# ARMOR

## Mounted Maneuver Journal
### November-December 2011

**Reconnaissance
Mission Command**

# ARMOR

*The Professional Bulletin of the Armor Branch, Headquarters, Department of the Army, PB 17-11-6*

## Features

## Departments

By Order of the Secretary of the Army:

Official:

JOYCE E. MORROW
*Administrative Assistant to the Secretary of the Army*
**1125201**

RAYMOND T. ODIERNO
*General, United States Army*
*Chief of Staff*

**November-December 2011, Vol. CXX, No.6**

# Armor School Points of Contact

**ARTICLE SUBMISSIONS:** Articles can be submitted as email attachments to *benn.armormagazine@conus.army.mil.* Articles can also be submitted on CD with a double-spaced hard copy. Mail to U.S. Army Armor School, ATTN: *ARMOR*, Building 9230, Room 104, 8150 Marne Road, Fort Benning, GA 31905. For all submissions, please include a complete mailing address and daytime phone number.

**SUBMISSION POLICY NOTE:** Due to the limited space per issue, we will not print articles that have been submitted to, and accepted for publication by, other Army professional bulletins. Please submit your article to only one Army professional bulletin at a time.

**GRAPHICS AND PHOTOS:** We will accept conventional photo prints or electronic graphic and photo files in no less than 300 dpi TIF or JPG format. (Please do not send photos embedded in PowerPoint and Word.) If you use PowerPoint for illustrations, please try to avoid the use of excessive color and shading. If you have any questions concerning electronic art or photo submissions, contact Erin Wold.

**UNIT DISTRIBUTION:** To report unit free distribution delivery problems or changes of unit address, email *benn.armormagazine @conus.army.mil;* phone DSN 835-2350 or commercial (706) 545-2350. Requests to be added to the official distribution list should be in the form of a letter or email to the Editor in Chief.

**SUBSCRIPTIONS:** Subscriptions to *ARMOR* are available through the Government Printing Office Bookstore for $27 per year. To subscribe, call toll free (866) 512-1800, visit the GPO Website at *bookstore.gpo.gov,* mail the subscription form in this issue, or fax (202) 512-2104.

**EDITORIAL MAILING ADDRESS:** U.S. Army Armor School, ATTN: *ARMOR*, Building 9230, Room 104, 8150 Marne Road, Fort Benning, GA 31905.

**REPRINTS:** *ARMOR* is published by authority of the Chief of Staff, U.S. Army. Material may be reprinted, provided credit is given to *ARMOR* and to the author, except where copyright is indicated. Request all organizations not affiliated with the Department of the Army contact *ARMOR* for reproduction/reprinting permission. Inquiries may be directed to Editor in Chief, ATTN: *ARMOR*, Building 9230, Room 104, 8150 Marne Road, Fort Benning, GA 31905.

**ARMOR MAGAZINE ON-LINE:** Visit the *ARMOR* magazine Website at *www.benning.army.mil/armor/ArmorMagazine/.*

**ARMOR HOTLINE** — (706) 626-TANK (8265)/DSN 620: The Armor Hotline is a 24-hour service to provide assistance with questions concerning doctrine, training, organizations and equipment of the armor force.

## *ARMOR* Editorial Offices

**Editor in Chief**
Lisa Alley                                   (706) 545-9503
Email: lisa.alley@us.army.mil                      DSN 835

**Editor**
Erin Wold                                    (706) 545-8701
Email: erin.wold@us.army.mil                       DSN 835

**Art Director**
Jody Harmon                                  (706) 545-5754
Email: jody.harmon@us.army.mil                     DSN 835

**Editorial Assistant**
Jenny Forte                                  (706) 545-2698
Email: jenny.forte@us.army.mil                     DSN 835

## U.S. Army Armor School

**Commandant**                                     (ATZK-DF)
BG Thomas S. James Jr.                       (706) 545-2029
Email: thomas.james@us.army.mil                    DSN 835

**Deputy Commandant**                              (ATZK-DF)
COL Michael P. Wadsworth                     (706) 545-3815
Email: michael.wadsworth@us.army.mil              DSN: 835

**Armor School Command Sergeant Major**           (ATZK-CSM)
CSM Ricky Young                              (706) 545-2029
Email: ricky.young@us.army.mil                     DSN 835

**192ⁿᵈ Infantry Brigade**                         (ATSH-BC)
COL Ronald P. Clark                          (706) 544-8623
Email: ronald.p.clark@us.army.mil                  DSN 784

**194ᵗʰ Armored Brigade**                          (ATZK-BAZ)
COL Kevin S. MacWatters                      (706) 626-5989
Email: kevin.macwatters@us.army.mil                DSN 620

**316ᵗʰ Cavalry Brigade**                          (ATZK-SBZ)
COL Marshall K. Dougherty                    (706) 626-8105
Email: marshall.dougherty@us.army.mil              DSN 620

**TRADOC Capability Manager for Heavy Brigade Combat Team**
COL Gary R. Nicoson                             (ATZB-CIH)
Email: gary-nicoson@us.army.mil              (706) 545-4461
                                                   DSN 835

**TRADOC Capability Manager, Brigade Combat Team**
**Mission Command**                            (ATZK-PBC-CID)
COL Dwayne Carman                            (502) 624-4009
Email: dwayne.carman@us.army.mil                   DSN 464

**TRADOC Capability Manager, Battlefield Surveillance Brigade**
LTC Ed House                                 (706) 545-2078
Email: claude.house@us.army.mil                    DSN 835

**Office, Chief of Armor**                         (ATZK-AR)
George DeSario                               (706) 545-1352
Email: george.desario@us.army.mil                  DSN 835

# *LETTERS*

Dear *ARMOR*,

My compliments to CPT Michael S. Ibrahim for his interesting description and analysis of German panzer-force operations against France in 1940. ("Anatomy of Blitzkrieg – What We've Learned About the Combined-Arms Battlefield," *ARMOR*, July-August 2011 issue.) However, I wish to correct a few mistakes or oversights.

While German battlefield leadership was clearly superior to that of the French, CPT Ibrahim completely overlooked the German superiority in signals communications at the tactical level. The success of "mission-type" orders was highly dependent on this technical advantage.

The Luftwaffe definitely supported ground operations, but close-air support as we know it today was not practiced. Due to the organizational and technical limitations of the time, the Luftwaffe delivered preplanned attacks, though this could include area suppression and interdiction such as strafing against road-bound traffic.

Regarding the panzer-brigade structure, the panzer division's organization was in flux due to lessons-learned from the 1939 Polish campaign and shortages of available equipment. According to GEN Heinz Guderian's *Panzer Leader*, Appendix III:

- Panzer Divisions 1 through 5 and 10 each had a panzer brigade of two regiments (as described in the article).
- Panzer Division 9 had only one panzer regiment of two battalions.
- Panzer Divisions 6, 7 and 8 each had only one panzer regiment of three battalions of Czech equipment.

CPT Ibrahim erroneously determined that light tanks were preferred. In fact, the Mark I (only machinegun-armed) was intended as a training vehicle and even the 20mm-armed Mark II was determined to be inadequate in the 1939 Polish campaign. Both were employed simply because there were insufficient Mark III (37mm) and Mark IV (75mm) medium tanks to replace them.

CPT Ibrahim grouped the Czech PZ 35 and PZ 38 tanks with the German Mark II as "light tanks." By weight alone, this may be true, but in fact, the Czech tanks with their 37mm guns were employed in lieu of equally armed Mark III medium tanks. (The Mark III upgunned to 50mm was not available for the French campaign.)

Regarding Hitler's order after the campaign to reduce panzer divisions from a panzer brigade to a panzer regiment, this was not due to the need for more infantry (although that was a valid shortcoming) but rather due to the shortage of tanks despite the order to double the number of panzer divisions in anticipation of future operations.

Under [the subheading] "Infantry-support tactics," CPT Ibrahim repeats the myth of the supposed employment of the "dreaded 88mm anti-tank/anti-aircraft gun" in the assault. During this campaign, the 88mm was intended strictly for anti-aircraft protection. When Rommel's 7th Panzer Division encountered aggressively attacking superior Allied armor, he desperately pushed his 88mm guns into a defensive role and it worked, especially due to the poor operational flexibility of the Allies, already mentioned. Though successful, this expedient had adverse consequences not appreciated until later in the war. The 88mm was not dual-purpose but rather either-or. Once gun shields were added, the anti-aircraft sights were useless and removed. In the subsequent North African campaign, the 88mm continued to be very lethal against British armor, but Afrika Korp's air-defense capability dropped proportionately. When later faced by the equivalent and then superior Royal Air Force and U.S. Army Air Forces aircraft, Afrika Korp seriously suffered.

Finally, while it is obviously true that the American military studied the German campaigns and made changes accordingly, it is incorrect to conclude that "[p]erhaps most importantly, the panzer division's style of battlefield leadership laid the foundation for our own leadership practices." In fact, our own doctrine evolved concurrently and in parallel with German, Russian, British, French and others' doctrine. Prewar interchange was open and frequent – for example, German general officers visited the 7th Mechanized Brigade at Fort Knox, KY. Once World War II began, we certainly adjusted based on lessons-learned, but we certainly did not assume or copy German leadership practices, many of which simply would not work in our society.

Forge the Thunderbolt!

CHESTER A. KOJRO
LTC, U.S. Army (retired)

*BG Thomas S. James Jr.*
*Commandant*
*U.S. Army Armor School*

# Mission Command and the Mounted Leader

Mission command, the art of command driving the science of control, is an evolving term magnified by our experiences in Iraq and Afghanistan. Our operations over the last 10 years illustrates that we cannot accurately predict the nature, location or duration of the next conflict. The operational environment continues to evolve as we face hybrid threats in the future defined by regular and irregular forces fighting to achieve mutually supporting objectives. Leaders cannot become overly dependent on technology or incapable of acting independently under conditions of ambiguity. Here in the Armor School we are developing leaders equipped with the skills to apply mission command under conditions of uncertainty and complexity in the dynamic and decentralized future operating environment.

The most recent change to FM 3-0, *Operations*, dated Feb. 22, 2011, emphasizes initiative and responsibility at lower levels of command – implicit recognition of the requirement for decentralized authority that enables subordinates to develop the situation through action, consistent with their commander's intent. The complex demands placed on today's leaders have expanded dramatically, often operating in full-spectrum conflict among populations. The need to empower leaders with skills, knowledge, resources and freedom of action is critical to our future success. Mission command emphasizes the expanded role of bold and imaginative leaders; the importance of initiative; decentralized operations; and communications to build situational understanding.

The concept of mission command is not new to the mounted force or to mounted leaders. During the interwar years (1918-1939), mounted leaders played a significant role in the early development of mission command. The creation of the 7th Cavalry Brigade (Mechanized) in 1933 presented the Army with a unique organization, based entirely on vehicles rather than horses. Intended to perform the full range of cavalry missions (reconnaissance, security, economy of force, offense, defense, pursuit, exploitation and raid), it required an unparalleled degree of command flexibility and organizational adaptation to achieve the high operational tempo desired. Horse-cavalry doctrine mandated dispersion in small groups over a broad frontage to offset the growing lethality of the evolving battlefield. Applied to the mechanized cavalry, this principle led to the employment of the brigade as a collection of combat teams maneuvering independently in support of common objective. The challenge for leaders of this period was how to coordinate the actions of these teams without reducing forward momentum.

Mechanized-cavalry leaders relied upon analysis, maneuver trials and field exercises to determine the most effective command-and-control process. They recognized that the radio was the fastest means of sharing information and discarded mandatory encryption procedures in favor of short, cryptic messages sent in the clear. To ensure recipients had the proper context for these messages, all team commanders were briefed on their roles and the objectives of their parent unit before operations began. Armed with these instructions, commanders executed their assigned missions, modifying operations based on enemy actions and the short, cryptic messages they received. Using this technique, the 7th Cavalry Brigade (Mechanized) was able to coordinate the fast-paced, independent operations of subordinate teams toward a common objective and still allow team commanders the latitude to execute their specific missions in the manner they chose.

Through trial and error, the leadership of the interwar mechanized cavalry pioneered and evolved mission-type orders, decentralized execution of operations and the exercise of initiative within the commander's intent. The exer-

cise of mission command in the fledgling mounted force was revolutionary in the 1930s U.S. Army. Perhaps more importantly, it became the foundation of combat-command structure later adopted by U.S. armored divisions in World War II and the modular brigade combat team organizations that take the fight to the enemy in today's complex and ambiguous operating environment.
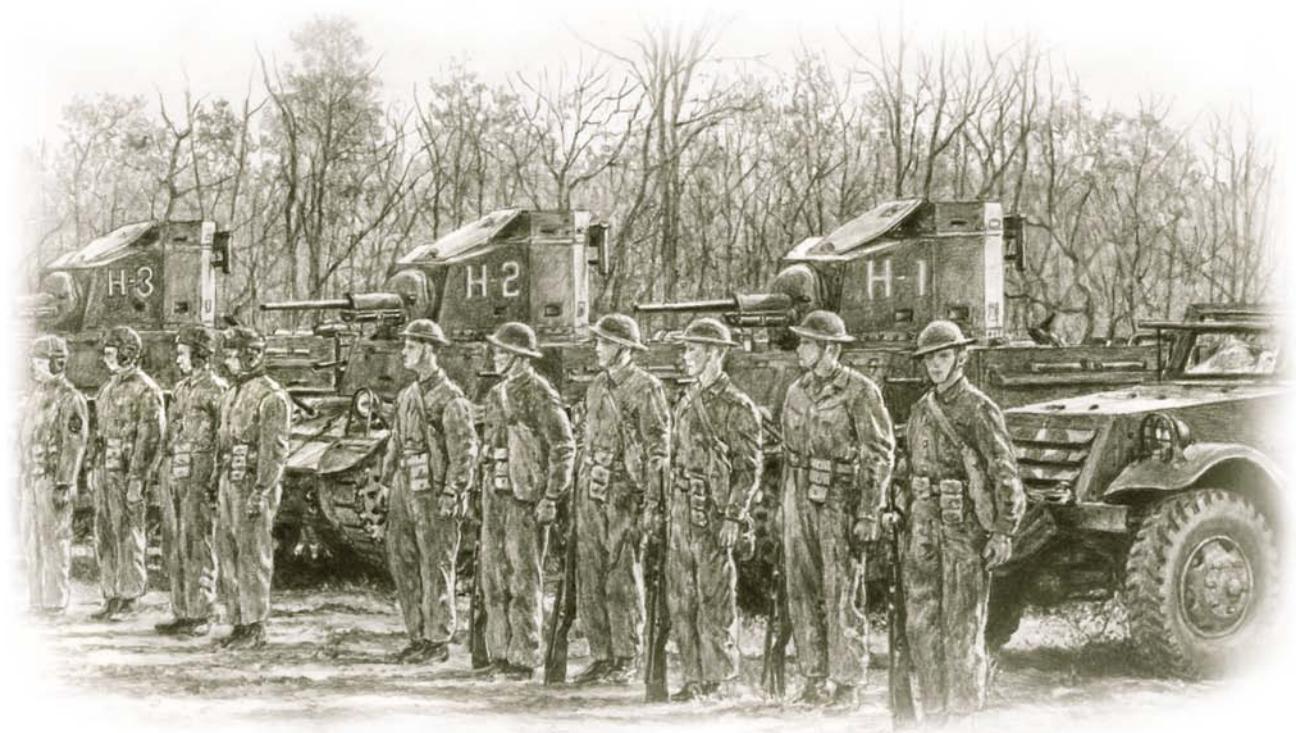
Today's evolved concept of mission command is exercised iteratively in the development of mounted leaders in the Armor School through:

- Developing mutual trust, understanding and initiative; accomplishing assigned missions (tasks) in accord with the commander's intent (purpose);
- Delegating decision-making; gauging risk in relation to the advantage of quicker decisions by subordinates within the context of the mission;
- Decentralized operations; small units resourced with combined-arms capabilities and access to relevant intelligence to prevail in uncertain and complex environments;
- Developing bold, audacious and imaginative leaders; leaders with the ability to understand, adapt and seek advantage amidst uncertainty;
- Developing trained and cohesive units; Soldiers and leaders skilled in applying organic and external capabilities across networked platforms to enable the decentralized execution of battle drills.

Armor and Cavalry leaders demonstrate their understanding of mission command during the execution of tactical operations through critical thinking, their comfort with ambiguity, their willingness to accept prudent risk and their ability to rapidly adjust while continuously assessing the situation. These leader skills and attributes enable resourcefulness and imagination, and create opportunities to maneuver decisively to destroy the enemy. We remain committed to exploit every available training opportunity here at Fort Benning to continue to produce the world's finest Cavalry scouts, tank crewman and Armor and Cavalry leaders for our Army.

Forge the Thunderbolt!

# GUNNER'S SEAT

CSM Ricky Young
Command Sergeant Major
U.S. Army Armor School

## The Armor and Cavalry Legacy Continues at Fort Benning

Base Realignment and Closure ended Sept. 15, and the movement of the home of Armor and Cavalry from Fort Knox, KY, to Fort Benning, GA, was completed. From the announcement of the BRAC decision in 2005 through its completion, this transition has garnered much attention and has had its share of pitfalls and setbacks, but can really be looked at as a success story.

The mission was simple: as facilities come on-line at Fort Benning, move courses, equipment and people from Fort Knox while maintaining the required training load in all initial military training and functional courses required to support our Army at war. As you can see, this was not the normal unit relocation many of us have experienced throughout our years of service. We could not just shut down or cease training, pack up and move. As of Sept. 1, 33 courses with an annual training load of 21,000 soldiers, noncommissioned officers and officers; 1,100 Army civilians; 27,000 tons of equipment; and 70 years of Armor and Cavalry history have relocated from Knox to Benning.

Our Armor and Cavalry legacy is now alive and well at Fort Benning as we serve side by side with our infantry brothers. The crowning moment came Sept. 23 with the dedication of McGinnis-Wickam Hall. McGinnis-Wickam Hall was formerly known as Infantry Hall or Bldg. 4. With the main renovation complete, it was time to bring it all together. The building is dedicated to two Medal of Honor recipients, one an infantryman – SPC Ross A. McGinnis – and one a Cavalry trooper – CPL Jerry W. Wickam. This building serves as the headquarters for the Maneuver Center of Excellence and houses the headquarters of the Armor and Infantry schools.

Since the title of this article speaks to a continuing legacy, I feel it is fitting to look at a representation of that history and our legacy. CPL Wickam's Medal of Honor citation for his actions Jan. 6, 1968, reads: "For conspicuous gallantry and intrepidity in action at the risk of his life above and beyond the call of duty. CPL Wickam distinguished himself while serving with Troop F, 2nd Squadron, 11th Armored Cavalry Regiment. Troop F was conducting a reconnaissance-in-force mission southwest of Loc Ninh when the lead element of the friendly force was subjected to a heavy barrage of rocket, automatic weapons and small-arms fire from a well-concealed enemy bunker complex. Disregarding the intense fire, CPL Wickam leaped from his armored vehicle and assaulted one of the enemy bunkers and threw a grenade into it, killing two enemy soldiers. He moved into the bunker, and with aid of another soldier, he began to remove the body of one Viet Cong when he detected the sound of an enemy grenade being charged. CPL Wickam warned his comrade and physically pushed him away from the grenade, thus protecting him from the blast.

When a second Viet Cong bunker was discovered, he ran through a hail of enemy fire to deliver deadly fire into the bunker, killing one enemy soldier. He also captured one Viet Cong, who later provided valuable information on enemy activity in the Loc Ninh area. After the patrol withdrew and an airstrike was conducted, CPL Wickam led his men back to evaluate the success of the strike. They were immediately attacked again by enemy fire. Without hesitation, he charged the bunker from which the fire was being directed, enabling the remainder of his men to seek cover. He threw a grenade inside the enemy's position, killing two Viet Cong and destroying the bunker. Moments later he was mortally wounded by enemy fire. CPL Wickam's extraordinary heroism at the cost of his life were in keeping with the highest traditions of the military service and reflect great credit upon himself and U.S. Army."

CPL Wickam was the personification of what Armor and Cavalry warriors were, are and will always be. It is in troopers like CPL Wickam, those who went before him and our Armor and Cavalry Soldiers of today that our legacy lives. It is not about geographical locations or buildings. The Armor and Cavalry legacy will continue to be forged at the home of Armor and Cavalry: Fort Benning.

"Treat 'Em Rough"

# Mission Command

## by GEN Martin E. Dempsey

*(**Editor's note**: This article provides context for **ARMOR's** themes for July-August 2011 (the joint fight/the hybrid threat), September-October 2011 (operational adaptability) and this edition (mission command, with reconnaissance as the Armor focus). All three themes link closely together. **ARMOR** writers' perspectives in the preceding issues and this edition contribute to Army-wide discussion of these topics.)*

To combat a decentralized enemy, we've learned—relearned—that we have to decentralize capabilities and distribute operations. We've been reminded that wars are a fundamentally human endeavor and always require interaction with a broad range of actors and potential partners. We've discovered—rediscovered—that technology provides important enablers but can never entirely lift the fog and friction inherent in war. We've seen hybrid threats emerge as the new norm in the operational environment and necessitate preparation across the full spectrum of conflict.

[The] demand for preparation across the full spectrum of conflict is … a demand to achieve proficiency in both combined-arms maneuver and wide-area security. That is, we must be able to maneuver to gain the initiative and provide security to consolidate gains. Often we will be required to execute both broad responsibilities simultaneously.

Confronting hybrid threats—combinations of regular, irregular, terrorist and criminal groups—in such an environment requires leaders who not only accept but seek and embrace adaptability as an imperative. In this environment, we believe *mission command* is a better reflection of how we must approach the art and science of command on the 21st-Century battlefield.

As defined in the latest update of Field Manual 3-0, *Operations*, mission command is the exercise of authority and direction by the commander using mission orders to ensure disciplined initiative within the commander's intent to accomplish full-spectrum operations. Mission command employs the art of command and the science of control to enable commanders, supported by staffs, to integrate all the warfighting functions and enable agile and adaptive commanders, leaders and organizations. Importantly, mission command supports our drive toward operational adapt-

ability by requiring a thorough understanding of the operational environment, by seeking adaptive teams capable of anticipating and managing transitions and by acknowledging that we must share risk across echelons to create opportunities. We've learned that mission command is essential for our success. Thus the … revision to 3-0 establishes mission command as a warfighting function replacing command and control.

This change to mission command is not merely a matter of rhetoric. It represents a philosophical shift to emphasize the centrality of the commander, not the systems that he or she employs. It seeks a balance of command and control in the conduct of full-spectrum operations; it asserts that command is likely to include not only U.S. military forces but also, increasingly, a diverse group of international, nongovernmental and host-nation partners.

Mission command emphasizes the importance of context and of managing the transitions between combined-arms maneuver and wide-area security among offense, defense and stability operations, and between centralized and decentralized operations through disciplined initiative within the commander's intent. Mission command illuminates the leader's responsibility to understand, visualize, decide, direct, lead and assess.

Previously, the term *battle command* recognized the need to apply leadership to "translate decisions into actions—by synchronizing forces and warfighting functions in time, space and purpose—to accomplish missions." What the terms *battle command* and *command and control* did not adequately address was the increasing need for the commander to frequently frame and reframe an environment of ill-structured problems to gain the context of operations by continuously challenging assumptions both

HARMON

before and during execution. In addition, these terms inadequately addressed the role of the commander in building teams with joint, interagency, intergovernmental and multinational partners. Mission command emphasizes the critical role of leaders at every echelon in contributing to a common operating assessment of context—we "co-create context"—and it asserts that as we pass resources and responsibility "to the edge," we must also recognize the requirement to aggregate information and intelligence "from the edge." Mission command establishes a mindset among leaders that the best understanding comes from the bottom up, not from the top down.

We know how to fight today, and we are living the principles of mission command in Iraq and Afghanistan. Yet these principles have not yet been made institutional in our doctrine and in our training. They do not pervade the force. Until they do—until they drive our leader development, our organizational design and our materiel acquisitions—we cannot consider ourselves ready, and we should not consider ourselves sufficiently adaptable.

