

# ARMOR

March-April 2008



# ARMOR

The Professional Bulletin of the Armor Branch, Headquarters, Department of the Army, PB 17-08-2

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*ARMOR* (ISSN 0004-2420) is published bi-monthly by the U.S. Army Armor Center, ATTN: ATZK-DAS-A, Building 1109A, 201 6th Avenue, Ste 373, Fort Knox, KY 40121-5721.

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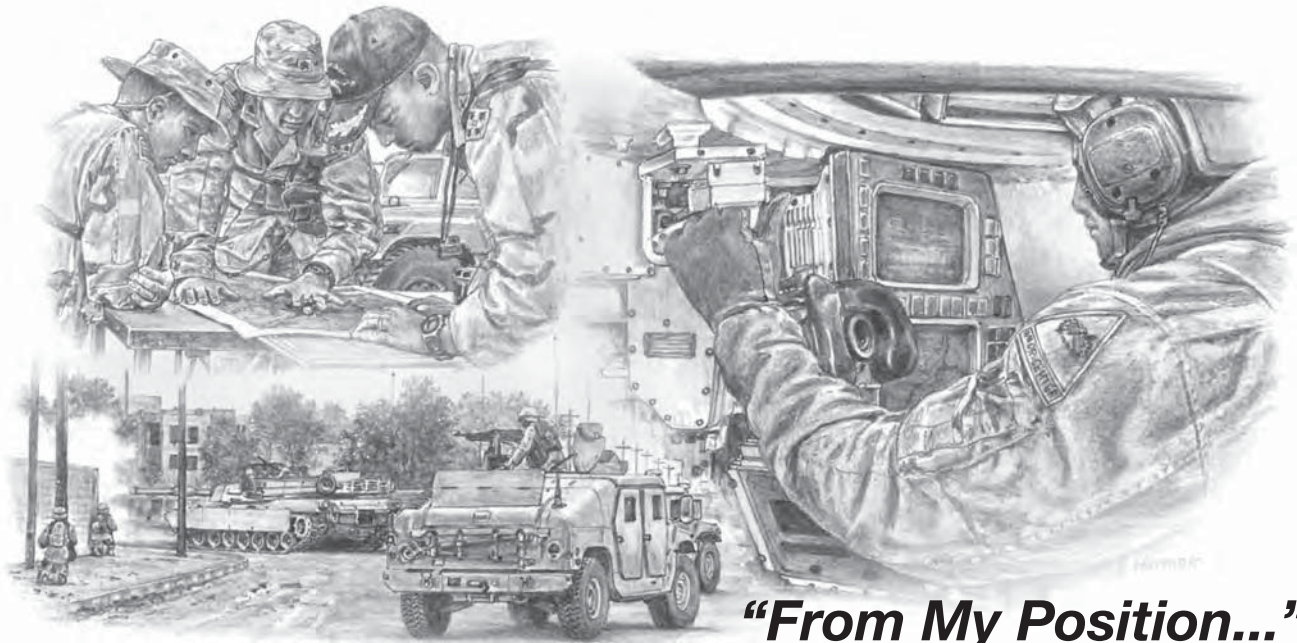
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Periodicals Postage paid at Fort Knox, KY, and additional mailing offices. Postmaster: Send address changes to Editor, ATTN: ATZK-DAS-A, ARMOR, 201 6th Avenue, Ste 373, Fort Knox, KY 40121-5721.

USPS 467-970



## “From My Position...”

“... Son can you play me a memory? I'm not really sure how it goes, but it's sad and it's sweet and I knew it complete when I wore a younger man's clothes.”

Billy Joel from *Piano Man*, 1973

Although I'm certainly not the old man sitting at the bar described in Billy Joel's classic song, I can nevertheless relate to the mixture of both sad and sweet emotions that flood over me as I write my final editorial for *ARMOR*. As my term as editor in chief comes to a close and my retirement date draws near, I know that I have a great deal to look forward to. Nevertheless, at this moment, the memories of the things I will miss most about the Army easily displace any thoughts I may have of the future.

They are memories of the simple, universal, and ultimately profound things to which many of my brother warriors can relate. As any Abrams tankerman will tell you, there is always a small, but palpable, element of doubt associated with telling the driver to, “crank it up,” especially if your tank has just completed services. With that in mind, I will surely miss the reassuring, lowered pitch of the engine's whining turbine blades at the end of a successful start cycle. In fact, that whistling engine is probably what sealed my decision to choose armor branch more than any other factor. In the age of *Top Gun*, there was nothing cooler than commanding a 70-ton, rolling machine that not only moved with the sound of a jet but sometimes flew like one as well.

