with an involuntary Individual Ready Reserve recall. Reserve Component units are already a part of the force structure and possess a small infrastructure for already trained forces. The Reserve unit mobilization processes are further honed through years of cyclic mobilization. Mobilization of a civilian populace is different.

The expansion assumed in most force reduction approaches is the ability to quickly mobilize from the civilian populace as well as ramp up industry for increased equipment requirements. The infrastructure for such a mobilization is functionally nonexistent. It would include systems for rapid accession, training capacity for the rapid accession, and industrial plans for equipping the rapid increase in forces. This mobilization infrastructure is costly with a low likelihood of use. Therefore, it is a frequent and easy budget target. Any force structure reduction that assumes rapid expansion should also include within its cost-benefit analysis the proposed size and speed of the expansion, the time and cost to implement it, and its associated risks. The smaller the standing force, the more likely the mobilization infrastructure will be needed and the greater the risk if it is not up to the task.

Conclusion

The comprehensive strategy review will present the elements of a resource-driven strategy with new force structure analysis based on specified resources. The magnitude of the directives to reduce the budget will affect the intensity of the resulting force structure debate. In such an environment, working from an objective and logical framework provides an anchor to guide the discussions as they inform decisions. To avoid the mistakes of the past, the Army will need to make educated decisions about its force structure. Informed by continuous review of assumptions and risk, it must work to provide a best-value force. *MR*

NOTES

1. From President Obama's speech on 13 April 2011: "Over the last two years, Secretary Bob Gates has courageously taken on wasteful spending, saving $400 billion in current and future spending. I believe we can do that again. We need to not only eliminate waste and improve efficiency and effectiveness, but we're going to have to conduct a fundamental review of America's missions, capabilities, and our role in a changing world. I intend to work with Secretary Gates and the Joint Chiefs on this review, and I will make specific decisions about spending after it's complete." Excerpt from "Remarks by the President on Fiscal Policy," White House Office of the Press Secretary, 13 April 2011, <http://www.whitehouse.gov/the-press-office/2011/04/13/remarks-president-fiscal-policy> (accessed 22 August 2011).

2. Within the debt deal, initial cuts to the Department of Defense are $350 billion in 10 years, which are likely close to the planning assumptions for the Comprehensive Strategy Review based on the presidential statement of 13 April 2011. The follow-on bipartisan committee must identify an additional $1.5 trillion by 23 November 2011 with Congressional approval by 23 December 2011. Failure to vote the cuts into law by 23 December 2011 will invoke automatic cuts split 50-50 between national security and domestic spending. The Defense Department portion is estimated at $500 billion. With the automatic cuts, the Defense Budget would need to cut $850 billion over 10 years. "Military Frets Over Debt Deal's Potential Cuts," CBSNews.com, 5 August 2011, <http://www.cbsnews.com/stories/2011/08/05/politics/main20088546.shtml> (accessed 22 August 2011). "Fact Sheet: Bipartisan Debt Deal: A Win for the Economy and Budget Discipline," The White House, <http://www.whitehouse.gov/fact-sheet-victory-bipartisan-compromise-economy-american-people> (accessed 22 August 2011).

3. The quotation is from a written note to the Department of Defense after the "debt deal" passed. Leon Panetta, "Meeting Our Fiscal and National Security Responsibilities," U.S. Department of Defense, Office of the Assistant Secretary of Defense (Public Affairs), 3 August 2011, <http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1597> (accessed 22 August, 2011).

4. Sean O'Keefe is quoted in response to Deputy Secretary of Defense Lynn's statements at the Center for Strategic and International Studies on the strategic roles and missions review. Sandra Erwin, National Defense Weblog, "Advice to the Pentagon: Stop Fiddling, Come to Grips With Impending Fiscal Doom," 10 June 2011, <http://www.nationaldefensemagazine.org/blog/Lists/Posts/Post.aspx?ID=441> (accessed 22 August 2011).

5. Robert Gates, United States Military Academy (West Point, NY), U.S. Department of Defense, Office of the Assistant Secretary of Defense (Public Affairs), 25 February 2011, <http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1539> (accessed 22 August 2011).

Surging Security Force Assistance in Afghanistan

Lieutenant General William B. Caldwell, IV, with Derek S. Reveron

Lieutenant General William B. Caldwell, IV, commanded the NATO Training Mission-Afghanistan in Kabul, November 2009 to December 2011.

Derek S. Reveron is a professor at the U.S. Naval War College.

PHOTO: Afghan soldiers conduct air mobility training with the Afghan Air Force. (NTM-A Public Affairs)

WHEN THE UNITED States surged an additional 30,000 troops to Afghanistan in 2009-10, they enabled the training of an additional 113,000 Afghan soldiers and police, a corresponding "Afghan surge." Together, the combined force of 150,000 NATO troops and 305,000 Afghan National Army, Air Force, and Police has enabled the start of geographic transition, which began in July 2011 and will be complete by December 2014. Through the geographic transition process, NATO transfers lead security responsibility to Afghan forces and shifts from a combat role to an advise and assist role.

As Afghan forces train to assume security lead, combined NATO-Afghan operations are also clearing insurgent strongholds in Helmand, Kandahar, and Kunduz Provinces. Normalcy is slowly returning to areas that once only knew war. Local militias are integrating into the formal security structure, commerce is returning, and schools are opening. Afghanistan's gross domestic product has increased from $170 under the Taliban to $1,000 per capita in 2010. Almost all Afghans now have access to basic health services (only nine percent did in 2002). School enrollment increased from 900,000 (mainly boys) to almost seven million (37 percent girls). Women now serve in government, and female officers are even training to become pilots. Further, most of the country is now connected via mobile phones (15 million Afghans use mobile phones), highways, and a common purpose—to assume responsibility for its own development, governance, and security.

While the Afghan surge is incomplete and still reversible, it was by no means pre-ordained. Though the international community had been supporting the Afghan government, military, and police for several years, efforts suffered from limited resources and poor unity of effort. In 2009, the Afghan security force was underpaid, poorly trained, ill-equipped, illiterate, and poorly led. The Afghan National Army could not conduct counterinsurgency operations, and soldiers were deserting faster than could be recruited. The Afghan police were employed before being trained and lacked the armor needed to survive in a counterinsurgency environment.

Their limited capabilities, poor morale, and leadership deficit could not prevent the Taliban from regrouping and conducting attacks. Numerous government and nongovernment studies documented rising violence rates and the shortcomings in the Afghan National Security Force. In spite of these challenges, the international community committed to grow the force in 2009 and rebuild the Afghan army, air force, and police through a "security force assistance surge."

Investing in Unity of Command

Recognizing the shortcomings of the past and the challenges for the future, a concerted effort was made to unify international action when NATO Training Mission-Afghanistan (NTM-A) was created in November 2009. The command linked the resources of the U.S.-led Combined Security Transition Command-Afghanistan (CSTC-A) with the depth and expertise of a NATO command. As a dual-hatted command, critical professional gaps could be filled by NATO countries. At the same time, NTM-A was organized to support the Afghan ministries it was charged to advise and develop. For example, a single intelligence director was responsible for both providing intelligence to the command and partnering with the Afghan army and police intelligence to train, advise, and assist. The same was true across the J-coded staff, which is matrixed to deputy commanding generals responsible for developing the Afghan army, air force, and police.

The true benefit of the unified command of CSTC-A and NTM-A, however, was evident when it came to police training. For years, think tanks documented the poor results of police training efforts by disparate organizations. However, as a NATO command, NTM-A was able to leverage the expertise from national police forces like the Italian Carabinieri, French Gendarme, Spanish Guardia Civil, and the Royal Canadian Mounted Police. Thus, through a NATO command it was an Italian Carabinieri general who was responsible for police training; having a professional civil police officer responsible for training police was clearly superior to a U.S. military officer. At the same time, the NATO command could also bring together different training programs and harmonize actions with other multilateral organizations like the European Union Police and German Police Project team through a newly established International Police Coordination Board.

In addition to unifying international efforts to assist the Afghan security forces, the NTM-A also served as a focal point for international donations of equipment, funds, and trainers. In 2009, for example, there were just 1,400 U.S. trainers and 30 NATO trainers. This created poor conditions for training. By March 2012, there will be 3,400 U.S. trainers and 3,100 NATO trainers. When an additional 4,400 Afghan trainers are added, the trainer/recruit ratio will fall to levels conducive to good training. Further, the development of Afghan trainers enables coalition forces to shift focus to professionalizing the force and developing systems that will endure past transition at the end of 2014.

With a surge of trainers also came additional financial resources, which grew from $2.8 billion in Fiscal Year 2008 to $11.6 billion in Fiscal Year 2011. With the lessons of the past as a guide and the availability of additional resources, NTM-A directed its energy to invest in Afghanistan's greatest resource—its people. This included literacy training, leader development, and direct investment.
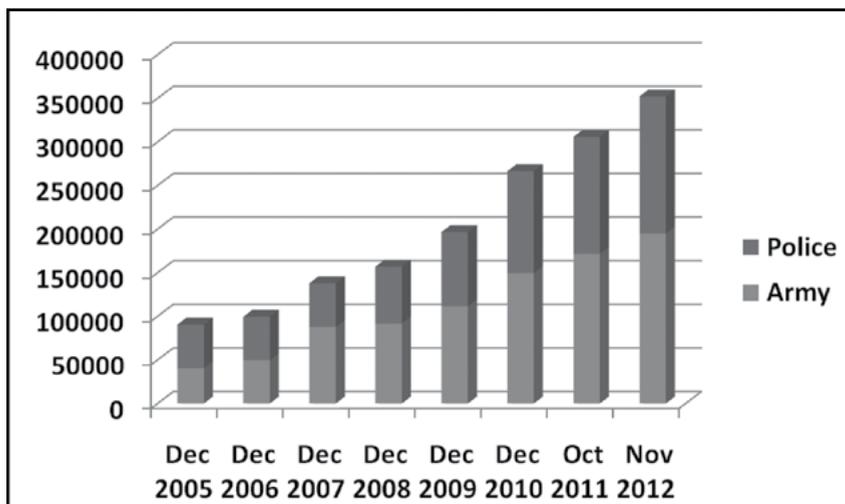
Figure 1: The Afghan Surge

After the large number of infrastructure projects are completed over the next three years, U.S. contributions are projected to fall to $4 billion.

Enabling Literacy

At the time NTM-A was created, literacy programs were not viewed as essential. After all, with a growing insurgency, trained and equipped Afghan military and police were considered necessities. Illiteracy was accepted as a fact rather than a challenge to overcome. However, with counsel from Ambassador Richard Holbrooke, we soon learned that literacy was the essential enabler. Literacy enables soldiers to account for the equipment they are issued and count their pay that is disbursed, plan operations and write orders, and investigate crimes and analyze reports.

Once started, the value of the literacy program proved itself on the battlefield, when wounded soldiers had the ability to read a map to call in medical evacuation, and in the training centers, where police could study the Afghan constitution and learn about community policing. Given that Afghanistan is considered one of the most corrupt countries in the world, literacy can also serve as an inoculation to corruption.

Through international support and the newly established NATO Trust Fund for Literacy, NTM-A employs about 3,000 Afghan teachers. The investment is beginning to show results. In July 2011, the 100,000th literate recruit was recognized; with continued support, the military and police will have a literacy rate twice that of the population in 2012. This will continue to reap benefits for the military and police as Afghans assume responsibility for logistics and maintenance. Literate service members can maintain inventories, develop maintenance schedules, and read service manuals. In the long run, promoting literacy will give hundreds of thousands of Afghans new opportunities that were destroyed by decades of war. As post-Taliban Afghan children receive the benefits from the civilian education system, the illiteracy challenge among recruits will dissipate over the next decade.

Developing Leaders

We know from our own experiences in the military that leaders matter. Good leaders make the most of the resources they are given. Good leaders understand their soldiers' needs and help them solve problems. And good leaders inspire their forces to excel. The same is true in Afghanistan. What is different, however, is the leader gap, which gave rise to an urgency to develop leaders to support the growing force. In 2011, for example, the officer fill rate in the army is 87 percent, while in the police it is 76 percent. Among noncommissioned officers, the fill rate in the army is 83 percent and 85 percent in the police. The impact of the leader deficit is evident in the attrition rate, readiness levels, and combat effectiveness, so overcoming the deficit remains a priority.

To reduce the leader deficit, there is considerable international emphasis on leader development. This includes a police officer candidate school in Turkey, army noncommissioned officer training in the United Arab Emirates, pilot training in the United States, and a robust leadership development program within Afghanistan. For example, the National Military Academy of Afghanistan is a four-year undergraduate program that leads to a commission in the army, air force, or police. Modeled after West Point, the program is extremely competitive and has attracted Afghanistan's best and brightest. Additionally, there are officer candidate schools for both police and army. Now that leadership schools are in place, the officer and NCO deficits should continue to decrease, but growing senior NCOs and field-grade officers takes time. In the interim, coalition partnering takes on additional significance; partnering reinforces good conduct, imparts on-the-job training skills, and supports force professionalization.

Stimulating Economic Activity

A key element of creating a self-sustaining military is developing a defense sector to support the army, air force, and police. Through the "Afghan First" program, NATO is supporting the establishment of indigenous industries to supply uniforms, equipment, and services to the Afghan military and police. The program reduces overall costs to equip the Afghan forces and positively impacts the Afghan economy by reducing imports. Under the Afghan First program, more than 17,000 Afghans are making combat boots, uniforms, individual load bearing equipment, tents, and furniture. Further, the program uses international donations to Afghanistan

more efficiently than using funds for imports alone. For example, 125,000 boots made in the United States costs about $15 million ($110/per pair, $775,000 to ship, and $552,000 admin fee). Under the Afghan First program, the same quantity costs almost half at $7.75 million ($62/per pair with no other fees). Through initiatives like these, we save about $168 million annually.

In addition to replacing imported uniform items, Afghan First is expanding to support infrastructure development projects. To support the growing force with training facilities, barracks, and logistic depots, the international community has committed about $11 billion to construction projects. When possible, Afghan companies are contracted to produce building materials such as doors and electrical supplies. In the long run, we anticipate the Afghan First program supporting the export of consumable military items and factories diversifying from combat boots to casual footware. Finally, by purchasing locally produced items for the military and police, the program facilitates the development of legitimate commerce,

reduces cross-border transactions, and institutionalizes transparent procurement mechanisms.

The Afghan Military and Police Beyond 2011

Without a doubt, many advances have been made over the past two years; geographic transition is progressing, the army and police met their 2011 growth goals, and the systems are in place to support the addition of 47,000 more soldiers and police in 2012. Army attrition remains stubborn, but the force is growing and professionalizing. International investment in the Afghan forces has helped to improve quality and public confidence in the Afghan army, air force, and police. This is evident in international opinion polling and the number of young Afghans who volunteer for national service every month.

However, if there is any lesson to be learned from the past decade, it is that gains can easily be reversed. Volunteers can go AWOL and resources can be misused or unaccounted for. Without

(NTM-A Public Affairs)

A U.S. soldier teaches marksmanship shoulder-to-shoulder.

good leaders to manage the force, attrition can under-mine progress. Even with proper training and equipment, mission success will be based on the ability to build sustainable capacity and capability within the Afghan National Security Force. This includes effective leaders managing well-developed ministerial and institutional systems. To safeguard the gains and reap the return on investment, continued emphasis is required on developing specialty skills, instilling stewardship, and implementing sustainable systems. **MR**

Counterinsurgency Vocabulary and Strategic Success

James Thomas Snyder

James Thomas Snyder served as an information officer in the Public Diplomacy Division at NATO Headquarters in Brussels, Belgium, from 2005 to 2011. A former U.S. congressional speechwriter, he is working on a book on public diplomacy for Palgrave Macmillan. He holds a B.A. from the University of California at Los Angeles and a joint J.D. and M.A. from American University.

PHOTO: Protesters against U.S. involvement in the Vietnam War march down Fifth Avenue in New York City, 27 April 1968. (AP PHOTO)

WESTERN GOVERNMENTS AND MILITARIES lack a basic vocabulary to articulate counterinsurgency strategy, process, and success to their publics. The domestic public is a strategic battleground in counterinsurgency, and Western governments must fight for support at home as well as abroad.

Insurgents wreak havoc not only to maintain control over indigenous populations but also to dislodge foreign forces by alienating international public support for those forces.[1] Current counterinsurgency doctrine recognizes this; in fact, this was understood in the aftermath of the Vietnam War and outlined in the Weinberger Doctrine of 1984, which articulated strategic objectives "supported by the widest possible number of our citizens."[2] Although many scholars focus on the tactical and leadership failures that led to the loss of the Vietnam War, the collapse of political support in Congress after the public abandoned the war made a winning strategy impossible.[3]

Osama bin-Laden famously argued that the American and allied withdrawal from Lebanon and Somalia demonstrated that a collapse of public support follows U.S. casualties, proving that tactical setbacks can have strategic consequences.[4] Indeed, the media often relate public opinion to major military events, and terrorists attempt to exploit their strategic effects.[5]

Political support for a conflict historically cannot survive if public support for it drops below 50 percent. When more than half the population opposed the war in Vietnam in 1967, public support for the conflict never recovered (Figure 1). Similarly, after 2007, support for the war in Iraq collapsed and never recovered despite the extraordinary success U.S. and Iraqi counterinsurgency forces

Figure 1. Gallup poll on Vietnam.

achieved. Nevertheless, just as with Vietnam, public frustration with Iraq can have strategic consequences: it suggests an Iraq War fatigue that makes extended or emergency commitments elsewhere far less likely. Public opinion has not yet reached this point for Afghanistan, but the possibility of its doing so makes the subject of this article imminently critical (Figure 2).

Insurgencies are different from conventional warfare in part due to their lengthy duration. In the modern era, the average successful insurgency has lasted 12 to 15 years.[6] By comparison, the Second World War lasted five years for Great Britain and four years for the United States, and the "shooting phase" of the Korean conflict lasted only three years. More recently, conventional warfare has lived up to its "high-intensity" reputation in the Six Day War (1967), the 38 days of air strikes followed by the 100-hour liberation of Kuwait (1991), the 78-day war over Kosovo (1999), the two-month capitulation of Afghanistan (2001), the three-week conquest of Iraq (2003), and the five-day war in Georgia (2008). Major combat seems to start dramatically and stop just as quickly.

These wars of major combat also share a neat and ultimately misleading narrative structure: a surprising start, dramatic combat, and violent conclusion. The narrative of World War II is the *ur*-narrative. Dozens of movies and documentaries during the past 60 years have helped shape the public's basic understanding of the normative concept of warfare: bad nations commit aggression, good nations reluctantly fight back, and through force of arms, the enemy submits to unconditional surrender. The inevitable intimacy that occurs when nations fight—and the years-long post-war occupations that have occurred in Japan, Korea, Germany, Austria, Iraq, and the Balkans—fall inconveniently away from this tidy storyline. When war fails to fit the *ur*-narrative, we lack the tools to understand and articulate it.

We must develop these tools because insurgencies and other wars among the people are the normative reality of warfare.[7] Messy insurgencies, occupations, and efforts at nationbuilding dominate military operations, but they don't dominate our public's shared understanding of modern warfare.

Even the short wars cited above led to sticky wars among the people. Israel is still living with the messy consequences of its occupation of territory after the 1967 Arab-Israeli War. The two wars over Iraq have not ended. Assuming U.S. withdrawal from Iraq at the end of 2011, the combined conflicts and monitoring and enforcement operations will have lasted 20 years. NATO remains in Kosovo more than a decade after the war with the former Yugoslavia. After taking over from NATO in 2004, European Union forces remain in Bosnia 16 years after the Dayton Peace Accords.

We must uncouple the current fights from words and expressions associated with conventional warfare and with past, mostly unsuccessful, insurgencies. Conventional warfare has left us with a standard vocabulary readily understood by the public: *fight*, *win*, *victory*, *prevail*, *front*, *battle*, *line*, *surrender*, *exhaust*, *campaign*, *destroy*, *kill*, *attack*, *prisoner*, *assault*, *casualty*, *flank*, *shell*, *comrade*, *death*, *loss*, *ally*, *enemy*, *push*, *retreat*, *crush*, and *smash*. These are vivid, intense words that also accurately represent, rather than euphemistically distort, high-intensity warfare. Words not directly associated with violence can be considered positive, even in the case of those like *loss*, *surrender*, and *retreat*—provided they occur to the enemy.

Unfortunately, commonly understood words relating to Western militaries and insurgencies are almost entirely negative: *quagmire*, *exit strategy*, *defeat*, *failure*, *guerrilla*, *terrorist*, *police action*, *coup*, *resistance*, *insurgency*, *search and destroy*, *hearts and minds*, *pacification*, *intervention*, *attrition*, *withdrawal*, *pullout*, *timeline*, *transition*.

This situation has left us with a dearth of vocabulary to describe the fight we are in or to rally public support for a long war. We find it difficult to place tactical setbacks and defeats in a strategic and political context, or even to define and articulate success.

Compare our current predicament with Winston Churchill's expansive vow to the House of Commons with its inclusive, stirring rhetoric: "We shall fight on the beaches, we shall fight on the landing grounds, we shall fight in the fields and in the streets, we shall fight in the hills; we shall never surrender."[8] The rallying calls evoked recently do not resonate with the public like Churchill's did. Compare General David Petraeus's remarks in a recent interview: "There's no hill to take and flag to plant and proclamation of victory. Rather it's just hard work."[9]

The uniquely political aspect of counterinsurgency poses a particular challenge to articulating progress, explaining setbacks, and maintaining

Thinking now about U.S. military action in Afghanistan that began in October 2001, do you think the United States made a mistake in sending military forces to Afghanistan, or not?

■ % Yes, made a mistake   ■ % No, did not
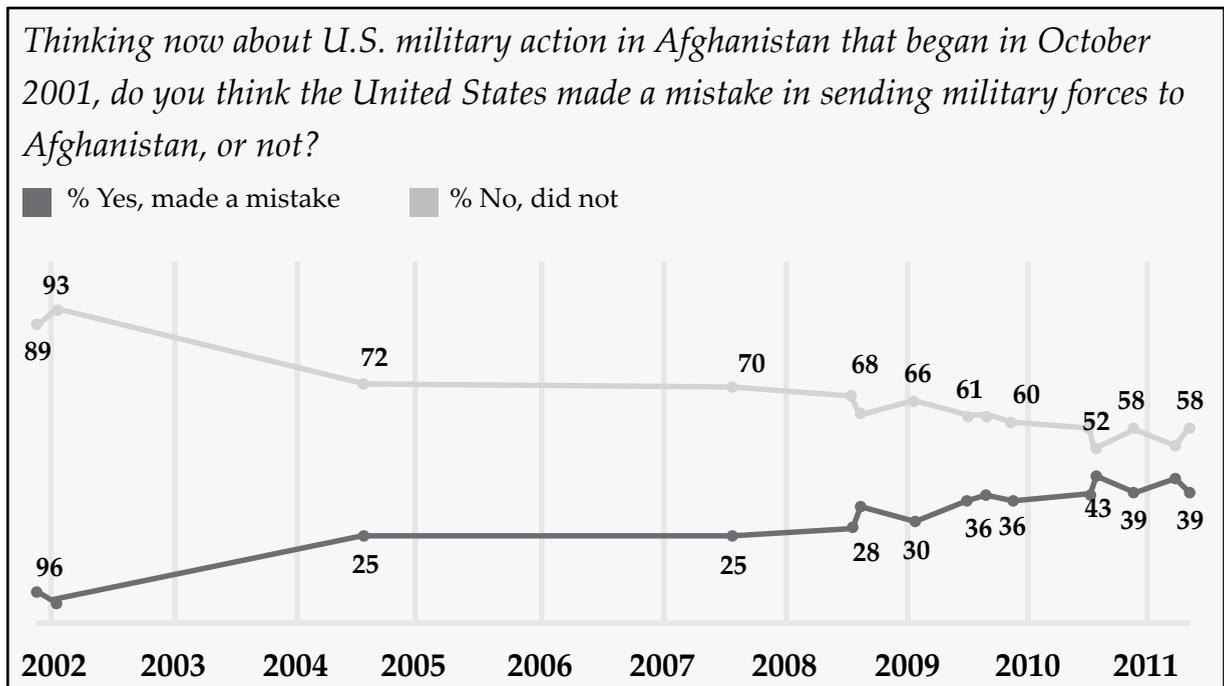
Figure 2. American public opinion on Afghanistan.

support for long-term operations. Common political expressions either relate too similarly to conventional warfare–*campaign*, *fight*, *win*, *coalition*, *victory*, *triumph*, *enemy*, *defeat*—or they appear entirely alien and even inappropriate to the context of warfare—*cooperate*, *co-opt*, *reach out to*, *join*, *reconcile*, *stand with*, *work together*, *ally*, *friend.* Clichés compound this problem. Political figures often use clichés to make their actions sound more vigorous than they are—*rolling up our sleeves*, *standing shoulder to shoulder*, *getting down to work*, *finding common ground*, *working hard*—but do little to articulate reality.

In counterinsurgency as in democracy, politics is essential.[10] Indeed, counterinsurgency reminds us of the wisdom of Clausewitz's famous observation that "war is politics by other means." Politics is an intense, energetic, intimate human activity, but unfortunately, it appears entirely ephemeral to an outsider. Finding, articulating, and assimilating a real and robust vocabulary to describe political actions, achievements, and obstacles is like the "slow boring of hard boards," in the words of sociologist Max Weber.[11] But doing so is vital to explain the difficult work and unsteady progress of counterinsurgency.

The Bush and Obama administrations corrected themselves in the way they communicated by eliminating vocabulary associated with conventional warfare. The next step we should take is to change the direction and tone in discussing the wars in Iraq and Afghanistan with the public. General Petraeus, in particular, applied a specific lesson from the war in Vietnam to speak honestly about the challenges of insurgency, and not to inflate expectations for success, but to reduce them in order to maintain understanding, if not necessarily support, among the American public for the current war.

As James H. Willbanks, director of the military history department at the U.S. Army Command and General Staff College, noted in an opinion article written during the anniversary of the Tet Offensive:

> To dampen antiwar sentiment, [President Lyndon] Johnson and [General William] Westmoreland encouraged what turned out to be false expectations about our prospects in Vietnam, and this colored Americans' perception of the Tet offensive, stretching the president's credibility gap to the

breaking point. A tactical victory became a strategic defeat and led to the virtual abdication of President Johnson. General Tran Do of North Vietnam acknowledged that the offensive failed to achieve its objectives, but noted that the public reaction in the United States was "a fortunate result."

> Gen. David Petraeus . . . is a student of the Vietnam War whose doctoral dissertation at Princeton was titled "The American Military and the Lessons of Vietnam." Clearly, he internalized those lessons, because, in discussing the surge and the progress of the war in Iraq, he has studiously avoided building undue expectations and has repeatedly said that there will be tough times ahead.[12]

Indeed, Petraeus' guidance for Afghanistan was explicit on this point: "Manage expectations. Avoid premature declarations of success. Note what has been accomplished and what still needs to be done. Strive to under-promise and over-deliver."[13]

It is one thing to purge public discussion of particular language, and even to alter the basic approach, but what national security communications professionals need, on a daily basis, is a fundamental tool—a vocabulary—to articulate the current struggle in a way that makes immediate sense and has an instant impact with the Western public that must support the fighting for it to be successful.

To my mind, current messaging relating to the wars in Iraq and Afghanistan does not make an immediate impact with the public and may contribute to declining support. Here are some examples.

(AP Photo/Pablo Martinez Monsivais)

GEN David Petraeus testifies on Capitol Hill before the Senate Foreign Relations Committee hearing on Afghanistan, Washington, DC, 9 December 2009.

A protester holds a placard with pictures of Americans who have died in the war in Iraq at a demonstration by various activist groups calling for an end to U.S involvement in Iraq, Philadelphia, PA, 18 June 2003.

First, an excerpt from a 2007 *Economist* article quoting General Sir David Dannat, former British Army Chief of Staff:

> [T]he generals plead for more time. They point to Iraq's Anbar province, where Sunni tribes are turning against al-Qaeda. In Afghanistan, says Britain's General Dannatt, "strategic patience" is essential. American officers quote internal studies showing that it takes nine years on average (and often much longer) to defeat insurgencies. Yet perseverance is no guarantee of victory; many campaigns have taken as long, if not longer, to lose.[14]

Next, excerpts from a speech delivered by President Barack Obama on 1 December 2009, as he announced his decision to change strategy in Afghanistan:

> Now, let me be clear: None of this will be easy. The struggle against violent extremism will not be finished quickly. We must reverse the Taliban's momentum and deny it the ability to overthrow the government.

Our overarching goal remains the same: to disrupt, dismantle, and defeat al Qaeda in Afghanistan and Pakistan.

Finally, comments by Afghan President Hamid Karzai at the NATO Summit in Lisbon, Portugal, in November 2010:

> We are confident that the transition will succeed, to the Afghan authority, leadership and ownership because I found today a strong commitment by the international community. This strong commitment by the international community will be matched by determination and hard work by the people of Afghanistan. The two combined will give us the results of an effective, irreversible and sustainable transition.[15]

Expressions the British general used such as *strategic patience* have little utility because they are terms of art. In popular application, the term *patience* is a passive concept: patience is not active; it does not achieve anything. To apply a sports metaphor, patience does not win a marathon. *Stamina* and *endurance* do.

Table 1—Words: *endurance, stamina, pressure, gain, loss, obstacle, disappoint, encourage, progress, benchmark, goal, build, construct, overwhelm, positive, flood, reinforce, bolster, energy, dogged, resolute, strong-willed, single-minded, common purpose, methodical, mass*

Table 2—Expressions: *give our friends a fighting chance, build up our friends, break down our enemies, strengthen our friends, reconcile our adversaries, destroy our enemies, leave the country stronger than we found it, make friends of enemies, friends in the fight, constructing capabilities*

The President's *reversing momentum* and *denying ability* are the grammatical equivalent of achieving negatives: at best, they reach a zero sum. As to *disrupt, dismantle,* and *defeat*, does this occur concurrently or progressively? Finally, *sustainable transition* means nothing to the lay audience; it is unquantifiable policy jargon. It has no substance.[16]

In ideal circumstances, we might select a vocabulary and test it with focus groups in a controlled environment and across target audiences (in different countries).[17] This is both extremely expensive and time-consuming. Alternatively, we can start to apply and test new words and rhetorical concepts, beginning a discussion among professionals about how best to gain and maintain support with the public.

The lists in Tables 1 and 2 are by no means exhaustive. They intend to begin a discussion, to encourage experimentation. It is hard to come by the perfect expression that is both easy to remember and accurately summarizes a policy, strategy, or event. Not every day do we get something as clear and accurate as "clear, hold, and build."

In the meantime, it is important for communications professionals to—

● Speak and write plainly and literally, without euphemism.

● Use simple, linear examples, citing cause and effect.

● Connect tactical successes to larger, strategic progress without inflating expectations.

● Avoid jargon, acronyms, theory, and speculation.[18]

My former colleague, Jamie Shea, the NATO spokesperson during Operation Allied Force, once noted, "A media campaign will not win you a war. But a bad media campaign can and will lose you a war."