*Former Army Chief of Staff GEN Martin Dempsey is chairman of the Joint Chiefs of Staff and was commanding U.S. Army Training and Doctrine Command when he wrote this article. Previously he served as acting com-*

*"Mission command is the conduct of military operations through decentralized execution based on mission orders. Successful mission command demands that subordinate leaders at all echelons exercise disciplined initiative, acting aggressively and independently to accomplish the mission within the commander's intent." –Training and Doctrine Command Pamphlet 525-3-0, The Capstone Concept*

*mander, U.S. Central Command, and commander, Multi-National Security Transition Command-Iraq. A graduate of the U.S. Military Academy, he holds master's degrees in English, military art and science, and national security and strategic studies.*

*From ARMY magazine, January 2011. Copyright 2011 by the Association of the U.S. Army. Limited reprint permission granted by AUSA.*

## Further reading

"Culture to Support Mission Command," blog post by Don Vandergriff, http://donvandergriff.wordpress.com/2010/08/06/culture-to-support-mission-command/#more-954.

"Mission Command and the Army's Capstone Concept," blog post by Frank Chadwick, http://greathistory.com/mission-command-and-the-armys-capstone-concept.htm.

# Streamlining Joint Operations by Empowering Commanders at Operational and Tactical Levels

## by MAJ Joseph LaBarbera

Commander-centricity must be our warfighting framework; the structure established by the Goldwater-Nichols Act is not the answer. It actually hinders us.

In joint operations, a commander should control the multiple and diverse forces he needs to defeat his enemies. Although this has traditionally been the domain of generals, because of technical innovations that limit a general's span of control, warfare has evolved into greater reliance on lower-level decision-making. Modern warfare now requires junior officers to show the same decisiveness and strategic thinking expected of a general in the past. Military practices that facilitated tactical formations and operational maneuvers in history can no longer facilitate mission command in modern warfare.

## Past and present

As we examine how the junior officer's role has expanded, we see that from the Roman legions' centurions to the 20th Century's maneuver-company captains, the tactical commander must be an expert fighting man, a charismatic leader and a disciplinarian. However, the cap-

tains of history, when compared to the modern company commander, had a myopic viewpoint of the battlefield. The modern company commander must not only be what his predecessors were but also know how to employ air support, integrate his soldiers with mechanized assault vehicles and grasp his unit's impact on the civilian population. He must also have under his direct control the liaisons and experts needed to best employ these modern assets.

Looking deeper into the disparity between ancient and modern warfare, a modern company commander no longer has a narrow front to fight on, thus his span of influence can cover the same ground as a general's of the pre-21st Century world. The company commander's battalion commander is now less of a tactician but is instead more of a mentor to company commanders and an operational planner. The brigade level now operates on the campaign level of warfare – for example, we find Air Force liaisons at the battalion level and see interagency cooperation at the brigade level.

The joint level is therefore now at a lower level than ever before, and what was

normally considered generalship can be witnessed at the tactical level. It's a mistake that current doctrine establishes the joint level at theater command because the control, organization and autonomy seen as the general officer's field must be cultivated on a lower level. Also, creating robust commands at such a lofty level sucks the autonomy from lower-level units and becomes a drain on their time and creativity.

At the same time, the training and assets a general possesses won't be of much use if the lower-level commanders employing them don't own these assets organically. This is especially true in counterinsurgency operations, where competition for resources among brigade through company commands tends to occupy the commander's time more than time spent gathering intelligence to defeat the insurgency. From flawed operations such as Grenada in 1983, Panama in 1989 and the escape of large portions of the Republican Guard during the 1991 Gulf War,[1] we see that to make joint operations a reality, assets need to be better streamlined into supporting maneuver units and not consolidated at such a high level that, due to a diversified and exten-

sive battlefield, we can't employ assets efficiently in support of combined-arms warfare.

One thing the generals of history had was autonomous control of their forces and unity of command. An optimal example is the Roman Empire's military – Rome maintained the longest span of military victories and a more dominant military than any other in history. What personified the Roman commander was his control over all assets he needed to fight and complete ownership of the tactics, training and personnel of his legions.

Victorious generals of the early Roman Republic usually had this.[2] In contrast, when Rome sent its generals to war having to answer to the Senate, and when two consuls commanded the same force to satisfy political anxieties, the results were poor. A case in point was the Battle of Cannae, where a micromanaging Senate interfered with the two consul-commanders, who had to make tactical decisions through consensus. They were defeated by a weaker force under Hannibal Barca, a commander who undoubtedly had unity of command and answered to no one.[3] Learning from this, Roman commanders such as Fabius, Marcellus, Scipio Africanus, Aemilius Paullus, Scipio Aemilianus, Caius Marius, Sertorius, Pompey, Germanicus, Corbulo, Titus, Trajan, Julian the Apostate and Belisarius all had either autonomy and unity of command or stipulated it as a requirement.[4]

## Asset mismanagement

In contrast to the Romans' efficiency, our current system mismanages assets. We have in the current U.S. military hierarchy a pseudo-joint infrastructure that's hostile to maneuver forces' lower echelons. The word "hostile" is appropriate because that's the result of these units' current organization, which inhibits them from having the capabilities needed for combined-arms warfare, both conventional and irregular.

In contrast, a Marine Corps battalion landing team, as part of a Marine expeditionary unit, is an example of an effective combined-arms unit that employs joint forces. Its form is only seen in two U.S. Army units: 75th Ranger Regiment and 3rd Armored Cavalry Regiment. These units, like the MEU, have organic fire-support liaisons for not only surface-delivered munitions but close-air support as well, and they have organic aviation units that train with and deploy with the unit. Also, they maintain a healthy influence over the personnel system, in which
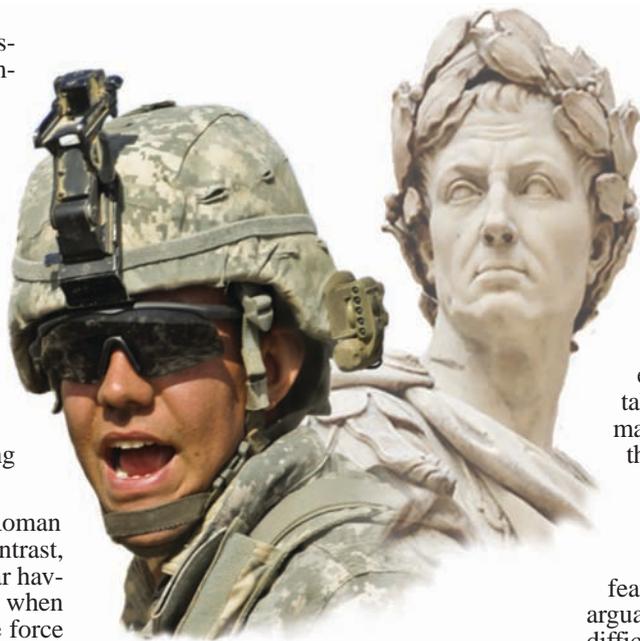
they can control the influx and rotation of their troops and leaders. No conventional Army brigade has this ability but instead relies on support from command-and-staff sections echelons above them to maintain a stable personnel turnover and supply them special-skills operatives with whom they coordinate their combined-arms support.

Also, other Army units at brigade/regiment level generally don't see their supporting-arms units or train with them until immediately before a deployment. This is because the framework of the combatant command gets in the way. With such a powerful and absorbing entity like a combatant command (and other commands set up by the Goldwater-Nichols Act), much institutional attention caters to those commands' needs (which sometimes conflict with the needs of lower-level units); the result is a hesitancy to commit to a mission set so that actual operational units don't get the time and training they need.

The current campaign in Afghanistan exemplifies this dilemma.[5] So much is wasted in the form of time and resources by these commands and the climate they create that combat effectiveness is severely downgraded. Until this is streamlined, combined-arms warfare, applied efficiently, won't be a reality. I note that with so many higher commands and staffs, the appearance of efficiency will be creatively demonstrated in the form of PowerPoint briefings.

## Excessive staff culture

Streamlined effectively by autonomous and unified commands, maneuver units can deploy jointly to fight conventional and irregular conflicts without having to alter or change their task organization.

The key in doing this is in autonomous leadership, but to accomplish this requires shedding an excessive staff culture. In name a command may be autonomous, but if a battalion commander finds himself subject to the whims and machinations of higher staffs, he truly isn't a commander but is merely a manager.

The Goldwater-Nichols Act created this excessive staff culture by establishing many robust higher commands, which inadvertently influence the "raising" of staff officers vice future commanders. Burdened by this staff culture, U.S. military joint operations have not been flexible and reactive enough to defeat asymmetric enemies. Also, it's arguable that the U.S. military may have difficulty with conventional enemies as well – two victories against Saddam's Iraq were more because of failures on Saddam's part rather than because of virtues on our generals' parts.[6] This may be because of the staff-centric culture in our Army standing between the Army's leaders and operational and tactical units. As a result, the Army officer advancement system often installs sycophantic staff officers as tactical leaders as opposed to real, effective ones.[7]

The system of multiple commands holding sway over units' operations indicates why brigades have difficulty operating. Too often the brigade has to "sell" a plan to not only its Army commanding general but to the Air Force command, theater-sustainment command, training command, etc. This becomes exacerbated as each of these commands' staffs copy this relationship and, as a result, salesmanship and systems manipulation become the officers' predominant virtues instead of leadership and tactical prowess.

The predominance of staff culture that the Goldwater-Nichols Act inadvertently induced resulted in the lack of the commander's autonomy, degrading the principle of unity of command. This is the greatest inhibitor of joint operations. Our ability to defeat enemy forces is constrained by the combatant commands' heavy reliance on other components for resources and small influence on the organization, training and character of their fighting units. Further, multiple limitations on command authority are instilled in doctrine, obviously influenced by the Goldwater-Nichols Act.

For example, as the Army's operations manual, Field Manual 3.0, in Paragraph B-23 states, "Coordinating authority is the authority delegated to a commander or individual for coordinating specific

functions or activities involving forces of two or more military departments, two or more joint-force components, or two or more forces of the same [s]ervice. The commander or individual granted coordinating authority can require consultation between the agencies involved but does not have the authority to compel agreement. In the event that essential agreement cannot be obtained, the matter shall be referred to the appointing authority."

This way of hamstringing commanders permeates to the lowest levels in a dysfunctional fashion. By the time a tactical Army unit meets its enemy, it has been through a cauldron of interference from so many commands and influences that it is operating under the illusion of a cohesive unit and is, in fact, an ad hoc organization.[8] The unit now finds that its primary requirement isn't to get results on the battlefield but to appease the requirements of higher staffs. This is exacerbated as fourth-generation warfare theorist William Lind describes: "All those headquarters' officers are continually looking for something to do, and for some scrap of information that will give them 30 seconds of face time in the endless PowerPoint briefings that are American headquarters' main business. The result is that they impose endless demands on the time and energy of subordinate units. One Army battalion last year told me they had to submit 64 reports to their division every day."[9]

## Affiliation issues

Adding to this drain of energy and time-consuming disruption is the constant formation and reformations of brigades before they deploy. The brigade has trouble keeping its unit "corporate identity." Consider these factors:

- In the span of one to two years, an Army brigade is formed of individuals from various commands, all who have been trained at a number of Army schools – which propose different warfighting philosophies and emphasize various specialties – and are led by officers whose military upbringing couldn't be more schismatically diverse.
- The brigade's soldiers are then trained by a mixture of U.S. Army Training and Doctrine Command and division schools with different agendas, and little time is given for collective unit training.[10]
- The brigade staff itself is often composed of officers with historical affiliations outside the unit and has little in common with the regi-

mental lineages under the brigade's command.
- The brigade is often, with less than one year's notice, assigned outside the parent division to another division, kind of like a sub-prime mortgage sold to another mortgage company.
- The combatant commander receives the brigade after a collective-training period of two weeks at one of three training centers – each of which has a different doctrinal interpretation on how a brigade should operate.
- Throughout this time, the unit is still losing and gaining personnel in leadership positions down to platoon and squad level.
- Within months, the brigade is assigned to the combatant commander and is attached to a theater-level command; with little guidance, the brigade is often left to figure out its mission set on its own.[11]
- Multiple commands outside the mission the brigade is nested with control the brigade's pay and resources.

The result is that this tactical-level unit is under the sway of multiple masters continuously and can do little more than occupy ground and conduct shaping operations. FM 3.0 portrays an example of supporting relationships: "Under joint doctrine, each joint force includes a [s]ervice component command that provides administrative and logistic support to [s]ervice forces under [operational control] of that joint force. However, Army doctrine distinguishes between the Army component of a combatant command and Army components of subordinate joint forces. Under Army doctrine, *Army service component command* refers to the Army component assigned to a combatant command. There is only one ASCC within a combatant command's area of responsibility. The Army components of all other joint forces are called [Army forces]."

From this, one can infer conflict arising between the staffs of the maneuver units and support units, although Army commanders will rarely publicize their grievances. Conflict creates schism, leads to rephrasing language about mishaps in reports and other documents, and shapes a unit's mission statement to meet the limitations of its inadequate capability.

When a unit is successful, as in the invasion of Iraq and 3rd ACR's actions in Tal-Afar, it's because the brigade commander broke away from convention and operated on his own. However, his autonomy came at a cost to him in the form of

hostility from myriad generals who expected fealty from him in respecting their turfs.[12] The occasion of a brigade's success shows that the combatant command, designed to facilitate joint operations, is being marginalized by multiple commands who have too much of a role in the brigade's operations. The combatant command's marginalization is exacerbated by the complexities of multiple subcommands. Creation of these commands ensures that robust staffs follow – and from this the marginalization of lower-level commands, which inhibits creativity and forestalls momentum.

## Commander isolation

For a joint-operations culture to permeate throughout the military, the military's table of organization and equipment must account for the personnel needed for effective joint ops. Otherwise, the current ad hoc manner of task organization will continue to throw assets at units without integration training, and this will lead to failure. Compared to a Marine battalion landing team, an Army brigade lacks enough forward air controllers, human-intelligence collectors, administrative specialists and logistical detachments at battalion level.[13]

Instead, the Army brigade maintains robust assets in the form of a support battalion and "special troops" battalion. These battalions, instead of providing real response to maneuver battalions, become entities of their own. Their commanders compete for recognition from the brigade commander. This is a gross conflict of interest within the brigade and divides the brigade's teeth from its tail.

Also, as mentioned, the brigade commander is isolated from his battalion commanders through a robust filter in the form of a staff, with as many (or more) field-grade officers on the brigade staff as in all the battalions combined. A separate command can arise within the brigade in the form of a deputy brigade commander, who will take charge of a number of projects and generally get the forces he needs to accomplish them – for example, taking a military-police platoon as his personal security detachment.

Combine this huge headquarters with the only real fighting elements – two maneuver battalions, a recce squadron and an artillery battalion – and what results is twofold: the battalion's staff ends up working more for the brigade staff than for their own commanders, and battalion commanders can find themselves subordinate to the brigade staff in many ways.

From the company level to the national level, command authority has to be sac-

rosanct and supreme. The officer career path should be much more command-centric if we want to grow great leaders and not great secretaries. The Goldwater-Nichols Act's creation of multiple entities may facilitate more collaboration, but it detracts from streamlining and command authority.

Fighting units must be guaranteed ownership of assets compatible with their mission set, and the chain of command must be the sole authority in the military. We can achieve this by structuring the unit's doctrinal framework to be compatible with joint operations and not attempt to specialize it for one-time missions, as the Army tries to do with its various formations.

The most effective units continue to be those that emphasize warfighting-skills basics and have the most streamlined and capable leadership. They also become the most adaptable and effective no matter what capacity they're in, whether it's conventional or irregular warfare. Either way, when a commander has unity of command and control of his assets, the issue of success becomes much less complicated, as it is an issue of his ability and not the complexities of the systematic machinations of doctrine or theory.

*MAJ Joseph LaBarbera is a student at the Army's Command and Staff College, Fort Leavenworth, KS. He has completed four Global War on Terrorism deployments totaling 44 months. He served in various command-and-staff positions in the continental United States, Iraq and Afghanistan, including rifle-company commander, 2-14 Infantry, 10th Mountain Division; armored-reconnaissance company trainer (observer-controller), National Training Center, Fort Irwin, CA; and three transition-team billets as an adviser. The adviser assignments were to an Iraqi army brigade S-3, the 4-6 Iraqi army brigade com-*

*mando company commander and the 303rd Afghan Police Corps G-2 in Northern Afghanistan. He received a bachelor's of arts degree from the City University of New York and is completing his thesis for his master's of arts degree in national security studies at American Military University.*

## Notes

[1]Vandenbrouke, Lucien. **Perilous Options: Special Operations as an Instrument of Foreign Policy**. London: Oxford University Press, 1993.

[2]Goldsworthy, Adrian. **In the Name of Rome: the Men Who Won the Roman Empire**. Phoenix, AZ: Orion Press, 2005.

[3]Daly, Gregory. **Cannae: The Experience of Battle in the Second Punic War**. London: Routledge (Taylor & Francis Group), 2004.

[4]Goldsworthy.

[5]Hope, Ian COL. **Unity of Command in Afghanistan: a Forsaken Principal of War**. Accessed at http://www.strategicstudiesinstitute.army.mil/pdffiles/pub889.pdf. Strategic Studies Institute, November 2008.

[6]McGregor, Douglas. "Fire the Generals: the Failure of U.S. Military Leadership in Iraq." Accessed at http://www.counterpunch.org/macgregor05262006.html. **Counterpunch**, May 26, 2006.

[7]Ibid.

[8]Lind, William Sturgiss. "Reorganization or Reform?" Accessed at http://

www.military.com/opinion/0,15202,91380,00.html. **Military.com**, March 2006.

[9]Ibid.

[10]Romagnioli, Paul. "Increasing the Effectiveness in Training and Doctrine Command." Accessed at http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA450914. School of Advanced Military Studies, academic year 05-06.

[11]Hope.

[12]McGregor.

[13]The table of organization and equipment for a light infantry brigade, accessible at http://www.fas.org/man/dod-101/army/unit/toe/07015L000.htm, shows that these billets are centralized and/or dependent on outside organizations to attach them. Also, in my experience, they are either misused or their employment is dictated by the parent unit. Many times soldiers come to a new unit jaded because of mis-leadership from the parent unit.

# The Commander's Role in Receipt of Mission: 'Frame the Problem' and 'Issue an Initial Proposed Problem Statement'

## by LTC Harold Douglas Baker Jr. and retired LTC Kevin E. Brown

*"My operations officer and I just attended higher's [operations-order briefing]. During the confirmation brief, I acknowledged my understanding of the commander's intent and my unit's task and purpose. Overall, the mission seems clear. However, I know there are potential variables and obstacles that could prevent us from achieving the desired end state. In addition, there are second- and third-order effects my staff needs to know before it moves into mission analysis. As part of my initial guidance, I update my running estimate, conduct an initial assessment, frame the problem and issue an initial proposed problem statement. As we move farther into mission analysis, we will likely adjust the initial problem statement. Then, I'll give the staff about 30 minutes to get their arms around the problem, pull them together and see if I've framed this thing correctly." – Commander, summarizing challenges in the military decision-making process*

The latest version of Field Manual 5-0, **The Operations Process**, introduces *develop a proposed problem statement* as the 12th task in Step 2 (mission analysis) of the military decision-making process. In the previous version, *a proposed problem statement* was merely part of the mission-analysis brief. Adding its development as a task emphasizes the importance of the problem statement.[1] However, the task description in the current manual provides confusing guidance regarding when and how to develop it.

According to the manual, the commander, staff and other partners produce the problem statement as part of design. During mission analysis, they review and revise it based on an increased understanding of the situation. If a commander does not elect to initiate design activities before mission analysis, the commander and staff develop a problem statement before progressing into course-of-action development.[2] The current manual's wording places more emphasis on the commander's decision to conduct design rather than develop a well-structured problem statement. Likewise, it potentially subtracts from an opportunity for a commander to conduct a key portion of mission command. A commander's choice to conduct design or not demonstrates that he or she has attempted to *frame the problem* and *draft an initial proposed problem statement* and, unable to do so coherently, elects to initiate design early in the MDMP.

This article proposes that, regardless of the problem's type, and regardless of a commander's decision to initiate design or not, the process of *develop a proposed problem statement* begins within Step 1 (receipt of mission) of the MDMP. Commanders should frame the problem as a component of updating running estimates and conducting the initial assessment. Therefore, part of the commander's initial guidance should be *issuing an initial proposed problem statement*.

To be clear, this article is not another critique or analysis of the worthiness of design. However, a look at the doctrinal basis for

our proposal brings design into the equation. As previously mentioned, the commander's initial guidance includes a decision to initiate design or go straight into the MDMP.[3] In our opinion, this means that the commander attempted to frame the problem and, based on his or her understanding (or lack thereof), chose to proceed in a certain direction.

## Design: how much?

To bring another supporting perspective, a recent Command and General Staff College classroom discussion on the commander's role in the MDMP prompted one of the students to state, "What do you mean that the commander decides in his initial guidance whether or not to design? It's really how much to design." The student went on to explain that his point came not because he believed that the overall design procedure applied to every situation but that design's second element, framing the problem,[4] should be considered part of the MDMP. He went on to say it should occur sooner rather than later in the process.

Taken in that context, a commander and staff should not wait until mission analysis to frame any problem type and should definitely not delay the task *develop a proposed problem statement* until just before moving into COA development.

Ultimately, in accordance with FM 3-0, the commander must frame the problem and produce an initial proposed problem statement much earlier in the MDMP.[5] If commanders view these tasks as part of *receipt of mission*, the problem-statement task for the staff during mission analysis becomes *refine the proposed problem statement* as it encapsulates any new information. This revision, in turn, leads to a final problem statement for approval or modification during the mission-analysis brief.

## Doctrinal tasks

CGSC's Department of Army Tactics has taught students for several years that to gain situational understanding, the commander and staff conduct a tactical problem analysis upon receipt of mission using mission variables (mission, enemy, terrain and weather, troops and support available – time available and civilians, or METT-TC) and applicable operational variables (political, military, economic, social, infrastructure, information, physical environment and time, or PMESII-PT). This method draws upon a loosely defined tactical problem in FM 3-90,Tactics, which "accounts for the factors of [METT-TC], the variables whose infinite mutations always combine to form a new tactical pattern. They never produce exactly the same situation; thus there can be no checklist that adequately addresses each unique situation."[6]

Logically there's no checklist, but accounting for the factors of mission variables with the addition of applicable operational variables provides a framework to the process. Hence, a coherent analysis using mission and operational variables meets the standard for *frame the problem*.

Doctrinal support for using the mission and operational variables to frame the problem, and conducting this analysis within receipt of mission, is available throughout FM 5-0. "Upon receipt of a mission, commanders filter information categorized by the operational variables into relevant information with respect to the mission," states FM 5-0. Also, commanders "use the mission variables, in combination with the operational variables, to refine their understanding of the situation."[7]

In addition, *update running estimates*, the third task under the MDMP's *receipt of mission* section, supports inserting *frame the problem*. This task states that commanders should "immediately begin updating their running estimates upon receipt of the mission"[8] that includes a summary of the problem, the operational approach and all variables that affect the mission.

## Commander's role

Commanders integrate personal knowledge of the situation, analysis of the operational and mission variables, assessments by subordinate commanders and other organizations, and relevant details gained from running estimates.[9] Thus, *frame the problem* reasonably fits as a subtask of the receipt of mission's *conduct initial assessment*. If a commander follows the MDMP's doctrinal tasks, he or she has the requirements and relevant information needed to frame the problem and, in turn, issue an initial proposed problem statement as part of *issue the commander's initial guidance*.

FM 5-0 states that commanders are the "most important participant in the MDMP" and are much more than "simple decision-makers in this process." They "use their experience, knowledge and judgment to guide staff planning efforts."[10] Although the commander's initial proposed problem statement may be incomplete or portions of it incorrect, it provides guidance to a staff that allows it to conduct mission analysis within a greater context of the situation as currently known.

In a manner, the commander's initial proposed problem statement is a direct part of mission command that enables him to take a more active and earlier role in driving the operations process.[11] In general, the effort shows the staff that the commander has dedicated time to "identifying the right problem to solve." This will lead to greater dialogue between the staff and commander as they move into mission analysis.[12]

## Essential commander task

Given the logic of placing *frame the problem* and *issue initial proposed problem statement* in *receipt of mission*, the 12th task of mission analysis is better suited to *refine the problem statement*. Placing the problem-statement task in its current location may have intended to direct the commander and staff to conduct a full mission analysis before drafting a problem statement. However, the commander and staff need to have already addressed, reviewed and refined the problem statement much earlier than just prior to moving into the next step of COA development. A commander cannot give an adequate initial commander's intent and planning guidance if he or she has not framed the problem and analyzed the proposed problem statement well before the mission-analysis brief.