I'll also miss other things, such as the delirious, fatigue induced laughter of a soldier's joke that never seemed to be quite as funny when repeated in the comforting, well-rested, confines of garrison life; or the taste and smell of a hot-A grilled steak in the field. No home-cooked fillet of grade-A beef ever tasted as good or was nearly as satisfying as a rib-eye earned at the successful completion of Tank Table VIII. I'll miss the snorting, belching, chug-chug-chug of ugly, idling M88s, whose grating, guttural, unmistakably mechanical tones always sounded like sweet music as soon as they arrived to recover your mount from the vacuum-like clutches of a skirt-deep mire; the scruffy, bone-tired, grease-stained, but unquestionably first-rate, track mechanics who crewed them; the crack of man-made thunder at the command of “on the way!;” the recoil of the cannon; the sweet, acrid smell of cordite and the satisfying sound of “target, target, target” over the net. Although, I will not miss the gut-deep, uncertain, sadness of leaving loved ones behind at home, I will most certainly

miss the exultant, unrestrained joy of returning home after a deployment. No satisfaction of a job well-done was ever greater. No anticipation of better days was ever brighter, and no homecoming was ever sweeter.

Of course, I'll miss much more than the few things I've listed inside the boundaries of this page with a touch of occasional sadness. I also know, however, that those same memories are the very ingredients that will bring sweetness to my future life apart from the dust, mud, searing heat, and sometimes bitter cold of the track-based heavy Army. They are memories both sad and sweet seasoned with grateful pride.

Of all the things I have to be proud of, I'm most proud of the answer I'll be able to give my son one day when he asks me, “Daddy, what kind of Soldier were you?”

*With the conviction and passion born of sleepless nights,  
Dusty road marches,  
And the crackle of the command net,*

*I'll be able to tell him that I was honored and privileged  
To have served with a small, powerful and magnificently heroic few  
Who willingly bore the heaviest burdens of the many.*

*Some of them drew their power from their faith;  
Others from the depth of their training and the quality of their equipment;  
Still others from the richness of their heritage, the character of their  
leaders, and their love of soldiering;*

*But ultimately all of them,  
From their confidence in and love for their brothers.*

*They were tankers and troopers; first sergeants and corporals of horse.  
They were Conquerors, Tigers, and Death Dealers.  
They were Buffalo Soldiers and 9/12 Lancers.*

*A few of them were Marines.*

*They moved with speed, audacity, and precision  
And thought in miles rather than in yards.  
They were and still are a unique band of brothers  
And I was humbled to serve in their presence.*

*For you see I wasn't just any Soldier.  
I too was a mounted warrior — a Soldier who rode steel!*

S.E. LEE

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**UNIT DISTRIBUTION:** To report unit free distribution delivery problems or changes of unit address, e-mail us at *knox.armormag@conus.army.mil*; phone DSN 464-2249, commercial (502) 624-2249; or FAX DSN 464-5039, commercial (502) 624-5039. Requests to be added to the official distribution list should be in the form of a letter or e-mail to the Editor in Chief.

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# LETTERS

## “The Ground” Has Ignored the Antithesis

Dear *ARMOR*,

While I am impressed by Captain Anthony Rose’s articulation of the importance of terrain and its effects on combat, in his article, “The Ground,” in the January-February 2008 issue of *ARMOR*, he has ignored the antithesis: the combat actions taken on and around that terrain. Terrain influences the outcome, but battles are won by tactics, techniques, and procedures, enabled by technology. It comes down to the combined arms team.

In the macro terrain of the sea, the World War I British fleet gained some advantage with their advanced dreadnought battleships, but Germany also had such ships. It was the overall mass of the Royal Navy that assured its victory. During World War II, the Kriegsmarine Ship Bismarck was not threatened by superior British fire control per se (after all, it sank the HMS Hood in a fair fight), but rather by massed fire, having been isolated, crippled, surrounded, and pounded by overwhelming odds. Midway was the turning point of the Pacific Campaign, not because the U.S. fleet sank four Imperial Japanese navy carriers, but rather that the Japanese carriers (and trained pilots) were irreplaceable, while the U.S. fleet carriers were only beginning to arrive in overwhelming numbers.

The Normandy hedgerows were difficult because the U.S. Army was only beginning to coordinate its combined arms at the company and platoon levels. It was here that telephone phones were added to tanks, and tank and in-

fantry units embedded each other’s radio operators. Yet, they still lacked a precision indirect fire capability, which could have been truly effective in such compartmented terrain.