A new approach to communicating counterinsurgency to Western publics has the added benefit of being more open, transparent, and honest with the committed citizens of our democracies who bear the burden, carry the cost, and ultimately decide the direction of the long war. **MR**

NOTES

1. U.S. Army Field Manual 3-24, *Counterinsurgency* (Washington, DC: Government Printing Office, 2006), para. 3-98.

2. Secretary of Defense Caspar Weinberger, "The Uses of Military Power," speech before the National Press Club, 28 November 1984.

3. See reference to GEN Creighton Abrams' 1969 campaign plan referring to diminished public support in John A. Nagl, *Learning to Eat Soup with a Knife* (Chicago: University of Chicago Press, 2005). For discussion of tactical and leadership failures see, e.g., Andrew Krepinevich, *The Army and Vietnam* (Baltimore: The Johns Hopkins University Press, 1986); Lewis Sorley, *A Better War: The Unexamined Victories and Final Tragedy of America's Last Years in Vietnam* (Boston: Harcourt, 1999); and H.R. McMaster, *Dereliction of Duty: Johnson, McNamara, the Joint Chiefs of Staff, and the Lies That Led to Vietnam* (New York: Harper Perennial, 1998).

4. Peter Bergen, "Bin Laden's Lonely Crusade," *Vanity Fair*, January 2011.

5. For example, the 2004 attacks on the Madrid transit network had the terrorists' intended effect of ending Spain's military commitment to the conflict in Iraq. Seth G. Jones, *In the Graveyard of Empires* (New York: W.W. Norton, 2010), 287.

6. Sebastian L.V. Gorka and David Kilcullen, "An Actor-Centric Theory of War," *Joint Force Quarterly* (1st Quarter 2011).

7. GEN Rupert Smith, *The Utility of Force* (New York: Knopf, 2007).

8. Winston Churchill, address to the House of Commons, 4 June 1940.

9. Rajiv Chandrasekaran, "GEN David Petraeus says Afghanistan war strategy 'fundamentally sound'," *The Washington Post*, 15 August 2010.

10. "So intricate is the interplay between the political and the military actions that they cannot be tidily separated; on the contrary, every military move has to be weighed with regard to its political effects and vice versa." David Galula, *Counterinsurgency Warfare Theory and Practice* (Westport, CT: Praeger, 2006), 5.

11. Max Weber, "Politics as a Vocation," *The Vocation Lectures* (Indianapolis: Hackett, 2004), 93.

12. James H. Willbanks, "Winning the Battle, Losing the War," *The New York Times*, 5 March 2008.

13. GEN David H. Petraeus, United States Army, "COMISAF's Counterinsurgency Guidance," Headquarters, International Security Assistance Force/United States Forces-Afghanistan, Kabul, Afghanistan, 27 July 2010.

14. "After smart weapons, smart soldiers," *The Economist*, 25 October 2007.

15. NATO Summit Press Conference, 20 November 2010, Lisbon, Portugal.

16. Other examples of "sustainable transition" can be found in official documents and statements such as NATO Summit Declaration, Lisbon, 20 November 2010, para. 4 and 5; "Afghanistan's transition to greater responsibility for its own destiny requires realignment of aid with priorities, Security Council told," United Nations Security Council Press Release, SC/10142, Department of Public Information, News and Media Division, New York, 22 December 2010; and Thom Shanker, "Petraeus Finishes Rules for Afghan Transition," *The New York Times*, 10 August 2010.

17. Frank Luntz, *Words That Work: It's Not What You Say, It's What People Hear* (New York: Hyperion, 2008).

18. Indeed, readers should consult George Orwell's "Politics and the English Language" and "Propaganda and Demotic Language," easily available on the Internet and both robust rearguards for clear, robust language against the unceasing assault by leaden, bureaucratic verbiage that constitutes most political discourse.

Adaptive Leadership in the Military Decision Making Process

Lieutenant Colonel William J. Cojocar, Ph.D., U.S. Army, Retired

Army leaders in this century need to be pentathletes, multi-skilled leaders who can thrive in uncertain and complex operating environments . . . innovative and adaptive leaders who are expert in the art and science of the profession of arms. The Army needs leaders who are decisive, innovative, adaptive, culturally astute, effective communicators, and dedicated to life-long learning.

— *Francis J. Harvey, Secretary of the Army, speech for U.S. Army Command and General Staff College graduation*[1]

Lieutenant Colonel Bill Cojocar, Ph.D., U.S. Army, Retired, is a Combined Arms Center team lead for the Training and Doctrine Command G2 Intelligence, Surveillance, and Reconnaissance TOPOFF Program. He previously served as a principal analyst for operations/intelligence for General Dynamics Information Technology, Army Solutions Division, Simulations and Training Division's Battle Staff Training Team. He is an adjunct professor for Texas A&M University-San Antonio and Wayland Baptist University and served in U.S. Army CENTCOM in Afghanistan. He holds a B.A. from Kent State University, an M.A. from Boston University, and a Ph.D. from Capella University.

PHOTO: 3rd Armored Cavalry Regiment soldiers identify targets for Iraqi Army field artillery training, Wasit, Iraq, 20 October 2010. (U.S. Army, SPC Charles M. Willingham)

TODAY'S ARMY LEADERS have accepted adaptive leadership as a practice and a methodology, integrating it into the way we train leaders to meet the challenges of the contemporary operating environment. Adaptive leadership is an accepted leadership practice that facilitates leading in a difficult and changing environment, as we encounter threats that change and evolve their tactics, techniques, and procedures on a weekly to monthly basis. Much has evolved in this practice in the last eight years, including leadership and operational doctrine and new training venues to train tomorrow's leaders. This article examines current U.S. Army doctrine on adaptive leadership, reviews current adaptive leadership theory and practice, and recommends ways to incorporate adaptive leadership practices into the military decision making process (MDMP).

Chairman of the Joint Chiefs of Staff General Martin Dempsey recently commented on new leadership and operational doctrine, stating, "The recent release of FM 5-0, *The Operations Process*, represents a major shift in how we develop adaptive leaders through its introduction of the Design process. The goal here is to develop leaders who do not think linearly, but who instead seek to understand the complexity of problems before seeking to solve them. Design gives leaders the cognitive tool to *understand* complex problems as part of the Visualize, Understand, Decide, Direct responsibilities of the commander."[2]

General Dempsey added, "We're trying to decide how to build in new skill sets for our leaders to meet the hybrid threats that exist in these uncertain times. The pace of change adds to the increasing complexity . . . . We're seeking creative thinking skills and trying to replicate those complexities in our

training scenarios. We want to build on the ability to adapt. The 2015 learners will be able to easily create and adapt virtual training environments to meet their individual or collective training needs."[3]

Our current doctrine addresses what adaptive leadership is and provides some tools for being adaptive, but fails to address how to implement it in the MDMP process. This is important because the MDMP is the genesis of operations. In order to develop and execute adaptive plans and operations, and lead adaptively, today's leaders must understand where and how in the MDMP they can integrate, apply, and master adaptive leadership to meet adaptive threats and changing situations.

Adapting to the "Hybrid" Threat Environment

The U.S. Army Combined Arms Center Threats Division defines the hybrid threat as a diverse, dynamic combination of regular forces, irregular forces, and criminal elements unified to achieve mutually benefitting effects.[4] The term "hybrid" is used to capture the essence of the complexity of war, the multiplicity of actors involved, and the blurring between traditional categories of conflict. Hybrid threats are innovative, adaptive, globally connected, networked, and embedded in local populations. They can possess a wide range of old, adapted, and advanced technologies—possibly including weapons of mass destruction. U.S. forces must prepare for a range of conflicts. New threat doctrine includes an operational Design component called *adaptive operations* or actions to preserve the threat's power and apply it in adaptive ways against overmatching opponents.[5] The hybrid threat's immediate goal is survival, but its long-term goal is the expansion of its influence. The hybrid threat's operational goal is to adapt temporarily, using patience, adapting tactics, techniques, procedures, and even operational and strategic goals, to live and fight another day.

In the article "Beyond the 'Hybrid' Threat: Asserting the Essential Unity of Warfare," the authors reinforce the notion that adaptive leadership is essential to counter present and future adversaries. They note, "Those [threats] that have not adapted have faced rapid extinction in the jungle of the global strategic order. Those that do are *entities or movements that, based on a*

continuous scanning of their operational environment, maneuver with speed and agility through material and cognitive capabilities to affect the will and psyche of others, in order to attain their political objectives."[6]

The ability to shift approaches with agility and speed is the essence of the future threat, as well as of former Secretary of Defense Robert M. Gates' vision for our armed forces (adaptive in organizational and campaign Design, capabilities development, and execution). Future threats will adapt specific mixes of cognitive and material capabilities based on a continual assessment and reassessment of the other's strengths and weaknesses, requiring constant adaptation, experimentation, and learning. This adaptability is a measure of one's ability to change in order to fit altered circumstances and provides commanders an added measure of resiliency in the face of the unknown. This need for adaptability and adaptive leadership points to a potential gap in our doctrinal system.[7]

Adaptive Leadership Reviewed

The Army's current leadership doctrine, Field Manual (FM) 6-22, provides a solid definition for adaptive leadership, exploring the practice of creative thinking that uses adaptive approaches drawn from previous circumstances or lessons learned, along with creating innovative approaches.[8] It says that when tasks are difficult, adaptive leaders identify and account for the capabilities of the team, noting that while some tasks are routine, others require leader clarification, and still others present new challenges.[9] FM 6-22 provides some new tools for adaptability and defines what it is to be an adaptable leader.

Adaptability is the ability to recognize changes in the environment, identify the critical elements of a new situation, and trigger changes to meet new requirements. Adaptability is an effective change in behavior in response to an altered situation.

Adaptable leaders scan the environment, determine the key characteristics of the situation, and are aware of what it will take to perform in the changed environment. Highly adaptable leaders are comfortable entering unfamiliar environments, have the proper frame of mind for operating under mission command orders in any

organization (FM 6-0), and seek to apply new or modified skills and competencies.

Adaptive leadership includes being a change agent. This means helping other members of the organization, especially key leaders, recognize that an environment is changing and building consensus as change is occurring. As a consensus builds, adaptive leaders work to influence the course of the organization. They use several different methods for influencing their organization depending on the immediacy of the problem.[10]

Deciding when to adapt is as important as determining how to do it. Deciding not to adapt in a new environment may result in poor performance or outright failure. On the other hand, adapting does not guarantee the change will improve matters.

Field Manual 6-22 describes adaptable leaders as leaders who are comfortable with ambiguity and are flexible and innovative. They are ready to face the challenges at hand with the resources available. They are passionate learners, able to handle multiple demands, shift priorities, and change rapidly and smoothly. They view change as an opportunity.

Adaptability has two key components:
● The ability of a leader to identify the essential elements critical for performance in each new situation.
● The ability of a leader to change his practices or his unit by quickly capitalizing on strengths and minimizing weaknesses.[11]

Adaptive leaders are open-minded. They do not jump to conclusions, are willing to take risks, and are resilient to setbacks. Our new leadership doctrine informs leaders how to become more adaptable. They must learn to lead across cultures, seek challenges, and leverage their cognitive abilities to counteract the challenges of the operational environment through logical problem solving.[12]

Adaptive Thinking, Design, and FM 5-0

The Army's new FM 5-0, *The Operations Process*, addresses adaptation by focusing on creative thinking, a process that involves creating something new or original when facing old or unfamiliar problems that require new solutions. Creative thinking

(U.S. Army)

Chief of Staff of the Army GEN Martin E. Dempsey speaks with U.S. soldiers from United States Division-Center during a visit to Camp Liberty, Iraq, 19 April 2011.

produces new insights, novel approaches, fresh perspectives, and new ways of understanding and conceiving things. Leaders look at the options to solve problems using adaptive approaches (drawn from previous similar circumstances) or innovative approaches (completely new ideas).[13] Today's full spectrum operations demand planning that can be integrated and addressed in the operational Design process, the MDMP, and troop-leading procedures.[14]

> *…adaptive leadership is the framework required to effectively close the gap and make aspirations a reality.*

Innovation, adaptation, and continuous learning are all central tenets of Design. Innovation involves taking a new approach to a familiar or known situation. Adaptation involves taking a known solution and modifying it to a particular situation or responding effectively to changes in the operational environment. Design helps commanders lead; guides planning, preparing, executing, and assessing operations; and requires agile, versatile leaders who foster continuous organizational learning while actively engaging in iterative collaboration and dialog that enhances decision-making at all levels.[15] Design provides a model for problem framing and cognitive tools to understand problems and appreciate their complexities before trying to solve them. The tools help leaders recognize and manage transitions, educating and training them to identify adaptive, innovative solutions, create and exploit opportunities, and leverage risks to their advantage.[16] Leaders must lead organizational learning, develop methods to determine if reframing is necessary during the course of an operation and continuously assess, evaluate, and reflect on the problem at hand.[17]

Adaptive Leadership Practice

The pioneer of adaptive leadership theory, Ronald Heifetz of Harvard University, states that adaptive leadership is the practice of mobilizing people to tackle tough challenges and thrive. It's about changes that enable the capacity to thrive. Such changes build on the past rather than jettisoning it. Organizational adaptation occurs through experimentation.[18]

Heifetz, Alexander Grashow, and Marty Linsky state that adaptive leadership is an iterative process involving three key activities:
● Observing events and patterns.
● Interpreting them.
● Designing interventions based on the observations.[19]

Adaptive leadership has three parts: observation, interpretation, and intervention. Adaptive leaders must adopt an experimental mind-set that commits to an intervention but does not become wedded to it. Adaptive leadership is about will and skill. "The single most important skill and most undervalued capacity for exercising adaptive leadership is diagnosis," which in military terms translates to "mission analysis" and "running estimate analysis."

Heifetz, Grashow, Linsky provide the following recommendations for practicing adaptive leadership:
● Don't do it alone.
● Live life as a leadership laboratory.
● Resist the leap to action.
● Discover the joy of making hard choices.[20]

Adaptive challenges are difficult because their solutions require people to change their ways. Adaptive work demands three tough human tasks:
● Figure out what to conserve from past practices (lessons learned).
● Figure out what to discard from past practices.
● Invent new ways that build from the best of the past.[21]

When leaders realize their organization's aspirations—the innovations and progress they want to see—demand responses outside the current capacities, adaptive leadership is the framework required to effectively close the gap and make aspirations a reality.[22] It provides a disciplined approach to do more for what you care about most.[23]

Adaptive Leadership and the MDMP

Understanding adaptive leadership is important, but integrating it into the military decision making process is a challenge. Not many have written about

| Determining what practices are core to the future and which are obstacles | Running smart experiments and testing new practices | Integrating new practices, aligning people across the organization to execute |
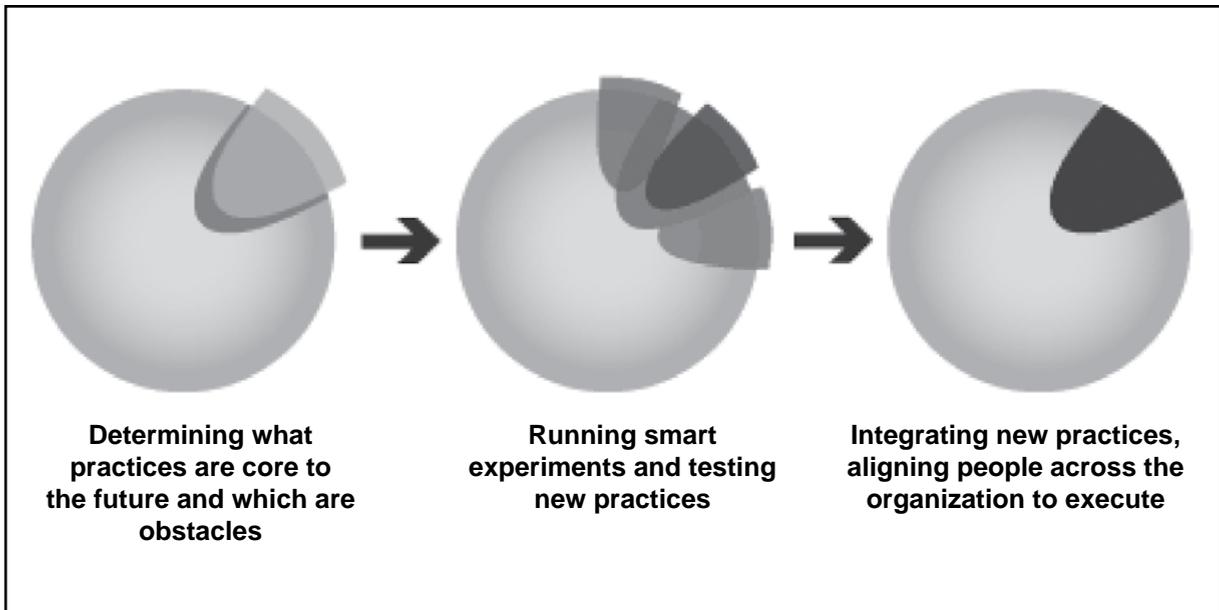
Introduction to Organizational Adaption.

it. The following are some recommendations worth considering during the MDMP:

Step 1. Receipt of mission. Receiving higher headquarters' order of a new mission is receipt of mission. Commanders are responsible for providing initial guidance and time allocation. Depending on the complexity of the situation, they may initiate Design activities before or in parallel with the MDMP. As specified by FM 5-0, commanders may choose to conduct Design to help them understand the operational environment, frame the problem, and consider operational approaches to manage it or solve it.

Why are leaders reluctant to "Design"? Is it because they don't understand what Design is? Is it because it takes too much time? Or is it because they feel they have a firm grasp of what the real problem is and do not need to waste time validating the problem?

Whichever the case, Design provides an ideal platform to begin adaptive thinking by modeling innovative, adaptive problem framing. Design provides leaders with the tools to understand problems and appreciate their complexities before trying to solve them. Taking and making time for this valuable exercise helps build adaptive leadership skills by educating and training leaders to identify and employ adaptive, innovative solutions, create and exploit opportunities, and leverage risks to their

advantage. Time invested in the Design process is a valuable step in understanding the threat, the environment, and how to meet both with adaptive plans and operations.

Step 2. Mission analysis. The commander and staff conduct mission analysis to better understand the situation and problem and identify *what* the command must accomplish, *when* and *where* to do it, and most important, *why*—the purpose of the operation. Mission analysis is the most important step in the MDMP because no amount of subsequent planning can solve a problem if the commander and staff do not understand it. Mission analysis allows commanders to visualize the operation and describe how it may unfold in the commander's intent and planning guidance.[24] Mission analysis is one of the most important steps for integrating adaptive leadership. How adaptable, flexible, and agile are we? Are we lock-stepped into our tactics, techniques, and procedures, continually reacting to the threat, or are we preemptive, proactive, and agile? Although not specified in Army doctrine, two valuable tools that can facilitate adaptability are the strengths, weaknesses, opportunities, and threats analysis and the force field analysis. The staff should also observe, analyze, understand, and interpret patterns (pattern analysis).

Step 3: Course of action (COA) development. This step generates options for follow-on analysis

and comparison to satisfy the commander's intent and planning guidance. Planners use the problem statement, mission statement, commander's intent, planning guidance, and knowledge products developed during mission analysis to develop COAs. Staffs often develop one to two courses of action that are diametrically different in their approaches to solving the problem. Many times, staffs are directed to develop a third COA that often serves as a throw-away option, with the staff not investing much time on it. Staffs should instead develop a proactive, preemptive COA as a way to inject adaptability into the MDMP. They may also use "adaptive" as a screening criterion to screen for validity in COA analysis. Of course, we must train our staffs to understand what the screening criterion is and how to apply it in quantifiable terms.

Step 4: COA analysis (wargame). This step allows commanders and staffs to identify difficulties or problems in coordination as well as the probable consequences of actions they are planning or considering.[25] Threat-focused decision making, proactive or reactive, and adaptive actions, reactions, and counteractions make for a dynamic COA analysis. Risk assessment is another consideration. Are we pushing the risk envelope? Are we hinging on a low- to moderate-, or moderate- to high-risk level during wargaming? COA analysis (wargaming) can become an extremely adaptive exercise if the staff develops an adaptive COA, war games it, integrates the results, and assesses them. This MDMP step is the experimental stage, during which the staff tests interventions.

Step 5: COA comparison. This is an objective process to independently evaluate COAs against set evaluation criteria approved by the commander and staff to identify their strengths and weaknesses and allow the commander and staff to select one with the highest probability of success and develop it in an operations plan or order.[26] Using adaptive screening and evaluation criteria for COA comparison injects adaptability into the MDMP process.

Conclusion

Adaptive leadership is an accepted leadership practice that facilitates leading in a difficult and changing environment in which we encounter adaptive and "hybrid" threats that change and evolve tactics, techniques, and procedures across the conflict spectrum. *MR*

NOTES

1. Dr. Francis J. Harvey, Secretary of the Army, speech for U.S. Army Command and General Staff College graduation (2005).
2. See <http://www.military-training-technology.com/mt2-home/259-mt2-2010-volume-15-issue-4-july/3105-qaa-general-martin-e-dempsey.html>.
3. See <http://www.army.mil/-news/2009/09/04/27024-tradoc-commander-discusses-leadership-training-at-forum, http://www.military-training-technology.com/mt2-home/259-mt2-2010-volume-15-issue-4-july/3105-qaa-general-martin-e-dempsey.html>.
4. Training Circular 7-100, *Hybrid Threat* (Washington DC: Government Printing Office [GPO], 2011), iv.
5. Ibid., 4-1.
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Rhodesia's Approach to Counterinsurgency: A Preference For Killing

Marno de Boer

IN THE 1970s, a bloody insurgency took place in Rhodesia, now present-day Zimbabwe. African insurgents faced a settler-state determined to keep power in white hands. The government adopted a punitive and enemy-centric counterinsurgency strategy. Many Rhodesian soldiers embraced the punitive approach to such an extent that they overextended the rules of engagement. Although the Rhodesian Bush War took place in its unique historical context, it should also serve as a warning for commanders of troops currently engaged in enemy-centric "anti-terrorism" operations.

Overview of the Conflict

Rhodesia was founded in 1890 by Cecil Rhodes when he tried to assert British dominance over Southern Africa. In 1923, it became a self-governing territory within the British Empire. After World War II, white settlers tried to cling to power, even though Great Britain granted independence to its colonies under the principle of majority rule. Rhodesia, Great Britain, and African nationalists could not agree on a solution, so Rhodesian Prime Minister Ian Smith issued the Unilateral Declaration of Independence on 11 November 1965. This kept political and economic power in white hands, sparking African resistance in the formation of two political groups: the Zimbabwe African People's Union (ZAPU), led by Joshua Nkomo, and the Zimbabwe African National Union (ZANU) under Ndabaningi Sithole. The Zimbabwe African People's Union was supported by the Ndebele tribe, which included about 19 percent of Rhodesia's 4.8 million blacks. The Zimbabwe African National Union was backed by the Shona tribe, which constituted almost 80 percent of the African population. The rest of Rhodesia consisted of around 230,000 whites, 9,000 Asians, and 15,000 people of mixed ethnicity.[1]

When Smith issued the Unilateral Declaration of Independence, ZAPU and ZANU went on the offensive through their armed wings, the Zimbabwe People's Revolutionary Army (ZIPRA) and the Zimbabwe African National Liberation Army (ZANLA). They infiltrated Rhodesia from Zambia from

Marno de Boer is currently studying for an L.L.M. in public international law at Utrecht University, the Netherlands, after finishing an M.A. in the history of warfare at the War Studies Department of King's College, London. This article is based on the thesis he wrote for his B.A. at University College, Utrecht, the Netherlands.

PHOTO: Jubilant demonstrators celebrate the removal of colonialism by flogging the statue of Rhodesia's founder, Cecil John Rhodes, 31 July 1980. (AP Photo/Louis Gubb).

1966 through 1968. Since they did so in large groups, the Rhodesian security forces quickly detected and engaged them. By late 1968, the death rate was 160 insurgents for 12 security force members. The guerrillas failed to establish a base in Rhodesia, and the survivors fled back to Zambia.[2]

After these raids, ZANLA adopted a Maoist approach, aided by Chinese advisers. It planned to avoid direct confrontations with the security forces and gradually extend control over the countryside. This changed the pattern of war in the early 1970s, when ZANLA began to establish control over African rural life. Its strategic aim was to overextend the security forces so that the white economy would collapse as large numbers of reservists were mobilized. An alliance with the Mozambican guerrilla group FRELIMO permitted ZANLA to infiltrate Rhodesia, especially after this group became the legal government in 1975 following Mozambican independence from Portugal.[3] ZANLA then flooded Rhodesia with guerrillas. In January 1976, there were an estimated 1,600 present within Rhodesia. By mid-1977, there were 6,000. Near the end of the war, ZANLA deployed around 10,000 fighters in Rhodesia while holding 3,500 in reserve abroad.

By then, ZIPRA had infiltrated about 4,000 men and held back 16,000 trained fighters.[4] Rather than taking a Maoist approach, ZAPU's military wing received advice and aid from the Soviet Union and hoped for a decisive battle.[5]

In the end, ZANLA's strategy proved successful. The security forces lost control over large swaths of the country. The increased mobilizations and defense spending harmed the economy and motivated a significant number of whites to emigrate. By late 1979, Rhodesia was on its last legs.[6] Even an internal settlement in which whites shared power with the non-Marxist, African Bishop Muzorewa did not bring peace, because neither the insurgent groups nor the international community recognized his government. In December 1979, Great Britain, Rhodesia, ZANU, and ZAPU reached an agreement in London over majority rule elections. In March 1980, ZANU, by then led by Robert Mugabe, won the elections.

A Punitive Strategy

The Rhodesian security forces embraced a punitive approach to counterinsurgency. Apart from some attempts at population control, there was no program to win over the African population by positive measures. The army focused on achieving a high "kill rate."[7] It became skilfull at this; even with its outdated equipment the Rhodesian Army killed over 10,000 guerrillas inside Rhodesia and thousands outside it, and it lost only 1,361 service members between December 1972 and December 1979.[8] This article illustrates how Rhodesian soldiers first embraced the kill-rate strategy and subsequently took it one step further to the extent that it actually had detrimental effects on the way the political and military leaders wanted to conduct the war.

Existing studies on the background of this punitive approach explain that its underlying reason was that the Unilateral Declaration of Independence aimed to preserve a privileged position for whites. Rhodesians were never willing to give up this position sufficiently to win over the Africans.[9] An approach such as Great Britain used in Malaya, with improvements to the situation of the ethnic Chinese and the promise of Malayan independence, was therefore not feasible. What remained was the use of force to kill insurgents in a strategy of attrition.

Ideological blinders reinforced this path. White Rhodesians lived under the false impression that their country's blacks were "the happiest in Africa."[10] They further believed that most Africans only understood and respected force.[11] In that sense, Rhodesia still reasoned the same as British Colonel Charles Callwell advised in his late nineteenth century study of colonial wars.[12] Moreover, Rhodesians believed that most Africans were incapable of developing political ideas or forming effective organizations. Therefore, they reasoned, the war was not the product of domestic injustices, but of outside communist agitators directed by China and the Soviet Union. The goal of the war became to eliminate these "intruders." This interpretation also fit in with Rhodesia's reluctance to share power or resources with blacks.[13] In the 1960s, the strategy actually worked. The army could track down and deal with infiltrations that took place in large groups far from populated areas. This initial success reinforced white Rhodesia's belief in its military superiority. Even ZANLA's turn toward Maoist revolutionary warfare did not

immediately cause Rhodesia such problems that it revised its strategy. Until FRELIMO took over in Mozambique, ZANLA could not expand beyond the underdeveloped northeast of Rhodesia. The war then reached a stalemate.[14] However, from 1976 onward, the punitive approach became fatal. ZANLA flooded the country with guerrillas, while Rhodesia could neither offer an attractive political solution to the African population nor achieve a kill rate higher than ZANLA's recruitment and infiltration rates.[15]

(AP Photo/Matt Franjola)

Guerrillas who fought a prolonged war rejoice as they leave the stadium where independence celebrations were held, Salisbury, Rhodesia, 18 April 1980.

Soldiers' Training

Infantry training immersed Rhodesian recruits in the enemy-centric approach. The program aimed at making the recruits adept at killing insurgents. It consisted of six weeks basic training, six weeks conventional warfare training, and five weeks in what we now call counterinsurgency (COIN) training. This last phase trained the recruits in aggressive bush fighting. They learned to snapshoot at moving targets with the "double tap" technique (two single shots fired in rapid succession to overcome the recoil of the rifle), lay and react to ambushes, and disembark from a helicopter. They also learned survival skills.[16] In the 1960s, the program had been slightly different, with less emphasis on COIN, but more emphasis on physical fitness and weapon skills.[17]

Another goal was to make soldiers aggressive fighters. This took place explicitly in exercises where recruits had to charge at sandbags with a bayonet while swearing.[18] One former recruit suggests that it also took place implicitly over the course of the entire training program. Moreover, abusive instructors caused anger and resentment among the recruits, which they released on the enemy.[19] Some suggest that these same techniques were used in American training during the Vietnam era.[20]

Several aspects were notably absent during basic training. Most prominently lacking was training on the treatment of civilians and the value of intelligence. The Rhodesian COIN manual did mention the importance of good civil-military relations (especially for intelligence gathering), the value of prisoners for intelligence purposes, and the importance and difficulties of establishing observation posts in rural areas.[21] This is not surprising since contemporary British COIN specialist Sir Robert Thompson wrote the same. Various high-ranking Rhodesian officers had also fought in the Malayan Emergency from which Thompson drew his lessons.[22] The absence of these themes during basic training is even more remarkable in the light of how Rhodesia organized its war effort. Most patrols consisted of a four-man "stick" or an eight-man "call sign," led by a private or corporal. These units had to maintain civil-military relations, take prisoners, and gather intelligence on the ground. Despite the importance the manual attached to these things, soldiers' training focused on the killing part of COIN.

Punitive Combat Deployment: Fire Force and External Raids

Combat deployment further strengthened the soldiers' enemy-centric experience of war. The quintessential example of this was the fire force, a Rhodesian invention to deploy scarce manpower in an aggressive role. When guerrillas were sighted—usually by the multiracial Selous Scouts dressed as insurgents—Alouettte helicopters and, later,

Dakota planes flew in troops to box in the enemy.[23] Initially, white regulars of the Rhodesian Light Infantry manned the fire forces. With the expansion of the war, black soldiers under white officers of the Rhodesian African Rifles and white reservists of the Rhodesia Regiments also participated. The fact that Rhodesian intelligence attributed 68 percent of insurgent deaths inside Rhodesia to the Scouts, who usually let the fire force do the killing, indicates the important role of the concept.[24]

The war diary of a Rhodesian African Rifles company commander, Captain André Dennison, clearly indicates how the fire force changed the soldiers' experience of war. From 11 July to 22 August 1978, his company carried out regular patrols, killing three insurgents and capturing one. Its prior deployment, from 16 May to 27 June, as fire force, resulted in 37 guerrillas killed and four captured. Their next stint as fire force, from 5 September to 17 October 1978, yielded 72 killed guerrillas and six captured.[25]

Fire force troopers possessed the tactical initiative and carried out an aggressive fight against the enemy. This was important because, as one soldier described, "The more contacts there were, the higher the morale rose, because there were tangible results for all the effort and it was felt that something constructive was being achieved." When it was quiet, troopers became bored and annoyed with army regulations, and morale dropped.[26]

Cross-border raids were the second type of enemy-centric deployment. When the war escalated, Rhodesia mounted operations into Zambia and Mozambique to strike at insurgent bases and harass infiltration routes. Initially, the Special Air Service, Scouts, and Rhodesian Light Infantry carried out the raids, but later the Rhodesia Regiments participated as well. One reservist even described a 10-day patrol 70 kilometers into Mozambique.[27] Soldiers were generally positive about conducting cross-border operations. Just as in fire force duty, operations aimed at a high kill rate and yielded tangible results. Cross-border raids thus corresponded to the Rhodesian perception of the war. During campfire talks, soldiers frequently argued that they should strike at foreign bases. They felt frustrated when such actions were put on hold for fear of negative reactions from the international community.[28] Rhodesian Light Infantry troopers also liked the cross-border raids because they confirmed their status as elite soldiers. They heard stories from the old guard who had fought with the Portuguese

Rhodesian cavalrymen detain a black Rhodesian for questioning, Lupane, Southern Rhodesia, September 1977.