In all, this article's intent is to propose that *frame the problem* and *issue an initial proposed problem statement* are essential commander tasks in the operations process for implementation prior to mission analysis. These tasks are not just elements of design that occur only when facing a complex, ill-structured problem. As a recent article in **Military Review** stated, "Once one moves from an abstract, theoretical problem (such as 'seize an airfield') to a real-world version of the same problem ('seize *this* airfield in *this* real location to create *these* conditions'), complexity immediately rears its head."[13]

*Frame the problem* and *issue an initial proposed problem statement* apply to every problem set. What may at first glance seem to be a medium-structured problem, or even a well-structured one, could be quite complicated and complex once one considers and analyzes the varying factors.

As stated earlier, even clearly complex and ill-structured problems warrant an effort by the commander to frame the problem and draft an initial proposed problem statement. Otherwise,

without that type of analysis, how can he or she make a decision to initiate design?

In conclusion, the amount of work required by a commander to frame the problem and write an initial proposed problem statement in many cases may be minimal. Yet that effort provides a means for a commander to influence, guide and direct a staff early in the MDMP through a display of his or her understanding of the situation and a presentation of information gaps that need to be filled. If commanders are truly the most important participant in the MDMP, the inclusion of *frame the problem* and *issue an initial proposed problem statement* within the MDMP's first step provides a doctrinal impetus for the execution of mission command.

*LTC Doug Baker Jr. is an instructor with the Department of Army Tactics, CGSC, Fort Leavenworth, KS. He served multiple tours in Iraq as a Stryker battalion S-3 and executive officer and, most recently, as a centralized-selection-list security-force assistance adviser. He is recipient of three Bronze Stars and an Army Commendation Medal for valor. His military schooling includes Airborne School, the Infantry Officer Basic and Advanced Courses, Ranger School, Jumpmaster School, Combined Arms and Services Staff School and CGSC. He received a bachelor's of science degree in international and strategic studies from the U.S. Military Academy and a master's of arts in military history from Louisiana State University.*

*Retired LTC Kevin Brown is an assistant professor with the Department of Army Tactics, CGSC. During his military career, he served with 1st Armored Division, 2nd Armored Cavalry Regiment and 3rd Armored Cavalry Regiment. He also served as an assistant professor of military science at the University of Texas at Arlington and as an instructor at CAS3. His military schooling includes CGSC, CAS3, Armor Officer Basic and Advanced Courses, Airborne School, Bradley Infantry Fighting Vehicle Course and Air Assault School. He received a bachelor's of science degree in marketing from the University of South Alabama and a master's of science in adult and continuing education from Kansas State University.*

## Notes

[1] FM 5-0, *The Operations Process*, Washington, DC: Government Printing Office, March 2010. Paragraph B-65.

[2] FM 5-0, Change 1, *The Operations Process,* Washington, DC: Government Printing Office, March 2011. Paragraph B-57.

[3] Ibid. Paragraph B-23.

[4] Ibid. Paragraph 3-52.

[5] FM 3-0, Change 1, *Operations*, Washington, DC: Government Printing Office, February 2011. Paragraph 5-15.

[6] FM 3-90, *Tactics,* Washington, DC: Government Printing Office, July 2001. Paragraph 1-15.

[7] FM 5-0, Change 1. Paragraph 1-43.

[8] Ibid. Paragraph G-7.

[9] Ibid. Paragraph 1-37.

[10] Ibid. Paragraph B-8.

[11] FM 3-0, Change 1. Paragraph 5-13.

[12] FM 5-0, Change 1. Paragraph B-58.

[13] Wayne W. Grigsby Jr., et al, "Integrated Planning: The Operations Process, Design and the Military Decision-Making Process,*" Military Review* 91 (January-February 2011). Page 29.

**ACRONYM QUICK-SCAN**

**CAS3 –** Combined Arms and Services Staff School
**CGSC –** Command and General Staff College
**COA –** course of action
**FM –** field manual
**MDMP –** military decision-making process
**METT-TC –** mission, enemy, terrain and weather, troops and support available – time available, civilians
**PMESII-PT –** political, military, economic, social, infrastructure, information, physical environment and time

# Changing the Culture:
## Reconnaissance Squadron Employment of Tube-Launched, Optically Tracked, Wire-Guided Improved Target-Acquisition Weapon System in Full-Spectrum Operations

### by Adam Moore

The tube-launched, optically tracked, wire-guided missile system has been part of many infantry and cavalry units' arsenals for decades. The TOW system, which has survived many revisions since its first use in Vietnam, continues to prove itself as an effective anti-armor weapon. In fact, the system is a victim of its own success – its effectiveness in previous anti-armor fights makes it difficult to see its potential in other combat applications.

However, 3rd Squadron, 10th Cavalry, has seen the TOW missile's potential and has used every aspect of its improved target-acquisition system in Afghanistan. The unit's commander, LTC Thomas Gukeisen, relates the questioning he received: "The discussion was, 'There are no tanks in Afghanistan. So why are you using TOW?'"

LTC Gukeisen is very familiar with the TOW missile system. He used it extensively as a mechanized-infantry platoon leader and throughout his career as a company commander, staff officer and squadron commander. In a recent interview, he described for me the new tactics, techniques and procedures that

enemy insurgents used in Afghanistan. He also described how American forces are employing the TOW missile and its ITAS to counter enemy TTP.

## Perfect for Afghanistan

Much of Afghanistan's territory alternates between steep mountains and low-lying valleys. Towns, military bases and road systems commonly lie at the base of one or more towering mountains, leaving them vulnerable to enemy attack. Winding rivers that provide field and crop irrigation to nearby towns also create obstacles for movement of military forces unfamiliar with the terrain. Conversely, terrain of this type lends itself well to enemy movement and quick strikes against U.S. and coalition forces.

Covering the vast expanses of land is nearly impossible with the limited personnel and resources available to infantry and cavalry commanders. Insurgent forces in Afghanistan are well aware of the capabilities of standard weapons carried by American infantrymen and cavalrymen. Thus the TTP they develop miti-

gates the effects of American weapons while maximizing the effects of their own.

"After a while, they figured it out," LTC Gukeisen said of the insurgents' activities. "The 'Darwinism factor' kicked in. They knew how to avoid the effects of [high explosives] and Willy Pete."

Insurgents occupied elevated attack positions on mountains overlooking roads, towns and bases. They used gravity to increase the maximum ranges of their weapon systems while simultaneously decreasing the ability of U.S. and coalition forces to deliver effective return fire. The distance and elevation provided insurgents with natural cover, blocking American attempts to close in and engage them. This allowed enemy forces the time they needed to execute preplanned egresses.

Natural overhead cover provided by the rocky terrain protected insurgents from the effects of indirect fire. When cover was unavailable, insurgents planned their retreat to avoid contact of close-air support or indirect fire. These tactics frustrated American forces.

## TOW system's capabilities

The TOW missile system's maximum range of 3,750 meters is longer than any other standard direct-fire weapon system carried by the American infantryman or cavalryman. Unlike indirect-fire systems, the on-site commander, usually a staff sergeant, can clear the TOW missile for fire. This significantly reduces the reaction time for American forces against hostile acts. Insurgents can no longer exploit the time-to-target window required to deliver indirect fire. The direct-fire capability of a TOW missile means that enemy forces may not use caves and mountain outcroppings as overhead cover to hide from its deadly effects.

LTC Gukeisen's soldiers used the TOW missile's capabilities in firing multiple missiles at hostile forces during their recent deployment to Afghanistan. The missiles, fired from distances ranging between 1,000 and 3,000 meters, all had deadly effect. The optical range and clarity of the targeting system accompanying the TOW missile opened up new uses for the weapon as well.

"Do you realize what you can do [with TOW missiles]?" LTC Gukeisen commented. "You can put a precision-guided missile out to 3,750 [meters]. I don't think [the insurgents] ever figured it out: one, what hit them, and two, where it came from."

Based on the squadron's success, "we began an analysis of how to cover large amounts of ground with limited forces," LTC Gukeisen said.

The analysis capitalized on the fact that ITAS gives the TOW missile operator a magnified sight with both day- and night-vision capabilities. Units like 3-10 Cavalry employ ITAS as part



**TOW missiles increase American soldiers' ability to engage enemy combatants previously thought to be out of reach.** *(photo by Close Combat Weapons Systems)*

of their observation plan. ITAS, used in conjunction with systems like the Long-Range Surveillance System Scout, provides greater depth of observation to units' areas of operation. LRSSS covers far distances and facilitates positive identification of potential threats. Once positive ID is determined, the TOW/ITAS operator engages. As these hunter-killer teams spread out to observation posts across a large area, the TOW/ITAS system reduces the number of soldiers required for observation, and its range allows observation posts to provide mutually supporting fires for each other.

The 3-10 Cavalry's Charlie Troop incorporated the same principles as part of a forward-operating base defense plan. Shadow and Predator unmanned aerial vehicles provided overhead coverage and more firepower when needed. A handful of teams at established locations allowed 3-10 Cavalry to control large portions of terrain merely through observation, reducing the number of ground patrols needed in a given area and thus limiting the threat exposure to soldiers.

The TOW missile's accuracy, paired with ITAS' optical capabilities, set the system apart from all other direct-fire weapons 3-10 Cavalry soldiers used. The TOW missile's precision guidance gave it the reliability of a point-weapon system, even at its maximum range. This accuracy meant that many of the firing restrictions – concern over collateral damage being one of them – which limited use of most crew-served weapons in Afghanistan did not apply to the TOW missile.

"Do you really want to use your .50 cal or [M]240?" LTC Gukeisen pointed out. "[I'd say] 'Remember, Lieutenant, that a machine gun is not a point-weapon system.'"

## Fire-mission threat

However, 3-10 Cavalry soldiers did not always need to fire the TOW missile when using the system in an engagement – they also employed the far-target locator attached to the TOW/ITAS missile system. The FTL is a laser-based locator that gives the operator a 10-digit grid to a target. No bracketing is required to bring indirect fire down onto the heads of hostile forces.

"[The FTL made it] a battle drill for us," LTC Gukeisen said. "That grid allowed us to immediately have a call-for-fire mission."

LTC Gukeisen's 3-10 Cavalry used the FTL to develop battle drills that combined the effects of indirect fire and the TOW missile. By coordinating the times of flight for the TOW missile and indirect fire, 3-10 Cavalry soldiers could synchronize the impacts of both on a desired target.

The combination of a direct-fire missile with indirect ensured the targets had no cover to hide behind. "The terrain is the dom-

inating factor in Afghanistan," LTC Gukeisen pointed out, but his soldiers overcame the terrain problem lethally. "[We had to] control the high ground, deny terrain and cover locations with [TOW/ITAS]. But [with TOW/ITAS], we had a system that could kill instantly."

The soldiers of 3-10 Cavalry used every aspect of the TOW/ITAS system. Most importantly, they used the system with the innovation and ingenuity that has characterized American soldiers in conflicts past. They looked beyond the TOW missile's old label of just an anti-armor platform and found that it excelled in several new missions.

TOW missiles increase American soldiers' ability to engage enemy combatants previously thought to be out of reach. Insurgents now have much less time to retreat from an engagement before they receive overwhelming fire. ITAS' observation capabilities give American soldiers the ability to cover much larger areas of land while simultaneously reducing the number of personnel required to maintain that coverage.

In areas with collateral-damage concerns, the accuracy of a precision-guided, direct-fire TOW missile is unparalleled. Thanks to the FTL, American forces can send instant call-for-fire missions. The lethality of a TOW missile can augment indirect fire.

Insurgents do not use tanks against U.S. forces in Afghanistan. If more American units realized the superior anti-personnel capabilities of the TOW/ITAS system, it would become far more hazardous for insurgents to try to use any weapons at all.

*Former CPT Adam Moore served as an Armor officer for four years on active duty and three years in the Alabama Army National Guard. He is employed as a military analyst for Science Applications International Corporation in Huntsville, AL.*

In areas with collateral-damage concerns, the accuracy of a precision-guided, direct-fire TOW missile is unparalleled. Thanks to the FTL, American forces can send instant call-for-fire missions. The lethality of a TOW missile can augment indirect fire.

# The Role of Multifunction Radio-Frequency Sensors on Maneuver Vehicles

## by Dr. John S. Reed

Radar technology has matured to enable low-cost, smaller-size, low-weight and low-power-draining multifunction radio-frequency sensors to ship affordably on U.S. Army maneuver-element vehicles. These close-combat tactical radars provide organic, on-the-move situational awareness and force protection for the smallest, most exposed elements of all brigade combat teams and battlefield surveillance brigades, even while these elements are operating in complex terrain. Vehicle radars also complement existing vehicle electro-optical sensors and emplaced higher-echelon battlefield radars.

This article outlines CCTR capabilities that may provide technology support of mission command.

## Background

The role of battlefield radars for the U.S. Army dates back before World War II. However, due to their large size and power requirements and the vulnerability of early RF emitters (radars, radios, etc.) to enemy direction-finding and signals intercept, maneuver forces have generally been reluctant to employ these technologies in close proximity to the enemy. As a result, U.S. Army combat-arms radar employment has generally been concentrated in the air-defense and field-artillery target-acquisition communities.

Many of the radars the Army deploys today continue to be large (trailer- or truck-mounted) systems operated from rear-echelon fixed positions, functioning in dedicated single modes of operation (for example, air surveillance, weapons-locating, etc.). However, as RF hardware and radar-antenna technology has matured, the active electronically steered array has been deployed on U.S. Air Force front-line fighters, large U.S. Navy surface ships and some of the larger U.S. Army radars. Application of this technology is emerging for close-combat operations for scout/reconnaissance elements, armor/infantry maneuver units and field artillery/ air defense target-acquisition teams in all BCTs and BfSBs.

## AESA radars

The AESA radar uses an array of hundreds to thousands of miniature transmit/ receive elements combined to form the radar directional beam that can be electronically steered/scanned. Full 360-degree azimuth coverage with very quick revisit rates is readily enabled with multi-faced AESA arrays. AESA eliminates many of the reliability issues associated with the moving parts of a mechanically scanned antenna and the single point of failure of the legacy radar's high-power transmitter. The increased availability (approaching 99 percent) significantly reduces the radar's lifecycle-support costs.

More importantly, the AESA enables multifunction modes of operation for the RF sensor. Since the typical AESA radar can generate 50 to 500 beams per second, each with a specialized waveform, the radar can support multiple-mission functions virtually simultaneously. Another side benefit is that the electronically scanned beam can be electronically "stabilized" in space while operating on the move with little degradation in system performance.

A key enabling function for AESA radar is the automatic resource manager. With individual beams or "dwells" occupying as little as 1,000th of a second, the scheduling of dwells for each function the operator desires is not a manual operation. With any radar, the critical resource to optimize is "power + time-on-target." By employing algorithms tailored to the particular mission/threat laydown and automatically adapted to the threat environment, the true performance gains of multifunction AESA radar are realized vs. those obtained by a single-function mechanically scanned EO or RF system, all with little operator intervention.

The CCTR based on AESA technology delivers critical, enhanced performance characteristics to all BCTs and BfSBs. The hemispherical search volume effectively creates a 360-degree situational awareness dome over the radar, its platform and any units, personnel and/or bases it covers at ranges directly proportional to the range of the direct- and indirect-fire weapons and sensor systems organic to company-size elements and below (see Figure 1). The very rapid refresh rates generated by the millisecond-duration AESA radar beams present a persistent view of all moving targets in the battlespace to a platform or small-unit commander. From this view, the local EO sensors and weapons systems can be slewed from target to target in the selected threat priority.

CCTRs are small enough to mount on any combat or tactical platform in any BCT or BfSB, cavalry, armor and infantry unit. The force-protection and situational-awareness capabilities of CCTRs are available when operating autonomously beyond the range of larger and less agile radars and while on the move.

## CCTR functions

**Ground situational awareness**. The capability to detect, track, identify and engage enemy mounted and dismounted ground targets consistent with the maximum ranges of a unit's organic weapons is fundamental to mounted combat operations – especially for reconnaissance and cavalry forces. Currently, EO sensors provide this organic, on-the-move combat advantage in situational awareness and force protection to U.S. Army maneuver forces. However, specific limitations persist. EO sights search areas limited to narrow fields of view. They identify and process as encountered rather than in a priority sequence. Constant visual scanning creates operator fatigue.

The CCTR ground-surveillance mode resolves these shortcomings, complementing and enhancing the inherent value of the EO sights. AESA radar constantly scans the full 360-degree horizon and au-

**Figure 1. CCTRs provide autonomous, organic situational awareness and force protection to small-unit leaders against moving air and ground threats in complex terrain where less agile sensors cannot go.**

tomatically establishes a persistent view of "tracks" of all ground moving objects within the sector. By projecting these tracks in real-time onto a single geo-referenced station map display, leaders at the section and platoon levels have persistent situational awareness of all moving targets in their areas of operations. Using this CCTR radar picture, noncommissioned-officer leaders can then slew EO sights onto the most threatening potential targets and, if appropriate, slew organic weapons for engagement.

Modeling and simulation exercises, based on the seizure of al-Najaf in Iraq in 2003, demonstrate vast improvements in military utility criteria when AESA radars are used to complement EO sensors. Studies show that CCTRs integrated with EO sensors reduce time to first detection by 40 percent over performance by an EO sensor alone. This allows increased detection, identification and engagement ranges. Large numbers of targets previously over-

looked by EO sensors alone, because of their restricted fields of view and manual scanning, are revealed to recon and maneuver small-unit leaders – an average of 46 percent more targets than detected by EO sensors alone. Overall, combining AESA radars with EO sensors reduced the time to complete the al-Najaf operation by about 35 percent in this exercise.

**Air situational awareness/force protection.** Using the same principles, AESA radars provide air situational awareness and related force protection directly to small-unit leaders throughout the BCT and BfSB AOs. Any moving airborne objects – fixed- and rotary-wing aircraft, unmanned aircraft systems, cruise missiles, etc. – are automatically detected, tracked and reported, initially on a visual display for the individual platform commander but also through the forward-area air-defense command-and-control network for incorporation into the common air picture.

Because of the ability to mount these small sensors on virtually any combat or tactical platform in the BCT, small-unit leaders can now have an organic, on-the-move capability providing autonomous air situational awareness and force protection. With the exponentially growing threat of small, slow-moving and low-altitude enemy recon and attack unmanned aerial vehicles, the importance of this organic capability to the small recon or maneuver element is magnified, especially when standoff radar assets cannot see the small UAVs due to terrain masking or standoff range. As the U.S. Army develops enhanced FAAD capabilities – gun or missile – AESA radar capabilities can provide small-unit fire-control capability as well.

**Counter rocket/artillery/mortar force protection.** Recon, cavalry and maneuver elements can mitigate most threats of indirect fire simply by moving. However, when at-the-halt – whether part of mis-

sion execution or for rest, refueling or re-supply – even these highly mobile elements become vulnerable to rocket, artillery and mortar fire.

A special case of air situational awareness and force protection, CCTRs can provide sense-and-warn and counter-fire capabilities to autonomously operating small units and widely dispersed combat outposts not covered by longer-range C-RAM systems. Exercises at Fort Benning, GA; Fort Dix, NJ; and Yuma Proving Ground, AZ, since November 2009 have demonstrated the ability of current ground AESA CCTRs to provide useable, real-time point-of-origin and point-of-impact data; warn personnel to take protective measures; and allow leaders to initiate counter-fire. As is the case in the air situational awareness/force protection mode, CCTRs give the small-unit leader an organic, autonomous C-RAM capability unhampered by complex terrain or long distance from the nearest fixed-site C-RAM sensors.

**Other key functions.** While the preceding functional modes of AESA radars are well advanced along the path for fielding, more potential capabilities are at various stages of government and/or industry development. These capabilities include high-bandwidth communications, combat identification, Active Protection System fire control and indirect-fires support.

For high-bandwidth communications, directional and rapidly steerable beams of the AESA radar can carry high-bandwidth communications to and from small recon, cavalry and maneuver units at the tactical edge of the BCT and BfSB AOs. Specific potential benefits include the ability to communicate during operations in improvised-explosive-device-infested regions despite active friendly (or enemy) jamming and the ability to pass streaming video from highly capable EO sensors into squadron-and-above tactical-operations centers.

For combat identification, a more specialized application of the communications function, millimeter-wave AESA radars can provide the interrogator function for the Battlefield Target Identification Device.

For APS fire-control applications, efforts to reduce the weight of combat platforms to make them more deployable and flexible on the battlefield have led to research and development of APSs that defeat incoming rocket-propelled grenade, anti-tank guided missiles and tank-fired rounds. Already demonstrated to defeat RPGs while on the move, existing APS packages can use an onboard CCTR with the detection, track and fire-control sen-

sor and to direct the APS countermeasure to destroy the incoming threats.

For indirect-fires support, the rapid local-horizon scanning capability of AESA radar permits it to locate obstructions in projectile lines of flight – mountains, buildings, etc. This essentially creates a map of the clear fire regions that is dynamically updated as the gun position or surrounding environment changes. Also, because of the ability to precisely measure the muzzle velocity of outgoing rounds, CCTRs can substantially improve the accuracy of artillery fire.

## Overcoming maneuver-vehicle radar concerns

Incorporating RF technologies – radio and radar – into fast-moving, agile maneuver forces has been hampered by two traditional characteristics of these RF systems: the ability of enemy forces to detect, locate, intercept and attack systems that emit an electronic signature in the battlespace and the large size, weight, power and cost demands of traditional radars. Recent advances in technology for AESA-based CCTR systems substantially mitigate both these barriers.

Traditional RF emitters send out continuous, omni-directional and/or predictable signals in frequency bands for which spectrum analyzers are widely available. Here, the potential for a hostile receiver to be at the proper frequency and within range for a sufficient period to detect, locate and intercept the emitted energy is high. AESA-based CCTRs, on the other hand, have a dramatically lower probability of detection/intercept relative to the traditional battlefield emitter. CCTR beams are very focused (typically 3 degrees or less) and randomly hop continuously and quickly throughout the search volume and across a wide and randomly selected part of the frequency spectrum. These characteristics make the threat receiver implementation impractical. Even if the enemy determines there are energy emissions somewhere in the vicinity, AESA beams move in space and frequency so quickly that they cannot be located, let alone intercepted for exploitation.

The second key barrier to U.S. Army warfighter exploitation of traditional radar capabilities on maneuver platforms has been the equipment's SWaP-C demands. Technological advances in AESA components core to CCTRs have significantly mitigated these SWaP-C considerations. With millimeter-wave antennas less than half a cubic foot in volume, the practical result has been the development of radars small and light enough, and with such a reduced power demand, as to permit mounting them on virtually every

combat and tactical platform in the Army inventory.

Operationally, this means that for the first time NCO leaders in scout/recon sections, armor/infantry platoons and target-acquisition teams could have an organic situational awareness and force protection RF capability. Moreover, the influx of newer platforms – especially the mine-resistant, ambush-protected all-terrain vehicle and Joint Light Tactical Vehicle (in place of the currently overtaxed humvee) should fully eliminate any SWaP-C limitations. Perhaps equally important, advances in RF packaging that advantage the commercial-electronics manufacturing industry (for example, cellphones) now enable affordable AESA implementations for many mission equipment packages across a BCT or BfSB.

While "bigger is always better" is the first reaction from the user of any standoff sensor desiring to provide situational awareness and force protection to a vastly extended maneuver element, operation in complex terrain and while on the move frequently prevents the "bigger" material solution from being entirely effective. Per Figure 2, by simply task-organizing a limited number of "smaller," more affordable AESA CCTR assets through the maneuver-element AO, the same degree of situational awareness and force protection will result in the environments typical of theater operations today. There is a certain degree of redundancy in case some of the local sensor assets are inoperable. If network assets are available (or enabled by using the radar as a communications aperture), the outputs of the distributed vehicle radars can merge into a single common operating picture.

## Summary

With recent technical advances, multifunction AESA radars can now deliver critical situational awareness and force protection capabilities to the smallest, most exposed recon/cavalry sections, maneuver platoons and target-acquisition teams at the tactical edge of the BCT and BfSB battlespace. This multifunction RF capability is provided on the move and while operating in complex terrain that may prevent standoff radar assets from detecting local threats. Dramatic reductions in SWaP-C requirements and vastly mitigated vulnerability to hostile electronic direction-finding and intercept have enabled full realization of radar advantages in front-line maneuver vehicles.

Already at high technology-readiness levels, these systems can achieve a mean-time-between-failure rate of several-thousand hours due to the redundant and reliable solid-state transmit/receive elements
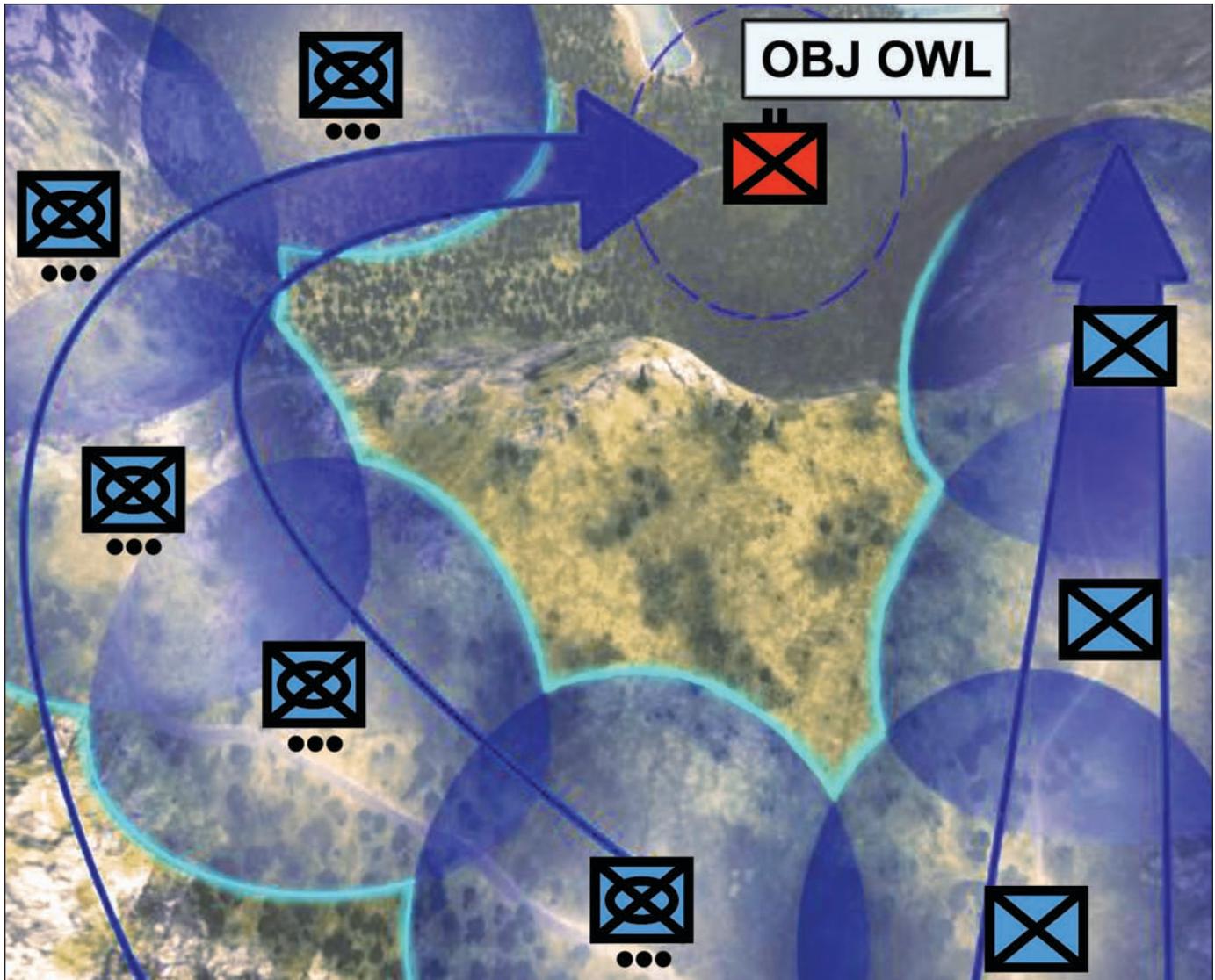
**Figure 2. Task-organizing and netting the on-the-move RF sensor assets within the maneuver element provides organic, large AO protection that moves with the force.**

of the AESA radar. Through a process of automatic interleaving, many of these functional modes are available simultaneously to the small-unit leader and vehicle commander, vastly increasing his warfighting and force-protection effectiveness.



*Dr. John Reed is a senior principal engineering fellow with Raytheon Company's network-centric systems based in McKinney, TX. He has more than 29 years' experience in developing advanced radar systems for space-, airborne- and ground-based applications.*

---

### ACRONYM QUICK-SCAN

**AESA** – active electronically steered array
**APS** – Active Protection System
**AO** – area of operations
**BCT** – brigade combat team
**BfSB** – battlefield surveillance brigade

**CCTR** – close-combat tactical radar
**C-RAM** – counter rocket/artillery/mortar
**EO** – electro-optical
**FAAD** – forward-area air defense
**RF** – radio frequency

**RPG** – rocket-propelled grenade
**SWaP-C** – size, weight, power and cost
**UAV** – unmanned aerial vehicle
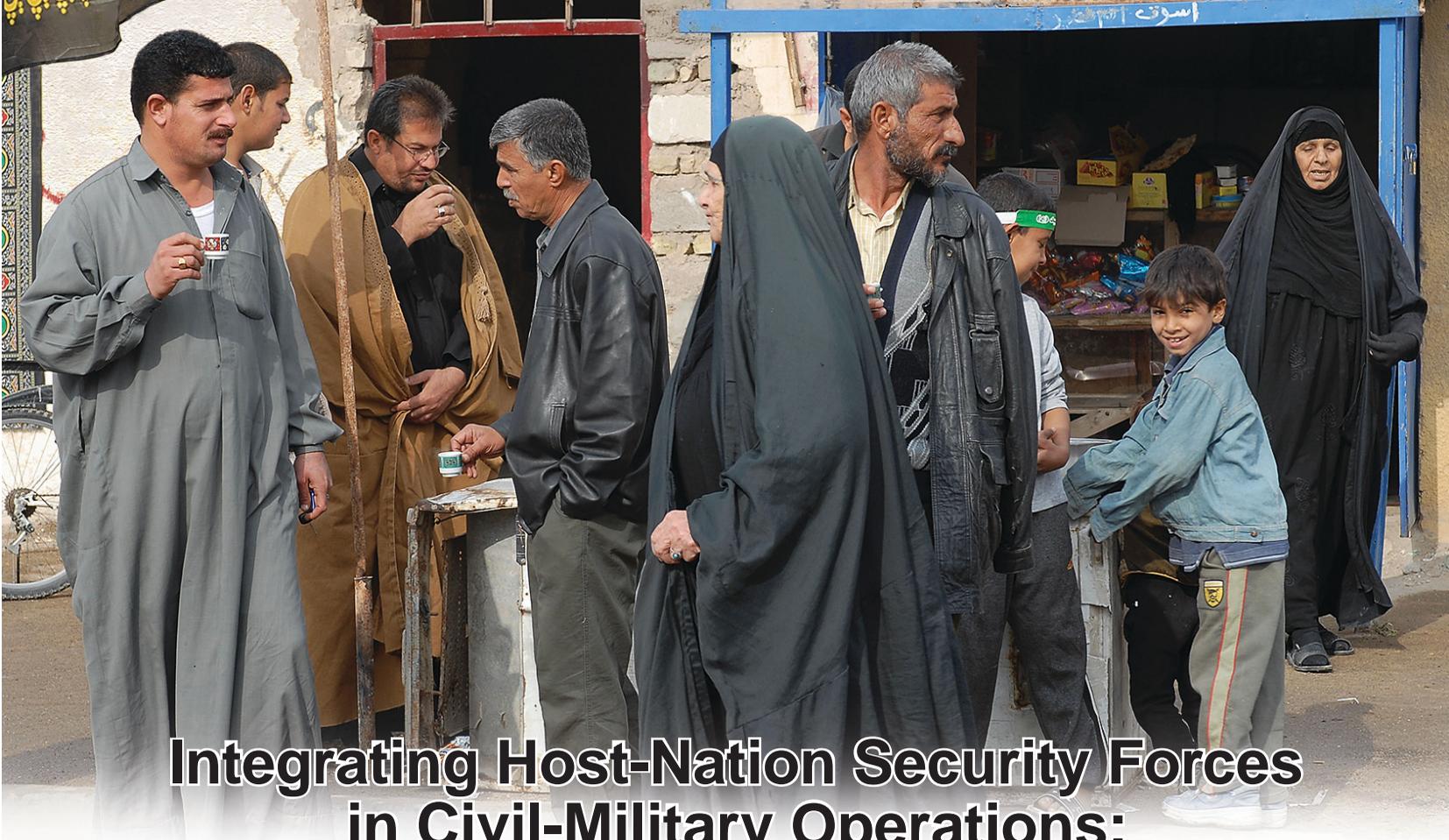
# Integrating Host-Nation Security Forces in Civil-Military Operations: Achieving Unity of Effort

## by CPT Walter A. Reed IV

Achieving unity of effort in counterinsurgency operations is a cornerstone of current doctrine and one that most counterinsurgents understand and can recite on cue. Unity of effort must include host-nation security forces to result in any real COIN progress, however. The synergistic effects achieved from integration make both civil-military operations and combat and civil-security operations more effective.

This article recounts this principle as seen in Operation Charge of the Knights, which brought peace and order back to the streets of Basra, a city in southern Iraq, by clearing out criminal elements in the city. Shops reopened all over the city as the citizens began to go about their daily lives again. Locals felt safe enough again to walk the riverfront of the Shatt al'Arab or spend time talking together at roadside stands. Children made their way to and from school again as Iraqi police and the Iraqi army patrolled the streets.

None of this would have been possible without unity of effort between American military forces and Iraqi Security Forces.

## Logical lines of operation

Unity of effort begins with logical lines of operation. Field Manual 3-24 uses the concept of LLOs to illustrate the need for commanders to synchronize efforts in converging on a commonly understood end state.

LLOs are ways the commander can visualize and describe operations against an enemy where positional reference has little purpose. The five examples of LLOs described in FM 3-24 are:

- Combat operations/civil-security operations;
- Host-nation security forces;
- Essential services;
- Governance; and
- Economic development.

Current COIN doctrine advises that operations must occur along multiple LLOs in a synchronized manner to achieve some measure of unity of effort. This concept is not difficult – it is a non-lethal extension of the combined-arms approach – but operating in joint, multi-agency or host-nation channels makes synchronization and unity of effort extremely difficult.

## Operation Charge of the Knights

Although difficult, operating in host-nation channels is necessary, as integrating host-nation security forces into civil-military operations allows multiple synergies between LLOs to achieve true unity of effort. For example, in Basra, integrating ISF in civil-military operations during Operation Charge of the Knights achieved unity of effort and synchronized progress along multiple LLOs.

The Iraqi government initiated Operation Charge of the Knights in Spring 2008 to re-establish legitimate government control over Basra. The entire military history of the operation is outside this article's scope, but several facts deserve mention:

- First, Iraqis led and executed the operation with coalition assistance in combat aviation, logistics and civil-military support.
- Second, the units tasked with conducting most of the combat operations were not originally from Basra. Neighboring provinces sent units when the Basra-raised and British-trained units proved ineffective in the conflict's early days. As a result, the Iraqi-army units in Basra did not know the city or the inhabitants and were only slightly

more aware of the human terrain than the coalition forces operating in many parts of Iraq were.

- Lastly, the units that arrived in Basra were some of the most highly competent and well-trained units in the Iraqi army, with several units staying together through four or more sets of coalition adviser teams.

After the initial fighting to remove militia elements, the Iraqi army settled into steady-state operations and the coalition advisers began requesting civil-military operations support for post-conflict-effects mitigation activities. Several teams from 360th Civil Affairs Brigade came from Baghdad to form a civil-military operations center and a civil-affairs team to support the Iraqi army.

After two days of initial assessments, the team chose to focus efforts on the neighborhood of Hyanniyah, an overcrowded slum on the outskirts of the city. Hyanniyah, like many other slums in Iraq, is an area initially built to house 50,000 that now contains almost 200,000 people. A decades-long migration trend from the countryside into the cities had strained already unreliable and underfunded city services.

Hyanniyah also served as a primary recruiting zone for militia elements that formerly controlled the city.

## Hyanniyah project

The militia made significant gains in the area based on the local government's historical inability or unwillingness to provide regular essential services to the population of Hyanniyah. Tribal sheiks held some power in the neighborhood; however, the urban poor in Hyanniyah stayed there primarily because they had no tribal structure to rely on. There was no potable water in the neighborhood. The area received less than two hours of government power per day. The sewage system consisted of a series of ditches that ran down the sides of the roads into gutters, which ran the waste to large stagnant ponds on the outskirts of the neighborhood. There were no police stations or substations inside the neighborhood.

In short, the neighborhood lacked any semblance of consistent essential services and would likely remain so for years, if not decades. Attempting to solve all the problems in Hyanniyah was out of the question, but identifying several areas for high-impact and low-cost improvements showed the Iraqi government's and coalition forces' resolve to improve citizens' lives.

Several immediate issues were identified that could be resolved within the scope of guidance for the Commanders Emergency Response Program funds allocated to the task force. The most important issue facing the people of Hyanniyah was the tremendous amount of garbage and debris that had accumulated due to militia control of the city streets and the heavy fighting to remove them. Municipal trash crews and road cleanup teams, already barely keeping up with the amount of debris and trash on the streets, were incapable of clearing the streets in a reasonable amount of time.

The civil-affairs team identified the trash piles and sewage backups as a significant public-health threat, as well as a significant obstacle to economic recovery in the area. Importantly, the project concept did not replace the municipal government or city services for any length of time, but rather it supplemented the city work crews with men from areas affected by the fighting.

The intent for the project was threefold:

- First, assisting the municipal government with debris and trash removal, Iraqi and coalition forces would avert a potential public-health disaster and enemy information-operations victory.

- Second, the project showed the public that the Iraqi army and their coalition partners would improve the neighborhood conditions now that militia control had ended.
- Last, hiring men from the neighborhood to serve on the work crews, the project injected some economic benefit directly into the community.

Based on this intent, the team identified several measures of performance that included removing all large piles of trash from the major thoroughfares; completing the project within three days of starting it; and injecting $25,000 into the local economy. MoP ensured performance of the task to the required standard.

Identifying measures of effectiveness ensured the project achieved its desired impact. For example, to measure whether the project was successful in averting a public-health disaster, the team surveyed the health clinics to identify and record any changes in the baseline number of sanitation-based public-health issues such as cholera, dysentery, viral diarrhea, etc. The second MoE posited that the trash and debris removal would be sufficient so that within three days of completion the municipal sanitation services could resume. Lastly, to measure the economic benefit, the team counted the number of local market stands and surveyed shop owners to identify the level of spending in the neighborhood markets.

## First try

The first attempt at the project used the tribal sheiks in the neighborhood to gather the work crews for the cleanup. The team used this approach to facilitate a rapid start as well as to reinforce the tribal power structures utilizable by ISF or coalition forces in the future. The sheiks raised the required labor crews and set to work clearing the trash and debris piles from the major thoroughfares throughout the neighborhood. Having removed the largest trash piles, the project was complete in five days. It met all MoP the civil-affairs team had identified and paid $25,000 to employ almost 300 Iraqis temporarily.

The team also analyzed the results by evaluating the project against MoE. The team identified no significant increase in the number of public-health issues, meeting the first MoE. However, the second and third MoEs (municipal crews running, economic impact) went unmet.

Several factors led to the inability of the municipal crews to resume work. First, the level of work throughout the neighborhood was inconsistent and poorly supervised at the crew level. The tribal sheiks had no real interest in cleaning the neighborhood; they knew which of the largest piles to clean up and left the interior of the neighborhood untouched. Their interest was in strengthening the patronage networks that had suffered during militia control.

Second, lack of time and resources limited the project, so the interior section of the neighborhood was untouched and still presented a problem. After clearing the large trash and debris piles, more trash and debris from the interior of the neighborhood quickly replaced them on major roads.

Market surveys and the types of workers on the crews deemed the project's economic impact insufficient. The tribal sheiks used their patronage to reward members of their tribe, some of whom did not live in Hyanniyah and some who were as young as 12 years old. The lack of working-age men with families to support, illustrated by no appreciable impact on the local markets, was a major impediment to the project's economic impact in the community.

Analysis of the initial project's effectiveness convinced the team that more control was necessary to ensure the project met MoEs. Since the Iraqi-army battalion in Hyanniyah had, at this time, established areas of operation at company level that divided the

neighborhood, the U.S. civil-affairs team approached the Iraqi battalion commander with the idea to use the Iraqi company commanders to generate work crews and ensure that work met standards within their AOs for three reasons:

- The team figured that the company commanders wanted the side streets and interior alleys in their AOs cleared since they would operate among them.
- By generating the work crews from inside their AO, the company commanders could better connect with the citizens in their neighborhood and further enforce the Iraqi government information-operations campaign that painted a brighter future for Iraq free of militia control.
- The Iraqi-army units had the required manpower and interest to effectively supervise the crews and foreman.

The second project launched less than three days after the first at five times the original scale.

## Second try

The second run of the trash and debris removal project yielded tremendous results, with all MoP and MoE met:

- The crews completed the work to a uniform standard, and the Iraqi-army commanders vouched for them on payday. They ensured that only legitimate workers were paid.
- Families from within the respective neighborhoods provided the work crews.
- All males paid out on the second project (almost 2,000) were in the target-age range with families to support.
- With the interior of the neighborhoods cleared, the municipal trash crews began collecting manageable amounts of trash and debris.
- Business in neighborhood markets picked up appreciably, and the amount of business conducted in U.S. dollars (the method of payment for workers in the project) increased substantially.

The project was a success in that it met the commander's intent within the time and resources allocated. However, the project's real success was just becoming apparent in COIN operations in progress in the neighborhood.

When the decision was made to use the Iraqi army to assist in the Hyanniyah CERP project, there was very little thought of the direct military benefit to the Iraqi-army battalion on the ground. Leaders did not foresee that involving the Iraqi army in civil-military operations would pay dividends along one of the COIN LLOs as well as improve essential services. The first inclination of this occurred when the first cleanup crew arrived for payment.

Due to strict money-handling and contracting procedures, the U.S. Army contracting officer and pay agents were the only ones authorized to accept work and disburse pay. However, even though the Iraqi army never touched any of the money, they organized the work crews in preparation for payment; required names, addresses, tribes and some form of identification before workers reported for payment; and could verify whether the individual actually worked.

The Iraqi army battalion S-2 was present during the payment operation and talked to each individual about conditions in the neighborhood and the current level of militia activity.

On several occasions during the payment operation, individuals with fake or altered identification cards were refused payment until they could provide an acceptable form of identification.

These actions provided a tremendous amount of information that the Iraqi army used to enable operations along the civil-security LLO. By understanding the human terrain at the street and neighborhood level, they began to separate the insurgents from the population, a key element of COIN operations.

Another advancement occurred simply by using the Iraqi army to assist in supervising the work crews. This fought the Iraqi army's tendency to conduct operations solely using static traffic-control points scattered around the city. By supervising the street-cleanup project, the company commanders and platoon leaders engaged the population of the neighborhood daily. This presented several opportunities where better intelligence and more reliable information was gained by being among the people and accessible to the citizens.

Tip-line activity increased tenfold once Iraqi-army personnel began supervising the crews. This led to better targeting and more effective operations. With no functioning police force in Hyanniyah or anywhere else in Basra, the Iraqi army had the task of securing the populace. By supervising work crews and gathering individuals for teams, the Iraqi-army companies conducted several combat patrols daily, identifying and stopping many instances of petty crime and providing a sense of renewed security following militia control. Based on the increased human-terrain awareness, better intelligence and their ability to secure the population, the ISF conducted more effective COIN operations, due in part to the project's requirements.

## Synergy and future challenges

It is important to note that these developments, occurring along three COIN LLOs, were simultaneous and synchronized, as FM 3-24 requires. The ISF were conducting civil-security operations while concurrently assisting in economically developing the area at the same time they were assisting in restoring essential services. Each activity was conducted along a separate LLO, but the Iraqi army was the critical link to bring all three together and move along several at once. The first iteration of the project essentially worked along one or two of the COIN LLOs (economic development and restoration of essential services); however, Iraqi-army participation evinced progress along all three LLOs at once.

Not only were operations conducted along several LLOs at once, the actions each became more effective by the presence of the other, creating a synergistic effect. One example occurred when the Iraqi-army units gathered work crews from the neighborhoods in their AOs. Iraqi-army units ensured a more substantial economic-development impact of the project by selecting working-age males with families to support. They also gathered information (names, addresses, tribal affiliation) that could be used to separate insurgents from the population, thus making their civil-security operations more effective. Furthermore, by providing economic assistance to the militia's prime recruiting age group, the ISF further attacked the militia's base of support. Therefore, both the economic-development piece and civil-security operations were more effective than they would have been if done in isolation either by coalition forces or by ISF.

The coalition-force elements and ISF executed this project under circumstances that are unlikely to be replicated in the future. A look at several potential challenges to involving the Iraqi army in civil-military operations is in order. The first challenge is that the role of the ISF (specifically the Iraqi army) changes, resulting in the loss of the key link between the multiple LLOs. If the role of the Iraqi army changes and the government of Iraq deems the army's primary mission to be external defense rather than the protection of its citizens from internal or insurgent threats, the emphasis on Iraqi partners for civil-military operations would then of necessity shift to the police.

Currently all but a very-select-few police units are incapable of conducting the type of disciplined operation that is required for success, but if they are entrusted with the security of the local

population, they could be useful partners. The most important quality of the ISF partner is not the color of their uniform but their ability to take advantage of the opportunities to improve security and economic development created by civil-military projects.

Another potential challenge might come from the changing U.S. force structure in Iraq. The Status of Forces Agreement mandates that all "combat troops" be out of Iraq by August 2011. This does not present a significant challenge because progress can take place along multiple LLOs simply by integrating enablers like the civil-affairs teams and military-training teams. No U.S. "combat units" participated in the projects in the Hyanniyah neighborhood. Coalition adviser teams and civil-affairs personnel were the only coalition troops involved.

The most significant future challenge to attaining simultaneous progress along multiple COIN LLOs as described in this article will be access to appropriate resources. Without coalition control of the resources used to conduct the projects, the Iraqi-army units in Basra would have been unable to conduct civil-military operations to the required standards of responsiveness and completeness. Based on the speed and responsiveness of the money allocated by the government of Iraq to Basra province for reconstruction, resources would not have been responsive enough to progress the COIN fight in Hyanniyah.

There is no CERP-like program for the ISF to use to respond to immediate and critical reconstruction needs. The Iraqi government has set aside money for this purpose, but the major threat is that CERP's rapid responsiveness will be lost once money is channeled through the cumbersome bureaucracy and endemic corruption, eroding the true benefit. If the government of Iraq is serious about conducting COIN operations (and there are doctrinal and force-structure indications they are: establishment of the Iraqi COIN school in Taji and creation of the battalion-level civil-affairs officer position, to name two), military control of small-scale rapid-reconstruction funds is essential.

## Summary

In conclusion, by integrating host-nation security forces into civil-military operations (in this case, Iraqi-army units in Basra in 2008), simultaneous progress along multiple COIN LLOs can result in unity of effort. Furthermore, the synergistic effects of integration make both civil-military operations as well as combat and civil-security operations more effective.

Civil-military operations gain effectiveness by using cultural experience, additional supervision and additional Iraqi stakeholders. On a larger scale, participation by host-nation security forces in civil-military projects contributed to the legitimacy of the government's actions. Understanding the human terrain and the requirement to engage the population are just a few benefits the ISF gained that assisted their combat and civil-security operations because of their significant participation in civil-military operations.

In Hyanniyah, the supervision requirement for the project forced the counterinsurgents to operate among the people and made significant security gains in terms of a lower crime rate, intelligence gained and, most importantly, the prevention of militia resurgence in the neighborhood. Although this approach is not a panacea for achieving unity of effort along multiple LLOs, the integration improved the effectiveness of the projects and the counterinsurgents' ability to conduct operations. Integration also ultimately contributed to the legitimacy of the Iraqi government's operations in Basra.