(AP Photo/J. Ross Baughman)

in Mozambique and longed for similar action. Rhodesian Light Infantry troopers felt honored to be briefed together with the Special Air Service.[29]

Other Internal Operations

When not on fire force duty, troops engaged in other tasks that further strengthened their enemy-centric understanding of the war. Among these were ambushes and larger sweep operations aimed solely at killing insurgents. Protection and administration of protected villages, where peasants were forcibly resettled to isolate insurgents from the population, fell under the responsibility of the separate Guard Force.[30] Rhodesian soldiers never engaged in the pacification and development of a specific area.

The only internal task not directly aimed at killing was intelligence gathering. However, this had such meager results that it probably did not influence the soldiers' perceptions of the war. The early-warning network of *mujibas* (teenage insurgent sympathizers) and the white soldiers' limited knowledge of the local environment created almost insurmountable problems.[31] Only the Scouts seem to have had the necessary special training and local knowledge to man observation posts effectively.[32] Dennison's war diary clearly shows the meager results of observation posts and random ambushes of wells and deserted guerrilla camps. Even though his company consisted largely of Africans, the deployment led to only three insurgents killed and one captured in return for two casualties. The contacts that took place were mostly ambushes initiated by guerrillas. The next deployment, from 5 September until 17 October, was again as fire force, and resulted in 72 killed and 6 captured for 4 troops wounded.[33] Patrols encountered similar problems because of the "*mujiba*" network and unfamiliarity of the region.[34] Intelligence gathering by nonspecialized units was thus not very effective and unlikely to change the impression of the war as being about killing opponents in aggressive combat.

Beer, Boots, and Vietnam

More factors than tangible military results influenced the soldiers' preference for punitive action. The men did not have to spend nights in the cold while living off rations. Instead, they slept on stretchers and enjoyed cold beer and freshly prepared food.[35] During the day they were on standby and could play cards rather than walk long distances as infantrymen. A territorial soldier used to such foot patrols was delighted with his deployment in a fire force for precisely these reasons.[36]

Another advantage of fire force was the chance to loot dead guerrillas. A fair number of them carried money, so troopers searched the corpses immediately after a fight. The troopers prized Tokarev pistols, which they could sell for a high price on the black market.[37] They also searched for useful gear—such as webbing, water bottles, and even boots—to replace their inferior Rhodesian-issued material.[38]

The presence of veterans from the Vietnam War further influenced Rhodesian soldiers. An estimated 1,400 foreigners served in Rhodesia throughout the war, often with the Rhodesian Light Infantry.[39] The number of American or Australian Vietnam veterans in the region is unknown, but most Rhodesian soldiers seem to have been in touch with at least one at some point.[40] These veterans had fought a war in which the "body count" was seen as the index of success.[41] This was essentially the same as the Rhodesian "kill rate." Vietnam veterans were usually well received in Rhodesia, and Rhodesian soldiers were often interested in their experiences.[42] Most likely, the Vietnam veterans strengthened the Rhodesian soldiers' punitive focus. Substantiating how influential the Vietnam veterans were is difficult, but soldiers' slang offers a clue. At the beginning of the war, insurgents were referred to as "terrorists," a term that other Rhodesians used throughout the war.[43] In the late 1970s soldiers began to call insurgents "*gooks*."[44] This was the same term some Americans in Vietnam used to refer to their opponents.[45] One network of infiltration routes frequently used by ZANLA was also called the "Ho Chi Minh Trail," after the route used by the North Vietnamese to infiltrate the South.[46]

The Punitive Approach One Step Further: Execution of Prisoners

The soldiers' preference for killing insurgents did not undermine the war effort. The kill rate was perhaps not a fruitful method to win the war, but Rhodesia's leaders had designed the kill rate strategy, so the soldiers' preference for punitive action was execution of the national strategy on the

tactical level. On the ground, however, the soldiers embraced the punitive approach so wholeheartedly that it became a goal in itself and harmed plans of higher authorities.

The frequent execution of surrendering or wounded insurgents is the clearest example of this. According to Thompson, gathering intelligence is of paramount importance in counterinsurgency. It allows security forces to eliminate the insurgent underground network and achieve a high kill rate. The main sources of information are agents, informers, and captured opponents and documents.[47] In 1960s' Rhodesia, it was indeed the informer network of Police Special Branch that detected most infiltrating guerrillas.[48] However, by 1972, ZANLA had politicized the population and destroyed the informer network in northeastern Rhodesia.[49] Breathing new life into this network while at war proved difficult.[50]

As a result, taking prisoners became vital to the war effort. Together with captured documents, it was the first way of obtaining intelligence. The fact that the insurgents often talked after capture helped the British in Malaya.[51] This seems to have also been the case in Rhodesia.[52] The information extracted from prisoners was indeed vital for planning attacks on insurgent camps.[53] The problem with prisoners and documents was that they only revealed old information. To gather fresher intelligence that could lead to killing insurgents inside Rhodesia, the army founded the Selous Scouts in 1974. They posed as insurgents to obtain information from villagers on the guerrilla presence and reconnoiter without "*mujibas*" raising the alarm. Then they captured the insurgents themselves or called in a fire force. To function, the pseudo-concept required a constant flow of information on insurgent habits, watchwords, training, and organization.[54] Prisoners thus became vital to the Rhodesian intelligence effort.

However, ordinary Rhodesian soldiers often executed wounded or surrendering guerrillas. The Rhodesian Light Infantry and African Rifles were mainly involved in this, because as fire forces they had the most contacts. In the Rhodesian Light Infantry, the execution of wounded enemy was almost standard operating procedure. Dennis Croukamp, who served in the Light Infantry before and after a stint with the Scouts, says that

Light Infantry platoon commanders usually shot wounded or surrendering guerrillas. Most of them knew that people higher up needed and wanted prisoners, but they simply chose to ignore this.[55]

Prisoner execution took place in other units as well. In 45 months, Dennison's African Rifles Company killed 364 insurgents and captured only 39.[56] The most likely explanation for this discrepancy is that the men were not inclined to take prisoners. That insurgents took their wounded with them after a fight is an unlikely explanation. Their favorite countermeasure against fire forces was to run off in all directions.[57] Moreover, the number of weapons captured usually coincided roughly with the number of kills and captives.[58] Guerrillas likely did not take anything but their own gear when fleeing because the fire force shot the wounded. A reservist also mentioned how a captain encouraged the execution of prisoners.[59]

Apart from personal consideration, there were some general motives behind all this. Although racism undoubtedly played a role, a strong ideological commitment to the Rhodesian cause was not a precondition. Some of the Rhodesian Light Infantry troopers cited above were not strong ideological supporters of the Rhodesian cause.[60] This was even clearer in the case of the African Rifles soldiers who were in the army mostly for the economic opportunity. Nevertheless, it is likely that the general framework through which Rhodesians perceived the war paved the ground for the executions. In their eyes, the enemy consisted of "communist terrorists" from abroad who infiltrated peaceful Rhodesia, home of the "happiest blacks in Africa." Shooting someone thought of as a "terrorist" was probably easier for troopers than shooting a peasant disaffected with Rhodesia's racial and social inequities. Training, with its focus on aggressive bush fighting, reinforced this framework.

The intensification of the war hardened these attitudes. In the late 1960s and early 1970s, Rhodesian Light Infantry troopers had accompanied the Portuguese Army in Mozambique. One of these men mentioned how the Portuguese habit of executing prisoners shocked the Rhodesians, but later they did exactly the same.[61] Another soldier, when complaining about an order to give first aid to wounded guerrillas, said his sergeant probably

did not know yet how dirty the war was, and that their opponents would never consider treating a wounded Rhodesian soldier.[62] Given the fact that the opinion of Rhodesian society hardened as well toward the end of the war, it is likely that many reservists experienced feelings similar to those of the regulars.[63]

Another reason for executing prisoners rather than holding them captive was the low regard Rhodesian soldiers had of the intelligence community. Special Branch was in many ways a peacetime police organization that had trouble providing the operational intelligence the army needed.[64] Letting Special Branch handle intelligence had worked well for the British in Malaya, but it exchanged qualified liaison officers with the army.[65] In Rhodesia, the army often used the few existing intelligence posts to get rid of incompetent officers.[66] Only when individuals of both organizations cooperated closely on a permanent basis, such as in the Scouts,

Zimbabwe Prime Minister Robert Mugabe speaks during a press conference at Bintumani Hotel, Freetown, Sierra Leone, 4 July 1980.

(AP Photo/Zuheir Saade)

did the situation improve.[67] Croukamp rated the intelligence he received with the Scouts much higher than intelligence he received with the Rhodesian Light Infantry. Other soldiers expressed a similar opinion.[68] Apart from the merits of Special Branch, it seems that the lack of emphasis on intelligence during training also contributed to this reluctance to comply with intelligence requests.

Another reason for the executions was a practical one. Captives, wounded or not, could still escape or resist, so the troopers had to guard them. Since the Rhodesians fought in four-man sticks, it was hardly possible to leave someone behind as a guard. After contact, troopers had to carry wounded prisoners to a suitable helicopter-landing zone, making the stick vulnerable to ambushes. Troopers often found it easier to execute a prisoner. Prisoners took up valuable space in the Alouette, which could only transport four men. This would mean that the troopers had to stay out overnight rather than enjoy a cold beer at the base.[69]

Toward the end of the war, with the internal settlement in sight, and even more so when the Lancaster House talks started, soldiers realized that prisoners might gain their release under amnesty programs. Consequently, some killed surrendering guerrillas in the field and held captive only an officer who could reveal the most valuable intelligence.[70] This execution of prisoners at the time of the amnesty program was not only harmful to intelligence gathering, but also hampered the political solution Rhodesia tried to achieve with the backing of black prime minister Muzorewa. Rhodesia hoped that Muzorewa would make Africans acquiesce in a society in which the whites retained a privileged position and convince the international community to lift the sanctions imposed after the Unilateral Declaration of Independence. One of the main ways to show that Muzorewa had genuine popular support and could end the war was an amnesty program to create a government militia of former guerrillas. Either because Muzorewa did not appeal to the rebels or because of the strict control these organizations enforced over their members, the scheme's implementation was problematic.[71] Captured insurgents, fully under government control, would have been an ideal recruitment pool. The frequent executions by the men on the ground prevented this.

Violence Toward Civilians

Violence against civilians also supports the thesis that soldiers adopted and extended the punitive approach to counterinsurgency. About 19,000 African civilians died in the war. Partly this was a result of insurgent actions. They used force against uncooperative civilians, used them as cover, and targeted the rural health and veterinary services. This later caused a surge of malaria, rabies, and tsetse flies. As the war intensified, the government allowed more violence against black civilians. This punitive approach had started in 1973 with the imposition of fines on communities that aided insurgents. Brutalities against civilians were not yet accepted, but in the late 1970s Rhodesia used the term "killed in crossfire" rather liberally.[72] There was never a clear and uniform policy targeting civilians though. Actually, the cabinet always pushed for a tougher approach, while General Walls, Rhodesia's most senior military official, tried to limit the freedom Ian Smith wanted to give him. At one point Smith, supported by several cabinet members, even proposed to abandon the "Queensbury Rules of waging warfare" and impose nationwide martial law. Walls retorted that if the cabinet really wanted that, it should resign and let him rule the country at the head of a military junta.[73]

In this climate, soldiers had greater freedom to stretch the rules. The reporting of a significant number of "killed in crossfire" was now accepted, while in the early 1970s Special Branch still treated each death as regular police work.[74] One soldier probably described the new attitude accurately: "If in doubt, shoot. It kept you alive." He, for example, opened fire on a hut if he saw an insurgent hiding amidst civilians. Soldiers also disclosed that they shot at unidentified figures running at a distance.[75] Dennison's war diary gives some idea of the number of civilians killed this way. Between 29 November 1975 and 28 July 1979, his company killed 364 insurgents and captured 39 while killing 170 civilians (the number of wounded civilians is not recorded).[76]

Interestingly enough, soldiers did not consciously execute government policy when they targeted civilians. The above-mentioned soldier who shot to stay alive thought that higher-ranking officers tried to adhere to the Geneva Conventions while "the troops in the field tended to sneer at the idea."[77] Another soldier explained how troops beat up uncooperative civilians to extract information. Such treatment was actually illegal, and usually ineffective, but often happened.[78] An instructor also told Rhodesian Light Infantry recruits that if a civilian saw him on a cross-border operation, he would kill the person so there was less risk of compromising the mission. He would never do this in Rhodesia, because there, "the Rule of Law applied."[79] Given this notion among soldiers that the killing of civilians was illegal, we cannot explain the large number of persons killed in crossfires as government policy. It was probably another manifestation of Rhodesian soldiers embracing a punitive approach toward counterinsurgency and taking it one step further than (they thought) was allowed, by showing little regard for civilian lives.

Attempts to Wreck the Peace

Some soldiers embraced the punitive approach so enthusiastically that they wanted to fight on after Mugabe's electoral victory. Initially, there was "Operation Quartz," a counter-coup designed by the higher echelon of the security forces in case Mugabe lost the election and decided to resume the war. With South African support, the air force, Special Air Service, Selous Scouts, and Rhodesian Light Infantry would take out ZANU's leaders and the guerrillas at the ceasefire assembly points. This was supposed to set back ZANLA's war effort 20 years, after which ZAPU would be invited to join a coalition government. Many junior officers and NCOs who knew of the plan either hoped or wanted it to be a preemptive coup. This did not happen because both Muzorewa and General Walls refused to lend their support to it when the first news of Mugabe's victory surfaced. Rhodesia's leaders knew that the game was up.[80]

Nevertheless, some soldiers were so determined to fight that they wanted to initiate a coup themselves. That these were the men of the Rhodesian Light Infantry is perhaps not surprising, given that they were employed primarily in the punitive fire force. In Algeria, paratroopers flown to battle by helicopter and used in a similar fashion as the fire forces turned against the French government in 1960 and 1961.[81] One Rhodesian

(AP Photo/Eddie Adams)

Rhodesian children peer from their makeshift quarters in the Harare refugee camp set up next to a bus station in Salisbury, Rhodesia, 17 April 1979.

Light Infantry platoon commander who knew that the coup was off instructed his men to provoke celebrating Africans. He told them that if the people responded with aggression, they should shoot and hope to ignite a renewal of the war. Yet despite actions by the soldiers, such as spitting and urinating on the masses, the people did not respond, so the troops returned to their barracks.[82]

A Rhodesian Light Infantry unit on guard at the Rhodesia Broadcasting Studios was probably even closer to provoking a resumption of hostilities. After his electoral victory, Mugabe arrived with a few bodyguards to address the nation in a television speech. Many of the young troopers voiced a desire to kill him, but in the end, the commander decided against it. He feared that the army command would withhold support and regard them as traitors. Later the commander discovered that one of his men was missing. He found the man inside the studio complex with a hand grenade, waiting for the opportune moment to take out Mugabe.[83]

Since only about a dozen Rhodesian veterans have committed their experiences to paper, other similar events probably took place. If one of those had taken a slightly different turn, a violent reaction by Mugabe's supporters against whites could have resulted. This would have forced Walls or other security force commanders to activate "Operation Quartz," and possibly provided a *casus belli* for South African intervention. After Mugabe's victory, Pretoria stationed a battle group near the Zimbabwean border. The plan was for South African and Rhodesian Special Forces to plant bombs during Mugabe's inauguration. This would have killed the new prime minister and Prince Charles. Angry ZANLA supporters would then turn against Rhodesia's whites. To prevent a massacre, South Africa could then intervene, without protests by a United Kingdom shocked about the death of the heir-apparent and concerned for the safety of the many white Rhodesians with British passports. After the invasion, South Africa hoped to join forces with

ZIPRA to wipe out ZANLA and install Nkomo as a black leader beholden to Pretoria. The plan did not materialize because Rhodesia's Central Intelligence Organization got wind of it and expelled the special forces.[84] A spontaneous action from the lower ranks, such as the the assassination attempts described above, would probably have been equally effective in sparking violence toward whites and setting the machine in motion.

Insights

Rhodesia fought a strongly punitive and enemy-centric counterinsurgency. Strategy focused on the kill rate, which the soldiers embraced wholeheartedly. In a sense, this worked well because the troops remained motivated to kill insurgents up until the end of the war, even under a black prime minister and against a tsunami of infiltrating insurgents.

The downside of the kill focus was that Rhodesian soldiers embraced it so fully that they began to employ it irrespective of higher orders. In that way, violence on the ground acquired its own dynamism and in fact became an independent process only partially controlled by higher authorities. The penchant to kill resulted in the frequent execution of prisoners, which hampered Rhodesia's intelligence effort, something existing studies of the war often overlook.[85] It was also visible in the attempts to wreck the peace, which, if successful, would have distorted Rhodesia's political and the military elite's plans to end the war.

The behavior of Rhodesian soldiers gives insights into soldiers' actions in guerrilla wars. Several recent books have studied what motivates actors to take sides in such wars. Stathis Kalyvas, in his study on violence in civil war, points out the importance of actors joining the side that appears to have de facto control over an area. This presents an opportunity for people to settle private disputes by aligning with this force and denouncing those they dislike. The party that controls an area therefore determines people's allegiance. Daniel Branch, in his study of loyalists during the Kenyan Mau Mau War, regards British control as the "trigger" for loyalism and the opportunity to gain access to labor and land as a key "sustainer." Norma Kriger suggested something similar to Kalyvas about African peasants in Rhodesia when she argues that the disempowered (such as youth in the age-based village hierarchy) supported ZANLA insurgents to change their situation. This article shows that for government soldiers the simple desire to continue an enemy-centric and punitive approach can become a motivating factor in itself.[86]

This is something that should be a warning for the Western coalition's effort in Afghanistan. That war has always had a strong focus on killing Taliban and Al-Qaeda fighters, especially during the early years of the conflict. Secretary of Defense Donald Rumsfeld opposed nationbuilding and wanted to show that the United States could fight wars relying on elite units and technology. Therefore he took away control of Special Forces from regional commanders in the hope they would mount more aggressive operations in the hunt for terrorists.[87] Later, U.S. opposition to nationbuilding changed, and in 2006, U.S.-led coalition forces deployed throughout the country to create a stable Afghan nation.[88] Even so, the hunter-killer actions continued. In early 2010, President Obama even increased the number of Special Forces in Afghanistan and ordered them to continue hunting down Taliban and Al-Qaeda.[89]

These hunter-killer missions are not without risk. The frequent use of air support by the operators causes hundreds of civilian deaths a year. During night raids, civilians are easily mistaken for Taliban. In March 2010, ISAF commander General Stanley McCrystal took personal command of the Special Forces. He feared they were not complying with orders to minimize civilian casualties while hunting down Taliban, which undermined support for the Afghan government. These orders had already been preceded by a halt of special operations the year before to find a way to minimize civilian casualties.[90] Perhaps the operators found their aggressive actions more important than their commander's orders or the plan to create a viable Afghan government. It seems that what occurred in Rhodesia—where a military unit's desire for punitive action became a factor in itself—might be happening in Afghanistan too. Whether this (potential) danger is sufficiently understood is uncertain. Even retired Army Lieutenant Colonel John Nagel, a coauthor of the U.S. Army's COIN field manual,

FM 3-24, argues that when a conventional army fights a counterinsurgency war, the staffs have to change their ways of thinking and working. For ordinary soldiers, it is mostly business as usual since their primary task still is to close with and kill the enemy.[91] What this article shows is that it is an unrestrained preference for killing on the part of soldiers that can imperil the war effort. **MR**

NOTES

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SOLDIERS ALL

Robert M. Hill, Ed.D.

ON 20 SEPTEMBER 2011, "Don't Ask, Don't Tell" became history. As Secretary of Defense Leon Panetta said at a press conference that day, "Thanks to this change, I believe we move closer to achieving the goal at the foundation of the values that America's all about—equality, equal opportunity, and dignity for all Americans." The repeal took a long time to happen, and looking back, it is not always clear why. While it is important to understand the evolution of thinking about and the actual integration of minorities into the U.S. military, how we move forward from this point is what matters most. We have a rare opportunity to reassess progress in achieving an Army that fully reflects the diverse nation we are sworn to defend and that believes in equality among all soldiers. We must take it.

We've Come a Long Way, But . . .

In 1994, I attended the U.S. Army Advanced Public Affairs Course at the University of South Carolina. The culmination of the course was a team project that required us to focus on a current or emerging "thorny" issue and to devise a communication strategy to address the issue successfully. Because several legal challenges to Don't Ask, Don't Tell were ongoing in the early 1990s, our team believed that it would be overturned within three to five years and that a proactive public affairs campaign was essential to deal with this eventuality.

The three to five years we envisaged turned into 16. Interestingly, what we saw in 1994 as a potentially fractious event became almost a non-event by 2010. I believe this was due to two key factors. First, the repeal of Don't Ask, Don't Tell was not imposed by the courts, but rather came through legislative action—allowing the military time to implement the change methodically and carefully. In addition, the acceptance of gays and lesbians among the general population increased during those years.

After exploring the issue in depth in 1994 and conducting focus groups at nearby Fort Jackson, the team I was on devised a hypothetical campaign, primarily internal in focus, entitled "Soldiers All." The campaign's objective was to unify the force by reminding soldiers and leaders that what mattered was not one's faith, skin color, gender, ethnicity, or sexual orientation, but rather our common mission, purpose, and values. Sixteen years later, the question arises: Are we indeed unified by this belief?

Robert M. Hill is a deputy chief for the Leader Development, Education, and Training Branch, Information Proponent Office, Fort Leavenworth, KS. From July 2009 to July 2010, he served as a public affairs officer at International Security Assistance Force Headquarters, Kabul, Afghanistan. He received a B.S. from the U.S. Military Academy, an M.A. from Duke University, and an Ed.D. from the University of Missouri.

PHOTO: U.S. Marines attend a training session on the military's new policy on gay and lesbian service members and the repeal of "Don't Ask, Don't Tell," Camp Pendleton, CA, 28 April 2011. (AP Photo/Lenny Ignelzi)

The answer is mostly *yes*, but room for improvement still exists. As the repeal of Don't Ask, Don't Tell proceeds, the potential for incidents of harassment, intolerance, and even violence is real. Such incidents will likely be few, but we must be collectively vigilant and refuse to idly stand by and let incidents of violence happen, work harder to end sexual harassment and assaults against women, and guard against other forms of bigotry, such as discrimination against Muslim soldiers based on their religion and ethnicity.

Achieving an Army in which "Soldiers All" resonates fully means being sensitive to the fact that very real differences exist within our force, and that these differences make us stronger. While this may increase the challenge of achieving unity, we must accept and encourage our differences with the overarching belief that all soldiers deserve equal respect and opportunity. We must demonstrate this belief by our words and actions.

Army Strong Equals Army of One

To ensure a strong Army, we must ensure an inclusive one, an Army in which we enable every soldier to feel he or she can fully contribute to our collective success. The harmonization of individual gifts and capabilities makes us stronger, more vibrant, and more effective. Such strength begins with accepting that everyone is unique and equally integral to the whole. Denying or marginalizing any one person or sub-element degrades the whole.

As I write this article, media outlets are reporting on the relief of the commander of the USS *Enterprise* for videos in which he appeared when he was the ship's executive officer. The videos show him using foul language and making sexualized jokes, some of which demean gays and women. In a compilation video, this leader acknowledges that the videos have proven offensive to some, yet dismisses these concerns. This commander's admirers argue that the videos were meant to boost morale and that those outside the military (and outside the ship-borne Navy in particular) cannot begin to understand this matter. This cautionary tale suggests that despite significant advances in the integration of minorities into the military, we still have more to learn and farther to go before we are a military and, more specifically, an Army

of One. The following are my thoughts on ways to accelerate this advancement.

Apply the golden rule or its philosophical equivalent. Our human tendency is to fragment ourselves into "in" groups and "out" groups. The Golden Rule's fundamental premise is that we are all equally deserving of love and respect; thus, there can and should be only one group, one large "in" group. We must seek to celebrate difference rather than criticize or contain it, then find ways to synchronize and synergize it. Applying the Golden Rule must be every soldier's and leader's daily task, especially for commanders. They must work tirelessly to promote open, inclusive, and supportive environments.

Immediately correct inappropriate behavior. Creating inclusive and supportive environments means speaking up against and then correcting behavior that works against unity and inclusiveness. Initially, I was going to write *rebuke* inappropriate behavior, but rebukes spark defensiveness. They do not lead to understanding why certain behaviors, such as making slurs or telling derogatory jokes, are inappropriate. Instead, everyone must be willing to take the time to correct, educate, and enlighten himself and his fellow soldiers if we are to produce lasting, positive change. At the same time, we must swiftly punish those who assault or harass others and those who abet such behavior, especially commanders who actively or passively create environments in which predatory behavior is allowed to exist and thrive.

> *…what we saw in 1994 as a potentially fractious event became by 2010 almost a non-event.*

Be politically correct. The term "political correctness" tends to be employed by those who feel that public leaders, politicians, military brass, and even tactical-level commanders forsake candor in an effort to appeal to or appease everyone. They argue that we should be able, unapologetically and boldly, to single out something for what it is. Unfortunately, all too often, their perception is

President Barack Obama signs the Don't Ask, Don't Tell Repeal Act of 2010, 22 December 2010, at the Interior Department in Washington. From left are CDR Zoe Dunning, Marine SSG Eric Alva, and House Speaker Nancy Pelosi.

it is far less likely to occur in highly diverse units in which heterogeneous rather than homogeneous thinking is actively encouraged. Second, it will foster greater innovation in attacking problems and dealing with them swiftly and effectively by those most capable of addressing them.

All We Can Be

In writing this article, I have incorporated the Army's most recent campaign slogans or mottos. They suggest that all along we have fundamentally believed we are better and stronger when we embrace diversity and treat each other as equals.

distorted by stereotype, misinformation, or insufficient information. While we can't pretend that differences don't exist, we cannot build morale, let alone cohesion, on the backs of any one subgroup or minority. We must work to build unity through difference. This means dealing with teams or subgroups for what they are: collectives of individual people with distinct personalities who together achieve more than they could acting alone. The first place this insight should gain traction is among the members of these teams or subgroups themselves.

Give a voice to everyone. Today's operational environment is highly complex. If organizations are to survive and thrive in complex environments, they must evolve from a top-down hierarchy into a network, and grant every member of the organization equal voice and opportunity to solve the challenges confronting it. Creating more networked units and teams will accomplish two important outcomes that will enable unity through difference. First it will thwart group-think. While group-think is a risk inherent within any group,

Embracing unity through difference means that we must continue to topple barriers that prevent the Army from becoming "All It Can Be." The Navy has enabled women to serve on submarines, and the Army is now considering opening up combat arms to women, but there will always be a subgroup or minority that will test our resolve toward full inclusiveness and unity. If we fail this test, the consequences could be dire.

As a previous Army deputy chief of staff for personnel, Lieutenant General Michael D. Rochelle, stated in 2008, "We tend to think rather narrowly about diversity sometimes—it's a black-white or it's a Hispanic-black-white issue. It is not. Diversity is a national security issue and one that every one of us should be concerned about, frankly, because it is a force multiplier for our soldiers."

There is no better time than right now to redouble our efforts toward creating an Army in which every service member feels an equal and essential part of the whole. We cannot assign the task elsewhere. It falls to each and every one of us. Let us do our duty. *MR*

Flight Simulation for the Brain

Why Army Officers Must Write

Major Trent J. Lythgoe, U.S. Army

Major Trent J. Lythgoe is the executive officer of 3rd Squadron, 17th Cavalry, Hunter Army Airfield, GA. He received a B.A. from Weber State University and an M.A. from Webster University. He has served in a variety of command and staff assignments, and prior to attending the Command and General Staff College at Fort Leavenworth, KS, he was chief aviation observer/trainer for Operations Group C, Battle Command Training Program.

PHOTO: U.S. Army SPC Conklin writes his essay during the Task Force Gridley Soldier of the Quarter Competition in Paktika Province, Afghanistan, 21 March 2011. (U.S. Army, SSG Anna Rutherford)

WRITING IS ON the decline in the Army officer corps. Thoughtful, precise writing in staff papers has been replaced by hastily composed emails and PowerPoint slides filled with incomplete sentence bullet statements. This deterioration of writing skills is causing a corresponding deterioration of thinking skills. Writing, although valuable as a communication medium, is most valuable as a powerful way of thinking. Writing forces us to order thoughts in a logical and coherent way. It forces us to critically examine our own thinking, which ultimately leads to better thinking, better problem solving, and better decision making. If the Army wants better thinkers, we should start by educating better writers.

A Crisis in Writing

The decline of writing in the Army is part of a broader writing crisis in America. According to the most recent writing survey of the National Assessment of Education Progress, only 33 percent of 8th graders and 24 percent of 12th graders can write proficiently.[1] Predictably, many American students go to college with poor writing skills. A college writing professor received this email from a prospective student:

> i need help, i am writing a essay on writing i work for this company and my boss want me to help improve the workers writing skills can yall help me with some information thank you [sic] [2]

The writing crisis is filtering into the American workforce. According to a 2006 study, 27.8 percent of businesses report that college graduates were "deficient" in written communications. These same businesses ranked written communication as the most important skill for incoming workers with four-year degrees.[3] A recent survey of business leaders found that 40 percent of companies either offer or require writing improvement training for employees with writing deficiencies (at an estimated annual cost of $3.1 billion).[4]

Predictably, the writing crisis is affecting the Army. Like American businesses, the Command and General Staff College has implemented a writing improvement program to help ill-prepared Intermediate Level Education students improve their writing skills. Anecdotal evidence of declining writing skills abounds in the millions of poorly written emails sent by Army officers each day, many of which resemble the email above.

We cannot put all the blame for the Army's writing woes on America's education system. There has been a precipitous decline in formal writing within the Army itself. Staff studies and decision papers, once a mainstay of staff work, are almost a thing of the past. The old FM 101-5 had an entire appendix on staff studies and decision papers now absent in its replacement, FM 5-0. All that remains in today's FM 5-0 is an appendix on military briefings. Army Regulation 600-67, *Effective Writing for Army Leaders*, was last updated 25 years ago, a reflection of our institutional apathy toward formal writing. Email and PowerPoint slides have usurped formal writing as the preferred written communication media, and both are contributing to the problem.

Email is contributing to the deterioration of writing skills. This may seem counterintuitive since email is a writing medium. Consider, however, that while the average Army officer may send scores of emails every day, few take the time to compose thoughtful, well-written messages. Moreover, why should they? Unlike formal staff papers, there are no brevity, grammar, or correctness standards for emails. Many leaders do not demand well-written emails. The result is officers who practice poor writing day in and day out, which is arguably worse than not writing at all.

The widespread use of PowerPoint is another contributor to the demise of writing. PowerPoint slides are now the preferred medium for transmitting and receiving information in the Army. The problem is that PowerPoint does not require officers to formulate complete ideas or to put those ideas together in a logical way. Instead, officers reduce their thoughts to "bullet statements," a phrase that is shorthand for incomplete sentences. Many cut and paste PowerPoint slideshows from other slideshows. Officers assemble the slides without thinking about how, or even if, the ideas go together. Too many officers spend more time thinking about pictures and fonts than they do thinking about the substantive issues at hand.[5]

Although the demise of writing as a means of communicating ideas is regrettable, there is a far more concerning side effect of this trend. Writing is a form of thinking. As the writing skills of Army officers atrophy, our thinking skills may be wasting away as well.

Writing as Thinking

"Forward, the Light Brigade!"
Was there a man dismay'd?
Not tho' the soldier knew
Someone had blunder'd . . .
Into the valley of Death
Rode the six hundred.—Alfred, Lord Tennyson

Writing is a supremely important communication skill for Army officers. One of the most infamous military writing failures occurred at the Battle of Balaclava, leading to the infamous "Charge of the Light Brigade." A British cavalry commander misunderstood an ambiguous order written by his commander. Instead of moving to prevent the opposing Russian force from repositioning its artillery, the cavalry instead charged unsupported into the teeth of the Russian defense, suffering heavy casualties. Even today, written orders remain the centerpiece of battlefield command and control despite exponential technological advances. Army officers must clearly convey in written orders the mission, the commander's intent, and tasks to be accomplished.

Additionally, the Army's promotion and command selection processes depend heavily on good writing. Board members rely on rater and senior rater comments from officer evaluation reports to make promotion and command selections. Officers must be able to clearly articulate the leadership potential of subordinates in written form. Retired Major General Larry Lust, who sat on several promotion boards, observes, "The board is very good at picking the best paper. If officers in the field can't write accurate evaluation reports, then the board can't pick the best leaders for promotion and command."[6]

Although writing is an important communication medium, it serves its most important function as a means of thinking. According to John Gage of the University of Oregon, writing allows us to critically examine our own thoughts:

Although the demise of writing as a means of communicating ideas is regrettable, there is a far more concerning side effect of this trend. Writing is a form of thinking.

Writing is thinking-made-tangible, thinking that can be examined because it is "on the page" and not all "in the head," invisibly floating around. Writing is thinking that can be stopped and tinkered with. It is a way of holding thought still long enough to examine its structures, its flaws. The road to clearer understanding of one's thoughts is travelled on paper. It is through an attempt to find words for ourselves, and to find patterns for ourselves in which to express related ideas, that we often discover what we think.[7]

Gage's assertion that "writing is thinking" is not just a metaphor. According to Richard Menary of the University of Wollongong (Australia), the act of writing is actually a unique cognitive process. Menary contends that writing is more than the simple physical expression of neural thought. The physical act of writing, when combined with neural processes, constitutes a distinctive form of thinking with advantages over neural processes alone. In his words, "These [written] vehicles thus afford us new cognitive transformations which would be either impossible or extremely difficult by relying solely on neural resources."[8] Menary's proposition seems to embody the notion of author E.M. Forester when he wondered, "How do I know what I think until I see what I say?"[9]

Writing leads to better thinking, decision making, and problem solving because it organizes our ideas in ways our brain can use. We sometimes imagine the human brain is a computer that stores individual pieces of data, just like a laptop computer. However, our brain can't work that way because the space required to store the billions of details of everyday life would be astronomically large. To deal with this problem, our brain skips small details and instead looks for big ideas and the relationships that connect them. These ideas and relationships become mental models, our personal set of assumptions about how the world works. The process of writing forces us to put our disorganized ideas into coherent structures of actors and relationships that are useful as mental models.

Functionally, the human brain operates more like a pattern recognition and comparison engine using mental models to make sense of the world around us. Our brain continually looks for emerging patterns in the environment and then compares those patterns with stored mental models. When we come upon a new situation, our brain digs through its archives to find a mental model that matches or approximates the new situation. The brain uses the model to construct a story about the situation to discover what happens next. This process of story building is called mental simulation.

Writing as an Idea Simulator

We use mental simulation for much of our decision making and problem solving. When confronted with a problem or decision, we begin with what initially appears to be the best course of action. We then mentally simulate the likely outcome of that course of action using a mental model. If the mental simulation results in an undesirable outcome, then we analyze our course of action for the problem, and then mentally simulate an updated course of action. We repeat this process until we arrive at a suitable outcome.[10] Such was the case on 15 January 2009 in what came to be known as "The Miracle on the Hudson."

At 3:25 p.m., Flight 1549 took off from New York's La Guardia Airport under the command of Captain Chesley "Sully" Sullenberger. Two minutes after takeoff, at an altitude of only 3,200 feet, Captain Sullenberger's Airbus 320 passed through a large flock of birds, some of which entered and stopped both of the aircraft's engines. The heavy Airbus rapidly began to slow and lose altitude. Captain Sullenberger needed to land immediately.

Captain Sullenberger's first course of action was the one that all pilots learn from the beginning of flight training: turn around and return to the airport. He immediately made the request to air traffic control:

> *Sullenberger*: Uh, this is uh, Cactus fifteen thirty nine [sic]. Hit birds, we've lost thrust in both engines, we're turning back towards LaGuardia.

Air Traffic Control: Ok, uh, you need to return to LaGuardia? Turn left heading of uh, two two zero.[11]

At this point Captain Sullenberger ran a mental simulation of his flight path to LaGuardia airport. He recalled:

I quickly determined that due to our distance from LaGuardia and the distance and altitude required to make the turn back to LaGuardia, it would be problematic reaching the runway, and trying to make a runway I couldn't quite make could well be catastrophic to everyone on board, and persons on the ground. And my next thought was to consider Teterboro [Airport].[12]

Captain Sullenberger ran a second mental simulation, this time of his flight path to nearby Teterboro Airport, and concluded that Teterboro was out of reach as well. Captain Sullenberger ran a third mental simulation, this time to the Hudson River. He recalled, "The only viable alternative, the only level smooth place sufficiently large to land an airliner was the river."[13] Upon deciding to land in the Hudson, Captain Sullenberger mentally simulated the landing to anticipate potential problems:

I needed to touch down with the wings exactly level. I needed to touch down with the nose slightly up. I needed to touch down at a descent rate that was survivable. And I needed to touch down just above our minimum flying speed but not below it. And I needed to make all these things happen simultaneously.[14]

One of the reasons Captain Sullenberger was able to successfully save all the souls aboard Flight 1549 is because he had practiced engine failures in a flight simulator. Captain Sullenberger was able to draw on his experiences in the flight simulator to rapidly and accurately simulate the likely outcomes of a return to La Guardia, a diversion to Teterboro, and ultimately a landing in the Hudson River. The richness of Captain Sullenberger's mental models enabled him to make a good decision based on good mental simulations.

Unlike flying airplanes, most everyday situations do not have a computer simulator. However, we are effectively stepping into a simulator of ideas when we write. According to author Janet Emig, "Writing connects the three major tenses of our experience [past, present, and future] to make meaning. And the two major modes by which these three aspects are united are the processes of analysis and synthesis."[15] In other words, writing connects ideas and facts in a relational and temporal sense, creating rich patterns for use by our pattern-recognizing brain.

When we write, we are essentially composing a story through a series of mental simulations of facts, ideas, and relationships. Authors Chip and Dan Heath assert that "stories are like flight simulators for the brain."[16] The reason is that we cannot think about a story without mentally simulating it. Research suggests that mentally simulating an event activates the same parts of the brain as actually experiencing the same event. In one study, subjects who imagined tapping on their skin activated the area of the brain associated with tactile perception. Subjects who imagined a flashing light activated the visual perception area of

(AP Photo/Susan Walsh)
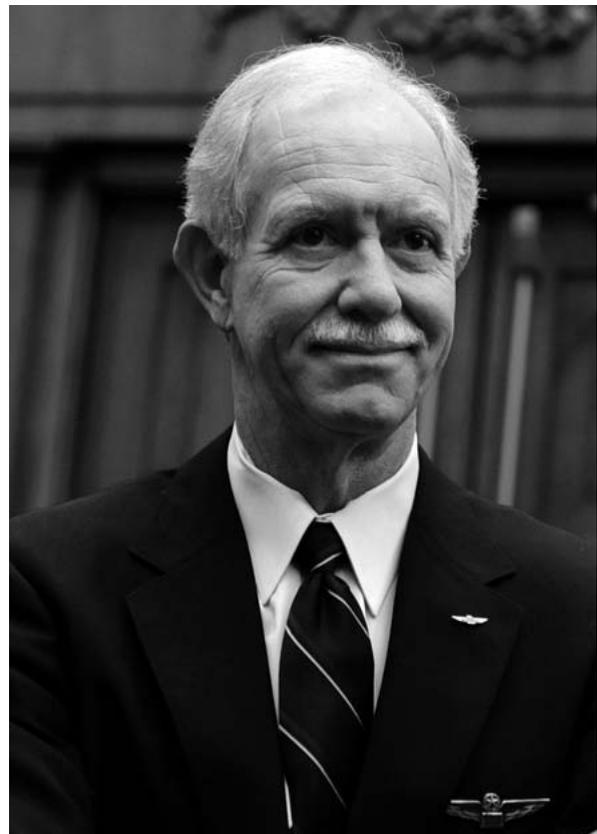
Captain Chesley B. Sullenberger, III, the pilot who safely landed a jetliner in New York's Hudson River 15 January 2009, waits to testify on Capitol Hill in Washington, 24 February 2009.

the brain.[17] In fact, mental simulation is so powerful it can actually improve physical performance. A study of more than 3,000 subjects revealed that mentally practicing tasks, such as playing a musical instrument or figure skating, delivered an average of 66 percent of the performance improvement benefits of actual physical practice.[18]

While we mentally simulate stories about ideas and relationships in our writing, our mental models simultaneously become richer and more accurate. Our brain becomes better at simulating likely outcomes, which makes us better problem solvers, decision makers, and ultimately better thinkers. Like a pilot in a flight simulator, time spent writing is akin to practicing thinking in a thinking simulator. Just as a pilot can replay a flight simulation to evaluate his or her performance, so too can writers critically examine their own thinking from multiple perspectives.

A Word on PowerPoint

To write coherently about an idea is to achieve an intimate understanding of that idea through mental simulation. Composing a coherent narrative requires the writer to unambiguously describe the nature of ideas and relationships—causal, corollary, or otherwise.[19] One simply cannot write well without attaining a thorough understanding of the subject matter.

On the other hand, it is relatively easy to produce a PowerPoint presentation without clearly understanding the subject matter. We can cut, paste, and rearrange bullet statements to produce the illusion of thinking and understanding. PowerPoint briefings often circulate within organizations as standalone communications, which can lead to misinterpretation of ideas. Retired Marine Corps Colonel T.X. Hammes lamented the widespread use of PowerPoint in an *Armed Forces Journal* essay entitled "Dumb-dumb bullets." Hammes argues that writing is a better method of communicating ideas than passing around slideshows:

> Most of the people who actually see the brief get an incomplete picture of the ideas presented. Some briefers attempt to overcome this by writing whole paragraphs in the briefing notes portion of the slide. Clearly, a paper is a better format than PowerPoint. If the concept requires whole paragraphs—and many do—then they should be put in an appropriate paper and provided ahead of time.[20]

Empirical research supports Hammes' idea that fragmented ideas, such as the bullet statements and briefing notes often found in PowerPoint, are not as effective as writing when it comes to learning. George E. Newell from the University of Kentucky examined how well students learned based on whether they took notes, wrote short answer responses to study questions, or wrote complete essays. The three methods examined in Newell's study provide a good analogue to compare PowerPoint against staff studies and similar written products. Note taking and short answer responses are similar to bullet statements and briefing notes from PowerPoint, respectively, while essay writing is similar to staff papers.

Newell found that writing essays enabled students to "produce a consistently more abstract set of associations for key concepts than did note taking or answering study questions."[21] Newell suggests the integrative nature of essay writing is responsible for the superior learning.

> [When] answering study questions . . . the writer can only consider information in isolated segments. Consequently, while a great deal of information is generated, it never gets integrated into a coherent text, and, in turn, into the students' own thinking. Essay writing, on the other hand, requires that the writers . . . integrate elements of the prose passage into their knowledge of the topic rather than leaving the information in isolated bits.[22]

Bloom's *Revised Taxonomy of Learning* (see figure) supports Newell's theory and provides an insight into why PowerPoint is not effective as a medium for thought. Writing is a dialectic process of both analysis and synthesis.[23] Analysis, the process of breaking up ideas into smaller ideas, sits in the middle of Bloom's *Taxonomy*. In contrast, synthesis, the process of putting together ideas to form larger ideas, mental models (patterns), and even new ideas, is the highest level of cognitive learning.[24] When we write, we are constantly analyzing ideas in lower-order cognitive processes, then we try to make different ideas make sense in the higher-order synthesis process. PowerPoint demands no
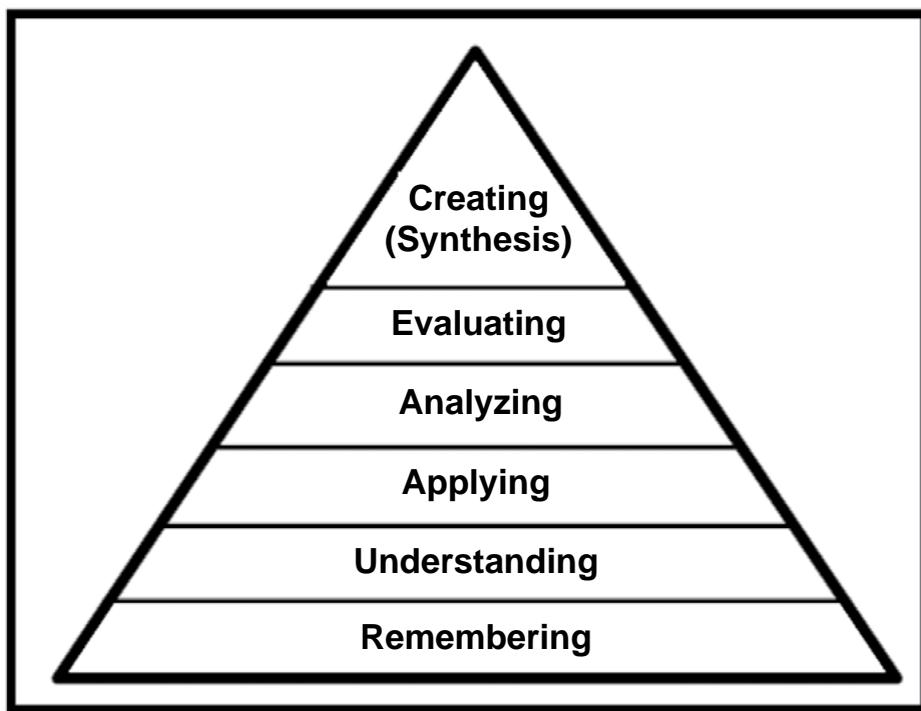
Bloom's Revised Taxonomy of Learning

such cognitive foray into the synthesis realm. The bullet statements of PowerPoint are products of simple analysis, independent bits of data free of the context and the broad story arcs our brain needs to build mental models. Granted, a skilled briefer can provide the needed synthesis for the slides to make sense; however, unlike writing, the medium itself does not force synthesis. Furthermore, the slides are often distributed as a standalone product, with no accompanying briefer to provide needed context.

This analysis-synthesis dialectic is central to thinking and decision making in a competitive environment. The great American strategist Colonel John Boyd called this process a "Dialectic Engine," which he describes in his essay "Destruction and Creation":

> [W]e can forge a new concept by applying the destructive deduction and creative induction mental operations. Also, remember, in order to perform these dialectic mental operations we must first shatter the rigid conceptual pattern, or patterns, firmly established in our mind.
>
> Next, we must find some common qualities, attributes, or operations to link isolated facts, perceptions, ideas, impressions, interactions, and observations together as possible concepts to represent the real world. Finally, we must repeat this unstructuring and restructuring until we develop a concept that begins to match-up with reality. By doing this, we find that the uncertainty and disorder generated by an inward-oriented system talking to itself can be offset by going outside and creating a new system. Simply stated, uncertainty and related disorder can be diminished by the direct artifice of creating a higher and broader more general concept to represent reality.[25]

Boyd theorized that in a competitive realm, the competitor who could conduct this mental process of destruction and creation quicker and with more accuracy than the opponent would ultimately prevail.[26] Today, we refer to this as "getting inside our opponent's decision cycle."

Boyd's interplay of deduction and induction effectively describes the cognitive process of writing. Writing requires the author to fire up his or her dialectic engine, but more than that, it allows the author to critically examine the functioning of that engine as the results of the cognitive processes are

put on paper. Boyd's ideas fit together with Emig's description of writing as a connecting process that connects past, present, and future through analysis and synthesis.[27]

Clearly, formal writing is the best way to promote clear thinking among Army officers. Furthermore, the Army's current PowerPoint cut-and-paste paradigm is undermining the ability of our officers to synthesize and think clearly about critical issues. To solve this problem, Army leaders need to bring writing back to the forefront as a critical leadership skill.

Toward a Writing Renaissance

An obvious place to start a renaissance in writing is our officer education system. Although field grade officers are routinely required to write in courses at the Command and General Staff College and the Army War College, company grade officer courses are less focused on writing. We need to remedy this by requiring officers to routinely write from the very beginning of their careers. Writing needs to be a part of every officer education course beginning at precommissioning and continuing through the Officer Basic Course and Captain's Career Course.

Professional journals are a fantastic medium for officers to share thoughts and experiences through writing. Commanders should encourage their officers to write and submit articles to these publications. Admiral James Stravidis encourages officers of all ranks to write for publication:

> Dare to read and develop your understanding. Carve out the time to think and form new ideas. Dare to speak out and challenge assumptions and accepted wisdom if your view differs from them. Have the courage to write, publish, and be heard. Launch your ideas and be an integral part of the conversation.[28]

Commanders should establish professional writing programs alongside their professional reading programs. The Army officer corps has a robust professional reading tradition. Our senior leaders publish professional reading lists to guide leaders in their reading endeavors. Many unit commanders also publish reading lists. Unfortunately, our professional writing ethic is not nearly so robust—unfortunate because writing, when combined with reading, produces powerful thinking.

… we need to bring good writing back as a visible part of day-to-day Army operations. Cleaning up email is a necessary step.

Research has shown that reading and writing together produces better thinking than reading or writing alone. In one study, researchers assigned 137 college students to read about a subject, write about a subject, or do both. The researchers found that students who both read and wrote did more critical thinking and were more willing to shift their perspective on the subject than students who only read or only wrote. The researchers concluded that reading and writing together form a "symbiotic" relationship, which leads to better thinking.[29]

Finally, we need to bring good writing back as a visible part of day-to-day Army operations. Cleaning up email is a necessary step. Leaders at all levels should demand clean, clear, and concise email correspondence. We need to integrate formal writing back into our staff work as well. Commanders should consider requiring staff officers to produce written papers to address key issues in lieu of cut-and-paste slide shows. Leaders should relegate PowerPoint to its rightful place as a secondary tool augmenting the primary communication mediums of writing and discussion.

The contemporary operating environment demands Army officers who can think creatively and critically. Writing can help them build these thinking skills. Writing is more than a simple means of expressing thought; it is a means of creating thought. However, the decline of writing within the Army officer corps, combined with over-reliance on PowerPoint and email, is a threat to clear and critical thinking. Army officers must return to writing as a primary means of communicating. Whether in professional journals, staff papers, or other venues, the return of writing to the forefront will ensure the officer corps has the communication and thinking skills necessary to effectively lead our Army. ***MR***

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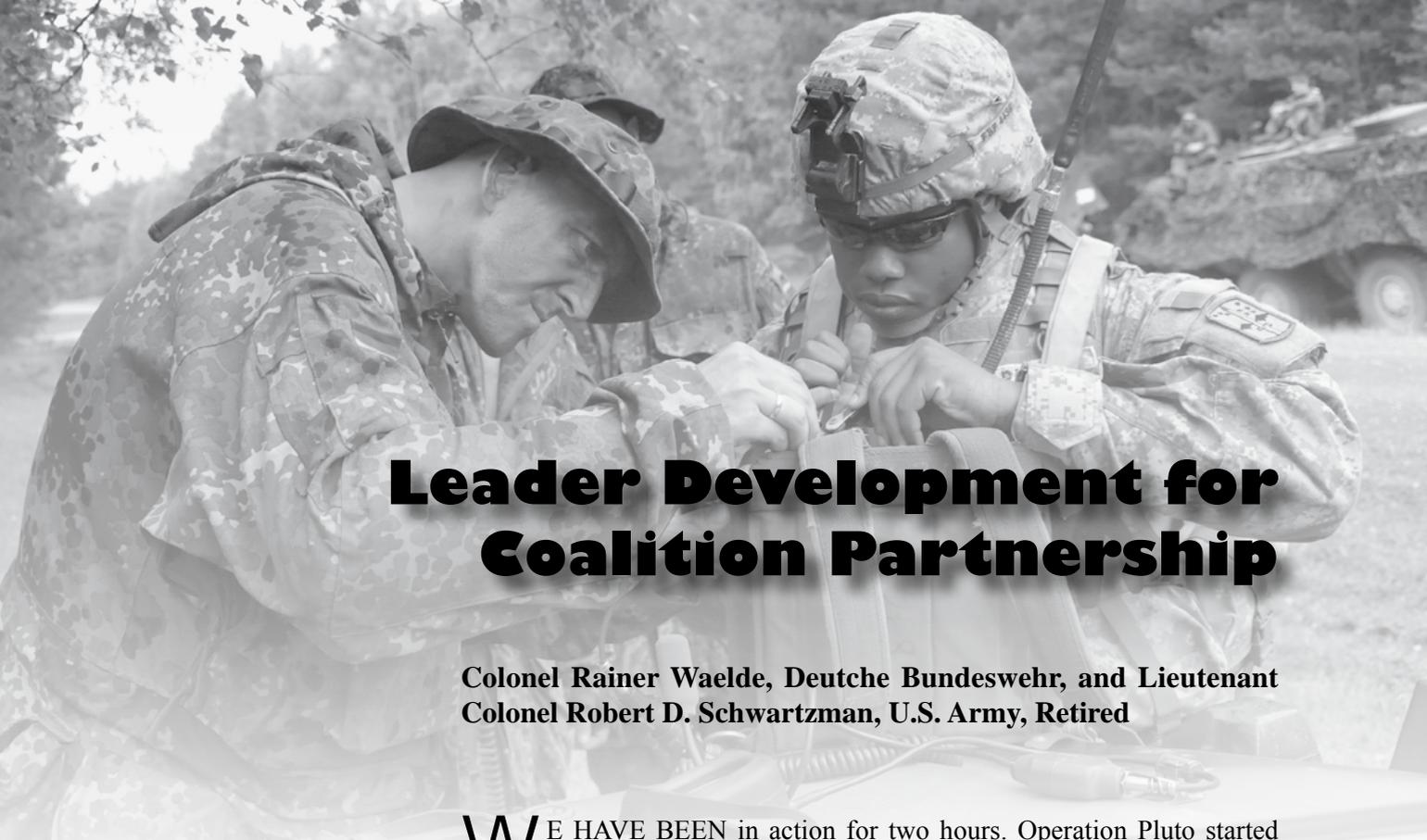
Leader Development for Coalition Partnership

Colonel Rainer Waelde, Deutche Bundeswehr, and Lieutenant Colonel Robert D. Schwartzman, U.S. Army, Retired

Colonel Rainer Waelde is a graduate of the Bundeswehr Command and Staff College, Hamburg, and the School of Advanced Military Studies, Fort Leavenworth, KS., where he earned an M.M.A.S. degree. He has served in numerous command and staff positions in Somalia and Brussels and in the United States as the German Army liaison officer to the U.S. Army Combined Arms Center, Fort Leavenworth.

Lieutenant Colonel Robert D. Schwartzman, U.S. Army, Retired, is the chief of the Concepts and Requirements Team in the Army Leader Development Division of the Center for Army Leadership, Fort Leavenworth, KS. He holds a degree in history from Old Dominion University and an M.A. in sociology from the College of William and Mary.

PHOTO: U.S. Army and German soldiers set up their radio during a German-led platoon attack mission, 23 August 2010, Grafenwoehr Training Area, Germany. (U.S.Army photo by Gertrud Zach)

WE HAVE BEEN in action for two hours. Operation Pluto started before sunrise. Afghan police and Hungarian ISAF forces blocked the withdrawal routes to the south. Afghan soldiers, supported by Norwegian and German ISAF forces, entered from the north.

The participation of Afghan, German, Norwegian, Hungarian, and U.S. forces in the hypothetical example above illustrates that the security challenges of today and of the near future require a joint and multinational approach.

Today the military contribution to conflict resolution ranges from high-intensity combat operations to security force training to humanitarian assistance. A soldier is a fighter, diplomat, administrator, instructor, and adviser. The operational environment's demands determine the soldier's functions. He coordinates with both governments and nongovernmental organizations. His missions are complex. The location of his employment is uncertain. Preplanned operations change rapidly. Environmental and cultural conditions differ dramatically. The time available for predeployment training is limited, as is mandatory training time for leaders.

Training future leaders for every kind of operation is impossible. Therefore, mandatory training must be prioritized to keep predeployment training a matter of quality, not quantity, given the short training time available.

Given the above, we must ask:

● What leader capabilities are required in the 21st-century security environment?

● What knowledge and skills do young leaders need for success in a multinational operational environment?

The U.S. Army and the German Army have a long-standing tradition of cooperation. Although the two armies are different, the challenges their leaders face are similar. This article discusses leader development and leader-

ship training and education in a joint, interagency, intergovernmental, and multinational environment.

U.S. Army Leader Development

Global trends indicate that it is unlikely that a nation or social collective will attempt the unilateral use of power to further its interests without one or more negotiated partnerships or coalitions. However, both U.S. Army and joint doctrine and German Army doctrine acknowledge there are times where each will, and that retaining the capability to do so is essential. Other than U.S. domestic operations that will always be U.S. only, the preference is for coalition partnership. Coalitions are not new. Environmental conditions dictate the characteristics and purposes of such partnerships. Today the signs point to a future of vacillating partnerships of convenience with the high probability of a shift in coalition power bases.

Although each nation has its best interests at the forefront of its decision making process, the advent of new technologies is moving information at ever-increasing speeds, creating change

dynamics that result in higher than acceptable risk levels. The greater the information complexity, the greater the need for specified capabilities, combined with national will, to achieve strategic aims. Like information power, the social group that possesses the high-demand capability will dictate the coalition leadership terms to the other partners. Incumbent upon all potential partners is the need to develop leaders adept at negotiation and the ability to understand foreign cultures rapidly. The rate of adaptation must keep pace with or exceed the rate of change.

The goal of U.S. Army leader development is to create the conditions for the development of leaders who can lead complex organizations successfully. The Army does this through a balanced approach in the three components of leader development: training, education, and experience, as articulated in the Army Leader Development Strategy. Today's operational environment influences how the Army addresses each component. Knowing that a coalition partnership can form anywhere along the spectrum of conflict compels

(U.S. Army photo by Gertrud Zach)

U.S. Army and German soldiers train together during a German-led platoon attack mission with a U.S. sapper squad in support, Grafenwoehr Training Area, Germany, 23 August 2010.

studying each partner's potential contributions and the cultural hurdles to overcome. Cognitive reconfiguration to build mutual trust between partners should supersede organizational and materiel reconfiguration.

Environmental Trends

The *Joint Operating Environment (JOE) 2010* and the *TRADOC Operational Environment* both provide compelling characteristics of the environment. Environmental conditions and variables require close attention for the successful conduct of operations to pursue national interests. Lessons from Iraq and Afghanistan have taught nations and military forces around the globe that environmental characteristics are the determining factor for required leader capabilities, now and for the future. They are also a testament to the demise of unilateral action by any one force.

The Army capstone concept conceptualizes how the United States Army accomplishes missions in today's environment. Nations form partnerships to increase capabilities in order to address the constraints and challenges the capstone concept identifies. The Army's concepts of operations and functions identify required capabilities in doctrine, organization, training, materiel, leadership and education, and personnel and facilities for the 21st-century security environment.

Identifying required leader capabilities for this environment is essential to provide the decision-making foundation for success both in negotiations with coalition partners and in subsequent collective actions.

Required Leader Capabilities

The development of leaders should change with changing conditions. Leaders require agility to direct rapid shifts from preplanned action and adaptability to reconfigure capabilities to meet new challenges. Nothing in the current operating environment, in any dimension, is fixed. Neither solutions, doctrine, skill sets, nor operational conditions are controlled. Leaders need the skills and education to see the context of events, but they have an even greater need for the abilities only experience can provide. Still, a baseline ability to think through problems and to apply models to develop new solutions is essential. Leader development systems create the conditions for training, education, and experiences that, over time, enable leaders to adapt as rapidly as developing conditions dictate, and the cognitive capacity to know when the adaptation must occur.

Army leaders require the following capabilities:

● Life-long learning ability and self-learner skills to facilitate rapid information accommodation and assimilation.

● Agility to rapidly shift physically and psychologically to create the conditions for reconfiguration.

● Adaptability to depart from what is no longer useful and to acquire what is, based on rapidly changing conditions.

● Systemic understanding of the joint and TRADOC operating environments and how to apply tenets of Design and critical thinking to plan for operations and adapt to changing conditions.

● Recognition of changed conditions to a level of significance that warrants an adaptive change to current activities and preplanned outcomes.

● Recognition of when to depart from standard practices and when to develop innovative, non-standard solutions.

● Organizational versatility for collective adaptation.

● Comfort with abdicating control of outcomes to subordinate leaders.

● Cross-cultural effectiveness; propensity for foreign languages and negotiation adeptness.

Advances in technology are increasing the speed of information transfer. Education, cognitive capacity, and interpersonal communication must keep pace with these advances. Emerging mission command doctrine articulates leader behavior for an environment of decentralized operations and degraded networks. Higher levels of innovation, adaptation, and cognitive problem solving are required in the absence of reliable information delivered rapidly. Risk increases dramatically in this environment and must be weighed carefully against mission requirements and the ethical application of lethal force.

Developing Leader Capabilities

Determining what we require in our leaders is the first step. The second step is achieving developmental outcomes. The Army leader

International Security Assistance Force Chief of Staff LTG Bruno Kasdorf (German Army) speaks before presenting the German Gold Cross of Honor Medal at a ceremony to honor U.S. soldiers for their bravery.