*CPT Walt Reed is an Armor Branch officer assigned to Fort Carson, CO.*

**ACRONYM QUICK-SCAN**

**AO –** area of operation
**CERP** – Commanders Emergency Response Program
**COIN –** counterinsurgency
**FM –** field manual
**ISF –** Iraqi Security Forces
**LLO** – logical lines of operation
**MoE** – measure of effectiveness
**MoP** – measure of performance

# 9 as 1:
## Small-Unit Leader Development – a Paradigm Shift

### by MG Robert B. Brown

---

*"A squad is an organizational idea jointly held by its members. It does not exist physically – you can't see a squad – you can only see the individuals who man it."–COL William E. DePuy, ARMY magazine, March 1958*

---

*First of a three-part series.*

The current and future operational environments in which the Army will fight continue to deal with an asymmetric and ambiguous battlefield against an intelligent and adaptive enemy. As Chairman of the Joint Chiefs of Staff GEN Martin Dempsey noted, we face "hybrid threats of regular, irregular, terrorist and criminal groups with capabilities that rival those of nation states; an exponential pace of technological change; and greater complexity."[1] Leaders at all levels must be prepared to face those enemies across the spectrum of operations by lethal and non-lethal means. According to GEN Dempsey, "The development of adaptive leaders who are comfortable operating in ambiguity and complexity will increasingly be our competitive advantage against future threats to our nation."[2]

*Overmatch* is essential to achieving success on the battlefield. The infantry's mission – to close with the enemy by means of fire and maneuver to defeat or capture him, or to repel his assault by fire, close combat and counterattack – depends on overmatch. Overmatch is the successful ability to execute critical tasks against projected threat forces in all operational environments, 1) concluding with decisive operations that drive the adversary to culmination and 2) achieving the operational objective while retaining the capability to continue with subsequent missions.[3]

As a military, where we have overmatch, we win. We enjoy overmatch in the air, sea and ground at higher echelons.

"We don't want to send a soldier into harm's way who doesn't overmatch his potential enemies. It is at the squad level where it



**Situational Understanding**

Leader development

External enablers

Army values warrior spirit

Training and education

Small unit common operating picture

Builds a cohesive team

Collaborative situational awareness "Unblinking Eye"

Advanced situational awareness

Digital comfort

Networked lethality

Embedded training

Mission planning tool

Mobile comms with voice, text and data

Comprehensive soldier fitness

Cultural, civil, language

Social, family

**...Operating under mission command.**

**Tactically and technically proficient, fully trained and empowered**

Figure 1. The Army leader.

becomes too much of a fair fight," GEN Dempsey emphasized in a speech given in May 2011.[4] It is at the small-unit level, on the ground, that it becomes too fair a fight. The enemy has adapted their methods due to this overmatch. Those who wish to do us harm avoid our strengths and look to "bleed us by a thousand cuts" at the small-unit level. We do not have a crystal ball to determine the future, but we can be certain that the future will remain one full of uncertainty, complexity and ambiguity. There may be those who look to attack our strengths, but we can be certain that our enemies will continue to attempt to exploit our weaknesses.

## Human dimension

Taking a bottom-up approach, we can thoroughly assess our gaps and weaknesses at the squad level and then fix them. We must work to get overmatch at the tip of the spear – where we need it most. We must analyze gaps across the formation, both material requirements and the human dimension, and then correct those gaps across the entire doctrine, organizations, training, material, leadership and education, personnel and facilities spectrum. We can gain overmatch at the squad from an effective combination of some new capabilities (network, load, mobility, power) and, most importantly, from a thorough review of small-unit leader development, training, education and empowerment. We will get to overmatch by looking at the measures of effectiveness for the squad formation. Those areas that offer the greatest impact on the formation will receive the priority to fix.

The result will be overmatch at the lowest level – where it matters most. This will only be effective by training small-unit leaders to take advantage of the overmatch and empower them to make decisions in an environment of trust through mission command. Given the incredible performance of our junior leaders over the past 10 years of conflict, how could we not provide overmatch and enable our squads to be dominant on the battlefield?

The human dimension is a priority because we know there are significant training and leader-development challenges ahead of us. Our small-unit leaders must become more familiar with resources that deployed units will have available to them. Our squad leaders must have a greater understanding of supporting weapon-system capabilities, vulnerabilities and employment considerations. They will have to make the most efficient and effective use of training time and facilities, and they must become familiar with 21st Century soldier competencies: cognitive, physical, social-cultural and moral-ethical.

## A case for change

At the forefront of our nation's forces is the infantry squad. The basics of *shoot, move and communicate* continue to provide the necessary foundation to the squad, but due to the environment, we must move away from the rote-repetition approach of settling an engagement. We should be able to integrate all capabilities within the squad's fight, thus once again creating overmatch. To ensure this happens, before deployment the Army must institute a method to develop cognitive skills, values, critical thinking and decision-making skills across all levels of command, including the squad. These additional leader skills will prepare leaders at all levels to support the squad to operate in any environment across the spectrum of operations.

The *squad as foundation of the decisive force* must have internal knowledge, skills and abilities in its leaders and soldiers for it to remain dominant on the battlefield. At leadership levels above the squad, leaders must have the right means to understand the situation, evaluate it quickly and introduce accurately the enablers needed to provide that overmatch capability needed in a squad fight. Leader development is a critical component in developing cognitive skills and decision-making ability to identify threats, collect intelligence and collect evidence through effective sensitive-site exploitation. Leader development is also a critical component in the psychological effects of

trust, cohesion, teamwork and empowerment under mission command.

As the environment in which we as a nation and Army operate changes and evolves, our response as a profession in developing leaders must change and evolve. A culture of adaptation and chaos-management must emerge as we shift the paradigm to a model of decentralization and empowerment for soldier and leader development across our force. But I'm confident we can do this successfully; not since Vietnam has our Army had a force with such rich operation experience to draw knowledge from to "grow" and adapt leadership development – and the Army as a whole – as a learning organization.

## Dialogue for change

The Maneuver Center of Excellence, along with the Armor and Infantry schools, are developing a series of three articles to open a dialogue for change in growth in small-unit leader development. This article addresses the challenges we face in leader selection and developmental changes for team leader and squad leaders; agile and adaptive leader training; and training management for the small-unit leader. The following two articles will address developing mission command and trust through immersive training, team building and cognitive-skills development through the Comprehensive Soldier Fitness-Performance and Resilience Enhancement Program.

These subsequent articles will detail examples from the experimental and operational forces, which have worked in improving leader development in both the institutional and operational force. As always, feedback from the force will create a dialogue for future changes and ensure that the operational force is receiving a quality product from the U.S. Army Training and Doctrine Command force, and that we team up as we re-energize home-station training and leader development to complement the professional military education the soldier receives. We share a common goal through structured self-development at home station and PME to develop the best leaders possible for the growing and intense demands of future conflicts.

## Team and squad leader training

Over the last 10 years, training and leader development has reduced, yet requirements and responsibilities for our noncommissioned offers have increased. Pre-9/11, the Primary Leadership Development Course / Warrior Leader Course was 30 days long; post-9/11, the course reduced to 17 days long. Pre-9/11, the Basic Noncommissioned Officer Course / Advanced Leader Course was eight weeks long; post-9/11, BNCOC / ALC was reduced to five weeks. Pre-9/11, the Advanced Noncommissioned Officers Course / Senior Leader Course was 11 weeks long; post-9/11, ANCOC / SLC became seven weeks long. The changes in course length reflect the Army's operational needs and tempo, especially during the surges of Iraq and Afghanistan, and although this doesn't necessarily represent decline in quality, it's time for the Army to look at the courses' structure.

As dwell time increases across the force, we have a unique opportunity to relook the courses and professional development holistically to buy back what we've sacrificed over the last 10 years. This also allows the Army to review the KSAs required at all levels of leadership, identify where they are taught and reduce redundancies across the institutional, operational and SSD domains. Operational requirements to train leaders in a timely manner for the operational force also created a shift in the domains to put the onus on the institutional Army for leader development; now is the opportune time to equally weight all three domains and capitalize on technological advances, allowing SSD and operational development to increase in developing our Army's junior leaders.

Programs of instruction will be required to make this model work. This must be a collaborative effort among Department of the Army, U.S. Army Forces Command and TRADOC. The PoIs will operate as the backbone to formalize the training across the force and aid the operational units to focus on leader development as opposed to course development. The PoIs provided will allow operational units to provide a structure to their leader courses and NCO development programs. They will also provide a model that provides the operational Army with the selection of building-block events that lead to capstone training; when a squad leader or platoon sergeant selects capstone training, the building blocks become available: resources, terrain needed, training ammunition and lesson plans.

The goal is to provide the requisite training and development at the appropriate time along the NCO's career to better enable the NCO to meet the demands of the current and future operating environments and to maximize 21st Century training capabilities. For example, this would include training on 360-degree assessment; instruction on how to teach, coach and mentor; focus on how to properly counsel and build teams; prepare leaders to lead from the front; and ensure leaders have the requisite technical and tactical skills to lead. Junior leaders will learn the most in their units from their leadership as they follow the two-down model – with first sergeants developing squad leaders and platoon sergeants developing team leaders. This will also allow unit leaders to adjust PoIs and implement unit-specific training requirements for their post requirements and specialty skills required in light, airborne, Stryker and mechanized units.



**Commanders employ mission command in training as well as actual operations. They tell subordinates their intent, and the subordinates determine how to achieve that intent.** *(U.S. Army photo)*

The institutional Army will assist by providing tools/applications, bite-size digital leader training and immersive squad trainers. The institutional Army will also develop assessments to measure programs and implement feedback as those courses develop.

Also, an individual training avatar will develop during initial military training – possibly earlier, during the accessions process – to help soldiers better recognize their personal strengths and weaknesses, and then provide them with instructional and training tools that will facilitate self-improvement. The avatar will also serve as the critical link between virtual and live. As the soldier performs, the avatar will follow in simulations. The

In training for full-spectrum operations, with the intent of developing the moral-ethical, cognitive and physical components of the human dimension, leaders may find it helpful to consider developing values-based standards derived from concepts such as the Army Learning Concept, Warrior Ethos and Army Values. *(U.S. Army photo)*

simulations / virtual link will allow more repetitions and hence a greater learning and trust-building environment for the soldier and leader.

The training avatar will also allow unit-leader access for the soldier's digital leader book upon his arrival in a unit. The avatar will be accessible in the NCO evaluation system as well allow an immersive experience focusing on the fundamentals of leadership at the team- through company-level NCO leadership. The avatar will provide the digital link to the Digital Training Management System for that soldier, allowing the soldier to carry forward successfully completed development in the SSD and operational domains to new units and NCOES.

## Outcomes-based training

In training for full-spectrum operations, with the intent of developing the moral-ethical, cognitive and physical components of the human dimension, leaders may find it helpful to consider developing values-based standards derived from concepts such as the Army Learning Concept, Warrior Ethos and Army Values. These concepts explicitly state what is important to our Army; however, the desired attributes and competencies are harder to measure than specific tasks or actions.[5] Consequently, training and education often focuses on menus of specific tasks, individual and collective, that somehow will develop the desired attributes. This task-focused approach to training may not be the best solution in developing attributes such as adaptability, confidence, initiative, judgment or accountability.

While task accomplishment is important and Army standards must be met, an outcomes focus on training may provide com-

manders with a better solution for developing the attributes associated with 21st Century soldier competencies, Warrior Ethos and Army Values. One of the eight leader-development imperatives stated in the "Army Leader Development Strategy for a 21st Century Army" information paper[6] is to "[p]repare leaders for hybrid threats and full-spectrum operations through outcomes-based training and education."[7] With an outcomes focus, leaders have the flexibility to adapt training to meet the developmental needs of subordinate leaders and soldiers.

Field Manual 7-0 tells us "using the principle of 'train as you will fight,' commanders employ mission command in training as well as actual operations. They tell subordinates their intent, and the subordinates determine how to achieve that intent."[8] When the commander includes developmental outcomes within his intent, soldier development becomes a dynamic and integral aspect of training. In the context of training, commanders should consider that the outcome includes not only the training objective, which describes the intended outcome (task, condition, standard) but the total impact of the training on the soldier or unit, intended or unintended.

With respect to the strategic squad, the squad leader would necessarily be empowered to execute the commander's intent. He would likely be responsible and accountable for developing and conducting training to achieve his commander's intent; however, he would need resources, especially time, to accomplish his task. To develop the necessary attributes associated with decentralized operations – such as initiative, discipline, accountability or adaptability – it follows that training should demand and develop those very same attributes. Mission command requires trust, and we trust the squad leader in combat. So why can't we

trust, and we trust the squad leader in combat. So why can't we trust him to train his squad? The NCOs at the squad level, both squad and team leaders, are relying on experience and baptism by fire in combat to develop and refine cognitive skills. It is time we elevate their training to the level required for a truly decisive force.

## Training management

Leader development is now taking on a lifelong-learning concept with SSD and PME combined to continue developing the leader at squad level.



When the commander includes developmental outcomes within his intent, soldier development becomes a dynamic and integral aspect of training. *(U.S. Army photo)*

Unit commanders also share responsibility in maximizing assets to narrow the training and education scope during the Army Forces Generation cycle. This includes specific regions/areas of responsibility, languages, cultures, enemy tactics, techniques and procedures, and leveraging technological assets to bring training-support packages and hip-pocket training to the next level. The next level includes interactive modules to increase cognitive skills through repetition with tactical-decision exercises at squad, platoon and company level.

Also, the squad-level leader must develop cognitive skills through training to assist his commander in developing lethal and non-lethal targets, answering the commander's priority intelligence requirements – and collecting through reconnaissance those requirements. Training will address personality targeting, tactical questioning, negotiation techniques, SSE and non-lethal – as well as lethal – targeting techniques. An example of a source currently available is advanced situational-awareness training, referred to in the U.S. Marine Corps as "combat hunter." This training stresses the value of combat-observation techniques, combat tracking, human profiling and behavior-pattern analysis techniques. The course's goal is *how* to train soldiers to be true sensors and subsequently to apply predictive analysis to all situations.

Once the squad leader has mastered these skills through leader development, he is ready to actively participate in collaborative training management of his squad, nested with the platoon's training goals and the company's and battalion's full-spectrum operations mission-essential task list. Individual- and collective-task training management is essential in not only developing cognitive fusion and teamwork across the squad, but it will inherently build trust, teamwork, cohesion and empowerment to psychologically prepare the squad for the rigors of combat in any environment against any enemy.

## Conclusion

In almost all our Army's past conflicts, the squad has always operated as part of a larger force: platoons and companies in Vietnam, battalions and regiments in Korea, and division-level and larger attacks during World War II. However, for today and the near future, the operating environment has changed. The squad continues to operate as part of a larger force; however, the environment has demanded that these forces assume risk and spread out across the battlefield, which in some cases prevents quick reaction, mutually supporting efforts and clear knowl-

edge of where all forces are at in times of crisis. This has proven to be even more difficult when these forces are operating in rugged terrain in a dismounted role – where we have the least connectivity to our supporting assets and the least situational awareness and understanding.

In parallel with the Army Learning Concept 2015, it is time to take a serious look at our leadership-development courses for junior leaders. Before moving to live training and trust-building, we must determine what material is outdated and where the training focus needs to be for the future fight. Ultimately we will adapt new, emerging technologies through the virtual, constructive and gaming constructs to enhance team- and squad-leader development before moving to live training and trust-building, enhancing mission command across the force. Empowerment across the force will allow timely feedback, tapping into our most valuable resource – combat-tested and -proven junior leaders – to adapt the courses to their needs, enhancing their strengths and structuring the courses to bridge current knowledge gaps in training management and home-station unit training.

In this article, we laid the foundation and case for change, addressing the challenges we face in leader selection and developmental changes for team and squad leaders; agile and adaptive leader training; and training management for the small-unit leader. Subsequent articles will address developing mission command and trust through immersive training, team-building and cognitive skills development through CSF-PREP. We plan to detail examples from the experimental and operational forces that have worked in improving leader development in both the institutional and operational force. Feedback from the operational force will facilitate both a bottom-up and collaborative effort, driving timely changes in our courses and cross-pollinating effective practices across various units as we continue to better ourselves as an Army.

*MG Robert Brown commands the U.S. Army Maneuver Center of Excellence, Fort Benning, GA. Previous assignments include chief of staff, U.S. Army Europe and Seventh Army; deputy commanding general for support, 25th Infantry Division, Schofield Barracks, HI, and Operation Iraqi Freedom, Iraq; director, exercises and training, J-7, U.S. Pacific Command, Camp H.M. Smith, HI; Joint Ground Maneuver Program analyst in force structure, Resource and Assessment Directorate, J-8, Washington, DC; and G-3 (training) and chief of operations, 25th Infantry Division, Schofield Barracks and Operation Uphold Democracy in Haiti. His other command experience includes D Company, 1st Battalion, 10th Infantry Regiment, 4th Infantry Division, Fort Carson, CO; 2nd Battalion, 5th Cavalry Regiment (Mechanized), 1st Cavalry Division, Fort Hood, TX, and Operation Joint Forge, Bosnia-Herzegovina; and 1st Stryker Brigade Combat Team, 25th Infantry Division, Fort Lewis, WA, and Operation Iraqi Freedom, Iraq. MG Brown's military education includes the Infantry Basic Course, Armor Advanced Course, Command and General Staff College and National War College. He holds a master's degree in national security and strategic studies from National Defense Univer-*

## Notes

[1]GEN Martin E. Dempsey, *ARMY* magazine, November 2010.

[2]GEN Martin E. Dempsey, *ARMY* magazine, February 2011.

[3]Joint Publication 3-0, Page IV-29, accessed Aug. 15, 2011, at http://www.fas.org/irp/doddir/dod/jp3_0.pdf.

[4]GEN Martin E. Dempsey, speech May 5, 2011, at Association for United States Army meeting.

[5]"An Initiative in Outcomes-Based Training and Education: Implications for an Integrated Approach to Values- Based Requirements," Asymmetric Warfare Group paper, March 2010.

[6](Editor's note: an information paper derived from the 2010 Army Posture Statement. For more information, see https://secureweb2.hqda.pentagon.mil/vdas_armyposturestatement/2010/information_papers/ Army_Leader_Development_Strategy_for_a_21st_Century_Army_(ALDS).asp.)

[7]"Army Leader Development Strategy for a 21st Century Army," Nov. 25, 2009.

[8]FM 7-0, *Training Units and Developing Leaders for Full-Spectrum Operations*, February 2011.

## Change in theme for *ARMOR*'s 1st writing competition

Although we announced in the September-October 2011 edition that the theme of *ARMOR*'s first writing competition would be "BCT 2020," the competition's focus has been changed to "enabling operational adaptability through reconnaissance."

Writers should refer to the foreword of the Army Capstone Concept, accessible at http://www.tradoc.army.mil/tpubs/pamndx.htm (especially the fourth paragraph) and discuss questions such as:

- Does the Armor Branch need different capabilities to do what is outlined in the foreword?
- Are we configured correctly to accomplish the mission?

Entries are due no later than Jan. 12, 2012. Winners will be published in the March-April 2012 edition of *ARMOR* and recognized at the 2012 Reconnaissance Summit March 6-8, 2012.

### How do I enter?

Submit an unclassified article examining "enabling operational adaptability through reconnaissance." Articles should be no more than 5,000 words, not counting endnotes. Concepts must address:

- Suggested configurations must be capable of full-spectrum operations; cannot cost the Army more money; and must be designed within the framework of existing resources.
- The training and professional-development implications of any suggested redesign.

Previously published articles, or articles being considered elsewhere for publication, are ineligible. Articles submitted to other competitions are also ineligible.

### What do winning writers receive?

**First place:** recognition at the Reconnaissance Summit/publication in *ARMOR*.

**Second place:** recognition at the Reconnaissance Summit/publication in *ARMOR*.

**Third place:** certificate of achievement signed by commandant/consideration for publication in *ARMOR*.

**Fourth place:** certificate of achievement signed by commandant/consideration for publication in *ARMOR*.

**Honorable mention:** certificate of recognition signed by commandant/possible publication in *ARMOR*.

### How do I submit an article?

- Complete the entry form and submit it with your manuscript via email to benn.armormagazine@conus.army.mil no later than Jan. 12, 2012. Include a biographical worksheet and filled-out operations-security certification form as part of your entry. The entry form, bio worksheet and OPSEC certification form are available on our Website at https://www.benning.army.mil/armor/ArmorMagazine/index.htm.

### How will the articles be evaluated and judged?

- The entry form, biographical worksheet and OPSEC certification are part of the submission; these forms must be with the manuscript for the entry to be considered.
- *ARMOR*'s editorial board will recommend to the Armor School commandant the winners using specific evaluation criteria.

If you have questions, contact benn.armormagazine@conus.army.mil.

# *ARMOR* Continues to Evolve

## by Lisa Alley

As the Armor Branch wrestles with how best to support our Army and our nation during these times of strict and declining resources, we are transitioning from print media to Web-based publication. Just as all the services' flagship publications – such as the Army's *Soldiers* magazine – will cease to appear in print after the October 2011 editions, this Armor School initiative is aimed at reducing costs while improving efficiency at the school.

But it's "all good": we're setting up a portal (called e*ARMOR* at this time) that will contain the on-line-only version of the magazine (also called e*ARMOR*). This will actually broaden the magazine's reach, as it will be available across the Internet in a Web-native (such as Hypertext Markup Language) format. However, we will publish and update e*ARMOR* more frequently. Watch for content to come on-line over the next few months as the old *ARMOR* Website, https://www.benning.army.mil/armor/ArmorMagazine/index.htm, is revised.

Through about the January-February 2013 edition, the printed and on-line editions of *ARMOR* and e*ARMOR* will both exist – that is, we plan to print *ARMOR* through 2012 to give us a chance to build and mature e*ARMOR*. During that time, we'll place the printed version on the Web in Portable Document Format. However, e*ARMOR* will be more than Web-based versions of *ARMOR* articles: e*ARMOR* will include articles not printed in *ARMOR* and will be published more frequently – such as weekly or every other week (frequency still to be determined at this time). Authors submitting manuscripts for publication in 2012 will be given the option of being published in *ARMOR* or e*ARMOR*.

Speaking of *ARMOR*/e*ARMOR*, it's an opportune time for Armor and Cavalry soldiers to speak out about the professional publication's name, to possibly choose a name that better reflects the branch's identity. As the portal and on-line-only edition of the publication diverge from the print edition, and the Armor School divests the print edition, the Web products can take on a new name as they evolve. Send your suggestions to benn.armor-magazine@conus.army.mil.

We outlined in the July-August edition some changes in how our younger audience (sergeants/staff sergeants/newly promoted sergeants first class and lieutenants/captains/new-in-grade majors) consumes information. Following those suggestions will be even more paramount as *ARMOR* ends and e*ARMOR* begins, as it will be vital to offer engaging visuals and scannable text, with resources provided for digging deeper (including Uniform Resource Locator addresses so we can set links, for instance).

## Helping readers 'consume'

Again we call on *ARMOR* writers to provide not just content but to enable readers to "consume" their articles. Clearly, concisely focus your article so your readers can easily understand and extract your main points/most important information. A reminder of the benchmarks in accomplishing this:

- Open with a direct, powerful purpose sentence that catches your reader's attention and emphasizes the main point of your article. This sentence tells readers what they should do, understand or take away from your article and is called the bottom-line-up-front, or reason for writing. If the BLUF isn't your first sentence, it should be in the first or second paragraph.
- Put your recommendation(s), conclusion(s) or lessons-learned and analysis near the BLUF – again, in the first or second paragraph. If you're writing a history, for example, forthrightly state the current lessons-learned and analysis to help establish clear relevancy to your readers. Same approach with personal-experiences stories: include lessons-learned that are applicable Armor Branch-wide.
- Clearly separate each major section by using headings, section titles or paragraph titles.

## Army writing standards

If you submit an article to *ARMOR*'s editorial office, you'll see that we apply the writing standards of DA Pamphlet 600-67, AR

25-30 and DA PAM 25-40 because, at their core, they put the reader first, and that's our bottom line. If you look closely at the standards, you'll see they guide you to write according to how *you* want to read material as a busy professional with a high optempo. For instance, from DA PAM 600-67, the standard for Army writing is writing the reader can understand in a single rapid reading, generally free of errors in grammar, mechanics and usage. If an article meets the standard, it's clear, concise, organized and to the point.