U.S. air medevac pilots and crew members receive the German Gold Cross Medal for bravery under fire while evacuating wounded German soldiers near Kunduz, Afghanistan, 2 April 2010.

development process is policy driven. Leadership, training, and education have a doctrinal basis. The Army Leader Development Strategy addresses leadership development and the effects of 10 years of armed conflict on leader development. The current strategy outlines nine imperatives essential to restoring the balance lost to excessive time in operating units and to mitigate the tension between immediate requirements and long-term needs.

The Leadership Requirements Model in Field Manual 6-22, *Army Leadership*, Appendix A, establishes leader attributes and core leader competencies. These attributes distinguish high performing leaders of character while the core competencies emphasize leader roles, functions, and activities. Together they represent what an Army leader is and does. Leaders influence people by providing purpose, direction, and motivation, while operating to accomplish the mission and improve organizations.

Leadership Training in the German Army

An important reformist in the Prussian Army, General Gerhard Johann David Waitz von Scharnhorst, referred to the requirements for a German officer by saying, "From now on, a claim to officer rank shall in peacetime be warranted only by knowledge and education and in time of war by exceptional bravery and quickness of perception." This claim is still very much applicable in the German armed forces today.

A rapidly changing environment and a highly adaptive enemy call for farsighted leaders with moral principles and clear concepts who recognize opportunities and accept risks. Ambiguous situations

that permit different interpretations, particularly of cause-and-effect relationships, require a skillful leader who is willing to make decisions and act intuitively. The successful leader is the fundamental objective of training. The mission determines the requirements profile.

Leadership does not legitimize itself by success alone; it has many facets. Society and members of the armed forces give legitimacy only to leaders who put the mission before their individual interests. A leadership culture consists of individual leadership competence and an overarching leadership philosophy.

Leadership competence is paramount. An individual's abilities outweigh all other considerations. The individual, with all his strengths and weaknesses, remains the decisive factor for military command and control. This will not change.

The art of leadership is complex. At its core are three elements of competence: knowledge (skills), character (behavior), and experience (capacity).

Leadership skills are the basis for leader competence. They can be a platform of theoretical knowledge to which a leader may turn.

Since no two tactical situations are quite the same, German Army mandatory officer training aims to teach universally applicable and comprehensive fundamentals. By mastering these fundamentals from the start and increasing their abilities to apply them to relevant situations, young officers obtain the necessary tools to cope with changing situations. Operational doctrine is subject to continuous development. Lifelong learning is therefore an integral part of leadership skills.

Competence arises from personal characteristics that influence behavior. We must shape the future military leader's attitudes and behavior with the four cardinal virtues defined by Plato—prudence, fortitude, temperance, and justice—as well as the spiritual virtues described by Thomas Aquinas—faith, hope, and charity. Field Marshal Helmuth Graf von Moltke called the virtues of truthfulness, bravery, steadfastness, and politeness (what we would probably call tolerance today) indispensable for military leaders.

This brings us to the German Basic Law: education by superiors is central to leadership behavior. Every superior is called upon to live on a daily basis what he demands of others so that from his example the young leader understands how trust and allegiance can grow, and what he must do to achieve this. Hypocrites cannot be leaders.

One cannot learn leadership in a short time, and one can improve only by gaining experience. Training that only teaches knowledge and skills is not enough. Experience in applying military fundamentals and developing one's capacities is also necessary. Training, simulations, and learning programs play supporting roles. Concrete actions develop leadership capacity.

Helmuth Graf von Moltke noted that "Leading troops is an art, a creative activity based on character, ability, and mental power. Its tenets cannot be described exhaustively. It tolerates neither formulas nor rigid rules. But every leader has to be guided by clear principles." Leadership competence without a guiding philosophy is technocratic and soulless. The two core elements of German leadership are *innere führung* (leadership philosophy) and mission-type command and control.

Innere führung binds military leaders to the values of the Basic Law during missions. It is, so to speak, the material that holds Bundeswehr command and control areas together in terms of thinking and acting. It provides a framework and foundation that reflects the legal and social integration of the armed forces and ensures they are humane, conform to the law, and accomplish missions efficiently. Innere führung has a significant impact on leadership behavior and contributes to building intercultural competence. One cannot recognize how one's culture differs from another or develop intercultural competence without knowledge of one's own culture.

The principle of mission-type command and control means the subordinate leader receives a clear and realistic objective as well as the assets required to achieve it and freedom of maneuver in the way he accomplishes his mission. He can concentrate on what is important and dismiss what is not. These conditions do not affect the principle of command obedience, but they do encourage showing initiative down to the lowest level of command as an indispensible factor in responding to a given situation in a timely way.

Mission-type command and control is a complex principle that is not easy to understand. It demands soldiers be willing to take the lead and think for themselves when making decisions and taking action consistent with the overarching strategy in any kind of situation. In the German Army, the superior is a leader, an instructor, and an educator. He is a master of his craft; he bases his actions on the values set forth in the German Basic Law. However, he is a citizen in uniform with a special obligation and responsibility.

Challenges in Afghanistan

Because of operations in Afghanistan, leader responsibilities have increased at lower echelons. Platoon- and company-level scenarios are as

Recognize transition signals in the environment

Assess organizational / individual position

Learn and change to meet the need

Adapt and implement new practices
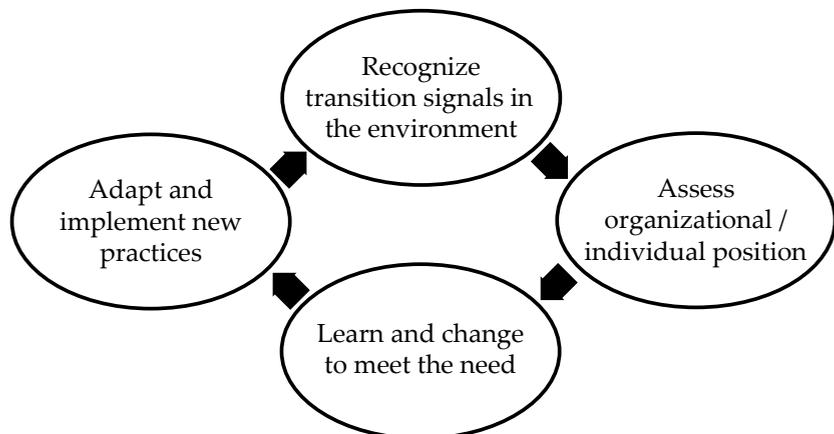
Model for coalition partnership.

complex as battalion- or brigade-level scenarios once were. Young captains and first lieutenants routinely conduct composite force operations. More than ever before, young leaders determine success or failure and life and death. In addition to being a fighter and specialist, the young soldier is a rescuer, helper, protector, trainer, mediator, and diplomat.

During the Cold War, superiors gave platoon leaders and company commanders the time to make mistakes. Today, deployment requirements allow fewer training exercises and young leaders have far less opportunity to learn from their mistakes. We did not impose such a heavy responsibility on platoon leaders or company commanders in the past. In addition, multinational units exist below the division level in Afghanistan today. Young leaders must know the operational doctrines of other armies, as well as different training requirements, leadership philosophies, and cultures. Acceptance of foreign habits and tolerance of cultural differences are indispensable for unity.

Model for Coalition Partnership

Challenges increase whenever different cultures combine in coalition partnerships. Leaders must depart the known of the status quo for the unknown of adaptation. Developing leaders in a sister service, interagency, intergovernmental, or multinational coalition is a challenge that increases with each addition to the coalition. This article demonstrates how different the approaches taken to develop leaders can be.

The illustration depicts how two or more coalition partners work to achieve unity of purpose. The model relies on each partner to collaborate at every stage of the cycle. It applies to interagency and intergovernmental partnerships as well as to humanitarian assistance and armed conflict.

Assess Organizational/Individual Position. A deliberate demand is a directive or mission order. An unanticipated demand is the result of an environmental condition that the organization does not directly control. Unanticipated demands, both internal and external to the partnership, affect the organization or individual's position.

Emanating from disparate cultures and working within the constraints of differing political pressures, coalition forces find their influence and capability limited by the degree of risk their political leaders are willing to take. For example, coalition forces have departed Afghanistan due to political pressure, not military success. A decision to participate in a partnership requires preparing for the inevitable culture clash that will ensue when two or more cultures interact, and two or more competing political agendas collide.

Learn and Change. To facilitate interoperability, partner forces should focus on leader training and education before considering operational compatibility.

Adapt and implement new practices. With requirements determined, partner leaders must decide on the necessary reconfiguration of individual thinking, collective reorganization, resource reallocation, individual and collective retraining, and the appropriate curricula for the impending collaboration and partnership. True partnership is the sharing of control, and the ramifications of this are far-reaching. They extend from the lowest level organization through the heights of national and political leadership. Decentralized operations involve more than just dispersing troops. Leaders must go beyond simply disseminating their intent and actually abdicate control of operational outcomes to subordinate leaders.

Recognize transition signals. Complacency is a coalition's worst enemy. The human brain seeks to simplify and categorize experiences in an effort to obtain clear answers to complex challenges. Resistance to change is a natural intuitive response and must be addressed when it manifests itself as reluctance to recognize signals that broadcast the need for campaign reconfiguration. The unwillingness to reconfigure a campaign can spell failure.

The development of leaders to meet the needs dictated by environmental conditions must contain an underlying awareness and expectation that pursing organizational purpose will include coalition partners of some kind and number. The speed of change caused by ever-increasing high rates of information transference in an age of transparency hastens the need for coalition partners to develop effective unity of purpose as quickly as critical thinking leaders are able. ***MR***
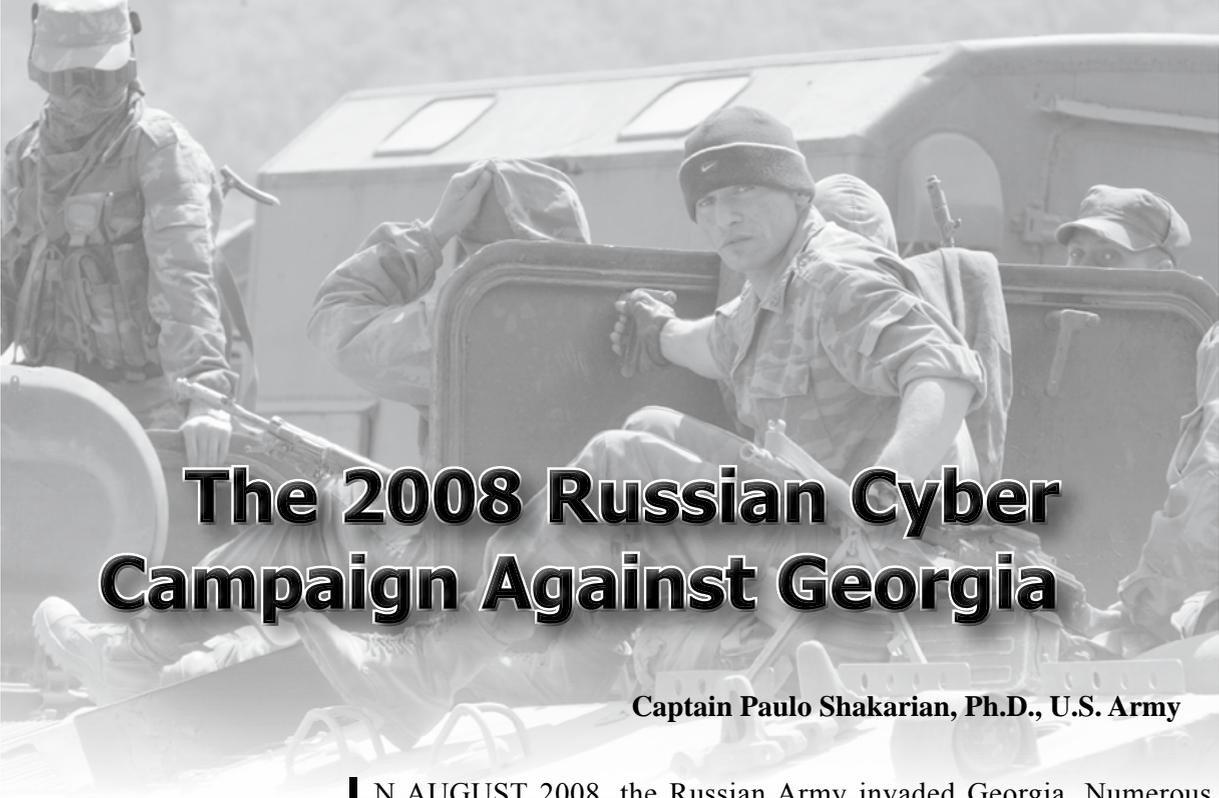
The 2008 Russian Cyber Campaign Against Georgia

Captain Paulo Shakarian, Ph.D., U.S. Army

I N AUGUST 2008, the Russian Army invaded Georgia. Numerous, coordinated cyber attacks accompanied the military campaign. This represents the first instance of a large-scale computer network attack (CNA) conducted in tandem with major ground combat operations. The attack had no direct connection to the Russian government, but had a significant informational and psychological impact on Georgia: it effectively isolated the Caucasus state from the outside world.

Security experts have identified two phases of the Russian cyber campaign against Georgia. The first phase commenced on the evening of 7 August when Russian hackers targeted Georgian news and government websites.[1] Russian Military Forecasting Center official Colonel Anatoly Tsyganok said these first actions were a response to Georgians hacking South Ossetian media sites earlier in the week.[2] The fact that the alleged counterattacks occurred only one day prior to the ground campaign has led many security experts to suggest that the hackers knew about the date of the invasion beforehand.

In the first phase of the attack, the Russian hackers primarily launched distributed denial of service (DDoS) attacks. A denial of service attack is a cyber attack that attempts to prevent the legitimate use of a computing resource. When multiple computers achieve this goal, a distributed denial of service attack has occurred. One way to categorize DDoS attacks is to differentiate between *semantic* and *brute force* attacks. A semantic DDoS takes advantage of either a feature or bug in some software on the target system. A brute force (or "flooding") DDoS attack occurs when the target system receives more Internet traffic than it can handle, which exhausts the command and control resources of the server, rendering it unavailable.[3]

The DDoS attacks during this phase were primarily carried out by *botnets*.[4] A botnet is a group of computers on the Internet (termed "bots" or "zombies") that have been infected with a piece of software known as malware. The malware allows a computer "command and control" server to issue commands to these bots. Often, botnets launch spam email

Captain Paulo Shakarian is an assistant professor in the Department of Electrical Engineering and Computer Science at the U.S. Military Academy (USMA). He holds a B.S. from USMA and an M.S. and Ph.D. from the University of Maryland. He served two tours in Iraq in various military intelligence positions.

PHOTO: Russian soldiers are seen atop an armored vehicle in the breakaway Georgian Province of South Ossetia, 8 August 2008. (AP Photo/Musa Sadulayev)

campaigns, but they can also be used to launch wide-scale DDoS attacks. The hijacking of the zombie computers typically occurs in the same manner as infections with other viruses (e.g., email scams, fake websites, infected documents). The communication from the command and control

> *… cyber activity shifted to the recruitment of "patriotic" Russian computer users—often referred to as "hacktivists."*

computer to the zombies can be conducted over seemingly innocuous channels on the network (such as a channel normally used for Internet chat) to prevent discovery.[5] Criminal organizations, such as the Russian Business Network (RBN), use and lease botnets for various purposes.[6] The botnets used in the onslaught against Georgian websites were affiliated with Russian criminal organizations, including the RBN.[7]

In this first phase, the attacks primarily targeted Georgian government and media websites. The Russian botnets relied on a brute force DDoS to attack these targets.[8] The Georgian networks, due to their fragile nature, were more susceptible to flooding than the Estonian networks Russian hackers attacked a year earlier.[9]

In the second phase, Georgian media and government websites continued to receive the attacks, but the Russian cyber operation sought to inflict damage upon an expanded target list including financial institutions, businesses, educational institutions, Western media (BBC and CNN), and a Georgian hacker website.[10] The assaults on these servers not only included DDoS, but defacements of the websites as well (e.g., pro-Russian graffiti on government sites such as a picture likening Georgian President Mikheil Saakashvili to Adolf Hitler). In addition, several Russian hackers utilized publically available email addresses of Georgian politicians to initiate a spam email campaign.[11]

To carry out website defacements, the Russian hackers resorted to another type of attack known as an *SQL injection,* which uses a text field on a webpage to directly communicate with the back end database (normally, a common SQL database—hence the name). A system susceptible to this type of vulnerability essentially gives the hacker total access to the database—including list user login IDs, financial transactions, or website content.[12]

During this phase of the operation, much of the cyber activity shifted to the recruitment of "patriotic" Russian computer users—often referred to as "hacktivists."[13] According to postings on some Russian hacker websites, many "hacktivists" were thought to be members of Russian youth movements.[14] The recruitment was primarily done through various websites, the most infamous of which was "StopGeorgia.ru," which went online 9 August 2008.[15] One hacktivist notes that the instructions provided were very accessible, even for a novice user.[16] For example, StopGeorgia.ru provided easy-to-use tools and instructions to launch DDoS from private machines. It even featured a user-friendly button called "FLOOD" which, when clicked, deployed multiple DDoS on Georgian targets. Although many of the hacktivist assaults relied on a different vulnerability than the botnet actions, they still aimed to overload Georgian servers by brute force.[17] The tools provided were also very versatile. For instance, some could assail up to 17 Georgian servers simultaneously. These hacktivist websites also featured target lists of Georgian systems—including specifications whether it was accessible from Russia or Lithuania and known vulnerabilities.[18] These included susceptibility to SQL injection.[19] It is also noteworthy that some security experts have linked StopGeorgia.ru to Russian organized crime.[20]

Another interesting aspect of the Russian hacker websites is their administrators' professionalism. Not only did they provide novice hacktivists with timely advice, they also policed their sites very well. During the conflict, administrators of Russian hacker site "XAKEP.ru" promptly responded to port-scans by the U.S.-based open-source security project called "Project Grey Goose" by temporarily blocking all U.S. Internet Protocol (IP) addresses. There was also evidence showing that they quickly cleaned up the server, in one instance removing a post containing the keyword "ARMY" in a matter of hours.[21] The precautions of

the administrators were well founded. One security organization identified a fake tool uploaded to a Russian hacker website described to launch attacks against Georgian targets. However, this particular piece of software turned out to target Russian systems. The experts concluded that Georgian hackers uploaded the software in an effort to launch a cyber counterattack, although there was no evidence that this tool caused significant damage.[22]

The Georgian reaction to the Russian attacks first consisted of filtering Russian IP addresses, but the Russian hackers quickly adapted and used non-Russian servers or spoofed IP addresses. The Georgians then moved many of their websites to servers out of the country (mainly to the United States). Nevertheless, even these offshore servers were still susceptible to flooding exploitation owing to the extremely high volume of the Russian brute force assault.[23]

Analysis

The following analysis surveys the objectives of the attack. Kenneth Corbin wrote that the goals of the Russian cyber attacks were to "isolate and silence" the Georgians.[24] The assaults had the effect of silencing the Georgian media and isolating the country from the global community. The reports on the event and the target lists provided on the Russian hacker websites give credence to Corbin's hypothesis. Furthermore, the Georgian population experienced a significant informational and psychological defeat, as they were unable to communicate what was happening to the outside world.

While careful not to attribute the cyber attacks to the Russian government, the head of the Russian Military Forecasting Center, Colonel Anatoly Tsyganok, describes the Russian cyber campaign as part of a larger information battle with Georgian and Western media.[25] Russian journalist Maksim Zharov describes cyber warfare as only a small part in a larger information campaign that also included bloggers and media outlets.[26] At one point, Russian sympathizers even flooded a CNN/Gallup poll with over 300,000 responders stating that the Russian cause was justified.[27] Many analysts believe that the primary goal of the first phase of the Russian CNA was to prevent Georgian media from telling their side of the story.[28] This seems to align with the Russian emphasis on information warfare.[29]

Isolating Georgia from the outside world may also explain the attacks on Georgian banks that occurred during the second phase of cyber opera-

(AP Photo/Darko Bandic)

Russian soldiers man a checkpoint on the outskirts of Gori, northwest of the capital Tbilisi, Georgia, 15 August 2008.

tions. At this time, several banks were flooded with fraudulent transactions. International banks, wanting to mitigate the damage, stopped banking operations in Georgia during the conflict.[30] As a result, Georgia's banking system was down for ten days.[31] This led to a shutdown of cell-phone services in the country—further isolating Georgia from the rest of the world.[32] Russian hackers targeting Georgian business websites, also during the second phase, may have aimed to cause similar economic damage.

The objectives of "isolate and silence" were limited in scope. They avoided doing permanent damage to Georgian networks and to Supervisory Control and Data Acquisition (SCADA) targets.[33] SCADA systems are designed for real-time data collection, control, and monitoring of critical infrastructure, including power plants, oil and gas pipelines, refineries, and water systems.[34] Obviously, disruption to these systems would have serious implications for the Georgian infrastructure. Since the Russian hackers most likely had the capability to attack these targets, it is reasonable to assume they exercised some restraint to make sure they did not harm them. Further, Georgia's physical connection to the Internet remained largely unaffected. At the time of the attacks, Georgia connected to the Internet by landlines through Turkey, Armenia, Azerbaijan, and Russia. No evidence points to an attempt to sever these connections in either the physical or virtual world—including the connections running through Russia.[35] This could suggest that the Russian aggressors did not intend to inflict permanent damage on Georgia's Internet infrastructure, but rather target particular servers to meet their "isolate and silence" objectives.

Coordination with Conventional Forces

The coordination of CNA with conventional forces was very limited. While many experts assert that the Russian hackers at least knew when the ground operations would commence, beyond the timing of the cyber attacks, there is little evidence of coordination. Two possible reasons exist for this: The Russian government wanted to be able to disassociate itself totally from the CNA operations (and there is still no hard proof for their involvement). Second, the Russian military

had not embraced "jointness" at the time of the conflict—causing cyber operations to be stovepiped.[36] However, some security experts saw some coordination between cyber and ground forces. For example, media and communication facilities were not attacked by kinetic means—this may have been due to the success of the Russian CNA. Additionally, Russian hackers also attacked a website for renting diesel-powered electric generators in support of conventional strikes against the Georgian electrical infrastructure.[37]

Reconnaissance and Preparation

Many security experts believe that the Russian hackers had prepared their operation prior to the initial cyber strikes of 7 August 2008.[38] This is due to the speed of the botnet attacks in phase one and the availability of target lists and hacking tools—that included known SQL injection vulnerabilities—in phase two. Simply put, the effectiveness of the CNA initiated by the Russian hackers leads us to infer that reconnaissance took place well in advance.

There were other indicators of preparation as well. In July 2008, Georgian servers (including the presidential website) were flooded with the message "win+love+in+Russia."[39] These attacks originated from a botnet known as *Machbot Network*, which is known to be used by various Russian criminal organizations.[40] Some analysts suspect that this early strike may have been a "dress rehearsal" for the August attacks.[41] Analysis of the graffiti images used to deface the Georgian websites led security experts to believe that some of these images were created as early as 2006, which could mean that the cyber attacks may have functioned as a contingency operation well before 2008.[42]

Attribution

Many bloggers and news reporters have pondered the level of involvement of the Russian government in the attacks. Here, I will touch on a few of these theories and illustrate how they stack up to the evidence.

● *The Russian cyber operations originated spontaneously from patriotic "hacktivists" primarily in response to attacks on South Ossetian websites.* While this theory may seem plausible, it also poses some problems. First, there was apparently a great

amount of reconnaissance planned and executed in preparation. This most likely occurred well before the attacks on South Ossetian media sites on 5 August. Second, the majority of CNA during the first phase of the operations launched from botnets. These assaults were significant and occurred several days before many sites recruiting and supporting the hacktivists went online. The use of botnets suggests the involvement of Russian organized crime–either launching DDoS against Georgia or leasing their botnets to other individuals doing so.

● *The cyber attacks originated solely from Russian organized crime.* The use of botnets and the fact that many hacktivist websites (such as StopGeorgia.ru) have been linked to Russian organized crime makes this hypothesis more credible than the previous one. However, the obvious question is what did the criminal organizations gain from these operations? If the Russian government did not fund or otherwise support them, one theory suggests that the hackers were using the cyber attacks to infiltrate certain Georgian systems for later use (such as the financial institutions attacked in phase two).

● *The cyber attacks originated from Russian organized crime at the request of the Kremlin.* This theory has been put forth by several writers who claim that organizations such as the RBN have links to Vladimir Putin and the Kremlin.[43] The coordination with conventional military operations addressed earlier and a linkage between StopGeorgia.ru and the Russian GRU are also supporting arguments.[44] However, even these findings are circumstantial (at the time of this writing, there is no hard proof of the Kremlin's involvement).

Preparing for a Cyber-Capable Adversary

Whether or not the Kremlin was involved, the cyber attacks yielded a benefit to the overall Russian operation. As such, perhaps we should regard cyber capabilities as a battlefield operating system similar to maneuver, artillery, air defense, etc. Fully understanding the enemy's cyber capabilities is an important piece of analysis. We note that the enemy hacker can take various forms—including individuals at government-sponsored labs, uniformed members of cyber units, members of criminal organizations, and hacktivists. Distinguishing different players in cyberspace is often difficult

or impossible. However, understanding which of these cyber soldiers are in a combatant's order of battle can provide insight into their actions. With the order of battle established, we can then apply cyber "doctrinal templates." An example based on the Georgia conflict would include Russian criminal organizations in the order of battle, even though we do not know their precise relationship to conventional forces. Based on their presence in the order of battle, we can then look at a doctrinal template associated with the criminals. This may indicate the use of botnets and hacktivists with the mission to isolate and silence the enemy, but not permanently affect the cyber infrastructure or SCADA.

The Cyber Aspect of the Area of Interest

Perhaps another lesson to infer from the Georgian case is that commanders should not only consider security issues for military networks, but civilian networks as well. While generally not focused on military targets, the Russian cyber attacks in Georgia had significant informational and psychological effects. Further, some cyber attacks, such as the July attacks on Georgian government websites, may forebode not only larger-scale cyber attacks, but ground operations as well. As a result, a commander may want to develop priority information requirements that are cyber in nature. To help protect the local populace, it may become imperative to ensure the survival of civilian computer networks.

Cyber Reconnaissance and Surveillance

As described above, smaller cyber attacks may be indicators for larger-scale CNA as well as kinetic operations. Additionally, there are other signs of impending CNA, the reporting of which may fall on a variety of individuals. For example, the communications officer may report suspicious traffic on a computer network, or a liaison with a

> *Whether or not the Kremlin was involved, the cyber attacks yielded a benefit to the overall Russian operation.*

host nation government may report suspicious traffic on a civilian network. Bloggers or other posts to hacker websites may also hint at an imminent cyber offensive. Personnel tasked with conducting open-source intelligence analysis could monitor them. We should also train and then task traditional signals and human intelligence personnel to identify indicators of cyber attacks specific to their domain.

The Russian cyber campaign on Georgia in August 2008 represents the first large-scale CNA occurring simultaneously with major conventional military operations. These CNA operations had a significant informational and psychological impact on Georgia, as they reduced the capability of not only the media and government, but also the public to communicate with the outside world. Although we cannot directly link the attacks to the Russian government, the government benefited enough from their effects to warrant consideration in future conflicts. Processes such as priority information requirements development and cyber reconnaissance and surveillance planning should be adjusted to account for a cyber capable enemy. **MR**

NOTES

1. John Bumgarner and Scott Borg, *Overview by the US-CCU of the Cyber Campaign Against Georgia in August of 2008.* U.S. Cyber Consequence Unit Special Report, August 2009, 2.

2. Anatoly Tsyganok, "Informational Warfare—A Geopolitical Reality," Strategic Culture Foundation online magazine, 5 November 2008, <http://rbth.ru/articles/2008/11/05/051108_strategic.html> (16 October 2010). Note that this is an English version of the article provided by the website. "South Ossetian News Sites Hacked," Civil.ge Daily News Online, 5 August 2008, <http://www.civil.ge/eng/article.php?id=18896> (16 October 2010).

3. Jelena Mirkovic and Peter Reiher, "A Taxonomy of DDoS Attack and DDoS Defense Mechanisms," *ACM SIGCOMM Computer Communication Review* 34, no. 2, April 2004, 39-53.

4. Jose Nazario, "Georgia DDoS Attacks—A Quick Summary of Observations," Arbor SERT (Security Engineering and Response Team), 12 August 2008, <http://asert.arbornetworks.com/2008/08/georgia-ddos-attacks-a-quick-summary-of-observations/> (16 October 2010).

5. We also note that more recent botnets use a far more advanced communication systems—the description of this is beyond the scope of this paper. See Evan Cooke, Farnam Jahanian, and Danny McPherson, "The Zombie Roundup: Understanding, Detecting, and Disrupting Botnets," *SRUTI* (Steps to Reducing Unwanted Traffic on the Internet Workshop), 2005, 39-44.

6. Jeffrey Carr, *Inside Cyber Warfare* (Sebastopol, CA, O'Reilly Media, Inc., 2010), 121-30.

7. Kenneth Corbin, "Lessons from the Russia-Georgia Cyberwar," *internetnews.com: Real time IT News,* 12 March 2009, <http://www.internetnews.com/government/article.php/3810011/Lessons-From-the-Russia-Georgia-Cyberwar.htm> (16 October 2010).

8. The Russian botnets in this phase particularly focused on vulnerability with the protocol known as a TCP SYN exploit. See Nazario for details.

9. Bumgarner and Borg, 4.

10. Ibid, 5.

11. Dancho Danchev, "Coordinated Russia vs. Georgia Cyber Attack in Progress," *ZDNet,* 11 August 2008, <http://www.zdnet.com/blog/security/coordinated-russia-vs-georgia-cyber-attack-in-progress/1670> (16 October 2010).

12. Johannes B. Ullricha and Jason Lamb, "Defacing websites via SQL injection," *Network Security,* vol. 2008, issue 1, January 2008, 9-10.

13. Danchev.

14. Carr, 84.

15. Ibid, 15.

16. Evgeny Morozov, "Army of Ones and Zeros: How I became a soldier in the Georgia-Russia Cyberwar," *Slate,* 14 August 2008, <http://www.slate.com/id/2197514> (16 October 2010).

17. The DDoS attack conducted using such tools differed somewhat from the DDoS attacks by the botnets. Where the botnets used TCP SYN attacks, which exploit the underlying network protocol, many of the tools employed by the "hacktiv-

ists" relied on flooding servers with HTTP requests. This attack worked by requesting a given website more times than the webserver can handle. See Bumgarner and Borg, 4 for details.

18. Morozov.

19. Danchev.

20. Carr, 105-15.

21. Ibid, 16.

22. Bumgarner and Borg, 7.

23. Ibid.

24. Corbin.

25. Tsyganok.

26. A synopsis of Maksim Zharov's articles at the time of the conflict can be found in Timothy Thomas, "The Bear Went Through the Mountain: Russia Appraises Its Five-Day War in South Ossetia," *Journal of Slavic Military Studies* 22, (2009): 31-67.

27. See <http://www.theaustralian.com.au/news/attacks-on-cyberspace-preceded-russian-tanks/story-e6frg6to-1111117197354> (16 October 2010).

28. Corbin.

29. Timothy Thomas, "Russian Information-Psychological Actions: Implications for U.S. PSYOP," *Special Warfare* 10, no. 1, Winter 1997, 12-19.

30. Corbin.

31. Bumgarner and Borg, 6.

32. Corbin.

33. Bumgarner and Borg, 5.

34. John D. Fernandez and Andres E. Fernandez, "SCADA systems: vulnerabilities and remediation," *Journal of Computing Sciences in Colleges* 20, no. 4 (April 2005): 160-68.

35. Earl Zmijewski, "Georgia Clings to the Net," *Reneysys: The Internet Intelligence Authority,* 10 August 2008, <http://www.renesys.com/blog/2008/08/georgia_clings_to_the_net.shtml> (16 October 2010).

36. Tor Bikkvol, "Russia's Military Performance in Georgia," *Military Review (*November-December 2009): 57-62.

37. Bumgarner and Borg, 6.

38. See Carr, 183, and Bumgarner and Borg, 6.

39. Timothy Thomas, "The Bear Went Through the Mountain: Russia Appraises Its Five-Day War in South Ossetia," *Journal of Slavic Military Studies* 22 (2009): 56.

40. Stephen Korns and Joshua Eastenberg, "Georgia's Cyber Left Hook," *Parameters* (Winter 2008-2009): 60-76.

41. Thomas, "The Bear Went Through the Mountain, 56.

42. Bumgarner and Borg, 5.

43. Corbin.

44. This circumstantial linkage is based on WHOIS registration for servers associated with StopGeorgia.ru. One registration address is located next to the Russian GRU headquarters in Moscow. Security experts and Project Grey Goose performed this analysis. See Carr, 105-15.

The Destruction of Sennacherib

by George Gordon, Lord Byron (1788-1824)

The Assyrian came down like the wolf on the fold,
And his cohorts were gleaming in purple and gold;
And the sheen of their spears was like stars on the sea,
When the blue wave rolls nightly on deep Galilee.

Like the leaves of the forest when Summer is green,
That host with their banners at sunset were seen:
Like the leaves of the forest when Autumn hath blown,
That host on the morrow lay withered and strown.

For the Angel of Death spread his wings on the blast,
And breathed in the face of the foe as he passed;
And the eyes of the sleepers waxed deadly and chill,
And their hearts but once heaved, and for ever grew still!

And there lay the steed with his nostril all wide,
But through it there rolled not the breath of his pride;
And the foam of his gasping lay white on the turf,
And cold as the spray of the rock-beating surf.

And there lay the rider distorted and pale,
With the dew on his brow, and the rust on his mail:
And the tents were all silent, the banners alone,
The lances unlifted, the trumpet unblown.

And the widows of Ashur are loud in their wail,
And the idols are broke in the temple of Baal;
And the might of the Gentile, unsmote by the sword,
Hath melted like snow in the glance of the Lord!

Sennacherib's Army Is Destroyed - Illustration by Gustave Doré (1832-
1883) (Felix Just, S.J.; http://catholic-resources.org/Art/Dore.htm)
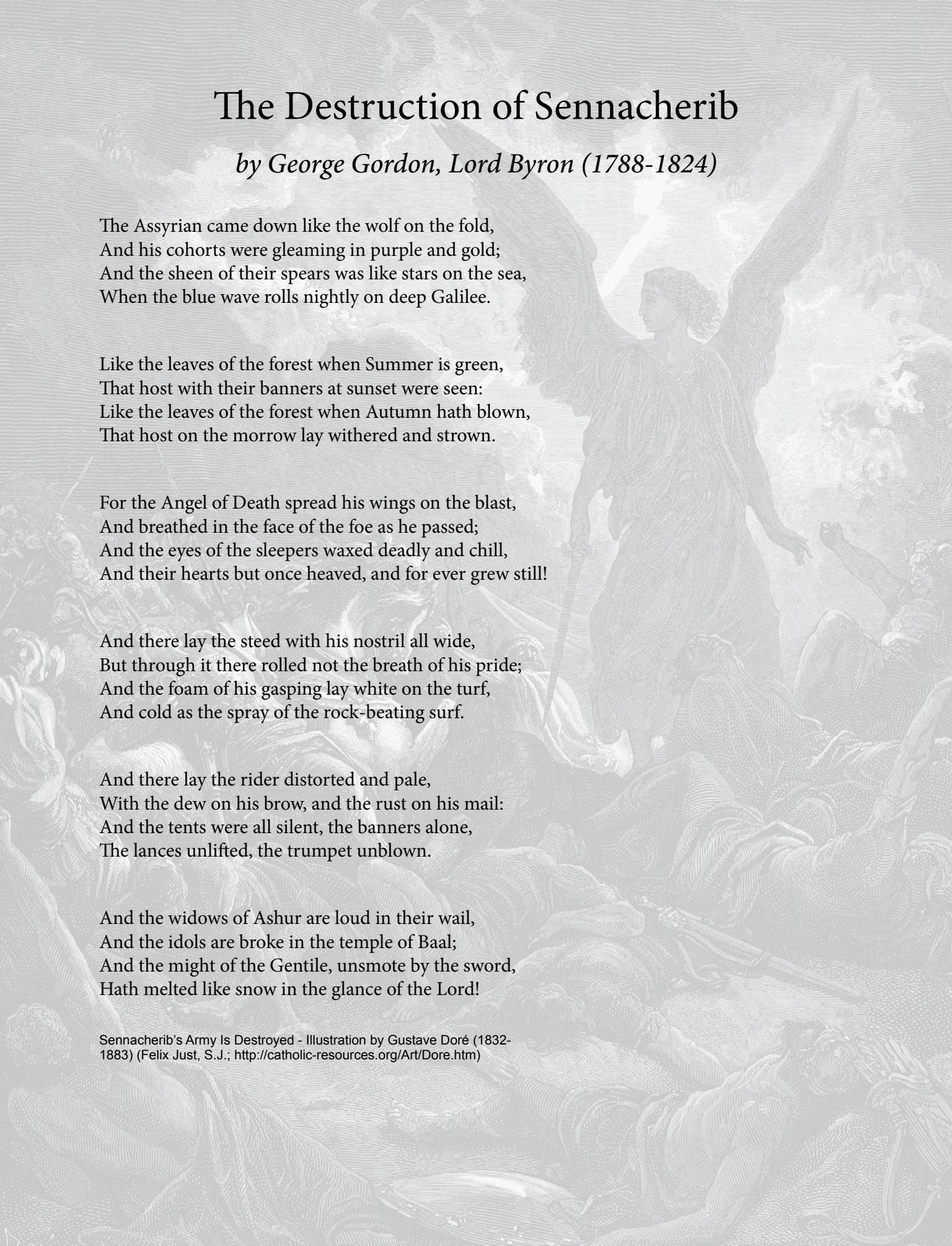
A More Agile Pentagon

Paul Scharre

Paul Scharre is a former infantryman of the 75th Ranger Regiment who has served in Iraq and Afghanistan. He currently works in the Office of the Secretary of Defense. He holds an M.A. in political economy and public policy and a B.S. in physics, both from Washington University in St. Louis. The views expressed in this article are those of the author and do not reflect the official position of the Office of the Secretary of Defense.

PHOTO: A prototype of the Expeditionary Fighting Vehicle, planned for fielding to the United States Marine Corps in 2015. (United States Marine Corps)

FORMER SECRETARY OF Defense Robert Gates departed office this year leaving behind a transformed Pentagon. Even before the latest round of budget cuts, he eliminated more than $450 billion of overhead, unneeded staffs, and underperforming programs, including the DDG-1000 destroyer, the VH-71 Presidential Helicopter, Future Combat Systems, the Multiple Kill Vehicle, the Airborne Laser, the Non-Line-of-Sight Launch System, and the Expeditionary Fighting Vehicle.[1] Cost overruns and schedule slippages were factors for placing many of these programs in the secretary's crosshairs, but ultimately, most simply were not relevant to today's security environment. They were conceived in the 1980s for a different threat, and as the security environment changed, they failed to change with it. The inflexibility of these programs, ultimately leading to their irrelevance, is a symptom of a broader problem: the Pentagon bureaucracy is not agile enough to adapt to a rapidly changing and uncertain future.

Under Department of Defense (DOD) current acquisition and programming processes, it may take 10 to 20 years to bring a major defense program from concept to initial operational capability, which may then stay in the inventory for another 30 to 50 years. Meanwhile, the security environment the U.S. military faces can change dramatically in only a few years. In 1996, when the Taliban took Afghanistan in a whirlwind of extremism, it was inconceivable that the United States would embark on a decade-long war to stabilize the country just five years later. In 1988, the Soviet Union seemed strong enough to last another 60-plus years, yet just five years later, the United States was taking a 20 percent peace dividend. Even between 2003 and 2008, as the wars U.S. troops were engaged in remained the same, the threats they faced on the ground changed radically, forcing a shift from fast and light "shock and awe" campaigns to heavily armored vehicles and increased troop levels. That

DOD will be able to reliably predict the character of warfare 70 years from now is implausible when the types of threats U.S. troops face overseas change on a month-to-month basis. Yet when DOD invests in a major defense program, such as a next-generation carrier, the United States is making a multi-billion dollar bet that a certain mode of warfare will be dominant half a century from now.

The Department of Defense must become more agile, flexible, and adaptable. In an era of budget austerity, a smaller DOD may not be able to prepare for every possible contingency, placing a premium on agility. Elements of reform include—

● "Good enough" requirements for acceptable performance at an affordable cost and within a realistic timeframe to meet warfighter needs.

● Modular designs and incremental upgrades to reduce costs and improve flexibility.

● Flexible programming mechanisms, including rapid acquisition processes and allowing the services to compete for funding and ownership of joint missions.

● Humility about predicting future military needs and the wisdom to terminate irrelevant programs.

Timing

Agility requires more than just the ability to rapidly develop capabilities or procure off-the-shelf solutions quickly. We must consider when we need a capability and then plan backwards to ensure that we acquire the *best tool in the time available* to do so. The right tool is not helpful if it arrives after the war ends. An 80 percent solution on time is much better than a 100 percent solution late.

Developing and fielding capabilities move on two tracks in DOD, both with relatively rigid timelines. The default track is a deliberate and time-consuming process that can take close to a decade or more to produce an initial operational capability. Taking time to develop the best possible system was prudent when facing an adversary with an inefficient, centrally planned economy who also developed weapons over 10 to 20 years. However, when troops are in continuous engagements with adversaries who can innovate and field new improvised solutions within weeks or days, delays cost lives and threaten the success of the mission.

Accordingly, DOD has a host of rapid acquisition processes to field commercial, off-the-shelf technologies to meet urgent wartime needs. By one count, 20 such rapid acquisition mechanisms exist.[2] When the current wars wind down, we should consolidate these processes and institutionalize them so the nation has the ability to respond to urgent needs in the future, including flexible reprogramming of funds within the same fiscal year without congressional approval.

The DOD's longer-term, deliberate process could also benefit from some reform. We must consider costs up front and ruthlessly balance them against requirements to determine what is "nice to have" and what is truly essential. Too often, DOD has pursued next-generation systems based on a desire to push the limits of technology rather than a realistic appraisal of future needs, balanced against costs. This has led to "requirements creep" and impressive, but over-priced, overly sophisticated "baroque" systems that are overkill for the most likely threats the military will face.[3] Deputy Defense Secretary Ashton Carter, while serving as under secretary of defense for acquisitions, placed a renewed emphasis on affordability, including it as a key performance parameter for all major defense programs.

A gap currently exists between DOD's immediate-term (up to 24 months) rapid acquisition processes and longer-term (10 to 20 year) deliberate development timeline. If a solution is required in a timely fashion but one is not immediately available within 24 months, DOD currently lacks an institutional path for fielding systems in the near-term (2 to 9 years). Developing systems along this near-term track requires settling for an 80 percent solution in a timeframe that is relevant to the warfighter, rather than waiting for a 100 percent solution. Under Secretary Carter directed precisely such an approach with the Army's new ground combat vehicle.[4] In some cases, DOD may need to waive deliberate acquisitions processes to reduce waste, but add additional steps that take time. We must weigh the risk of rushing a solution to the field against the risk that the warfighter goes without any capability at all. Strengthening the role of the combatant commanders in the requirements process could improve the assessment of these risks.

Flexibility

Other important factors in improving agility are—

● Flexibility through modular design.

● Diversity and hedging.

● Changes to the way the DOD resources joint missions.

Modular design with incremental upgrades is an essential tool for helping systems stay abreast of the latest technology and save money by reducing risk. Modular and open architecture design allows us to modify systems during their lifetimes, and is worth a marginal additional cost early on. The DOD has a proven record of accomplishment using modular design to improve flexibility and increase savings over the long run.

The Joint Direct Attack Munition is an example of a relatively low-cost modification to an existing "dumb bomb" that brought it into the information age as an affordable precision-guided munition. The Navy's vertical launching system tubes allow surface ships and submarines to be equipped with upgraded missiles of standard sizes without having to modify the vessel. The avionics and radars of fighter aircraft are regularly improved in "blocks"; the F-16 program has had 27 block upgrades since its inception in 1979.[5] Modularity allows the incorporation of new technology at an affordable cost and should be employed in future systems, like the new bomber.[6] Modular design with regular, incremental upgrades can help the U.S. military keep systems relevant and save money.[7]

We can also gain flexibility through a deliberate strategy of diversity, hedging, and leaving options open to pursue future development.[8] Unlike during the Cold War, when U.S. force planning focused overwhelmingly on a single adversary, the U.S. military today is in the difficult position of having to defend against a wide array of possible threats and actors. Potential adversaries of the United States look for weaknesses in U.S. systems and asymmetric vulnerabilities they can exploit. Sometimes these weaknesses can have strategic impact, such as the vulnerabilities of thin-skinned Humvees to improvised explosive devices (IEDs). The DOD can hedge against a weakness in any one system by pursuing a range of diverse solutions. The United States should have multiple means of projecting power in any given domain and

Former Brigadier General William "Billy" Mitchell (standing) at his court-martial, Washington, DC, 1925. Demoted to Colonel, Mitchell antagonized Pentagon officials by, among other things, demonstrating that an airplane could sink a battleship with a single bomb, threatening the core legacy of the Navy.

(U.S. Air Force photo)

deliberately pursue a strategy of diversification to hedge against potential vulnerabilities.[9]

Changes to the way DOD allocates responsibility for joint missions could also improve flexibility. The military services too often view joint tasks that do not clearly fall to one service but which multiple services could complete as simply additional bills to pay. There is little structural incentive for taking on missions seen as detracting from resources available for a service's "core" missions. Examples include airborne intelligence, surveillance, and reconnaissance to support ground troops or defense of air bases against air and missile attack. Changes to the way DOD allocates resources for these missions could reverse the current dynamic. Rather than task them to one service, DOD could allow the military services to compete in offering up solutions with the winning service receiving the mission and the necessary resources to accomplish it. The result would be to create an incentive structure where military services as "force providers" actually compete for missions and the best solutions (both in terms of effectiveness and in terms of cost) are rewarded.[10]

Humility

A bureaucracy that designs programs based around the need for them, sets realistic "good enough" program requirements, and uses modular design and diversified investment strategies will still occasionally be too slow or too inflexible to adapt to a rapidly changing world. The United States will still find itself, as it has at the start of all its wars, in conflicts for which its equipment, platforms, or weapons are less than optimal. In these circumstances, DOD military and civilian leaders must have the humility to acknowledge that some programs may no longer be relevant and need to be canceled. Structural and cultural factors in Congress, the defense industry, and within military and DOD civilian leadership can generate powerful forms of inertia toward continuing existing programs. Changing course often requires strong military and civilian leadership.

Constituencies in Congress and the defense industry may benefit from continued production, even without a sound strategic rationale for it, making it difficult to downsize or cancel established programs without direct intervention by a secretary willing to take on members of Congress. In some of the most egregious examples, Secretary Gates tussled with Congress repeatedly over the F-35 Joint Strike Fighter alternate engine and the C-17 cargo aircraft.[11] He threatened a veto if Congress funded either of them.[12]

Within the military services, structural and cultural factors may hamper flexibility. Existing programs have constituents in the form of program managers, whose jobs depend on the program in question, while new programs lack built-in institutional support. Thus, the military may be sometimes biased toward the status quo in terms of continuing existing programs. However, more challenging are cultural predilections for waging warfare in a certain manner. This is particularly the case when innovations challenge fundamental notions of how to achieve military victory in a particular domain. Each military service has its own culture and its own view of warfare in its respective domain. Developed over decades of experience, the views of senior service leaders, as well as their civilian counterparts, can be extraordinarily resistant to change, even in the face of glaring evidence that warfare is evolving. Military historian John Keegan writes, "Culture is as powerful a force as politics in the choice of military means, and often more likely to prevail than political or military logic."[13]

Examples of cultural obstinacy in the face of innovation abound in military lore. The Navy initially resisted steam-powered ships. Elements of the Army only reluctantly traded in horses for motorized vehicles before World War II. The Army's ignominious treatment of early air power innovator Billy Mitchell is legendary. Once in battle, U.S. service members have a tremendous record of adaptability at the tactical edge, but military institutions and bureaucracies are slower to change, especially if the change required is not merely tactical but actually foundational to the institution's view of warfare. The Army, for example, increased personal and vehicular protective armor relatively quickly in response to new threats in Iraq and Afghanistan. These tactical changes did not require altering the strategic paradigm for ground combat. The Army's institutional adoption of counterinsurgency doctrine, which required fundamentally adjusting the Army's paradigm for ground warfare, took longer.[14]

Similarly, the Army's Future Combat Systems (FCS) fleet of fast, thin-skinned vehicles con-

U.S. Marine Corps SGT Ken Blankenship, explosive ordnance disposal technician, sets up a Remote Ordnance Neutralization System robot during a force protection exercise being conducted at Camp Smedley D. Butler, Okinawa, Japan.

tinued in development until 2008, long after the proliferation of IEDs in current conflicts doomed the vehicles to irrelevance. When the axe finally came down, it came down from Gates, not from Army leaders. The Marine Corps' Expeditionary Fighting Vehicle (EFV) also faced problems from cost overruns, vulnerability to IEDs on land, and over-the-horizon targeting capabilities for anti-ship missiles, which would have pushed EFV-carrying ships further from shore. These problems were well known before Gates eliminated the program in 2011. Both Future Combat Systems and the Expeditionary Fighting Vehicle continued for so long in the face of glaring conceptual problems because they were central not only to each service's respective modernization initiatives, but also to their very identity—the Army as an armored maneuver force, and the Marines as an amphibious assault force. Both ultimately required the secretary's personal intervention to cancel them.

Civilian defense leaders are equally susceptible to the pitfalls of developing biases toward waging war in a certain manner, sometimes in spite of abundant real-world evidence that suggests we cannot box our adversaries into fighting in a manner advantageous to the United States. Before Secretary Gates canceled FCS, the previous defense secretary, Donald Rumsfeld, strongly championed "transformational" next-generation weapons programs including the FCS despite their lack of suitability for ongoing conflicts. When the Army continued FCS in spite of developments in Iraq and Afghanistan that should have thrown the program into doubt, its actions were consistent with Secretary Rumsfeld's intent.

An Uncertain Future

Defense leaders must always be on guard for changes in the security environment that cast current concepts of operation into doubt. A U.S. military that so clearly dominates in traditional categories is constantly at risk from innovative opponents who can find its Achilles' heel. The IED did this in Iraq and Afghanistan, but a host of innovations may compete

for that title in future conflicts. Each military service potentially faces significant challenges in the future that cut to the very core of its present identity.

Long-range, anti-ship ballistic missiles threaten the utility of large, expensive supercarriers, which have been the central organizing premise for naval power projection for the past 70 years. The Navy must ask if it makes sense to pursue investing more than $100 billion in a new fleet of supercarriers when adversaries are developing long-range anti-ship ballistic missiles that could push these carriers out beyond the effective range of their aircraft. Power projection from survivable submarines underwater or more dispersed concepts of surface operation may be a better use of defense dollars or at least help to diversify maritime power projection.

Similarly, the proliferation of long-range ballistic missiles that threaten air bases cuts to the heart of the Air Force's identity as a service dominated by fighter pilots. Short-range fighters lack the range necessary to effectively project power from bases in sanctuary, driving the need for long-range strike aircraft, which Gates directed the Air Force to develop. The Air Force has also been challenged by technology that removes pilots from aircraft and will eventually remove humans from the direct stick-and-rudder control of airplanes altogether. This trend will undoubtedly continue and expand to other missions and domains, challenging the culture of all the military services as warriors face the prospect of waging conflict remotely, removed from harms' way.

While retaining the hard-won lessons learned from today's wars, the Army and Marine Corps must prepare for future wars that may take many forms, including so-called "hybrid" conflicts against non-state actors possessing sophisticated weaponry, such as precision anti-tank missiles and man-portable air defense systems, hiding among civilian populations. The Army and Marine Corps must be ready to seize contested terrain, stabilize key populations, and train local security forces. They may be called upon to secure loose weapons of mass destruction or counter their proliferation. Performing these tasks will require flexibility, diversification of assets, and the humility to admit that, at best, we can only hope to get the business of predicting the character of future wars partly right.

Conclusion

The Department of Defense must become more agile. The world will not slow to the pace of the sclerotic Pentagon bureaucracy. Unable to compete with the U.S. military head-to-head, even sophisticated nation-state adversaries will find ways to undermine U.S. superiority by attacking through asymmetric means. The types of enemies the U.S. may confront 5, 10, or 15 years from now—to say nothing of 50 or 70 years from now—may not be foreseeable today. If the military is to remain relevant in future conflicts, DOD must move faster and be more flexible. Requirements should focus on what we can achieve at a realistic cost within an acceptable timeframe. Programs should incorporate modular design and incremental upgrades over time. Leaders must constantly be on guard for changes in the character of warfare that require shifts in concepts of operation. Protecting the nation will require adapting—and adapting again and again. *MR*

NOTES

1. Secretary of Defense Donald Rumsfeld canceled the Comanche helicopter and Crusader artillery system, both of which were plagued with irrelevance in the changing security environment.

2. Defense Science Board, "Fulfillment of Urgent Operational Needs" (July 2009), available at <http://www.acq.osd.mil/dsb/reports/ADA503382.pdf> (1 March 2011).

3. Robert Gates, "A Balanced Strategy," *Foreign Affairs* (January/February 2009), available at <http://www.foreignaffairs.com/articles/63717/robert-m-gates/a-balanced-strategy> (22 May 2011).

4. John T. Bennet, "Carter gets tough on ground combat vehicle specs," *Defense News* (15 September 2010), available at <http://www.defensenews.com/story.php?i=4780521> (22 May 2011).

5. See "F-16 versions," *F-16.net,* available at <http://www.f-16.net/f_16_versions.html> (22 May 2011).

6. The Chairman of the Defense Science Board, Paul Kaminsky, has advocated a block upgrade approach to the Department of Defense's (DOD's) new long-range bomber program. See John Reed, "DSB chief: block buys best for bombers," *DOD Buzz* (9 February 2011), available at <http://www.dodbuzz.com/2011/02/09/dsb-chief-block-buys-best-for-bombers/>.

7. For more on these strategies, see Defense Science Board, *Enhancing Adaptability of U.S. Military Forces,* DOD (January 2011), 33-39, available at <http://www.acq.osd.mil/dsb/reports/EnhancingAdaptabilityOfUSMilitaryForcesA.pdf (1 March 2011)>.

8. In fact, the *2010 Quadrennnial Defense Review* (QDR) exercised precisely this strategy with respect to the long-range bomber project. The QDR deferred a decision on production until an extensive study of long-range strike options was completed, while leaving the option open to begin a new bomber later. Secretary Gates exercised this option a year later when he announced a decision to start a new bomber program in the Fiscal Year 2012 budget.

9. P.W. Singer, "How the U.S. Military Can Win the Robotics Revolution," *Popular Mechanics* (13 May 2010), available at <http://www.popularmechanics.com/technology/military/robots/how-to-win-robot-military-revolution> (22 May 2011).

10. Dr. Scott Maley, personal correspondence.

11. Robert Gates, Statement on Department Budget and Efficiencies (6 January 2011), available at <http://www.defense.gov/speeches/speech.aspx?speechid=1527> (22 May 2011).

12. John T. Bennet, "Gates: veto needed if C-17, 2nd JSF engine funded," *Defense News* (24 March 2010), available at <http://www.defensenews.com/story.php?i=4552496> (22 May 2011).

13. John Keegan, *A History of Warfare* (New York: Alfred A. Knopf, 1993) 39.

14. While many individual commanders had already been employing COIN tactics since the beginnings of the Iraq insurgency in 2003, updated COIN concepts were not formally reified in Army doctrine until mid-2006. See Headquarters Department of the Army, Field Manual 3-24, *Counterinsurgency* (Washington, DC: U.S. Government Printing Office [GPO], 2006).
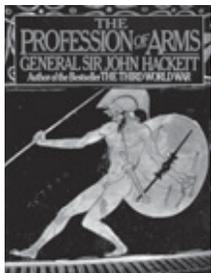
THE PROFESSION OF ARMS, General Sir John Hackett, Macmillan, New York, 1983, 239 pages.

General Sir John Hackett's treatise on the profession of arms combines concise historical analysis with a vast array of images to paint a vivid portrait of the professional soldier that spans the recorded history of mankind. *The Profession of Arms* seems to be a simple coffee table book: an oversize volume richly illustrated with art. Yet, Hackett constructs a provocative tale that moves from ancient Greece to the rice paddies of Vietnam, weaving together nearly three millennia of the profession of arms.

He frames his study with a few basic but timeless questions. What defines the military profession? What is the profession of arms? How did the profession evolve? Is the professional a warrior first and a guardian of the peace second? What role does the professional soldier assume in society?

Some focus on the function of the profession, "the ordered application of force in the resolution of a social problem." Others simply define the profession as "the management of violence." Hackett himself acknowledges that the profession is timeless and often of religious import. It is a distinguishable occupation with a unique identity and doctrine and has a distinct career structure and place of honor within society. The profession of arms is as exclusive and demanding a calling as medicine or the law, and as respected and honored as holy orders.

The author's study of the profession begins, logically, in Sparta, where the survival of the city-state wholly depended on the subordination of society to military efficacy. Hackett focuses on the rise of the Spartan military state to explore two distinct extremes of the profession of arms: one, the apex of the profession through unrelenting commitment to its principles, and the other, the failure of the profession when not balanced across the whole of society. The author's lesson was offered more than a quarter century ago, but the implications to our forces today are irrefutable: as we focus on the foundations of our own profession, is our connection to American society becoming increasingly distant?

The study of the evolution of the profession continues with an examination of the Roman legions under the reforms of Marius, which suggest the earliest foundations of a professional standing army. Under Marius, men enlisted for 20 years of paid service and the legion reorganized into battalion-size cohorts under a single standard. By Caesar's time, unique numbers identified the legions. In the ensuing years, Augustus added names to further distinguish legions, endowing them with an identity that had never previously existed.

In the eyes of the author, the emergence of the profession of arms as an institution unto itself occurred in the legions. The institutional quality of the Roman legion spurred a special brand of loyalty. Legionnaires swore allegiance to the Republic, and dedication to the profession came naturally. They were men-at-arms who endured tough, realistic training. Appointment as an officer offered a path to political advancement rivaled by no other profession in Roman society. But the eventual decline of the Roman system carried the legions down with it, and another 1,000 years would pass before anything resembling a legion would rise again.

The author credits Maurice of Nassau for reviving the spirit of the legions with the introduction of reforms at the beginning of the 17th century. Those reforms combined the contemporary firepower with infantry shock tactics in linear formations, "articulated into units of about battalion size." In a departure from the practice of the time, Gustavus Adolphus introduced new weapons into his strategy and successfully applied it in battle with a conscript national army. More reforms followed: junior leaders had more importance, stature, and initiative; the cavalry evolved into an arm of true shock action; drill and exercise became more common; and discipline and coherence became more important to these formations.

In the wake of Maurice's reforms, large standing armies became the norm across Europe, and in some ways gave rise to the modern nation state. At the beginning of the 17th century, Henry VI commanded an army of 15,000—3,000 of whom were Swiss mercenaries. By 1678, the French army numbered in excess of 280,000. Between those dates came the Thirty Years War (which spanned from 1618 to 1648), the Treaty of Westphalia (signed in 1648), and the evolution of the nation-state and the ascent of the professional army as the symbol of power for emerging nations.

Although Hackett's study on the profession of arms professes a uniquely Western perspective, it remains an essential resource for all scholars of the military art. As we emerge from a decade of war, leadership is at a premium, and we must regain the fundamentals of our profession. In *The Profession of Arms,* Hackett opens a window into our past, and offers a path to our future at a critical juncture in time.

He offers the wisdom of a highly decorated and knighted officer whose career spanned four decades in service to the British Army. Combat experience in the Levant, North Africa, and Western Europe during the Second World War shaped his perspective on the profession. His

eight books include *Warfare in the Ancient World* and *The Third World War*. His book, *I Was a Stranger*, recounts his experiences while commanding the British 4th Parachute Brigade in the assault on Arnhem during Operation Market Garden, where he was gravely wounded and nursed back to health by the Dutch underground. Following the war, Hackett continued his military service, eventually commanding the British Army of the Rhine and NATO's Northern Army Group.

A Commander of the Order of the British Empire and a Knight Grand Cross of the Order of the Bath, Hackett died in 1997 at the age of 86.
LTC Steve Leonard, USA, Fort Leavenworth, Kansas

MR Book Reviews

Featured Review
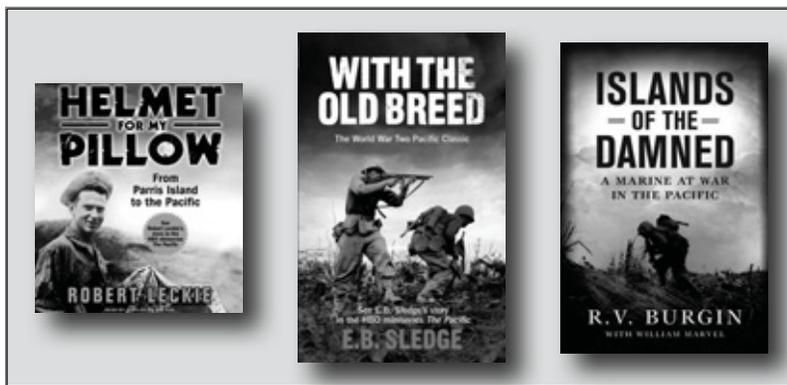
HELMET FOR MY PILLOW: From Parris Island to the Pacific, Robert Leckie, Bantam Books, New York, 2010, 305 pages, $16.00.
WITH THE OLD BREED: At Peleliu and Okinawa, E.B. Sledge, Presidio Press, New York, 2007, 352 pages, $16.00.
ISLANDS OF THE DAMNED: A Marine at War in the Pacific, R.V. Burgin, NAL, New York, 2010, 304 pages, $24.95.

War may be, as Oliver Wendell Holmes asserts, an "incommunicable experience," but this has not precluded soldiers from trying to communicate their experiences. War memoirs and stories date back to Thucydides, with Caesar's memoir being perhaps the most famous. Some generals write their memoirs for the simple reason that they need the money (as Grant did) or for political and nationalist purposes (as De Gaulle did). In contrast, soldiers' memoirs provide real insights into what fascinates readers most—"the incommunicable experience." This review compares and contrasts three important contributions to communicating the incommunicable. All

three will enrich the lives of those who read them.