*ARMOR* – and especially e*ARMOR* – articles primarily follow Army writing-style rules. Following these proven practices enhances readability, which also enhances comprehension – which enables your reader to better consume what you've written.

## Article submission requirements

Whether submitting for *ARMOR* or e*ARMOR*, we'll need an operations-security certification form filled out and a biographical worksheet for each author. Authors are responsible for getting their own work reviewed and cleared for public release because we practice "security at the source." *ARMOR* and e*ARMOR* are/will be distributed in the public domain and therefore must not include any sensitive, For Official Use Only or classified information.

Also, whether submitting for *ARMOR* or e*ARMOR*, your article may not be copyrighted or include copyrighted items. Please don't copyright your unit diagrams; those are Army property. Please don't send us an article that excerpts your upcoming book; if we publish it, that implies Army endorsement of the book. (Publish your book, and then we'll look at publishing a book review about it if it professionally develops Armor Branch soldiers.)

In summary, *ARMOR*, the Army's oldest professional bulletin, isn't dying – it's morphing into something else that leans forward in the saddle and looks at the future. We've proved our adaptability throughout our branch history. Thank you for your time and attention in making *ARMOR* a better, more dynamic publication.

*Lisa Alley is **ARMOR**'s editor in chief. The Keith L. Ware award-winning editor has spent most of her 29-year uniformed and civil-service career as an editor and staff member of military newspapers and magazines. She also has 15 years' experience in Army Web publishing and policy. Before joining the Army, she served as editor of the **Rose Hill Reporter**, Rose Hill, KS; and correspondent for both **Elgin Courier-News**, Elgin, IL, and **St. Charles Chronicle**, St. Charles, IL. Ms. Alley holds a bachelor's of arts degree in journalism and mass communication from Judson College in Elgin, IL. She has been a Keith L. Ware (Army journalism awards) judge at Army level and for the Installation Management Agency Northeast Region in the print and Web-publishing categories.*

| ACRONYM QUICK-SCAN |
| --- |
| **BLUF** – bottom line up front |

### *ARMOR* timelines for publication 2012-2013

| Edition | Suspense for manuscripts | Magazine published | Theme |
| --- | --- | --- | --- |
| January-February 2012 | Nov. 3, 2011 | o/a Jan. 3, 2012 | Enabling operational adaptability through reconnaissance |
| March-April 2012 | Jan. 6, 2012<br><br>Writing contest MS due by Jan. 12, 2012 | o/a March 7, 2012 | Precision gunnery<br><br>Winning articles (1st and 2nd place) for writing competition on "enabling operational adaptability through reconnaissance" published |
| May-June 2012 | March 7, 2012 | o/a May 1, 2012 | Armor and the profession of arms |
| July-August 2012 | May 4, 2012 | o/a July 2, 2012 | Armor and Cavalry leader development (including Armor mentors / mentorship) |
| September-October 2012 | July 2, 2012 | o/a Aug. 30, 2012 | To be determined |
| November-December 2012 | Sept. 7, 2012 | o/a Oct. 31, 2012 | To be determined |
| January-February 2013<br><br>(last *ARMOR* print edition published) | Oct. 25, 2012 | o/a Jan. 2, 2013 | To be determined |

# Walk-and-Shoot:
## Training Fires in Support of Maneuver

### by CPT Erik Sewell

Most Army units have fought in counterinsurgency environments for the past decade and have become experts in conducting static fire-support missions such as counter-fire and clearance of fire drills in a tactical operations center. Few units, however, have been required to integrate fires into a scheme of maneuver in the classic sense. Consequently, most of today's company-level leaders have little experience integrating fires and maneuver.

To regain this critical skill set in our ranks, 1st Brigade Combat Team, 1st Cavalry Division, at Fort Hood, TX, developed a walk-and-shoot concept to incorporate into training. The planning process began with defining a walk-and-shoot and identifying key tasks vital for training and testing. However, this in itself was not so easy, as CW2 Scott Zlatnik, the brigade targeting officer, accurately summarized. "No one in 1st Cavalry Division has done a walk-and-shoot since the advent of PowerPoint, so it looks like we will have to start this from scratch," he said. "The goal of the walk-and-shoot should be to train soldiers and leaders how to best integrate all available fire-support assets into the

ground commander's scheme of maneuver."

We discovered that the walk-and-shoot comes in many forms. It serves as a building block in developing the relationships and skill sets necessary for a BCT's maneuver leaders and fire supporters to maximize all forms of contact with the enemy in high-intensity conflict. The Ironhorse Brigade used a three-event crawl, walk, run progression to develop the walk-and-shoot training event and to certify leaders. This article will detail the three events and provide some lessons-learned to help other units improve on our concept.

## First exercise

The 1st BCT, 1st Cavalry Division, conducted two walk-and-shoot training exercises in the first quarter of Fiscal Year 2011. The first walk-and-shoot was the culminating event for the brigade's fire-support team certification. All company FISTs participated in a lane incorporating organic M120s (120mm mortars) from each FIST's battalion and M109A6 Pala-

din (155mm field artillery, self-propelled) support from 1st Battalion, 82nd Field Artillery.

The event focused on echeloning and shifting fires as the maneuver element approached the objective. Three phase lines were established. FISTs were expected to echelon and shift fires at each phase line, which notionally represented minimum safe distances upon approaching the objective. While it is unlikely that most fire supporters will ever do a textbook echelonment of fires in combat, doing it in training presents soldiers with complexities that help them to gain greater mastery of the concepts necessary to successfully integrate fires and maneuver.

During the first walk-and-shoot, range-control constraints required us to stay 1,000 meters from impact, but this distance was much closer than many fire supporters had experienced and allowed them to get a feel for what it's like to be close to incoming rounds. The primary objective in this training exercise was to learn the importance of assigning and maximizing priority of fires for an asset whenever

possible by using triggers. Initially, several FISTs began their missions with PoF for an asset but did not take the time to lay the guns on a priority target beforehand. When it was time to initiate fires on a preplanned target, the guns would take longer to shoot because they hadn't been instructed to lie on the target. Until the teams mastered these types of concepts, they struggled to keep continuous suppression on the objective as they maneuvered.

## Second exercise

The Ironhorse Brigade's second iteration of the walk-and-shoot was the culminating event for our maneuver-shooter program. The target audience for this training event was maneuver-company commanders/scout platoon leaders and their fire-support officers. The scenario for this lane was much more involved than the first, including a full battalion maneuver operations order with accompanying target-list worksheet and fire-support execution matrix.

Organic M120s, M109A6s and attack-aviation teams from 227th Air Cavalry Brigade, 1st Cavalry Division, supported this training event. The attack-aviation teams consisted of AH64s firing 30mm cannons and 2.75-inch rockets, and UH60s shooting door gunnery.

The maneuver commander developed a company scheme of maneuver, incorporating direct-fire engagements, fire-control measures and intelligence preparation of the battlefield. The FSO was required to develop a scheme of fires that integrated into the commander's maneuver plan. The scenario presented several planned targets in addition to several targets of opportunity. It was open-ended as much as possible so maneuver elements had the opportunity to use fire-support assets as they saw fit to develop their engagement areas.

Creating a scenario that allows events to occur simultaneously and non-sequentially allows the participant to have a more realistic training event that can test his maneuver and fires plan while forcing him to adjust the plan when he comes in contact. If the events in the scenario are set in one order, the training event becomes a series of fire-support tasks and loses the intended effect of teaching participants how to integrate fires and maneuver effectively.

The key tasks trained during this exercise included:

- Echelon fires on immediate threats while maneuvering to an objective;
- React to contact by calling marking smoke rounds and adjusting

close-combat attack on enemy threats;
- Obscure enemy observation assets with smoke;
- Call for and adjust fire on targets of opportunity; and
- Execute final protective fire.

However, the most important task (which was implied) was integrating triggers from the maneuver commander's plan into the actual coordination of fire-support assets.

## Challenges and considerations

During development of the first two walk-and-shoot exercises, we struggled over deciding whether trainees would maneuver mounted or dismounted. Although dismounted during the execution, many individuals commented that the training would have been better if performed in their combat vehicles. There are advantages to conducting a walk-and-shoot dismounted. In a dismounted setting, planning is simpler and only requires a small training area. Conducting the lane dismounted also provides a more intimate setting for mentoring and professional development. Conversely, conducting the walk-and-shoot while mounted allows trainees to gain confidence and proficiency on their designated platforms.

During the second walk-and-shoot, each company commander, with his FSO, participated in the lane under the battalion S-3's guidance. The 1st BCT commander, COL Scott Efflandt, spent an hour walking side-by-side with each team on the lane. The walk-and-shoot was a rare opportunity for the company commanders to spend time with their senior trainer in an operational setting.

The battalion OPORD given to company commanders in the second walk-and-shoot was written for a heavy combined-arms battalion facing a mechanized enemy force. The maneuver commanders had to jump from planning a mounted fight to dismounted maneuvering during the training event. This caused some confusion as to the proper approach to the event.

## Lessons-learned

Our take-away is that training fires and maneuver in a dismounted setting has benefits and helps trainees learn the basics, but it is best to train as you fight. As a heavy BCT, our future walk-and-shoots will incorporate our organic maneuver platforms.

**Include attack aviation.** Adding attack-aviation assets to the walk-and-shoot exercise exponentially increases the training's value. Air-to-ground integration re-

quires much more thought about the area of operations as a three-dimensional environment. Airspace-coordination areas and gun target lines become much more important to the ground commander when aviation is on station. This type of training develops an appreciation for fire-support coordination measures in the maneuver commander's thought process.

Observers with limited experience controlling attack-aviation assets tend to let the Apaches "do their thing" without giving the pilot a clear picture of the situation on the ground. After practicing, our observers became more skillful at giving aviation assets effective task and purpose. The participants learned that most pilots' primary focus is receiving an accurate location of friendly troops and establishing a target using friendly location as a reference.

It seems intuitive, but early in the training many ground controllers struggled to provide pilots enough information to paint a clear picture of ground activity. Controllers either gave too little information or overcomplicated the process by giving pilots directions in miles rather than giving them a cardinal direction. Successful observers generally used simplistic walk-ons, using cardinal directions and distances from mark to target (i.e., north of mark, 100 meters) or orientation based off the observer's/Apache's location (i.e., three vehicles in the open, attack vehicle furthest away from my/your current location).

Also, to avoid fratricide, controllers must understand it is crucial for the pilot to acknowledge the location of friendly positions before authorization to engage targets.

**Exercise at platoon level.** The next step and the third event in our development of the walk-and-shoot concept was to incorporate multiple fire-support assets into platoon live-fire exercises and/or Table 12 gunnery. The 2nd Battalion, 8th Cavalry, 1st BCT, conducted a platoon LFX incorporating all organic direct-fire assets and 120mm mortars in addition to M109A6 support from 1st Battalion, 82nd FA, and AH-64 support from 1st and 4th battalions, 227th Air Cavalry Brigade. All these assets supported a quick-reaction-force mission, which provided the platoon leader and his fire supporters an impressive array of firepower to manage.

The platoon's mission involved:

- Moving from a forward operating base to the objective;
- Assaulting (dismounted) the objective while M1A2 Abrams, M2A3 Bradleys and M1114 up-armored humvees provided support by fire; and

- Engaging the enemy from defensive positions.

The platoons generally excelled at these tasks and were very fluid in their ability to maneuver on the battlefield. By far the most challenging aspect of the exercise was the air-to-ground integration and clearance of fires handled between the platoon leader and FIST team.

Range restrictions required all direct- and indirect-fire assets to cease fire when aviation was cleared for attack, so the platoon leader and the FIST team had to talk constantly to control and mass their firepower effectively. Each platoon leader had to decide how he wanted to employ and control his assets. Some platoon leaders preferred to control attack aviation themselves. Others preferred to focus on the ground fight and task the FIST team to control aviation assets. Both ways worked for some and did not for others. In the end, we found it is more effective to find someone who is comfortable controlling aviation than to assign a certain position the task.

**Target leader/FSO relationship.** A walk-and-shoot can be designed for different target audiences, but we found one of the best targets for this training is the company commander/FSO relationship. Many company FSOs and company commanders commented on the value of the opportunity to plan realistic maneuver and fires together for the first time. This allows the FSO to prove himself to his commander as they work together in their intended relationship for the first time.

The same principle held true in the 2nd Battalion, 8th Cavalry, platoon LFX between the platoon leader and FIST team. During the platoon LFX, many platoon leaders discovered the lethality potential that fire supporters bring to their platoon when employed effectively.

**Coordinate early with Range Control.** One of the greatest challenges in developing a walk-and-shoot is to develop a scenario that allows each individual observer freedom to create a unique scheme of maneuver and fire-support plan. Live-fire in range training areas will always involve constraints that must be deconflicted. Sometimes these constraints can be manipulated to replicate FSCMs, but often they serve only as training distracters.

Therefore it is important to establish a positive working relationship with Range Control to mitigate range constraints as much as possible. Fort Hood Range Control played an integral part in the development of the walk-and-shoot concept. They attended many in-progress reviews and constantly advised us on ways to maximize our capabilities in the range training area.

When developing a walk-and-shoot, it is important to approach initial planning by building a robust scenario instead of asking for the capabilities of a specific range. Our first event was very restricted because we crammed it into one range. When we described the type of event we wanted to Range Control for the later progressions, they were able to help us build a better training event using a number of ranges together.

## Desired end state

The desired end state of our walk-and-shoot training progression is threefold:

- That FISTs begin to master fire support as a dynamic task instead of sitting on a stationary observation post calling for fire;
- That maneuver elements develop an understanding of what capabilities fire support brings them on the battlefield; and
- That maneuver elements start to think about methods of employing fires into their scheme of maneuver, as opposed to thinking of them as a separate entity operating independently on the battlefield.

Using our training model, BCTs can train fires in support of maneuver in a crawl, walk, run-phased training campaign. In the crawl phase, FISTs must become competent using triggers and managing multiple fire-support assets. The walk phase must combine fire supporters and maneuver leaders learning to integrate fires into maneuver plans. The walk-and-shoot concept we're developing is the ideal tool to train the first two phases and advance to the run phase, which occurs when multiple fire-support assets are integrated into the maneuver training of a platoon-sized element or larger.

Conducting all the prerequisite training to get to this phase of training most likely requires more than 12 months' dwell time to accomplish. As low-intensity conflict winds down, dwell time increases and our Army prepares for the next high-intensity conflict, the training concepts outlined here can help our Army be successful in the future.

*CPT Erik Sewell is a student at the Field Artillery Captains' Career Course, Fort Sill, Okla. He has served as battalion FSO, platoon leader and fire-direction officer, and will be assigned to 41st Fires Brigade at Fort Hood, TX, following graduation from the captains' career course. His military schooling includes the Field Artillery Basic Course and the Joint Firepower Course at Nellis Air Force Base, NV. He holds a bachelor's of science degree in engineering management, U.S. Military Academy, West Point, NY.*

**ACRONYM QUICK-SCAN**

**BCT –** brigade combat team
**FA –** field artillery
**FIST –** fire-support team
**FSCM –** fire-support coordination measure
**FSO –** fire-support officer
**LFX –** live-fire exercise
**OPORD –** operations order
**PoF –** priority of fires

# The U.S. Military Liaison Mission, Its Tri-Mission Partners and the Quest for the 'Holy Grail'

## by James M. Warford

"His weapons are stealth and discretion. He knows that successful collection is a deliberate and persistent endeavor that reveals the correct picture about his opponent from an emerging mosaic of separate information. Upon his individual judgment, initiative and courage, the success of USMLM is built." –COL Randall A. Greenwalt, chief of mission (1982), describing the qualifications of a U.S. Military Liaison Mission member

*(**Editor's note**: Although some would argue, the foundation of battlefield success is reconnaissance. Here Jim Warford gives us a glimpse of the dangerous time of the Cold War. It's a G-2, spy-vs.-spy type of story, yes, but it's mostly about reconnaissance and the "holy grail" that Tri-Mission (American, British and French) intelligence-collection efforts focused on: information about the tanks the Soviets would use to fight World War III. Warford looks behind the scenes at the work of the U.S. Military Liaison Mission, which grew out of the Huebner-Malinin Agreement. This agreement – signed in 1947 by LTG C.R. Huebner, deputy commander in chief of U.S. European Command, and Colonel-General Mikhail Malinin, deputy commander in chief and chief of staff of the Group of Soviet Occupation Forces, Germany – established a Soviet military-liaison mission headquarters in Frankfurt, West Germany, and the Western powers' headquarters in Potsdam, East Germany. The agreement guaranteed the right of free travel without escort for the military-liaison missions' accredited members throughout established zones "except places of disposition of military units" and permitted the missions to render aid and protect the interests of "people of their own country." But the less visible role, as outlined in the unit's history from 1964, was as "American military observers [who] could observe, photograph and appraise a combat-ready Soviet military force in the field. The USMLM intelligence-gathering program with its refined reconnaissance methods and efficient reporting system was of great importance to the U.S. intelligence effort."[1] The mission deactivated Oct. 1, 1990, in Potsdam as a result of the Cold War's end.)*

The U.S. Military Liaison Mission authorized the exchange of military-liaison teams or "missions," as they were commonly called, between U.S. and Soviet military headquarters in Germany to support the U.S. Army Europe commander in chief and GSFG commander in chief. However, it was in USMLM's secondary and, until the end of the Cold War, secret role where its contributions can truly be measured. Its secondary role was to "exploit its liaison status and attendant access for the collection of intelligence information in the German Democratic Republic."[2] This meant that throughout its 44-year history, members of USMLM spied on and gathered critical intelligence information on Soviet forces deployed in East Germany.

Of all their real-life missions – many of which rival the most daring exploits described in best-selling spy novels – the task of getting up close and personal with the brand-new Soviet T-64 main battle tank (later confirmed as the T-64A) and obtaining metallic scrapings of the tank's armor ranks as one of the most daring and critically important they ever conducted. The desire to touch the enemy's new tank (the best the Soviets had to offer) represented more than just a high-priority mission; it was, in fact, the quest for the Cold War's holy grail.

## Zones and restricted areas

At Yalta in 1945, U.S. President Franklin D. Roosevelt, British Prime Minister Winston Churchill and Soviet Central Committee Secretary Joseph Stalin agreed that post-World War II Germany (and Berlin) would be reorganized into zones of occupation: American, British, Soviet and French. Each zone was granted a liaison mission. The British mission was known as BRIX-MIS, the Soviet mission as SMLM (often named by American military forces as "smell 'em") and the French mission as FMLM.

The American, British and French missions were able to use their quasi-diplomatic status to observe, track and appraise Soviet military forces as they "toured" through East Germany. These "tours" normally consisted of two or three mission-team members in a modified civilian sedan or small sport-utility vehicle. They drove through East Germany both on- and off-road. In many cases, mission tours included tense stakeouts while hidden in the East German countryside for days at a time. If the Stasi (the East German State Security Police) or Soviet military forces spotted them, the chase was on. Tour members did everything they could to avoid being detained ("clobbered") by their pursuers, including dangerous high-speed chases and escape-and-evasion maneuvers.

USMLM tour members were not officially authorized to literally go wherever they wanted. The established mission agreements included the well-used provision of allowing the occupying military force to designate large areas of land as either permanent or temporary restricted areas. In most cases, GSFG-des-

ignated PRAs and TRAs were delineated by their surrounding road networks, which were actually considered to be inside the PRA/TRA. The result was that these many PRAs and TRAs greatly restricted the authorized travel available to the various mission tours.

GSFG TRAs were normally imposed for a set time to support Soviet military exercises. TRA locations and in-effect dates changed with each exercise or event, so they were delineated on maps made available to the various missions.



A USMLM tour monitors the introduction of the T-64A into the 10th Guards Tank Division in June 1978. Note the USMLM license plate. *(USMLM unit-history photo)*

PRAs, on the other hand, were just that – permanent. They were normally established around high-priority activities, installations and training areas. A mission tour inside a PRA required high-level permission from the U.S., British or French military chain-of-command and was considered very risky. Soviet and East German responses to these unauthorized incursions was unpredictable at best and could result in USMLM, BRIXMIS or FMLM tour members being detained or even shot by Soviet forces or the East German Stasi. At one point during the Cold War, 40 percent of East Germany was under PRA,[3] according to BRIXMIS.

## Results and risks

Just one example of the depths to which the dedicated and courageous Tri-Mission team members would go to gather intelligence was their response to the Soviet army practice of "litter-bugging." The Soviets were notorious for throwing away valuable documents and paperwork, leaving them in unsecure trash dumps when they moved from one location to another. Going through these trash dumps had been part of USMLM operations for some time, but in 1976 the Americans launched a more formal and intensified effort called Sand Dune. Sand Dune produced a variety of intelligence, including Soviet army unit-training schedules, tank-firing tables, vehicle-maintenance manuals, troop-rotation plans, new-equipment technical documentation and radio call signs and frequencies.

BRIXMIS had a similar program called Operation Tamarisk. Published accounts describe BRIXMIS team members not only digging through trash dumps but also through retired latrines and sites used for medical-waste disposal.

Perhaps the most significant find from Sand Dune and Tamarisk efforts over the years was made near a Soviet army barracks at Neustrelitz, in northern East Germany, in 1981. A Tamarisk operation produced a personal logbook written in Russian that included technical drawings. According to a British military-intelligence officer who knew what the logbook contained and who debriefed the BRIXMIS team who discovered it, "It was the most important thing we had from any source for 10 years."[4] The logbook contained top-secret information detailing the composition of the armor and the strengths and weaknesses of the new Soviet T-64A. The logbook also contained the same type of information regarding the even newer and more mysterious T-80B MBT.

The detailed description of Soviet tank armor contained in the Neustrelitz logbook launched a crash program to develop new and more powerful ammunition for the British Chieftain MBT.

The new British L23 120mm Armor-Piercing Fin-Stabilized Discarding Sabot ammunition (which included a newly designed, longer dart-like armor penetrator and was fielded in 1983/84) may have been designed for the sole purpose of defeating the Soviet tank armor described in the Neustrelitz logbook.

As mentioned, mission tours in and around GSFG PRAs and TRAs were risky. The risks were accepted, however, since it was USMLM's task (as well as that of the other Tri-Mission teams) to gather intelligence on Soviet and East German military forces. Incidents between the Americans and Soviets occurred frequently and were considered part of the job; their seriousness ranged from relatively routine detentions of mission members to much more violent Soviet and East German responses. Here are a few examples:

- August 1978: Soviet troops fired on a USMLM tour while the Americans were collecting unit-designation markings from train-mounted T-64As. Four rounds of ammunition struck the USMLM vehicle.[5]
- March 1979: A tour vehicle was caught in a well-planned trap when a Soviet army truck near a radar site deliberately broadsided it. The attack forced the USMLM vehicle off the road, where it turned over twice. The tour officer was seriously injured and incapacitated for four weeks.[6]
- June 1980: A Soviet army truck deliberately rammed a USMLM vehicle as team members observed Soviet military equipment near a rail siding.[7]
- January 1984: While a USMLM vehicle passed a Soviet army roadwork crew, a Soviet officer unexpectedly stepped toward the moving USMLM vehicle and swung a long-handled shovel through the vehicle's windshield.[8]

Easily the worst of these incidents was the fatal shooting of MAJ Arthur D. "Nick" Nicholson March 24, 1985. The official USMLM account of the tragedy is as follows:

"[MAJ] Nicholson was shot at 1545 [hours] outside tank sheds located on Ludwigslust Sub-caliber Range 475, where he had dismounted from the tour vehicle to check for the possible presence of [Soviet] armored vehicles. This facility served the Independent Tank Regiment of the 2nd Guards Tank Army. Known to be frequently guarded under normal conditions, it had a varied history of occasionally violent reactions. Thus, the tour had entered the area with considerable caution, stopping in the forest to watch and listen at intervals as they did so. The tour then approached the sheds and photographed signboards displayed nearby, and positioned the vehicle to permit the tour [noncommissioned officer] to pull security while the tour officer [Nicholson] checked for armor. Unknown to the tour and despite its best efforts at observation, a sentry remained undetected, concealed in the adjacent woods. SSG Schatz [the tour NCO] noticed him just before he opened fire. The sentry's first shot whizzed narrowly over the heads of the tour; it was not a warning, but a miss. One of the two remaining rounds fired struck [Nicholson], by this time run-

ning back to the tour vehicle, near his center of mass: his upper abdomen. The tour NCO sprang from the tour vehicle to administer first aid, but the sentry refused to let him do so. The sentry, who had held [Schatz] at gunpoint the entire time, shouldered his AK-47, took aim at [Schatz]'s head and motioned him back into the vehicle. Seeing the futility of further action and the hopelessness of the situation, [Schatz] complied. Over the next three hours, many Soviet officers and soldiers arrived to secure the area, collect data and investigate the situation. Yet no one, including the obvious medical personnel, rendered even rudimentary first aid. The protracted failure to provide or permit any medical attention at all ensured that the wound proved fatal."[9]

There are unresolved issues to this day surrounding Nicholson's shooting. Unconfirmed reports suggest that he may, in fact, have been murdered in retaliation for a U.S. intelligence coup. The coup took place the early morning of Jan. 1, 1984, when a USMLM tour gained access to a T-64B MBT shed for 24 hours, where they examined and took interior photographs of the new tank. According to available information, Nicholson was on the tour that conducted this event.