The three books reviewed here, Robert Leckie's *Helmet for My Pillow*, E.B. Sledge's *With the Old Breed*, and R.V. Burgin's *Islands of the Damned* are powerful examples of soldiers' memoirs. The authors each served with the 1st Marine Division in World War II. Leckie tried to enlist in the Marine Corps the day after Pearl Harbor but was turned down because he was not circumcised (apparently a qualification back then). He duly had the procedure performed and enlisted on 5 January 1942. After his training, Leckie joined the 1st Marine Regiment as a machine gunner. He fought at Guadalcanal, New Britain, and Pelelieu, where he was wounded. Leckie spent the rest of the war in an Army hospital in West Virginia.

Sledge and Burgin served together in the 60-mm mortar section assigned to K Company, 3rd Battalion, 5th Marines. Burgin enlisted in November 1942 when the draft caught up with him. Burgin preceded Sledge in the 5th Marines and fought on New Britain, Pelelieu,

and Okinawa. Sledge enlisted in a Marine officers commissioning program in December 1942. He wanted to go into the military immediately, but his parents preferred he serve as an officer, so in the summer of 1943 Sledge reported to Georgia Tech where he attended college and trained to become a Marine officer. He became increasingly concerned that he would miss the war, so he and 90 others intentionally flunked out of Georgia Tech so they could "get on with becoming a Marine." When asked about his academic performance, Sledge told his academic review officer that he "hadn't joined the Marine Corps to sit out the war in college."

Sledge caught up with Burgin and K Company in time to fight at Pelelieu and Okinawa. After the war, Leckie went home wounded, and Burgin, who had accumulated sufficient service points to rate a discharge, returned home. Sledge did not have enough points for a discharge and served several months in China before returning home to Alabama in 1946.

The three authors share Oliver Wendell Holmes's "incommunicable experience of war." Each communicated to those who have not shared the experience of war a glimpse of what he had felt and witnessed. Together the memoirs express honor and dishonor, compassion and savagery, beauty and ugliness, and, most of all, service and dedication.

The three authors took different paths after the war: Leckie worked as a journalist and published *Helmet for My Pillow* in 1957, the first of

more than 30 works mostly about military history. Sledge earned a doctoral degree in microbiology and taught at the university level in Alabama. Burgin returned to Texas where he made a career with the U.S. Postal Service.

The three books are as different as the authors are, yet they relate many of the same experiences. Not surprisingly, Leckie's book is the most literary. Occasionally, he strives too hard to turn just the right phrase, but in *Helmet for My Pillow,* he succeeds. What results is a visceral account of everything from his boot camp haircut to his sense of shame that the wound he suffered on Okinawa was somehow inadequate compared to others' wounds. Leckie's descriptions reverberate with clarity but none more than when he describes his reaction to the atomic bomb. Young Leckie noted, "Suddenly, secretly, covertly—I rejoiced. For as I lay in that hospital, I had faced the bleak prospect of returning to the Pacific and the war and the law of averages." Leckie understood that the destruction on Hiroshima and Nagasaki guaranteed he would not die in an assault on Japan. Leckie is not the only veteran who celebrated the immolation of Hiroshima and Nagasaki, as well they might. It is only as the recollection of what preceded August 1945 that the Japanese have managed to become victims of the war.

Sledge published *With the Old Breed* in 1981, some 35 years after the war. Unlike Leckie, Sledge did not see himself as a writer. He originally intended his memoir as a personal recollection for his family. Although he started drafting his notes after Pelelieu, he had trouble finishing them. He says, "My Pacific war experiences have haunted me, and it has been a burden to retain this story. But time heals, and the nightmares no longer wake me in a cold sweat with pounding heart and racing pulse." The story that resulted from time and healing is compelling. What differentiates him from Leckie is that he is not concerned with artful telling. His descriptions of events are methodical and almost clinical but with his own compelling insight to how these things made him feel. At the end of the fighting on Okinawa, Sledge and his mates faced one more revolting task. As he put it, "If this were a novel about war, or if I were a dramatic storyteller, I would find a romantic way to end this account while looking at that fine sunset off the cliffs of the southern end of Okinawa." Instead, the last section of *With the Old Breed* describes burying dead Japanese soldiers and picking up any brass larger than .50 caliber.

Burgin, according to Sledge, was a skilled sergeant and a good man with mortars. Of Burgin, Sledge says, "He was as fine a sergeant as I ever saw." After the war, Burgin bought his first and only set of "blues" to wear when he received his Bronze Star, which a Marine recruiter in Dallas pinned on him with little ceremony. He set out to put the war behind him and raised a family with an Australian girl he had met in Melbourne in 1943. About the same time, Sledge came to grips with his memories and finished *With the Old Breed.* Burgin and a few others of the "Old Breed" got together at the 1st Marine Division reunion in Indianapolis in 1980. For Burgin, this and other reunions opened a flood of memories. He wanted to educate people about the war in the Pacific and its islands of the damned. His writing style is that of an old man, recalling long ago events brightly lit in his mind, but he does so with leavening of the years. He is less critical of his officers than either Sledge or Leckie and remained friends with one for life. Mostly, Burgin recalls what had happened in a matter of fact way, with the truly ugly parts given short shrift. In this vein, he concludes his story by noting that he has not forgotten the "pain and terror and sorrow of the wary." Instead, he chose to focus on the men with whom he served, who were "good Marines, the finest, every one of them. You can't say anything better about a man." Leckie and Sledge are more dependable for relating the dark side of the war. Each author has his place in aiding those who seek to understand what happened in the war in the Pacific.

COL Gregory Fontenot, USA, Retired, Lansing, Kansas

BEYOND GUNS AND STEEL: A War Termination Strategy, Dominic J. Caraccilo, Praeger Security International, Santa Barbara, CA, 219 pages, $49.95.

America's warriors have always tended to see war as something that is won or lost in battle, a perspective that General Douglas MacArthur famously summarized when declaring, "In war, there is no substitute for victory." In recent decades, even the U.S. failure to achieve the desired political ends of conflicts in countries like Vietnam, Lebanon, Somalia, and Bosnia has not substantially altered this viewpoint. It is only belatedly, amidst the long wars that followed our initial, sweeping defeats of the organized armies of Saddam Hussein and the Taliban, that today's generation of warriors is awakening to realize the sometimes-limited utility of purely "kinetic" victories. Indeed, as we are starting to understand, such victories can prove entirely hollow.

What matters more than vanquishing our enemies' armies is our setting the conditions for an enduring political solution that is compatible with our nation's objectives—in short, "winning the peace." As our wars in Iraq and Afghanistan drag on, understanding how we achieve this peace has increasingly become the subject of books, articles, and scholarly treatises.

Colonel Dominic Caraccilo's *Beyond Guns and Steel* is unquestionably the strongest recent entry in this field. That a book by Caraccilo should make a mark will surprise no one. A soldier can count on one hand the number of U.S. Army officers who possess his credentials as both a leader and a writer. In the 1990s, Caraccilo wrote a well-regarded memoir of his experiences as an 82nd Airborne Division company commander during the Persian Gulf War. More recently, he commanded a 101st Airborne Division brigade in Iraq and coauthored the much-lauded book, *Achieving Victory in*

Iraq. Caraccilo is a leader who not only knows what right looks like but also can convincingly articulate it.

The book begins with a superb survey of existing literature on the subject. As Caracillo rightly concludes, no single work covers all aspects of how to successfully terminate a war and achieve an enduring, favorable conflict resolution. *Beyond Guns and Steel* is Caracillo's attempt to correct this shortfall.

Caracillo's core idea is that, to win the peace, the United States must ensure its war plans are oriented from the start toward achieving the conditions necessary for a lasting peace and must sufficiently resource a whole-of-government approach toward achieving these conditions. He supports this idea with a plethora of historical examples. When doing so, he often points out that the U.S. agencies responsible for projecting the nation's "soft power" (most notably the Department of State and Agency for International Development) have a decisive role to play in successful conflict resolution, but they seldom receive the resources to perform this function well. Ultimately, Caracillo lays out a logical, feasible plan for using our nation's existing ways and means to achieve better outcomes from war.

There are, however, major problems with Caracillo's argument. Most deeply, he seldom strays from a mechanistic understanding of war and how to successfully conclude it. Barely touching upon the psychological and moral dimensions of war, he misses the impact that such nonphysical considerations as the just war tradition, cultural differences, and political and moral "legitimacy" have on any effort to achieve lasting conflict resolution. Instead, he seems to argue that a favorable outcome can come from any war if only the war is planned well, resourced adequately, and executed coherently across the whole of government. Closer to the truth may be that, while such considerations are indeed important conditions of a successful war termination strategy, they are not the only conditions this strategy must meet.

Despite this shortcoming, the strengths of *Beyond Guns and Steel* outweigh its weaknesses. Seldom contradicting current military doctrine, it is perhaps the first real attempt to flesh out current doctrine's scanty ideas on the subject and provide a rational, practical solution to how our government can successfully conclude wars. This book is one of the very best starting points for any serious student of the art of conflict resolution, and it deserves—and will no doubt receive—a place in the curricula of the U.S. military's senior service schools for years to come.
MAJ Douglas Pryer, USA, United Kingdom

SHADOWS OF WAR: A Social History of Silence in the Twentieth Century, Efrat Ben-Ze'ev, Ruth Ginio, and Jay Winter, Cambridge University Press, New York, 2010, 234 pages, $85.00.

In today's society, we are inundated with noise. We hear the music that assaults us on the streets, the commentaries from the TV, and the diatribes from Internet blogs. The thoughts of others constantly assault our ears and minds. This book seeks to pull away from the clamor that accompanies our day-to-day lives and focuses instead on quiet, the silence between words. Refreshingly, the book is all about silence.

The book is a collection of essays, and at first glance, the book appears to be a philosophical tome that meanders about a nebulous topic. However, as the reader delves into the book, it is clear the essays have a common goal—to explore the silence often associated with war. Silence here is defined not as soundlessness, but as *what we do not say* when we recount our experiences. What we leave out of our recollections, as well as the silence we use when we pay homage to those who have died, speaks volumes about how we feel and how we are affected by the world around us. The authors examine the cultural pressures that influence what we talk about, what we do not, and what happens when we are forced to break our silence.

Shadows of War has a special relevance to today's events. As service members return from Iraq and Afghanistan with the mental scars brought about by the horrors they have witnessed, we see more cases of post traumatic stress disorder. Veterans silently hide their pain. *Shadows of War* talks directly to how culture pressures veterans to bury emotions and suffer in solitude instead of vocalizing their pain.

That is not to say the book is without shortcomings and challenges. First, $85 is quite a high price to pay for a relatively thin book. In addition, the authors tend to drift in and out of heavy philosophical discussions that cause the average reader to rub his eyes and sigh in frustration and confusion. Overall, *Shadows of War* is worth reading, even if at the local library.
MAJ Matthew B. Holmes, Fort Leavenworth, Kansas

BETWEEN WAR AND PEACE: How America Ends Its Wars, Ed. Matthew Moten, Free Press, 2011, New York, 384 pages, $27.99.

Colonel Matthew Moten has assembled a dream team of military historians to examine war termination during key U.S. conflicts. Historian Roger Spiller begins the book with six propositions about the American way of ending war. The most interesting resembles plate tectonics and highlights how stress revises the original aims of presidents. Brian Linn's chapter on the McKinley era describes how a naïve plan to "fix" the Philippines morphed into a dirty fight against guerrillas, a too often ignored textbook example in counterinsurgency. Peter Maslowski and John Hall focus on U.S. military campaigns against Native Americans. Maslowski offers a comment made by a Chinese People's Liberation Army historian about the "300-year war against the Indians." Although the assembled American military historians did not accept this Chinese assertion, it may tellingly reflect the Chinese perspective on their on-going conflicts with the native inhabitants of their own country's western provinces. Hall

perceptively noted that American officers were profoundly dissatisfied with "a thankless, inglorious brand of war" and longed to return to restoring conventional capabilities. In Mexico, General Scott and others found the glory that had eluded them as they performed "unwanted constabulary work."

Prominent war critics such as Colonel Gian Gentile and Andrew Bacevich wrote some of the more modern studies. Gentile observes that Vietnam, as part of the containment doctrine, was "hubris run amok." Bacevich levels similar criticism at the Bush administration's attempt at hegemony in the Middle East. The Obama administration does not escape Bacevich's wrath either: it "clings stubbornly" to a strategy that makes termination of the long war difficult.

Moten acknowledges Brigadier General H.R. McMaster and the Army's TRADOC staff for doing yeoman work in this heavyweight project. This historical military exercise needs more analysis of the diplomatic, informational, and economic aspects of war termination, but it is an extremely well written work that we should use in our professional studies along with Gideon Rose's recent politically focused *How Wars End* and Brian Bond's *The Pursuit of Victory*.

James Cricks,
Fort Leavenworth, Kansas

AFGHANISTAN: A Cultural and Political History, Thomas Barfield, Princeton University Press, Princeton, NJ, 2010, 389 pages, $29.95.

At certain times, certain readers may consider certain books important; they may deem a select few as essential. Thomas Barfield's *Afghanistan: A Cultural and Political History* fits the latter category. Barfield has written an important and topical work of cultural interpretation. A professor of anthropology at Boston University, he is uniquely equipped to write such a book. He published significant scholarly studies based on

extensive ethnographic fieldwork in Afghanistan and Central Asia long before these areas were headlines in our newspapers. He also serves as director of the Institute for the Study of Muslim Societies and Civilization and as president of the American Institute for Afghanistan Studies.

Barfield interprets the complex ethnic and social mosaic that is Afghanistan for interested nonspecialist readers in a way that does not talk down or oversimplify the complexity of the issues. An anthropologist who is no historical structuralist, Barfield provides a concise but informative history of Afghanistan. He explains how it has shaped and continues to influence the ethos, culture, and mores of the various ethnic groups, and suggests that a common history may be a unifying force that can supersede sectarian divisions. Thus, while recognizing Afghanistan's complex ethnic and linguistic diversity, the author makes a good case for treating it as a coherent large-scale cultural unit.

Particularly revealing is the discussion of the British experience in both Afghanistan and in the Pashtun belt—the old Northwest Frontier of the British Raj, which now straddles Afghanistan and Pakistan. Despite Britain's failure to conquer Afghanistan, the author contrasts the relative effectiveness of British colonial administrators and the genuine concern many of them had for their charges to the wheeling and dealing of present-day officials, most of whom do not have a stake in their activities, are not held accountable for them, and do not understand the environment where they work.

Barfield offers a critique of U.S. and Western strategy in Afghanistan that will likely generate controversy, but strategists, planners, and those on missions in Afghanistan ignore them at their peril. Highly recommended.
LTC Prisco R. Hernández, Ph.D.,
USAR, Fort Leavenworth, Kansas

Understanding PTSD Among Veterans of Iraq and Afghanistan, Erin P. Finley, ILR Press, 2011, Ithaca, NY, 240 pages, $24.94.

Erin P. Finley creates a compelling account of how to understand post-traumatic stress disorder (PTSD) and how to help treat those who suffer from it. As a medical anthropologist and investigator at the Veterans Evidence-Based Research Dissemination and Implementation Center, Department of Veterans Affairs Medical Center, San Antonio, Texas, and adjunct assistant professor in the Division of Clinical Epidemiology, Department of Medicine, at the University of Texas Health Science Center, San Antonio, Finley relates experiences and expectations of seven hypothetical individuals to help in understanding "veterans' personal experiences of PTSD and the cultural politics that surround and shape those experiences." She mixes historical accounts of PTSD as a medical illness with the current understandings of its causes, signs, and evidence-based treatment.

One concern of the book is that the hypothetical veterans interviewed come primarily from those who joined the military after 9/11. We get the impression these veterans did not expect to experience combat. It might be interesting to know how much combat expectations factor into PTSD. Would experiences with PTSD differ for those who enlisted knowing and expecting a life of combat in an era of persistent conflict?

Finley relates how a veteran and his wife perceive different realities as the veteran experiences symptoms of PTSD: "Where he saw symptoms, she saw meanness." Likewise, the tension of differing perceptions of PTSD is found in military culture, e.g., in the U.S. Army, "Military training is intended to rebuild individuals into a 'group-based culture' . . . Loyalty. Duty. Respect. Selfless Service. Honesty. Integrity. Personal Courage . . . make up an ethical code, and one that is not taken lightly." Finley indicates that this translates into a "warrior culture" which creates barriers and confusion preventing some soldiers from obtaining the mental and emotional help they need for combat trauma.

Finley also includes brief discussions of gender issues and PTSD and anthropological questions regarding PTSD. Some of the author's findings contradict various accounts showing systematic problems in health care for veterans. However, Finley gives us hope and several well thought-out recommendations for preventing and minimizing combat PTSD.

Kevin M. Bond, Ph.D.,
Los Angeles, California

RADICAL ISLAM IN AMERICA: Salafism's Journey from Arabia to the West, Christopher Heffelfinger, Potomac Books Inc., Dulles, VA, 2011, 135 pages, $29.95.

Sounding less like a scholar then an FBI agent on his third cup of coffee, Chris Heffelfinger in *Radical Islam in America* compiles too many names and numbers while barely scratching the surface of the socio-psychological complexities of Salafi Islam, the initially apolitical Salafi movement started by Muhammad Ibn Abd Al-Wahhab in Saudi Arabia.

Salafism calls for traditionalism as set forth by 13th-century Islamic scholars, and it calls for Muslims to return to Ahl al-Sunna wal-Jama'a. However, unrest ranging from anti-Colonialism sentiments in the 1800s to anti-Western hegemony sentiments in the 1990s divided Salafism into various sects. Dogmatic, albeit initially benign, scholarly discussions gave way to violent social activism meant to establish Sharia laws.

The author repeats one point nearly verbatim in almost every chapter: Salafism transcended international boundaries, fueled by a vast ever-growing pool of mismanaged petrodollars and a new common Muslim identity. The author presents such information articulately, but this book repeats itself so much that it quickly reaches a point of diminishing returns.

In one example, the author states: "Among the hundreds of terrorism-related arrests since 9/11, a large number were young, socially alienated Muslims who were moved by the jihadist message but not directed by jihadist networks overseas. That phenomenon—and the ideology behind it—is what Western society and governments must fully understand in order to construct a viable policy to confront it . . . ." This acknowledgement of our shortcomings does not offer insights into possible solutions or the way forward.

Radical Islam in America deserves praise for its language and presentation of thoughts. Each chapter averages 10 to 15 pages but contains approximately 15 to 20 references to other scholarly works, a testament to the author's impressive research. The book is a must read if you are beginning on your journey to learn about Salafi jihadism, but I would not recommend it for other readers.

1LT Keith Nguyen,
Afghanistan

AFGHANISTAN: How the West Lost Its Way, Tim Bird and Alex Marshall, Yale University Press, New Haven, CT, 2011, 298 pages, $30.00.

Despite an encouraging start, operations in Afghanistan have been restrained by under-resourcing, over-optimistic reporting, unachievable goals, and oscillating strategic incoherence. *Afghanistan: How the West Lost Its Way* provides a timely, plainspoken and much needed exploration of why the international community has found it so difficult in Afghanistan. The book takes a broad regional view and discusses the realities of the precarious "AfPak theater" from the outset. It also addresses the realities and shortcomings of NATO's political-military approach, which, according to the authors, seems more focused on engineering a timely quasi-imperial withdrawal with the reputation of the Alliance at its heart than on a peace that captures the progress of the last decade. Likewise, the book posits that U.S. counterinsurgency doctrine may be floundering (and could well be flawed), highlights strategy shortcomings and vacillation, and uncovers the unique challenges of the Afghan political landscape.

The authors are correct to note that their findings are not an original contribution to the understanding of the country and its people. However, that is not their aim. Instead, *Afghanistan: How The West Lost Its Way* sheds much needed light on why the West's efforts have been so ineffective and fruitless. The authors uncover an incoherent, simplistic, and ideological strategy, ill suited to defeating the Taliban or harnessing the complexities of the Afghan landscape. Agreeably, they tackle such issues as the U.S. government's initial lack of interest in nation building, the shortcomings of the "light footprint" approach, and the realities of the heroin trade. Corrupt national and local power brokers also come in for scrutiny, and many disagreements among the Western powers involved in the current intervention come to light. The authors reveal that, without strategic clarity and coherence, the West has been unable to turn military dominance into strategic success. They note that, although others are also culpable, Washington must bear the lion's share of the blame for the current situation in Afghanistan.

I recommend this book for students studying the region. It pulls no punches. Challenging, thought provoking, and extremely well written, few will be disappointed. This is just the sort of text that military planners and policy makers must read and reread during their tenure of responsibility. It is also an ideal staff college book. Indeed, it is one of the best books I have read on Afghanistan in a long time, and it is almost impossible to put down.

Lt. Col. Andrew M. Roe, Ph.D.,
British Army, Weeton Barracks,
United Kingdom

AFTER EMPIRE: The Birth of a Multipolar World, Dilip Hiro, Nation Books, New York, 2010, 297 pages, $27.50.

In *After Empire: The Birth of a Multipolar World*, Dilip Hiro examines the world from the perspective of America losing its status as the sole super power. Hiro examines

the world from a historical, economic, and political perspective as he attempts to postulate on what the world will look like in the 21st century with America's role greatly diminished. He lists flashpoints where China, Russia, and the United States may collide as they compete for resources, perceive threats to their national interests, seek control of disputed territories, and pursue their economic interests. American readers may be critical of the author's assumptions and facts, but still find themselves riveted to his point of view and perspective.

The author is very critical of the Bush administration and considers the invasion of Iraq a strategic overreach that cost the United States credibility within the international community. He says, given its economic crisis and the fiscal meltdown, America will become so weak that it will no longer be able to function as the world's sole super power. Hiro is also critical of the Clinton administration's role in Bosnia and Russia and its circumvention of the UN in its actions against Serbia.

Hiro believes the United States will no longer exert the same economic and military control over the world that it has exercised since the fall of the Soviet Union and the end to the Cold War. From this perspective he then postulates on how the different governing and economic models of Iran, Russia, China, India, the EU, and Venezuela will exert themselves within their regions to both limit the power and influence of the United States and extend their power and influence in the their region. Hiro believes that international order will come about because of multiple poles of power cooperating and competing with one another, with no one power acting as a hegemonic power.

Ken Miller, Platte City, Missouri

ARSENAL OF DEMOCRACY: The Politics of National Security— From World War II to the War on Terrorism, Julian E. Zelizer, Basic Books, New York, 2010, 583 pages, $35.00.

As I write this review, Dennis Blair, the director of National Intelligence, is on a TV talk show lamenting the politicization of the war on terror. Are he and other proponents of a bipartisan foreign policy oblivious to the most famous of all Karl von Clausewitz aphorisms: "War is a mere continuation of politics by other means?" Apparently so.

The above phraseology is a misleading translation of "*Der Krieg ist eine bloße Fortsetzung der Politik mit anderen Mitteln* [War is just politics by other means.]" "Politik" here could mean politics or it could mean state policy because Clausewitz wrote in the heyday of 19th-century Imperial Germany, when the state was a dynastic overlord sharing no substantial power with a legislature. Clausewitz meant that war is a way by which government enacts and enforces its policy. He did not say that war is a means by which aspirants for office compete for the favor of the body politic.

Julian Zelizer, professor of history and public affairs at Princeton University, does not quote the frequently quoted but rarely read Clausewitz, but his survey of U.S. national security policy from Pearl Harbor to the present clearly comes down on the side of war as "politics,"—that is, war is an issue in partisan (electoral) politics, the same as taxes, unemployment statistics, and Supreme Court appointments.

Many people think foreign threats, at least in the past, unified our nation. Then they add that today cable news, the Internet, political action committee, and primaries are politicizing defense policy. Zelizer, however, shows that while the present period is particularly partisan, partisanship had been prevalent during the entire century.

Arsenal of Democracy is not about military tactics or operations. So, what can military service members gain from reading such a book? They can gain perspective and consolation that a republic, which survived the Civil War and the Great Depression, can survive the politicization of national defense policy,

because the politicization of national defense policy is as American as apple pie.

Michael D. Pearlman, Ph.D., Lawrence, Kansas

FORGOTTEN WARRIORS: The 1st Marine Provisional Brigade, the Corps Ethos, and the Korean War, T.X. Hammes, University Press of Kansas, Lawrence, 2010, 286 pages, $36.95.

This brief, well-written monograph separates legend from fact while explaining the 1st Marine Provisional Brigade's success in the Korean War. Hammes explores the provisional brigade in the context of larger events. He views unit conduct in battle as the result of doctrine, focused training, and professional military education. The bulk of his monograph concentrates on the Marine Corps' fight for existence and its efforts to demonstrate its relevance between 1945 and 1950.

The Marine Provisional Brigade existed from July to September 1950. The book provides a case study of how the Marine Corps weathered the early part of the Cold War. The book is divided into several parts: an outline of the Marine Corps' role in the struggle over armed forces unification, its culture, and postwar professional education efforts aimed at creating a combined arms team. The second part details its doctrine, organization, training, and leadership; and the third section covers the brigade's mobilization, embarkation, and its role in the Pusan Perimeter battles. Hammes concludes with an analysis of the brigade's success.

The brigade is enshrined in legend as a unit that was formed over the winter of 1949 to 1950 and led by battle-hardened veterans of the Pacific War. In fact, none of the histories of Marine Corps participation in the war deal with the problems of rapid demobilization, armed forces unification, nuclear weapons, rapidly decreasing budgets, and postwar personnel policies. Most credit the brigade's success to the intensive combat experience of its leaders,

its intensive training, unit cohesion, and the overall physical fitness of individual Marines. While myth is an important part of heritage, it obstructs an objective view of the brigade's conduct and obscures the ability of the Marine Corps as an institution to take advantage of a challenge.

Hammes agrees with the immediate afteraction analysis that attributed the brigade's success to the Corps' common education, doctrine, and training. This was part of Marine Corps culture, the ability to remember and learn from the past, learn from mistakes, and begin again when necessary. The Korean War reinforced other Marine ideas: the necessity of ground-air support controlled by ground commanders, remaining a force in readiness, and the idea that every Marine is a rifleman. Finally, the war reinforced the Marine Corps' institutional paranoia because despite stellar performances after the two world wars and Korea, there were still moves to abolish it. Institutionally the Marine Corps believes that its combat performance is no guarantee of protection in Washington's budget battles, and Hammes cites this institutional paranoia as a critical component of its organizational culture and identity.

This study emphasizes the role of culture as well as technology in preparing for unimagined challenges. He shows how values, doctrine, and training count more than combat experience and unit cohesion for a unit's success in battle. He has written an important case study of institutional adaptation, which should be examined and considered by the readers of this journal.
**Lewis Bernstein, Ph.D.,
Seoul, Korea**

ROI OTTLEY'S WORLD WAR II: The Lost Diary of an African-American Journalist, Ed. Mark A. Huddle, University Press of Kansas, Lawrence, 2011, 199 pages, $29.95.

This book is neither a biography of Roi Ottley nor a compilation of his World War II dispatches as one of the few African-American correspondents to glide seamlessly between the white Allied military power structure and black American troops.

No, this book presents a previously unpublished manuscript—a diary lost for years in the archives—of Ottley's 1944 journey with the Army through war-torn Europe while he was sending dispatches to the U.S. labor newspaper *PM* and other publications such as *Liberty Magazine* and the *Pittsburgh Courier*, whose readership was largely African-American.

The book's editor, Mark A. Huddle, of the history faculty at Georgia College and State University, faithfully transcribed the diary as it was originally typed. Huddle's introduction serves to frame an almost-forgotten career; annotations provide additional context.

Included also are 13 of Ottley's published dispatches (which occasionally demonstrate differences between his private musings and his professional output). Although Ottley never achieved even a fraction of the fame of Ernie Pyle, he may have provided the closest approximation of Pyle for the Negro soldier of World War II. "If you think you know the American experience of World War II, just try looking at the European Theater through the eyes of . . . Roi Ottley," observed James Tobin, the author of *Erne Pyle's War*.

Ottley does not bemoan the lot of the so-called U.S. Negro troops in World War II—in many ways just the facts prove shocking enough to present-day readers—but he explains the role into which they were relegated, and how they excelled in the face of such treatment.

Raised and schooled among the affluent upper class of prewar Harlem, Ottley had an unusual knack of getting people of all races and stations in life to speak frankly. The memoirs of his boyhood friend Adam Clayton Powell, Jr., are replete with descriptions of their amorous adventures with the various chorus girls of Harlem, where laughter was easy and loud.

Fourteen days after the Allied invasion of Normandy, Ottley left England on a ship filled to twice its normal capacity with combat-bound soldiers. "First come, first served," he reported in noting the fact that there were no "Jim Crow" rules aboard. Stepping ashore in Normandy, he saw a beachhead on which "nearly two out of every three American soldiers is a Negro." He was later to discover that "Negro battalions moved onto the beach-heads alongside the assault troops [because] the task of keeping an avalanche of food, ammunition, and troops moving steadily toward the front is mainly the job of Negro troops."

One of the underlying myths of World War II was that the U.S. Army pigeonholed African Americans into quartermaster duties and supply truck drivers with the "Red Ball Express." Ottley discussed this frankly with a black lieutenant assigned to the Red Ball Express who had received a commendation from General Dwight Eisenhower. The lieutenant told Ottley that blacks were not combat troops, "because the average white man still believes that the Negro is incapable of being made into a first-class soldier."

Ottley made it his particular mission to expose military off-duty clubs that followed Jim Crow rules. "The lash of prejudice was felt high and low," he wrote. "Brig. Gen. Benjamin O. Davis, highest ranking Negro in the U.S. Army, was refused service by a white private in the Officers Mess. Even Sgt. Joe Louis (the heavyweight boxing champion) was refused admission to a Shrewsbury Theater."

Nevertheless, Ottley confessed surprise "with the ease with which I've been able to move about, especially in Army circles. Negro reporters, by and large, have received the same treatment as white reporters . . . The principal resentments I have met have come, curiously enough, from the newsmen. Most of them regard a war correspondent's occupation as something approaching an exclusive fraternity."

Later he wrote from Paris, "What actually is taking place in Paris is of great bewilderment to the American troops. They do not know what to make of the complete freedom Negroes have in Paris—for that matter the complete lack of racial inhibitions by the French." (Almost universally, Ottley used the term "Negro" to describe himself and the subjects of his reporting.)

Following an interview with the Belgian colonial minister, in an almost-eerie peek into the future, Ottley alone among all the American correspondents foretold the chaos that would sweep through the Belgian Congo only a decade and a half later. Nor did he spare his own country. Much of Ottley's diary mixed hopefulness with words of warning about the mind-set for change of returning African-American service members.

The diary is, of course, filled with less earth-shaking, but no less interesting, footnotes to history. For example, Ernest Hemingway informed Ottley that the movie version of *For Whom the Bell Tolls* was "a lousy picture."

George Ridge, J.D.,
Tucson, Arizona

CRY HAVOC: How the Arms Race Drove the World to War, 1931-1941, Joseph Maiolo, Basic Books/Perseus Books Group, New York, 2010, 473 pages, $38.00.

The enormous demand for munitions during World War I caused production problems for all nations involved in the conflict. After the war, many professional soldiers and some politicians advocated a centrally directed economy, like that developed in the Soviet Union, as the only way to wage industrial warfare. The apparent failure of capitalism during the Great Depression only reinforced this argument.

Joseph Maiolo, a professor at Kings College, London, has chosen to examine this issue as a unifying theme for his book, *Cry Havoc,* whose lurid title and the early chapters, describing manipulative financiers such as Hjalmar Schacht

of Germany, bring to mind Upton Sinclair novels warning of manufacturers selling unwanted weapons. However, Maiolo's real concern is not the weapons themselves but *how* they were produced. The author argues that manufacturers and democratic politicians were on the political defensive because totalitarian command economies appeared to outperform pluralistic capitalist states. Certainly, the French and British waited until war was upon them to increase governmental control of their economies.

In fact, the totalitarian states, especially Germany, had competing bureaucratic groups that prevented effective economic organization. Moreover, with the exception of the United States, no state had both the raw materials and machine tools it needed for maximum production, forcing government compromises about production priorities and allocation of foreign currencies. As a result, the author contends, Mussolini was never able to fight an industrial war, while Hitler took increasing risks for fear that his opponents would catch up with him in production. Ultimately, only Franklin Roosevelt achieved the mass production of armaments on a sustained basis without destroying his economy. However, Maiolo reminds us, the same problem of balancing the civilian economy, defense needs, and private property recurred in the Cold War, when President Eisenhower feared the effects of excessive armaments, and similar expenditures hastened the demise of the Soviet Union.

This sophisticated discussion neglects other factors such as training, organization, and field logistics, but the author notes that Germany's weapons were neither quantitatively nor qualitatively superior to those of its opponents in 1940, and he argues that France hoped to win a prolonged war of attrition. However, Germany's primary advantage was that, in contrast to its 1939-1941 opponents, its Panzer divisions had existed long enough to learn how to operate together, but not so long that their vehicles were worn out.

Cry Havoc would benefit greatly from a conclusion that summarizes the author's arguments more clearly. Nonetheless, this is a notable contribution to our understanding of the economic problems of national strategy, and it deserves wide readership for that reason.

COL Jonathan M. House,
USA, Retired,
Fort Leavenworth, Kansas

THE BATTLE FOR WESTERN EUROPE, FALL 1944: An Operational Assessment, John A. Adams, Indiana University Press, Bloomington, 2010, 369 pages, $34.95.

John A. Adams' *The Battle for Western Europe, Fall 1944: An Operational Assessment* is a book about World War II's Western Front during the final year of the war that fuses a number of different topics into a logical narrative and provides a broad assessment of combat operations without being either redundant or simplistic. It does an excellent job evaluating the performance of the Allied operational leaders during the second half of 1944. Adams avoids the dangerous pitfalls of focusing exclusively on minute points of strategy or tactics or of over-emphasizing certain leaders and armies at the expense of others. What emerges is a superior work that is a useful contribution to contemporary scholarship on World War II.

The author's argument revolves around Eisenhower's often misinterpreted "broad front" strategy. Adams asserts that Eisenhower's strategy was sound but derailed by faulty execution, and addresses how key Allied subordinates supported or, in too many cases, failed to support their commander's intent in the autumn of 1944. Occasionally, Adams argues, Eisenhower himself even made decisions that contradicted his own strategic objectives. Adams assesses a significantly dysfunctional command group, emphasizing that individual agendas led to tangential operational efforts, faulty unit deployment, and poorly conceived attacks. In his final analysis, this disjointed unity of

command was the underlying cause of the Allies' failure to decisively crack German defenses before the end of the year.

Adams uses the first three chapters to delineate the parameters of his argument, focusing on the logistical concerns of combat at the Army level in Western Europe after the Normandy landings and the operational goals that Eisenhower established for his force. Here, the author establishes a foundation for the remainder of the book.

Adams' great achievement is including the necessary level of detail to support analysis of a broad spectrum of historical events without boring the reader. Scholars have already examined many of the topics Adams addresses, but they have seldom drawn them together in a coherent evaluation of operational challenges as Adams has. One minor critique of the book is the author's tendency to conflate analysis and hindsight, but this does not detract from the valuable contribution that Adams has provided.

**LTC Michael A. Boden,
Hempstead, New York**

A COMPANY OF HEROES: Personal Memories About the Real Band of Brothers and the Legacy They Left Us, Marcus Brotherton, Berkley Caliber, New York, 2010, 346 pages, $25.95.

As chronicled by Stephen Ambrose in his book, *Band of Brothers,* the men of Easy Company, 506 Parachute Infantry Regiment, 101st Airborne Division, experienced both drama and trauma during World War II. HBO immortalized them in the famous television miniseries of the same name, but what became of those men? How did they live their lives after their experiences in the crucible? What were they like before joining the parachute infantry, and how did their combat experiences change them?

Author Marcus Brotherton answers these questions and gives the reader insight into the personal histories of 26 members of Easy Company in his book, *A Company*

of Heroes. Brotherton interviewed the sons and daughters, nephews and nieces, brothers and sisters, and, in a few cases, the widows of selected veterans. The surviving relatives shared personal recollections and stories about growing up with their veteran relatives, providing insight into how those vets tried to live unaffected lives after being combat infantryman. The stories vary from marriage, career, and family stories to dark accounts of alcoholism, divorce, and disease, with death as the only release from suffering.

The book recounts the lives of five enlisted men, 12 noncommissioned officers, and three officers who either were original members of Easy Company during its formation at Camp Toccoa, Georgia, or were replacements that joined the unit later in Europe. Included in the book are accounts of six members who were killed during combat.

A Company of Heroes tells of the nightmares that disturbed the sleep of the Easy Company men, of their attempts at self-medication with alcohol to suppress the memories and the guilt of surviving, of the scars left on the bodies and in the minds of the soldiers and the constant pain of combat injuries through the remainder of their lives. While the book does not provide the action impetus for a violent video game or the drama for an HBO miniseries, it does serve as a useful guide to how ordinary men dealt with extraordinary circumstances. By examining the candid examples recounted in the book, we can identify and seek to heal what we now recognize as post-traumatic stress disorder in today's soldiers and survivors of extraordinary situations.

**LTC Kevin Lindsay, USA,
Fort Leavenworth, Kansas**

VETERANS OF FUTURE WARS: A Study in Student Activism, Donald W. Whisenhunt, Lexington Books, Lanham, MD, 2011, 155 pages, $60.00.

The Veterans of Future Wars was one of the most successful collegiate

jokes in American history. In March 1936 a handful of Princeton students organized the Veterans of Future Wars, a student club that demanded bonuses paid for possible combat service in the future. They argued that receiving bonuses was useless after a war, particularly to the dead. Most of the students, led by Lewis Gorin and Robert Barnes, were fiscal conservatives and were actually protesting bonuses given to men who enlisted in World War I but did not serve in combat.

After the Bonus March of 1932, veteran's bonuses were a contentious issue in American politics. In 1936, Congress began to issue an early bonus to World War I veterans. The Veterans of Future Wars sought to parody the Veterans of Foreign Wars and militarism in general. Though originally just a joke, the organization hit a nerve among the generally pacifist national student population. Within a few months, the Veterans of Future Wars was a national organization with over 500 chapters and 60,000 members.

The journey from a college joke to a national movement was a surprising and rapid one. Robert Barnes published an article in the *New York Times* in March and the Associated Press picked it up. The students received a flood of letters, phone calls, and even donations. *The March of Time*, a radio and newsreel program, featured the Veterans of Future Wars. In response to the publicity, the Veterans of Future Wars opened an office, wrote a manifesto, created buttons, and granted charters for virtually every applicant. The movement also inspired other organizations, like the Future Gold Star Mothers, the Future Profiteers, the Chaplains of Future Wars, and the Future War Propagandists. Chapters even organized mock burials of the Unknown Soldier of Future Wars. They were all intended to parody the excesses of World War I and are a reflection of antiwar feeling of the time.

As can be expected, this student activity highly offended the Veterans of Foreign Wars and other veterans' organizations, and they succeeded

in stopping it on some campuses. Ultimately, the "Future War craze" died out in the summer of 1936 at the end of the semester due to a lack of a comprehensive plan.

Whisenhunt writes an interesting and enjoyable book. It places college agitation and pranks into their proper settings of antiwar agitation and a dismal national economy. Today, we face a similar situation with the economy, unpopular wars, and a large veteran population, but today's soldiers have the support of the public, even if their overseas operations do not.

The book has 155 pages, but it seems that the author could have covered the subject adequately in an article or as a section of a broader book on student protests in the 1930s. Exploring this bizarre but illustrative moment in American history is clearly a labor of love for Whisenhunt.

John E. Fahey, Lafayette, Indiana

HERMAN GÖRING: Fighter Ace, The World War I Career of Germany's Most Infamous Airman, Peter Kilduff, Grubb Street Publishing, London, 2010, 170 pages, $30.00.

Thoroughly researched and well written, this work provides an in-depth look at Göring's contributions to the German aerial war effort from 1914 to 1918. Aerial combat attracted Göring because it offered him thrills, independence, and the opportunity for military prestige and personal advancement. His quest for personal fame had deep roots in a childhood filled with fantasies of chivalry and knighthood. When his family moved into several castles owned by his Jewish godfather, Göring was able to live out those fantasies to the fullest. Propelled by this combination of fantasy and ambition, Göring excelled in the Prussian cadet corps, graduating with honors. Soon after, he joined an infantry regiment, but by late 1914, had manipulated his way into the flying corps.

Göring quickly distinguished himself in his initial service as an observer. Not content with observer status, Göring completed pilot training and was soon involved in the aerial combat his ego-driven personality craved. By late 1915, Göring was a pilot known for his bravery, recklessness, and overarching ambition. In addition to claiming 22 aerial victories, Göring eventually commanded the fighter wing formerly led by Manfred von Richthofen, "the Red Baron." At the war's end, Göring led his fighter group in defiant surrender and then headed into Germany's bleak future, supported only by his own ambition and sense of self-importance.

While a psychological study of Göring is not the main purpose of the work, Kilduff does an excellent job introducing the issues behind Göring's legendary megalomania. Relying on psychological interviews conducted post-World War II, Kilduff posits that Göring demonstrates a classic case of narcissistic personality disorder. Recognizing this penchant for self-glorification, Kilduff thoroughly analyzes records of Göring's aerial exploits and demonstrates that many were either exaggerations or outright lies. He questions Göring's claim of scoring 22 victories, yet admits that record keeping was so inconsistent that few certain conclusions can be reached. Kilduff, however, presents a thoroughly documented case to the readers, allowing them to reach their own conclusions.

Kilduff includes several masterful appendices that detail the victories and casualties in the units associated with Göring. Each appendix gives information on locations, aircraft type, and the results of combat. He also illustrates every key point in the book with appropriate photos or drawings, making liberal use of Göring's extensive personal photograph collection.

Cutting away Nazi propaganda and Allied ridicule, Kilduff shows Göring as a complex and deeply flawed man whose ambition drove him to achieve military honor but whose hubris brought him only disgrace and shame. The book contributes to our understanding of World War I aviation and of the man who lived and, by committing suicide, ultimately even died, on his own terms.

1LT Jonathan E. Newell, USAR, Nashua, New Hampshire

SUN TZU AT GETTYSBURG: Ancient Military Wisdom in the Modern World, Bevin Alexander, W.W. Norton & Company, Inc., New York, 2011, 304 pages, $26.95.

The wisdom of Sun Tzu and *The Art of War* is frequently quoted in military readings throughout the Western world. In recent years, the maxims of the "Great Master" have made their way into the civilian sector, spawning numerous Sun Tzu books and blogs, some extremely well-done and of great utility, others poorly planned and prepared and with little to offer.

One recent addition to the genre in the well-done category is acclaimed military historian Bevin Alexander's *Sun Tzu at Gettysburg: Ancient Military Wisdom in the Modern World* in which the author dissects ten significant battles and campaigns in history and focuses on the principles of Sun Tzu. As he states in his introduction, "This current volume is designed to show that commanders who unwittingly used Sun Tzu's axioms in important campaigns over the past two centuries were successful, while commanders who did not . . . suffered defeat, sometimes disastrous, war-losing calamities."

Alexander makes outstanding use of his previous body of work where he previously discussed many of the battles and campaigns (1862 Civil War campaigns, Stalingrad, Liberation of France during World War II, and Inchon). This enables him to provide readers with a concise, yet thorough understanding of each battle and campaign and sets the conditions for him to analyze each as they relate to the maxims of Sun Tzu.

Many authors place Sun Tzu on an intellectual pedestal. They believe they are the only ones who can comprehend *The Art of War* and consequently overanalyze the work.

Alexander lauds the great utility of the maxims, but clearly puts them in the proper perspective. He states, "None of the Sun Tzu principles is difficult. Every one when carried out appears in retrospect to have been the most obvious thing to do. Success came by using intelligent, careful thought to solve a specific problem."

Alexander both criticizes and praises senior leaders for their decisions during the planning and execution of combat operations. Those who do not fare well include Napoleon in Waterloo, Lee at Gettysburg, Moltke in the Marne, and Eisenhower in the closing days of World War II. Alexander does bestow praise where he believes it is warranted. Much of this is for Stonewall Jackson and his Civil War decisions.

Sun Tzu at Gettysburg will unquestionably add to Alexander's sterling reputation. He has developed a take on Sun Tzu that other authors have not. It is a book readers will find readable, informative, and insightful. As Sun Tzu himself has said, "Opportunities multiply as they are seized." Bevin Alexander has certainly seized this opportunity.
Rick Baillergeon,
Fort Leavenworth, Kansas

THE MAYAGUEZ INCIDENT: Testing America's Resolve in the Post-Vietnam Era, Robert J. Mahoney, Texas Tech University Press, Lubbock, 2011, 336 pages, $39.95.

From 12 to 15 May 1975, the United States was involved in a hostage situation and rescue operation with a government with which it had no diplomatic relations. The *Mayaguez* crisis nearly resulted in the annihilation of part of the rescue force and tested the presidency of Gerald Ford in the wake of U.S. failures in Southeast Asia. The Ford administration believed it had to demonstrate U.S. resolve and strength to both allies and adversaries. Although some have forgotten the seizure of the SS *Mayaguez*, author Robert Mahoney demonstrates in *The Mayaguez Incident*

that the lessons learned from this crisis are as pertinent today as they were decades ago.

Mahoney convincingly argues that the historical record on the *Mayaguez* is incomplete and that the crisis was a landmark event in that it tested the 1973 War Powers Act, exposed weaknesses in the U.S. ability to plan and conduct Joint operations, and was one of the first occasions where a strategic leader could speak directly to commanders on the battlefield. The author states his work is a "small step toward expanding scholarly understanding of the *Mayaguez* crisis in the broader context of the Cold War and correcting its treatment as a footnote for those who fought and died for their country in the rescue operation." He succeeds brilliantly on both accounts.

The book adds much to our understanding of the events. It ties together, for the first time, the strategic, operational, and tactical events and puts them into the larger context. It clearly portrays the complexity of decision making and why problems in crisis planning and execution can easily occur. The author's research also provides new insight into the crisis. Although often assessed as an intelligence failure, Mahoney's analysis reveals that the intelligence community was not solely at fault. The author concludes the chain of command contributed to the operational difficulties. Mahoney proves there were sufficient intelligence estimates of the enemy strength on Koh Tang Island available prior to the operation, but the estimates were never passed along to the Marines.

Mahoney, dean of academics and deputy director at the Marine Corps War College, uses many primary sources, some recently declassified, to explore the decisions involving the *Mayaguez*. He states, "This work is the first that ties policy, strategy, and execution together while keeping the reader aware of the time pressures involved." The book is easy to read and the author provides clarity to simultaneous and confusing events. Mahoney does an excellent job explaining the events,

putting them into context, and analyzing why a certain decision was made. His analysis is clear, logical, and easy to understand. The book's chapters are well organized and easily tie together the different levels of the story. Mahoney's research and analysis will add much to the history of this crisis.

Overall, the book is an excellent study in decision making during a complex crisis. It portrays the challenges associated with the types of operations U.S. forces could execute in the future and the difficulties involved. I highly recommend *The Mayaguez Incident* to readers interested in national security, decision making, the Vietnam War, or counter-piracy operations.
LTC Robert Rielly, USA, Retired,
Fort Leavenworth, Kansas

HOMER LEA: American Soldier of Fortune, Lawrence M. Kaplan, The University Press of Kentucky, Lexington, 2010, 314 pages, $40.00.

Homer Lea: American Soldier of Fortune introduces General Homer Lea as "a five-foot three-inch hunchback" who became a world-renowned military leader, general officer, and geopolitical strategist during the great transition period in China from 1899-1912. The book's title promises a soldier of fortune biography potentially at the level of a Charles "Chinese" Gordon and the Ever Victorious Army (1863-1864) or Claire Chennault and the Flying Tigers (1941).

Unfortunately, the biography does not live up to expectations. Homer Lea turns out to be a manipulator and unabashed schemer, who through subterfuge, half-truths, and raw ambition, sells himself as a military genius and strategist to various groups of Chinese reformers and revolutionaries at the turn of the century. Lea's deformity barred him from serving in the U.S. military, but his love for military history and science, his gift for self-promotion, and the inaccuracies of the media allowed Lea to gain a Chinese general's commission, the ear of Dr. Sun Yat-Sen, and the command of a

small cadet army of Chinese émigrés in California. Even so, his impact on the history of China is marginal, and the Chinese revolutionary movement would have had the same outcome with or without his involvement. Lea published a geopolitically influential book, *Valor of Ignorance* (1909), that presciently warned of a U.S.-Japanese War, and in this way, he contributed to the geopolitical debate of his time.

Lawrence M. Kaplan, a U.S. Department of Defense historian, uses primary and secondary sources. His documentation is thorough, and he supplements the text with unique and supporting color plates from both family and personal collections. Yet, I could not help but wonder why Kaplan focused on this marginal American soldier of fortune when a number of others beg for a full-length biography.

Considering the book's price of $40 and the limited relevance and impact of Homer Lea to history, readers interested in American soldiers of fortune might do better by purchasing Caleb Carr's *Devil Soldier*, a portrait of Fredrick Townsend Ward, an obscure American mercenary who rose to prominence during China's bloody Taiping rebellion. For those who really enjoy learning about obscure "niche" players in history, *Homer Lea* could be an interesting read.

MAJ Kevin D. Stringer, Ph.D., USAR, Zurich, Switzerland

MARITIME DOMINION AND THE TRIUMPH OF THE FREE WORLD: Naval Campaigns that Shaped the Modern World 1852-2001, Peter Padfield, The Overlook Press, New York, 2009, 369 pages, $30.00.

Readers who normally avoid naval histories should not do so because of this book's title. There is much more going on here than maritime nations gaining dominion over the modern world using their fleets.

Padfield's thesis is simple but sobering—maritime trading empires governed by consent of the governed triumph every time; however, their ability to provide peace, prosperity, and a way ahead for other nations is perhaps coming to an end. He states the matter most eloquently in the book's opening sentences: "We spoiled children of the Enlightenment are heading for a shock of scarcely imaginable proportions . . . the squeeze between an inexorably increasing world population and the demand for economic growth to support stable societies in the West and to lift the poorest from poverty in the developing giants, India and China particularly."

Padfield reviews the tension between "maritime" and "territorial" powers, showing how governance and trade conferred to the maritime powers significant advantages that enabled them to prevail. This is pure Mahan, whereas the opening lines quoted earlier recall Niall Ferguson's darker musings on globalism in books like *The War of the World* (2006). Padfield's tension between civilizations (Toynbee), between land and sea, is explicitly referenced in an H.A.L. Fisher quotation at the book's end, after the ultimate triumph of the United States following the end of the Cold War: "We are distinguished from the other great civilizations of the human family, from the Chinese, the Hindus, the Persians, and the Semites." He concludes on a somber note, saying that if there is any hope to solve the world's intractable problems, then it will only come from "a free people which can think itself out of this perilous paradox, not the demos [people], but the few geniuses nourished in freedom and empowered by free institutions." His final assessment is not optimistic, despite this hopeful language.

In between, there is much fascinating history based on some of the latest maritime and naval scholarship. This third volume picks up in the mid-19th century in the midst of *Pax Britannica* and then follows the course of history as Great Britain begins to deal with emerging rival continental powers until displaced, gradually at first, after World War I by her ideological offspring in the United States, a self-sustaining continental island with a huge industrial economy. He does occasionally veer off course into what some esoteric topics (dreadnought fire control for example). However, he always returns to the master narrative. Given the broad scope of the book, mistakes, both in the facts as well as in interpretation, are to be expected. These are surprisingly few—Padfield's volume here keeps pace with most of the extant and recent scholarship (some of it his own).

On the other hand, his treatment of the Japanese after the Russo-Japanese War seems unaware of substantial recent scholarship by Sadao Asada and Ed Drea. He gives the reader the impression of a diabolical Hirohito on par with Hitler, driving the nation to world conquest. However, since the themes here are rather minor compared to the actual behavior (motivation versus actual actions), they do not detract from the larger analysis that points an accusing finger more at Japan than her adversaries in the war that began in 1937 against China and finally included most of East Asia by 1942. The book occasionally lapses into environmental sermonizing, but the fundamental point that there are only limited global resources is spot on.

I highly recommend these volumes. Readers do not need the context of the two earlier volumes, though, since Padfield provides all the context and information a reader needs to both enjoy and reflect on these important themes. This third volume, because of its relevance to the real and pressing problems of today, is highly recommended for as broad and as educated a reading audience as possible.

John T. Kuehn, Ph.D., Fort Leavenworth, Kansas
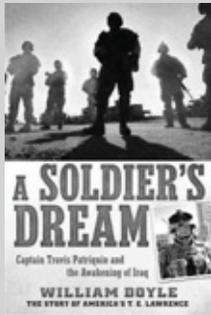
A SOLDIER'S DREAM: Captain Travis Patriquin and the Awakening of Iraq, William Doyle, NAL Caliber, New York, 2011, 336 pages, $25.95.

Travis Patriquin, a young Special Forces officer, had already won a Bronze Star in Afghanistan before being transferred to Iraq. An Arabic linguist, Patriquin set out to establish a crucial network with tribal leaders built on mutual trust and respect.

In 2006, Patriquin unleashed a diplomatic and cultural charm offensive upon the Sunni Arab sheiks of Anbar province, the heart of darkness of the Iraqi insurgency. He galvanized American support for the Sunni Awakening, the tribal revolt against Al Qaeda that spread through Anbar and eventually across the country—a turning point which led to dramatically lower levels of violence starting in mid-2007.

Before his tragic death from an IED explosion, Travis Patriquin was so beloved by Iraqis that they adopted him into their tribes and loved him as a brother. *A Soldier's Dream* is a tribute to a man who loved Iraq—and a devoted soldier who made a crucial impact on the Iraq War.
From the Publisher.

PEARL HARBOR CHRISTMAS: A World at War, December 1941, Stanley Weintraub, Da Capo Press, Cambridge, MA, 2011, 224 pages, $24.00.

Christmas 1941 came little more than two weeks after the attack on Pearl Harbor. The shock—in some cases overseas, elation—was worldwide. While Americans attempted to go about celebrating as usual, the reality of the just-declared war was on everybody's mind. United States troops on Wake Island were battling a Japanese landing force and, in the Philippines, losing the fight to save Luzon. In Japan, the Pearl Harbor strike force returned to Hiroshima Bay and toasted its sweeping success. Across the Atlantic, much of Europe was frozen in grim Nazi occupation. Just three days before Christmas, Churchill surprised Roosevelt with an unprecedented trip to Washington, where they jointly lit the White House Christmas tree. As the two Allied leaders met to map out a winning wartime strategy, the most remarkable Christmas of the century played out across the globe. *Pearl Harbor Christmas* is a deeply moving and inspiring story about what it was like to live through a holiday season few would ever forget.
From the Publisher.
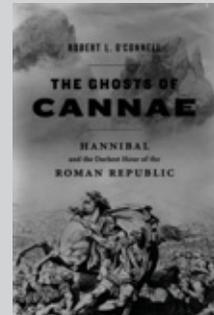
THE GHOSTS OF CANNAE: Hannibal and the Darkest Hour of the Roman Republic, Robert L. O'Connell, Random House Trade Paperbacks, New York, 336 pages, $17.00.

For millennia, Carthage's triumph over Rome at Cannae in 216 B.C. has inspired reverence and awe. No general since has matched Hannibal's most unexpected, innovative, and brutal military victory. Now Robert L. O'Connell, one of the most admired names in military history, tells the whole story of Cannae for the first time, giving us a stirring account of this apocalyptic battle, its causes and consequences. O'Connell brilliantly conveys how Rome amassed a giant army to punish Carthage's masterful commander, how Hannibal outwitted enemies that outnumbered him, and how this disastrous pivot point in Rome's history ultimately led to the republic's resurgence and the creation of its empire. Piecing together decayed shreds of ancient reportage, the author paints powerful portraits of the leading players, from Hannibal—resolutely sane and uncannily strategic—to Scipio Africanus, the self-promoting Roman military tribune. Finally, O'Connell reveals how Cannae's legend has inspired and haunted military leaders ever since, and the lessons it teaches for our own wars.
From the Publisher.

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Comprehensive Soldier Fitness

Colonel Arthur D. Simons Center for the Study of Interagency Cooperation

Interagency Writing Competition

The Colonel Arthur D. Simons Center for the Study of Interagency Cooperation is sponsoring a nation-wide Interagency Writing Competition, which is open to the public. We see this as an excellent opportunity for many to share their experiences, insights, and thinking about interagency cooperation, coordination, and collaboration at the tactical and operational level of effort.

TOPICS

Participants are encouraged to submit papers focused on one of two special topics:

- The interagency role in preventing conflict when dealing with failing or failed states; or

- The validity of the "whole-of-government" approach in dealing with the full range of homeland and national security threats.

First place winners will receive a certificate, engraved plaque, and a $2,000 cash award, along with publication in one of the Simons Center's publications. Second and third place winners will receive $1,000 and $500 cash awards respectively.

SUBMISSIONS

Manuscripts can be submitted through the Simons Center website at www.TheSimonsCenter.org/competition or emailed to editor@TheSimonsCenter.org with the subject line "Interagency Writing Competition." Deadline for submitting papers is **Friday, 16 March 2012.**

U.S. Army War College
STRATEGIC LANDPOWER
Essay Contest 2012

The United States Army War College and the United States Army War College Foundation are pleased to announce the annual **STRATEGIC LANDPOWER** Essay Contest.

The topic of the essay must relate to the strategic use of landpower. Specific topics of interest, for this year's contest are:

The Future of Landpower
Strategic Role of Landpower
The Army's Role in National Security

Anyone is eligible to enter and win except those involved in the judging. The Army War College Foundation will award a prize of $4000 to the author of the best essay and a prize of $1000 to the second place winner.

For more information contact:
Dr. Michael R. Matheny
U.S. Army War College, Department of Military Strategy, Planning and Operations
(717) 245-3459, DSN 242-3459, michael.matheny@us.army.mil

STRATEGIC LANDPOWER Essay Contest Rules:

1. Essays must be original, not to exceed 5000 words, and must not have been previously published. An exact word count must appear on the title page.

2. All entries should be directed to: **Dr. Michael R. Matheny, USAWC Strategic Landpower Essay Contest, U.S. Army War College, Department of Military Strategy, Planning and Operations, 122 Forbes Avenue, Carlisle, PA 17013-5242.**

3. **Essays must be postmarked on or before 17 February 2012.**

4. The name of the author shall not appear on the essay. Each author will assign a codename in addition to a title to the essay. This codename shall appear: (a) on the title page of the essay, with the title in lieu of the author's name, and (b) by itself on the outside of an accompanying sealed envelope. This sealed envelope should contain a typed sheet giving the name, rank/title, branch of service (if applicable), biographical sketch, address, and office and home phone numbers (if available) of the essayist, along with the title of the essay and the codename. This envelope will not be opened until after the final selections are made and the identity of the essayist will not be known by the selection committee.

5. All essays must be typewritten, double-spaced, on paper approximately 8½"x11". Submit two complete copies.

6. The award winners will be notified in early Spring 2012. Letters notifying all other entrants will be mailed by 1 April 2012.

7. The author of the best essay will receive $4000 from the U.S. Army War College Foundation. A separate prize of $1000 will be awarded to the author of the second best essay.

The Burial of Sir John Moore After Corunna

by Charles Wolfe (1791-1823)

Not a drum was heard, not a funeral note,
As his corse to the rampart we hurried;
Not a soldier discharged his farewell shot
O'er the grave where our hero we buried.

We buried him darkly at dead of night,
The sods with our bayonets turning,
By the struggling moonbeam's misty light
And the lanthorn dimly burning.

No useless coffin enclosed his breast,
Not in sheet or in shroud we wound him;
But he lay like a warrior taking his rest
With his martial cloak around him.

Few and short were the prayers we said,
And we spoke not a word of sorrow;
But we steadfastly gazed on the face that was dead,
And we bitterly thought of the morrow.

We thought, as we hollow'd his narrow bed
And smooth'd down his lonely pillow,
That the foe and the stranger would tread o'er his head,
And we far away on the billow!

Lightly they'll talk of the spirit that's gone,
And o'er his cold ashes upbraid him—
But little he'll reck, if they let him sleep on
In the grave where a Briton has laid him.

But half of our heavy task was done
When the clock struck the hour for retiring;
And we heard the distant and random gun
That the foe was sullenly firing.

Slowly and sadly we laid him down,
From the field of his fame fresh and gory;
We carved not a line, and we raised not a stone,
But we left him alone with his glory.

Sir John Moore died at the Battle of Corunne, Spain, 16 January 1809.
Sir John Moore by Sir Thomas Lawrence, d. 1830 National Portrait Gallery London 1898.

SGT DAKOTA MEYER
Medal of Honor

While serving with Marine Embedded Training Team 2-8 in Kunar Province, Afghanistan, on 8 September 2009, Corporal Dakota L. Meyer and his patrol were ambushed by more than 50 enemy fighters firing rocket propelled grenades, mortars, and machine guns. Corporal Meyer manned the machine gun in an armored HMMWV as he and a fellow Marine made a daring attempt to disrupt the enemy attack and locate a trapped U.S. team.

Disregarding intense enemy fire concentrated on their lone vehicle, Corporal Meyer killed a number of enemy fighters, some at near point blank range, as he and his driver made repeated trips into the ambush area. They evacuated two dozen Afghan soldiers, many of whom were wounded. Despite shrapnel wounds to his arm, he made more trips into the ambush area to rescue more wounded Afghan soldiers and search for the missing U.S. servicemen. Still under heavy enemy fire, he moved on foot to recover the bodies of his fallen team members.

Corporal Meyer's daring initiative and bold fighting spirit throughout the 6-hour battle significantly disrupted the enemy's attack and inspired the members of the combined force to fight on. His unwavering courage and steadfast devotion to his U.S. and Afghan comrades in the face of almost certain death reflected great credit upon himself and upheld the highest traditions of the Marine Corps and the United States Naval Service.