In the years following, Cold War spy James W. Hall, a former U.S. Army intelligence analyst convicted of espionage in 1989, confessed to providing his Soviet and East German "handlers" the details regarding Nicholson's intelligence coup with the T-64B. Clearly the Soviets knew the names of the USMLM team members responsible; it's likely that Hall's information to the Soviets ensured that the sentries at Ludwigslust 475 were very aware of whom they were dealing with March 24, 1985.

It's important to keep in mind that USMLM team members were never armed and relied solely on the standard equipment issue of a powerful Nikon camera with multiple lenses, a video camera (in more recent years), a tape recorder and a note pad to conduct their dangerous missions.

Another unresolved issue related to Nicholson's death concerns the target of his tour's intelligence-gathering efforts on that fatal day. Most available sources report that before the shooting, he had or was in the process of photographing T-80B tanks at the site. While the Ludwigslust 475 facility was located in the 2nd Guards Tank Army area of operations, which was equipped with T-64A and T-64B tanks, the established Soviet tank-deployment pattern had started to change. In 1984 USMLM observed a T-80B; this development changed the status quo, and USMLM was concerned. The confirmed presence of a T-80B in the 2nd Guards Tank Army in 1988 not only confirmed that the Soviets were upgrading T-64-equipped units with new T-80Bs but also that the tanks Nicholson had been photographing at Ludwigslust 475 could have been T-80Bs, not the expected T-64As or T-64Bs. It's likely the Soviets had decided not to allow a repeat of Nicholson's T-64B incident the previous year with the even newer T-80B in 1985.

## Friendly competition

Of all the important and, in many cases, even amazing intelligence-gathering efforts conducted by USMLM and its mission partners, those targeting the T-64A and T-64B stand above the rest. Perhaps most important was the campaign to get up close with the T-64A as quickly as possible following its initial deployment to the GSFG in 1976 and acquire metallic samples of the tank's armor.

A BRIXMIS overflight took the first photographs of the new tank at Bernau. Reportedly, the BRIXMIS member didn't recognize the prize he had photographed and sent the film through routine processing. Later that same day, a USMLM flight over the same area photographed the new tanks, but its crew realized they had seen something special. The USMLM flight crew thus claimed the "scoop" of being the first to photograph the new tank.

Interestingly enough, the new Soviet tanks were initially identified as T-72 MBTs because the U.S., British and French missions were only aware of a new Soviet tank called the T-72. It wasn't until the Soviet military parade in Red Square Nov. 7, 1977, that the missions learned there were in fact two new Soviet tanks: the T-72 and the T-64. The new tanks identified in East Germany were actually T-64As.

The first observations of the T-64A from the air by both BRIXMIS and USMLM on the same day launched a friendly competition between the missions. The challenge was to gather as much intelligence as possible on the T-64A, and if you were able to "scoop" your Tri-Mission partners in doing so, all the better.

What was needed was someone to be first to lay hands on a T-64A and bring back metallic samples of the tank. Before discovery of the Neustrelitz logbook, this was truly the holy grail for the Tri-Mission teams. However, the effort focused on the T-64A proved to be one of the few cases where Tri-Mission reporting and "credit" claims regarding who was first to accomplish something important were actually contradictory. Up until that time, each Tri-Mission team would normally give credit where credit was due. USMLM reporting, for example, consistently gave BRIXMIS and the FMLM credit for many significant discoveries and observations, including descriptions like "painstaking effort" or "determined vigilance." This apparently changed as the tour members began closing in on the T-64A in 1981/1982.

The friendly disagreement over who was first to obtain metallic scrapings of the tank's glacis and turret armor remains to this day, leaving assignment of credit for this significant Cold War achievement unresolved. Unfortunately, little unclassified information is available regarding the first grab of T-64A scrapings.

By August 1985, things seemed to be back to normal, with USMLM officially giving credit to BRIXMIS for close-up photography of the T-80B highlighting the tank's glacis. The FMLM was also officially given credit for the first sighting of the T-80B fitted with mounted reactive armor in September/October 1985.

## Benefitting NATO

The real-world and hands-on intelligence information gathered and provided by USMLM and other Tri-Mission teams proved invaluable during the Cold War. Their unprecedented proximity and access to the Soviet army's latest weapons provided a unique ground-level viewpoint. These were not the weapons shown annually during military parades in Red Square; they were, in fact, the weapons and capabilities the Soviet army would use to fight World War III.

The shared intelligence gathered by the Tri-Mission teams would prove to benefit all countries arrayed against the might of the Soviet Union and its Warsaw Pact allies in Europe. The detailed information regarding the almost fully exploited T-64A, for example, was distributed in many classified documents over the years, including the now unclassified USAREUR intelligence study, *Warsaw Pact Tanks in the Forward Area* (December 1983). According to the British Ministry of Defense, the T-64 intelligence gathered by BRIXMIS was so important that the North Atlantic Treaty Organization would not have been able to defend Europe without it.

Fortunately, disagreements like the one concerning who deserved the credit for being the first to achieve the Tri-Mission's holy grail

were few and far between. They were never allowed to interfere with what was truly most important, the rock-solid and united front represented by USMLM and the other Tri-Mission teams against Soviet military forces in East Germany.



*Retired MAJ James Warford is a senior training developer in the Kansas City, MO, area. During his career, he served in various command and staff positions, including tactics instructor, U.S. Army Command and General Staff College, Fort Leavenworth, KS; S-3 for 2nd Brigade, 24th Infantry Division, Fort Stewart, GA, and for 2nd Squadron, 4th Cavalry, Fort Stewart; small-group instructor, Armor Officer Advanced Course, Fort Knox, KY; and commander, Company A and Headquarters and Headquarters Company, 2nd Battalion, 66th Armor, 2nd Armored Division, Germany. His military education includes Armor Officer Basic Course, Armor Officer Advanced Course and U.S. Army Command and General Staff College. He received a bachelor's of science degree in history from the University of Santa Clara, a master's of military arts and science in operations, plans and training from U.S. Army Command and General Staff College and a master's of arts in human-resources development from Webster University.*

## Notes

[1] Paragraph IIIA, 1964 unit history, http://www.history.hqusareur.army.mil/uslmannual.htm. Other Websites have the unit histories as well, such as http://www.western-allies-berlin.com/units/military-liaison-mission/usmlm/detail/usmlm-history-1964, but they may not have the correct classification markings.

[2] USMLM history, 1982.

[3] *BRIXMIS – The Untold Exploits of Britain's Most Daring Cold War Spy Mission*, Tony Geraghty, New York: HarperCollins, 1996.

[4] Ibid.

[5] USMLM history, 1978 (unclassified).

[6] USMLM history, 1979 (unclassified).

[7] USMLM history, 1980 (unclassified).

[8] USMLM history, 1984 (unclassified).

[9] USMLM history, 1985 (unclassified).

---

### ACRONYM QUICK-SCAN

**BRIXMIS –** British commanders-in-chief mission
**FMLM –** French military-liaison mission
**GSFG –** Group of Soviet Forces, Germany
**MBT –** main battle tank
**NCO –** noncommissioned officer
**PRA –** permanent restricted area
**SMLM –** Soviet military-liaison mission
**TRA –** temporary restricted area
**USAREUR –** U.S. Army Europe
**USMLM –** U.S. Military Liaison Mission



**USMLM photography of T-64As, taken August 1978.** *(USMLM unit-history photo)*

# Peer-Competitor Conflict: Franco-Prussian War

## by Robert W. Lamont

Since the fall of the Berlin Wall, the United States has stood alone at the top of the world in superpower status. Our forces have answered the call to engage insurgent and terrorist forces around the globe. In so doing, our nation has gained a talented, courageous and experienced cadre of combat veterans. The Defense Department has also benefitted – this period of open-ended conflict has seen DoD receive significant financial support for the better part of a decade. While we can never be sure of what the future will hold, it seems clear that in an ever-shifting national agenda consistent with a pluralistic political process, the availability of resources for defense will decline, not expand.

The purpose of this article is to review the conditions that resulted in the demise of Imperial France and look for parallels in our national position as we enter the second decade of the 21st Century. We should reflect with a sober caution that the French let a similar superiority to our current one slip away in the span of only a decade.

It is incumbent upon a new generation of company-grade officers dutifully focused on the immediate dangers once called "low-intensity combat" to mature into field-grade staff planners who define and shape the defense establishment for future decades. The challenges on the path forward will include fewer resources, an ever-increasing rate of technology change and a more diverse population to mold into our next fighting force. The new generation of company-grade officers will also have to guard against the timeworn tendency of all military establishments to prepare for the last conflict based on personal experience as opposed to the developing threat on the horizon.

## Prelude to defeat

As Imperial France watched the 1860s end, she stood confident as the European continent's major military power. She triumphed over both Russia and Austria the previous decade and boasted of an experienced regimental cadre, who had been in constant small actions in Africa since the 1830s. Yet, by the summer of 1870, she was defeated in a decisive battle at Sedan by an upstart antagonist that only 10 years earlier lacked both military might and political unity.

France's complete collapse at Sedan was not just a failure of the military command but also the result of a deeply flawed mili-

tary system. As Michael Howard noted in his study of the Franco-Prussian War, the military system of a nation is not an independent section of the social system but an aspect of it in its totality.[1] The social and economic developments of the past 50 years had been brought about by military advancements and the industrial revolution. The Prussians kept up with this change, while France had not. These changes occurred on three main fronts: the theory of warfare, strategic mobility and a marked increase in tactical firepower.

The protracted campaigns of the first Napoleonic wars provided European military scholars ample operational examples to explore warfare at many levels. Jomini, Willisen, Rustow and Clausewitz all emerged during this period with insightful theories on the conduct of war. However, Clausewitz came to the forefront of Prussian military thought and provided the unifying concept that empowered the Prussian military to operate at the higher levels demanded of large-scale conflict.

The introduction of the telegraph and railways changed the strategic operational landscape by improving the ability of army commanders to concentrate their forces where needed. The German rail network improved the economic unity of the nation and its total industrial potential. Also, this rail network allowed Germany to exploit its central position and shift and mobilize troops where needed.[2] The telegraph provided the means to coordinate these movements. The combination provided the ability to move supplies in sufficient quantities to meet the larger demand of the forces in the industrial age.

At the tactical level, the introduction of breech-loading weapons impacted both small arms and cannon design of the conflict. The Prussians introduced a breech-loading Dreyse needle-gun as early as 1843. During the conflict with Austria in 1866, they were able to exploit a prone firing position and obtain a six-fold firing rate at a range of 600 yards that drove the muzzle-loading opposition from the field.

In contrast, the French bureaucracy delayed the fielding of this small-arms technology. Concerns about using too much ammunition, lack of testing and the promise of better designs around the corner all served to slow production. This bureaucratic resistance was coupled with the mistaken general belief in the army that French morale would win the next war, not improved weapons.

When Antoine Alphonse Chassepot developed a rubber seal forming a gas-tight rifle breech, he was able to both decrease the caliber so soldiers could carry more rounds and extend the range out to 1,600 yards. It took Napoleon III himself to override administrative objections and place the rifle into production.[3] Top-level leadership demanded that the French armaments industry overcome the ponderous ordnance machinery to ensure they would have a top-quality rifle. No such intervention was forthcoming on the cannon side of their ordnance development.

"La Gloire Militaire" (military glory) preoccupied the French leadership. They believed that marshal prowess would carry the day and, in so doing, they overlooked the significance firepower improvements would have on the tactical level. For example, the French fielded a 26-round rapid-fire weapon called the mitrailleuse. This precursor of the machine gun could generate large volumes of direct fire and disrupt assaults by cavalry or infantry. However, the French classified this weapon with the artillery and, in so doing, reduced the number of cannons available.

Also, the French preferred bronze guns over their steel counterparts – this was based on early fielding problems with the steel breech-loading cannon, but both the British and German gunmakers had eliminated most flaws. Consequently, the Prussian cannon had twice the range of the French.

In addition, French time-fuses could be set only for 1,200 and 2,800 meters, while the German percussion-fuses suffered no such limitations.[4] In one final sense of irony, Krupp, the renowned German cannon-maker, attempted to sell the French a breech-loading cannon, but Marshal Edmond Leboeuf rejected the idea to protect Schneider's fledging works from the ill effects of a communist strike.[5]

One final organizational difference between these two antagonists was the Prussian general staff. This body was focused on the study of war by analyzing the past and anticipating the future, and was chartered to provide field commanders information and advice. They looked at the mobilizations errors of the 1866 Austria conflict for better methods to move the army forward. They detailed the problems of rifled firearms' lethality and increased dispersal on the battlefield in updated tactical manuals.

Equally important, the general staff was the point of entry for common tactical thought. The chief of the general staff trained subordinate staffs to react to unexpected situations as if predicated on a scientific background. This gave the Prussian army a flexibility and unity of purpose when operating on a dispersed battlefield their French counterparts couldn't match.[6]

The way these small differences in force structure would play out under the pressure of contact was striking.

## War phases

The Franco-Prussian War divided into five phases. The first was the mobilization phase, which brought the armies forward to execute their battle plans. The second phase was initial contact along the frontier. The third phase was the investment of the Metz fortress and isolation of half the French field armies. This was followed by the decisive battle at Sedan. Finally, these open contests gave way to a prolonged series of siege and guerrilla warfare that characterized the French's last attempts to reverse the outcome established in the opening month of the war.

While first contact took place during a skirmish near Saarbrucken Aug. 2, 1870, the opening battle along the border occurred Aug. 6, 1870, at Spinchern and Froschwiller (Worth). These two engagements illustrate how the weapon systems of the antagonists interacted within their respective tactical designs over the course of the conflict's first month. Essentially, the outcomes of these early battles set the stage for the entire campaign in terms

of opposing-force positions and total-force morale. A more detailed look at the southernmost of these two battles fought on the approaches to the Vosges barrier at Froschwiller provides an instructive look at how the Prussians were able to maintain their advance, penetrate this obstacle and keep pressure on the defenders.

Prior to the initial contract between the two forces, the French army was one force under the direct command of Napoleon III, who had established his headquarters at Metz. Given the scale and distance involved, this approach for centralized control was deemed unworkable and, on the verge of conflict, the army's command structure was reorganized. The 1st, 5th and 7th Corps were placed under the control of 1st Corps commander GEN Patrice de Mac-Mahon on the right side. On the left, 3rd Corps commander GEN Achille Bazaine was given control of 2nd, 3rd and 4th Corps. Napoleon III retained control of the 6th Corps and Empire Guard. These new commanders were given no more staff resources or control over the administration functions for their organizations.[7]

While French doctrine was rooted in the decisive results achievable through offensive action, this did not translate well to actions observed along the frontier during the conflict's opening stages. With the notable exception of 2nd Corps, the French were passive across the front and assumed a defensive posture to develop the situation and determine what course of action their Prussian counterparts were adopting. In 1st Corps' area, they established strong positions on the eastern side of the Vosges slopes.

Mac-Mahon placed his four divisions about 20 miles apart to allow space for each to forage from the countryside. This was a natural outcome given the weakness of the French supply system and its inability to keep provisions flowing. Spacing the corps in this manner precluded mutual support between the divisions and explained how the Prussians were able to concentrate four corps against a single defending division for the opening engagement.[8] At the tactical level, the local unit commanders failed to make the best of their time to prepare their defenses for the upcoming assault.

The Froeschwiller ridge was a natural defense system that facilitated crossfire from the spurs that extended down from the main ridgeline. This high ground overlooked a mile devoid of concealment to the Sauerbach River. One weakness in the line was above the village of Morsbronn, where the forest cut into the fields of fire, complicating proper deployment. Poor intelligence regarding Prussian intentions led Mac-Mahon to disregard the threat of imminent attack. This helps explain why the French did not dig in or post sentries.[9]

The battle opened with inadvertent contact between the French outpost in Worth and advanced elements of the Prussian V Corps. The Prussians opened with cannon fire and sent the forward French back to their main line. The II Bavarian Corps and Prussian XI Corps, hearing the cannon fire, marched to the sound of the guns, placing three corps in motion toward the Froeschwiller ridge.

As the lead Bavarian troops crossed the open ground in front of the French, they were able to drive them to ground with Chassepot rifle fire. This first attack disintegrated into a single unsupported skirmish line that was unable to carry the ridge.[10]

In an attempt to decide the issue, the French deployed their cannon and fired on V Corps in the valley at the same time the XI Corps was deploying to their left. As this corps was coming into line, their guns were moved forward and quickly silenced the French batteries. While V Corps was unable to progress, they took on the task of holding the French defenders in position by placing all their artillery into the line and engaging the defenders on the ridge. This cannonade silenced the opposing guns and energized the commanding Prussian general to push forward

| Date | Battle | Prussian engaged | Losses | | French engaged | Losses | | Exchange |
|------|--------|------------------|--------|-----|----------------|--------|-----|----------|
| 1870 | | Troops | KIA / WIA | MIA | Troops | KIA / WIA | MIA | Pr / Fr |
| **Battle of the frontier – Phase I** | | | | | | | | |
| **Aug. 6** | Froschwiller (Worth) | 125,000 | 8,200 | 1,373 | 46,500 | 10,760 | 6,200 | 0.56 |
| | Spinchern | 45,000 | 4,491 | 372 | 29,980 | 1,982 | 1,096 | 1.58 |
| **Metz isolation – Phase II** | | | | | | | | |
| **Aug. 16** | Mars-La Tour | 75,000 | 17,000 | | 90,000 | 16,000 | | 1.06 |
| | Vionville | | | | | | | |
| **Aug. 18** | Gravelotte-St. Privat | 200,000 | 20,000 | | 125,000 | 12,000 | | 1.67 |
| **Battle at Sedan – Phase III** | | | | | | | | |
| **Aug. 30** | Beaumont | | 3,500 | | | 7,500 | | 0.47 |
| **Sept. 1** | Sedan | 185,000 | 9,000 | | 120,000 | 12,500 | 21,000 | 0.27 |
| | | | | | | | Total | 0.93 |

**Table 1. Battle summary Phase II through IV. Note: Data for Battle of Sedan from Howard. Others from Morris and Dupuy.**

with V Corps while XI Corps attempted to envelop the French flank. Only through hard-fought counterattacks by the French Zouaves and cuirassier cavalry were the defenders able to retain their ground against XI Corps' flank threat. By late afternoon, the II Bavarian Corps had crossed the difficult ground on their right flank, placing the defenders in a double envelopment.[11] With the Prussians able to dominate the field with cannon fire and their numbers able to maneuver the French out of their defensive position, the issue was certain and the pattern set for the opening stages of this heated conflict.

In reviewing the opening battles of the Franco-Prussian War, it is interesting to note that the French were able to hold their own in head-to-head engagements with their Prussian infantry counterparts. Table 1 shows key battles during the early phases of the conflict. The Prussian-to-French exchange ratio means numbers above one are a marked advantage for the French; those under one indicate the Prussians inflicted more damage on their opponent.

In our battle, the Prussians were able to hold the field and secure a large number of prisoners, which tends to distort their performance. When these prisoners are removed from the figures, the exchange ratio becomes a more representative .88, which is consistent with the overall campaign. In fact, it is not until the Prus-

sian army engages the undertrained mass conscripts of the French national reserve in and around Sedan that the exchange rates swing strongly in their favor.

## How Prussians won

At the tactical level, range and lethality determined the outcome. The French dominated the small-arms battle with a rifle that had twice the range and more accuracy than its Prussian counterpart did. The introduction of the rapid-fire milraileuse reinforced their ability to dominate the battle line in an infantry-centric struggle. However, the Prussian field cannon was able to out-range, more accurately fire and dominate rate of fire over French artillery. The lethality of their fuse system gave them a wider degree of freedom in employment and ensured they could respond on a wider array of tactical and terrain conditions. The ability of Krupp guns to restore movement to failing skirmish lines, pin defenders in place and silence their opponents (milraileuse and cannon) gave the Prussians the ability to maneuver and exploit their advantage in numbers when possible. (See Table 2.) In short, this conflict gave rise to combined arms that would continue into the modern age.

Finally, the Prussians' consistent ability to generate more combat power at the point of attack was an indication of superior staff

| | Side | Name | Type | Range (m) | RoF | Caliber | mm | Fuse |
|---|------|------|------|-----------|-----|---------|-----|------|
| 1 | Prussian | Needle gun | Rifle | 600 | 10-12 | 0.61 | 15.4 | None |
| 2 | French | Chassepot | Rifle | 1,200 | 10-12 | 0.43 | 11 | None |
| 3 | French | Milraileuse | Auto | 2,000 | 100 | 0.51 | 13 | None |
| 4 | French | Lahitte | Cannon | 3,000 | (-) | | | Time (1.2/2.8Km) |
| 5 | Prussian | Krupp 6-pounder | Cannon | 4,500 | (+) | | | Impact |

**Table 2. Weapons-system summary**

work conducted by a dedicated corps of scientifically trained planners empowered by a common vision and strong professional drive. The Prussian general staff was under the strict tutelage of Helmuth von Moltke. He recruited outstanding cadets from the Kriegsakademie by examination. He kept them under close observation on staff rides, training and planning performance. All these officers rotated in and out of regimental duty prior to promotion to ground their theoretical knowledge with practical experience.[12]

By the late 1860s, the general staff reorganized into two sections: the "main establishment" and the "support establishment." The main establishment was focused on training and preparation for wartime operations. This organization was further divided by geographical locations: Russia, Scandinavia and Southwest Europe; Germany, Italy and Switzerland; France, Britain and the West; and railroads. (It is interesting to note that an entire general-staff section focused on the leading strategic-mobility technology of the day.)

The support establishment took on scientific and academic tasking. Chief among these were military history, geographical statistics and topographical studies.[13] This body would plan and disseminate to lower-level staff the details needed to mobilize and sustain their armies more effectively than their opponents.

To those of us who have worked our way through the material shortages of the pre-Reagan build-up and the personnel challenges of the pre-drug-testing military, many of these issues have a familiar ring to them. The Prussian model of combined-arms integration, technology exploitation and superior staff planning through the study of history and the application of scientific technique should command our attention as we look beyond our current operational commitments to future strategic challenges. Only by deliberate and purposeful preparation will our nation stand ready to emerge from a resource-constrained peacetime establishment and face the next peer-competitor on the international stage.



*Retired U.S. Marine Corps LTC Robert W. Lamont served as an exercise action officer for III Marine Expeditionary Force in Okinawa, Japan, planning Tandem Thrust in Australia and Cobra Gold in Thailand. Other assignments included operations ana-* lyst in the Studies and Analysis Division, Marine Corps Combat Development Command, completing analyses for anti-armor force structure, combat identification and the Advanced Amphibious Assault Vehicle. He also served as a tank company commander and assistant operations officer with 3rd Tank Battalion, Twentynine Palms, CA. His service afloat includes executive officer, Marine Detachment, USS Constellation, and combat cargo officer, USS Cleveland. His military schooling includes the Basic School, Quantico, VA; Armor Officer Basic Course, Fort Knox, KY; and Armor Officer Advanced Course, Fort Knox, KY. He holds a bachelor's of science degree in management and technology from the U.S. Naval Academy and a master's of science in operations research from Naval Postgraduate School. He is a silver-level member of the Order of St. George.*

## Notes

[1]*The Franco-Prussian War*, Michael Howard, New York, NY: Dorest Press, 1961.

[2]Ibid.

[3]Ibid.

[4]Ibid.

[5]*The Arms of Krupp*, William Manchester, Boston, MA: Little, Brown & Co., 1964.

[6]Howard.

[7]Ibid.

[8]Ibid.

[9]Ibid.

[10]Ibid.

[11]Ibid.

[12]Ibid.

[13]"Strategy and Tactics, No. 149 – The Franco-Prussian War," Joseph Miranda, *Decision Games*, Lancaster, CA, February 1992.

| ACRONYM QUICK-SCAN |
| --- |
| **DoD** – Department of Defense<br>**RoF** – rate of fire |

# Battlefield Forensics:
## Dynamic Adaptation of a Company-Level Task Force

### by CPT Victor R. Morris

The contemporary operating environment offers fans of "NCIS" and the "CSI" series a chance to do some forensics of their own on the battlefield. This is possible through company-level exploitation-task-force operations, which offer a tactical way to target and prosecute "bad guys" through a company's rapid-response and organic exploitation capabilities.

A company is able to quickly exploit priority events and offer tactical solutions to enemy-related problems. This mission is vital during the responsible drawdown process in setting conditions for the Iraqi Security Forces, supporting the rule of law and maintaining situational awareness of the battlefield. Through close working relationships with expeditionary-forensics specialists, a maneuver soldier becomes a forensic analyst, coupled with his maneuver expertise.

## Conditions generating COE

The U.S. Army's authority to unilaterally apprehend and detain insurgents in Iraq expired in January 2009. This mandate occurred almost seven months before the historic June 30, 2009, withdrawal of U.S. forces from Iraq's cities – changes encompassed in the current United States-Iraq Status of Forces Agreement. The post-June 30 COE rapidly catalyzed the axiom of working by, with and through the ISF.

Implementing this axiom was a significant paradigm shift for USF operations and for situational understanding and awareness of the battlefield. The principle of working by, with and through the ISF is executed at all echelons of partnerships and Joint operations, but specifically in expeditionary forensics. In the post-June 30 COE, tactical battlefield-forensics operations are decisive at company level because they facilitate overall execution of the brigade combat team's warrant-based targeting and prosecution TF model.

## Fierce Company's experience

This article outlines the ETF mission of Fierce Company, 52$^{nd}$ Infantry Regiment, during late Operation Iraqi Freedom in 2009-10.

Fierce Company's mission was to execute full-spectrum ETF operations in western Baghdad, a dense urban area with a population of more than 3 million. The mission evolved from months of enduring force-protection patrols and Joint operations in the battalion's operational environment. When Fierce Company was designated as the decisive operation for Task Force Viking's quick-response unit, the company was attached to TF Viking — 2$^{nd}$ Battalion, 12$^{th}$ Field Artillery Regiment, 4$^{th}$ Stryker Brigade Combat Team, 2$^{nd}$ In-

fantry Division — while conducting operations. Thus the ETF mission truly became a combined-arms mission.

Fierce ETF's overall purpose was to rapidly secure, preserve and exploit enemy attack sites. The ETF's platoon leaders facilitated security at and exploitation of sensitive sites once trained in the mission's intent of taking advantage of a situation for tactical and/or operational gain. The mission included exploiting media, documents, explosives, ballistics, intelligence, biometrics and people of interest.

## ETF models

The stated end state for ETF operations clarified a dual purpose: one overarching purpose was to implement an effective site-exploitation model, leading to further intelligence and targeting to assist and protect the ISF and local population; and the ETF's second purpose was to establish an effective partnership with ISF to build their forensic and targeting capacities. We also hoped Fierce Company's work would generate a concise model that U.S. advise-and-assist brigades could use during the responsible drawdown of forces.

The standard targeting methodology that Fierce Company used was itself modeled after "find, fix, finish, exploit, analyze, disseminate, prosecute," or F3EAD-P. This model marked the first deliberate application of evidentiary-based targeting and detention at company level.

The final step in the F3EAD-P targeting model, as mentioned, is prosecution. The intent of this step, of course, was to convict insurgents through the Central Criminal Court of Iraq. In this environment, forensics became the key component to aid in convictions when presented as evidence to Iraqi judges.

## Task-organization changes

Fierce Company introduced task-organization changes at platoon level based on the fundamental tenets of ETF operations:

- Analysis of the threat, combining offensive operations with the ISF;
- Maneuver-element responsiveness; and
- Sensitive-site exploitation.

The platoons were primarily responsible for Tier I exploitation, analysis and dissemination. In some tactical scenarios, they assisted in finding, fixing and finishing the enemy. As the quick-reaction force, the platoons set the conditions for the combined exploitation cell and Joint

expeditionary forensic facilities Tier II-III analysis and dissemination back to the brigade.

Because of Fierce Company's mission change, the unit re-task-organized into three augmented maneuver elements. The company's main efforts were the two 20-man maneuver anti-tank platoons. The headquarters platoon, led primarily by the fire-support officer, redirected intelligence analysis, enemy trend identification and CEXC device-profile tracking. Also, the company first sergeant, senior medic, platoon sergeant and commodities sections ensured the platoons were resourced with mission-essential equipment and had counter-improvised-explosive-device-related training.

Each of the platoon's special teams had specified tasks and purposes related to the overall targeting model and concept of the operation. Each platoon augmented with a team of battlefield forensic specialists: explosive-ordnance-disposal team, weapons-intelligence team, law-enforcement professional and human-intelligence collection team. These external attachments combined with the platoon's special teams, including a tactical-site-exploitation team and detainee-operations team.

Next, each team integrated, rehearsed and executed specified tasks to maneuver units. The WIT was task-organized as part of an EOD team and was responsible for collecting evidence from IEDs and other explosives sites. This was done as a subsequent measure of the overall EOD post-blast analysis and assessment of the attack and type of munitions involved. The WIT also conducted technical analysis of recovered materials for biometric collection and analysis.

The LEP was attached to a platoon's special teams. The LEP brought a developed understanding of forensics to the platoon. On the objective, the LEP was integrated into the DETOPs team. His experience allowed him to see a target's house/attack site as a crime scene. Typically, the LEP advised the special teams and platoon leader after the EOD/WIT conducted their analysis. He focused the teams on local-national witnesses and guided the tactical questioning. He was also the subject-matter expert on point-of-capture operations and adherence to the U.S.-Iraq security agreement.

The HCT's mission while conducting ETF operations was to conduct tactical questioning, atmospherics gathering and source operations at the site of recent significant activities. The HCT aimed tactical questioning at providing the unit with a more thorough understanding of the SIGACT and enemy actions related to it.

Source operations, when practical, allowed identification and initial evaluation of potential sources, establishing relationships to build on through future engagements or meetings – the long-term goal was to provide actionable intelligence to USF or ISF.

The DETOPs team was a transformation of an enemy-prisoners-of-war team. This team specialized in security and small-unit tactics as they related to biometric identification. At platoon level, the DETOPs team secured the HCT and LEP as the mission dictated and deployed biometric identification-related equipment on the objective.

## ETF operations

The company ETF was thus reconfigured as an autonomous battlefield multiplier, capable of dynamically reacting to various SIGACTs in the OE. After initial company-level mission analysis, we outlined and realized tactical scenarios after 13 weeks of ETF operations. We based Fierce Company's ETF model on QRF responses to tactical scenarios involving troops in contact or react-to-contact battle drills (unilateral and bilateral responses).

Following are tactical scenarios the ETF encountered during operations:

- Brigade and/or battalion TF element in contact, requiring ETF support;
- Brigade and/or battalion route-clearance patrol identified threat and requested ETF support;
- Non-organic brigade and/or battalion TF element in contact, requiring ETF support;
- ISF/host-nation security force in contact, requiring ETF support;
- ISF/local-national agency in contact, requiring ETF support (support to the government of Iraq regarding high-profile attacks in Baghdad during the 2010 election period);
- Special-operations element requiring EOD support after joint-raid or close-target reconnaissance;
- Non-military logistical convoy element in contact, requiring ETF support or vehicle recovery; and
- ISF battlespace-owner link-up after a successful cache seizure to facilitate higher-echelon exploitation. (This included the link-up, reception and transfer of explosive material from an ISF location to CEXC laboratories for analysis.)

These missions required a variety of coordinating instructions. During execution

of the ETF mission, platoons conducted 24-hour QRF rotations staged at an Iraqi army division's joint security station, further enabling partnership, access and an opportunity for joint responses. Staging time was based on threat analysis and enemy IED emplacement windows.

Fierce Company's headquarters remained at the command post and executed command-and-control operations as required. The CP facilitated higher-echelon reporting, enabler support, intelligence- and surveillance-asset management and logistical synchronization. The CP also enabled more frequent and detailed use of the Tactical Ground Reporting System for post-operation site-exploitation reports, SIGACT mapping, enemy trends and overall CEXC case tracking.

Of course, company headquarters and the intelligence-support team remained at an elevated readiness status in the event multiple platoons deployed to multiple SIGACT locations.

Fierce Company ETF operations spanned the limits of the battalion's sector. During multiple operations, Fierce Company's platoons crossed adjacent battalion boundaries and coordinated with adjacent units. This freedom of maneuver allowed the company to partner with multiple Iraqi-army battalions across two Iraqi-army brigade sectors and to foster a positive working relationship. This relationship led to requests for support and information dissemination from Iraqi-army battalion commanders. Through this interaction, Fierce Company was able to coordinate directly with the battlespace owner while simultaneously relaying information to the Joint operations center and battalion's tactical operations center. The vertical and parallel reporting via multiple mediums directly contributed to the mission's effectiveness.

## Full-time ETF matters

The ability to execute the ETF mission full time was decisive to the brigade's and battalion's campaign plans for many reasons. One, after Fierce Company received the mission, the unit began immediately to exploit IEDs and explosively formed penetrators along one of the main supply routes in the battalion's sector – these devices presented a significant threat to USF traveling the route. This shift in mission was a brigade initiative to target the insurgent network and get "left of the boom" in the post-June 30 OE.

Two, both the brigade and battalion commanders were adamant about expeditionary forensics and their relationship with-

in the brigade prosecution TF model, which directly corresponded to ISF partnership and capacity-building. The commanders' intent was translated at all levels as platoons responded to SIGACTs in the OE.

Three, full-time ETF enabled the platoons to offer SSE for a dual purpose. The first purpose was to secure the site and support the unit in contact. The second purpose was to deploy the platoon's special teams to exploit the site. The special teams used a variety of sources to concisely assess the attack; the ETF was able to assess the type of device, method of emplacement angle, method of initiation, location of initiation, battle damage associated with the device and biometric evidence.

Four, each element's work was vital. The HCT and LEP exploited local-national witnesses and received reports from ISF in the area. Once the site was cleared, the ETF confiscated any forensic material from the attack for analysis. The CEXC received that material for analysis after Tier I analysis was completed. Depending on the incident's priority, a CEXC case could be populated in 24 to 36 hours, with biometric analysis following. If there was a biometric match, the unit began the

additional phases of the targeting cycle and preparation for warrant facilitation.

The ETF's role wasn't limited to quick response to SIGACTs; for example, it collaborated with an Iraqi-army EOD battalion and executed joint training and responses.

## ETF successes

One of the main functions of the ETF's exploitation focus was to liaise with EOD units to coordinate the transfer and follow-on analysis of cache materials seized during offensive operations. One event led to the analysis and exploitation of the largest IED cache found in the battalion's OE.

From April 13 to July 19, 2010, Fierce Company's ETF facilitated creation of 29 CEXC cases for follow-on exploitation in conjunction with technical analysis to protect against remote-detonated IEDs.

Also, one of the ETF platoons biometrically confirmed the identity of an al-Qaeda-in-Iraq leader after the Iraqi army detained him and he was transported to a hospital. The ETF's quick-response mission enabled higher-echelon leaders to coordinate joint interrogation and transfer the high-value individual to the proper authorities for prosecution.

*CPT Victor Morris is a doctrine analyst with the SBCT Warfighters' Forum, Joint Base Lewis-McChord, WA. An Armor officer commissioned from the University of Arizona ROTC program in 2004, he formerly commanded Fierce Company, 52nd Infantry Regiment, 4th SBCT, 2nd Infantry Division. He has been part of 4th SBCT since 2005, serving as a Stryker Mobile Gun System platoon leader and rifle platoon leader in B Company, 1st Battalion, 38th Infantry Regiment, during Operation Iraqi Freedom in 2007-08. He also served as assistant S-3 for 1-38 Infantry after redeploying to Iraq in 2008.*

---

## ACRONYM QUICK-SCAN

**CEXC** – combined exploitation cell
**CP** – command post
**COE** – contemporary operating environment
**DETOPs** – detainee operations
**EOD** – explosive-ordnance disposal
**ETF** – exploitation task force
**F3EADP** – find, fix, finish, exploit, analyze, disseminate, prosecute

**HCT** – human-intelligence collection team
**IED** – improvised explosive device
**ISF** – Iraqi Security Forces
**JEFF** – joint expeditionary forensic facilities
**LEP** – law-enforcement professional
**OE** – operating environment
**QRF** – quick-reaction force

**SBCT** – Stryker brigade combat team
**SIGACTs** – significant activities
**SSE** – sensitive-site exploitation
**TF** – task force
**USF** – U.S. forces
**WIT** – weapons-intelligence team



**Soldiers gather evidence on the battlefield.** *(U.S. Army photo)*

# The Importance of the Media to Military Officers

## by MAJ Benjamin F. Cureton III

Like it or not, the media is part of the modern battlefield. Reporters play a big part in shaping public opinion. And that influence is immediate – with today's technology, what once took days to make the news now takes minutes or seconds. Therefore officers must prepare to work with the media rather than push it away.

Many officers have negative feelings about the media; they feel the media creates stories without having all the facts. However, it's incumbent upon officers to provide the facts – in this age of up-to-the-minute news coverage, it's important to provide the public with timely, accurate information. Otherwise, reporters will obtain information from other sources, and it may not be accurate, or it may be incomplete.

### Media influence

Understanding the media's influence on war just requires a look at the daily newspaper or video. Because media plays a vital role in keeping the public informed, we need to ensure the public receives the facts – good or bad.

That's why a media course is essential for officers at all levels and should be required throughout their careers. Officers cannot be satisfied with not developing an understanding of the media role in today's military, on and off the battlefield. In today's world, through technology everyone on the battlefield has a part in strategic communication, and we have to be knowledgeable in the media relationship. We must understand how to create positive relationships with the media and learn how to engage more effectively with it. Understanding how to talk to media increases the chances of the public receiving factual stories. And officers can train and advise their soldiers in turn on media relations.

### Training is key

Engaging with media on the battlefield is inevitable, yet officers receive very little training and few tools to assist them. Giving officers more opportunities to attend schools or courses on media will provide skills and tools for these officers to bring back to their units. The officers can then train their units and implement the training down to the lowest level. This creates units that are prepared to engage the media and to use it effectively.

Effective media training enables officers to understand the role of the media on daily operations. It also enables us to advise our supervisors on the correct approach to assure positive outcomes with the media. As the military transitions for future combat operations, many of our senior leaders need to change their attitudes about the media – young officers must assist our senior leaders to make the positive change. The media is a key and essential asset on today's battlefield that we cannot afford to overlook. Many times we plan a great operation but do a poor job planning for media interaction.

Media education must be a continuous process. Officers should continue to read

and study how to engage the media and not shy away. In addition, all units should conduct ongoing media training, not just prior to deployment as "check the block" training.

## Media on the battlefield

Gone are the days when the media sat out of harm's way on the battlefield. Embedded reporters are all over the battlefield, so we only get one chance to get the correct story out to people. Today reporters are on the front lines with the soldiers, getting a firsthand account of what soldiers encounter on a minute-to-minute, hour-to-hour, day-to-day basis. Building a solid relationship with the media is crucial to ensure that the public fully understands what is going on in combat. Understanding strategic communication is an important skill. For example, officers must prepare for interviews. We must read the articles or news broadcasts the reporters have done before we interview with them.

Modern-day wars depend on defeating domestic and international public opinion as well as defeating the enemy on the battlefield. Media shapes the way the public forms its opinion on the wars or conflicts. The enemy knows this all too well. Whether they are true or not, our enemies have flooded the media with their stories. They only care about getting their opinions and propaganda in circulation. Therefore, it is important our military prepare to counter-attack quickly to get the truth out.

The military has paid a heavy price for its inability to engage the media. We must change the old military's negative view of the media and learn how to incorporate them into our units. We need to ensure that all officers receive media training throughout their military careers. This will help educate our officers so they can spread their knowledge back to the forces as the military transitions into a mobile fighting force to win the global war on terrorism.



*MAJ Benjamin Cureton is an Armor Branch officer assigned to G-3 Training*

*(Army Forces Generation) at Fort Bragg, NC. He served two one-year rotations during Operation Iraqi Freedom with Multinational Security Transition Command-Iraq and 2nd Brigade Combat Team, 82nd Airborne Division. Other assignments included 137th Ordnance Company and Company B, 1-37 Armor, 2nd BCT, 1st Armored Division, both in Germany.*

---

### ACRONYM QUICK-SCAN

**BCT –** brigade combat team

---

*(**Editor's note:** For a media-training tool, see U.S. Army Training and Doctrine Command Public Affairs Office's media guide at http://www.tradoc.army.mil/pao/viwebpage/mediaguide09/MediaGuide09.pdf. There may be other tools available.)*

# REVIEWS

Members of the U.S. military interested in insurgency operations tend to focus on T.E. Lawrence (of Arabia) and his activities to provide the architecture and leadership for the Arab revolt. However, Sean McMeekin, an assistant professor at Bilknet University in Turkey, takes readers into World War I's insurgency operations from the German and Ottoman perspectives – it is Lawrence of Arabia in reverse.

Readers are treated to the exploits of Baron Max von Oppenheim, the eccentric son of the Oppenheim banking dynasty, whose family's wealth allowed him to experiment as explorer, writer, archaeologist and prospector. He filled Kaiser Wilhelm with ideas of using anti-British sentiment in the Middle East and within the Muslim world to undermine Great Britain's hold on the region.

Other Germans in the run up to World War I and during the war played an important role in cultivating the Ottomans, with GEN Colmar von der Goltz improving Ottoman army performance during the 1897 war with Greece. The expensive Berlin-to-Baghdad railway was not only a transportation means but a means for Ottoman forces to reinforce their empire in Arabia, Iraq and Syria. In addition, it was a method to bypass the Suez Canal, which was under British control, as Egypt was a British protectorate.

A chapter entitled "A Gift from Mars: German Holy War Fever" is a must-read for those interested in inciting insurgencies. It offers a detailed account of the kaiser's jihad plan, with a jihad headquarters established in Berlin at the Foreign Ministry. There Oppenheim attempted to lay the blueprints for a pan-Islamic propaganda campaign against the Entente. Pamphlets and broadsheets in Arabic, Swahili, Persian, Turkish and Hindustani were mass-produced and circulated to create hatred of British control of India, Egypt and East Africa, as well as of the French in North Africa. The Sanussi tribesmen in Libya, who were at first incited against the Italian occupation of their land, later attacked British forces in Egypt. The Germans also traveled to Afghanistan to incite Habibulah Khan, the emir of Afghanistan, and hoped to stir up populations from Cairo to Calcutta. The Germans' intent in using the jihad card was to force the British to choose between empire and suing for peace.

Another chapter covers the details of the 1914 call for jihad and the inability to control it, leading to casualties among Germany and her allies. The "street" could not distinguish which infidel was foe and which was friend.

Also, as readers learn, in 1915 CPT Fritz Klein negotiated with the grand mufti of Karbala to issue a fatwa (religious opinion) calling on Shiite Muslims to wage war against Britain and Russia in exchange for an annual subsidy of $12,000. It was a great new game, and England began to seriously consider undermining the credibility of the Ottoman (Sunni) sultan's call for holy war.

McMeekin's volume gives new perspective and a more geostrategic context to Lawrence of Arabia and the British need to engineer the Arab revolt. McMeekin also provides a fascinating look at the use and exploitation of jihad (not the overarching meaning of striving but holy war) by European powers in World War I. This is a required read for the true specialist on the Middle East, World War I and South Asia. McMeekin mines German, Turkish, British and Russian archives to give us a remarkable historical narrative.

YOUSSEF ABOUL-ENEIN
CDR, U.S. Navy

---

## Manuscript deadlines 2012

| Edition | Suspense for manuscripts |
|---|---|
| January-February 2012 | Nov. 3, 2011 |
| March-April 2012 | Jan. 6, 2012 // writing contest MS due by Jan. 12, 2012 |
| May-June 2012 | March 7, 2012 |
| July-August 2012 | May 4, 2012 |
| September-October 2012 | July 2, 2012 |
| November-December 2012 | Sept. 7, 2012 |
| January-February 2013 (last **ARMOR** print edition) | Oct. 25, 2012 |
| **ARMOR**'s editorial staff thanks you for your continued support of the Armor Branch's professional bulletin during our time of transition to Web-based operations. | |

# U.S. Postal Service Statement of Ownership, Management and Circulation

**Publication title:** *ARMOR*. **Publication number:** 0000-2420. **Filing date:** Sept. 22, 2011. **Issue frequency:** bimonthly. **Number of issues published annually**: 6. **Annual subscription price**: $27.

**Complete mailing address of known office of publication:** U.S. Army Armor School, ATTN: *ARMOR* magazine, Bldg. 9230, Room 104, 8150 Marne Road, Fort Benning, GA 31905. Muscogee County. **Complete mailing address of headquarters or general business office of publisher:** U.S. Army Armor School, 1 Karker Street, Fort Benning, GA 31905. Muscogee County. **Full names and complete mailing addresses of publisher, editor and managing editor:** Publisher: Commandant, U.S. Army Armor School, 1 Karker Street, Fort Benning, GA 31905; editor/managing editor: Christy Bourgeois January-February through May-June 2011 editions; Lisa Alley July-August 2011 through November-December 2011 editions. Current mailing addresses of publisher and editorial office given preceding. **Owner:** Department of the Army. **Known bondholders, mortgagees and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities:** none. **Tax status:** The purpose, function and nonprofit status of this organization and the exempt status for federal income tax purposes has not changed during preceding 12 months.

**Issue date for circulation data below:** January-February 2011 through May-June 2011 (published from Fort Knox, KY).

**Extent and nature of circulation:** Legitimate paid and/or requested distribution (by mail and outside the mail). Average no. copies each issue during preceding 12 months: total number of copies (net press run): 5,060; (1) outside-county paid/requested mail subscriptions stated on PS Form 3541 – 4,064; (2) in-county paid/requested mail subscriptions stated on PS Form 3541 – 0; (3) sales through dealers and carriers, street vendors, counter sales and other paid or requested distribution outside USPS – 340; (4) requested copies distributed by other mail classes through the USPS – 148; total paid and/or requested circulation: 4,552. Nonrequested distribution (by mail and outside the mail): (1) outside-county nonrequested copies as stated on PS Form 3541 – 0; (2) in-county nonrequested copies as stated on PS Form 3541 – 0; (3) nonrequested copies distributed through the USPS by other classes of mail – 85. Nonrequested copies distributed outside the mail – 204. Total nonrequested distribution: 289. Total distribution: 4,841. Copies not distributed: 219. Total: 5,060.

**Issue date for circulation data below:** September-October 2011.

Legitimate paid and/or requested distribution (by mail and outside the mail). No. copies of single issue published nearest to filing date: total number of copies (net press run): 5,000; (1) outside-county paid/requested mail subscriptions – 4,110; (2) in-county paid/requested mail subscriptions – 0; (3) sales through dealers and carriers, street vendors, counter sales and other paid or requested distribution outside USPS – 125; (4) requested copies distributed by other mail classes through the USPS – 340; total paid and/or requested circulation: 4,575. Nonrequested distribution (by mail and outside the mail): (1) outside-county nonrequested copies – 65 (author advance courtesy copies); (2) in-county nonrequested copies – 0; (3) nonrequested copies distributed through the USPS by other classes of mail – 0; (4) nonrequested copies distributed outside the mail – 65 (office advance courtesy copies). Total nonrequested distribution: 130. Total distribution: 4,705. Copies not distributed: 295. Total: 5,000.

---

## Subscription Information

# 35TH ARMOR REGIMENT

**VINCERE VEL MORI**

The distinctive unit insignia was originally approved for the 35th Armored Regiment June 1, 1942. The shield is green, the color of the armored force. The armadillo, being characterized by the qualities of invulnerability, ferociousness, protection and cunning endurance, alludes to the elements which are vital if the organization is to pursue successfully its duties. The palm is for military victory. The fleur-de-lis commemorates World War II service in France.

PB 17-11-6
PIN 102192-000