The failed British breakout at Caen was not due so much to superior technology of the German 88, but rather to the British attack’s complete lack of combined arms tactics. Massed tanks attacked in the leading waves, followed well behind by infantry waves, and with no effective suppressive artillery support.

The U.S. M4 medium tank’s inferiority to the heavier German Panther and Tiger tanks in open terrain is without question. Based on then-current doctrine, available intelligence and production priorities, the U.S. took a risk and, in hindsight, chose poorly. But the Sherman was not isolated and alone—the M36 tank destroyer with its 90mm cannon arrived in theater long before the famously belated M26 heavy tank made its battlefield appearance. Regardless, as training and technology improved combined arms integration, including air interdiction, the superiority of the German tanks was overwhelmed.

Though my particular volume’s translation has a somewhat different choice of words, I accept Captain Rose’s quote, Sun Tzu once said that there are two types of combat, orthodox and unorthodox—the way one mixes and matches these two fights are infinite. However, I strongly reject his *interpretation* that these fights, orthodox and unorthodox, translate into the macro- and micro-terrain fight. Recall please that Sun Tzu’s *Art of War* includes an entire chapter on “The Nine Varieties of Ground.”

In conclusion, Captain Rose has a good foundation for considering the effects of terrain at tactical, operational, and strategic levels of war, but the individual examples lead to isolated conclusions that are too pedestrian and passive.

Good Lord, I served through TRADOC’s original Active Defense, and never could I imagine a more corrosive operational maneuver doctrine. Recall always the Principles of War and never forget mass and offensive. Strike Hard. Treat ‘Em Rough.

CHESTER A. KOJRO  
LTC, U.S. Army, Retired

## A Closer Look at Swift’s Influence on the Current MDMP

Dear *ARMOR*,

I would like to offer a brief comment on the excellent piece, “A German Perspective on the MDMP,” written by Captain Ulrich Humpert, in the November-December 2007 issue. In his article, CPT Humpert states that the American MDMP process was first pioneered by then-Lieutenant Eben Swift, a Fort Leavenworth instructor during the 1890s. Having done some historical research on Swift, I would like to correct this misleading statement. In itself, this historical fact is not important, but I think that a brief exploration of Swift’s views would actually shed some light on elements of our present MDMP.

First, it must be understood that Swift’s lifelong preoccupation was the development of a systematic means for giving orders—in fact, he was the originator of our present five-paragraph operations order (OPORD). Swift’s study of military history led him to the conclusion that many earlier battles had been lost due to simple errors originating in poorly written orders with missing, contradictory, or garbled information. Swift’s work provided a means for leaders to rapidly, efficiently, and clearly communicate their intent. Unfortunately, Swift and many of his successors often went overboard in emphasizing format at the expense of content.

Captain Humpert tactfully praises the German system, which in apparent contrast to our own system focuses on the essentials of making a decision and not getting wrapped up in the details. From this statement, I gather that Captain Humpert is under the impression that the American Army continues to privilege process over substance. Although I cannot make a categorical statement about the prevalence of this throughout today’s Army, I would concede that it does seem to be alive and well in many places.

Regardless of similarities in method, Swift’s work on communicating orders was fundamentally different from the MDMP. Swift was concerned with accurately communicating a course of action, not determining one. His later work at the Army War College (1906-1910) provides some insight into the differences between the

*Continued on Page 50*

## ***ARMOR and The Armor and Cavalry Journal***

Dear *ARMOR* Readers,

Beginning with the November-December 2007 edition of *ARMOR*, the Armor Association began printing its new publication, *The Armor and Cavalry Journal*, which includes the professional contents of *ARMOR* Magazine. The *ARMOR* staff completely develops the magazine and provides the Armor Association a copy of the electronic magazine. The Association adds advertising and Association news, which is combined with the professional content of *ARMOR*, to produce *The Armor and Cavalry Journal*, the official publication of the Armor Association that is distributed to its subscribers.

*ARMOR* remains the professional journal of the Armor Branch and is distributed to units on *ARMOR*’s official distribution list. The mission of *ARMOR* has not changed, nor has the publication been replaced. *The Armor and Cavalry Journal* is now published by the Armor Association and includes the professional content of *ARMOR*. Both publications are currently in circulation and will remain so without interruption. Subscriptions to *ARMOR* through the Armor Association will automatically transfer to *The Armor and Cavalry Journal*. The *ARMOR* Magazine and Association staffs will continue to work closely together to provide our readers with the same high-quality publication they deserve.

We invite all our readers, both *ARMOR* and *The Armor and Cavalry Journal*, to submit articles, write letters to the editor, and or contact us if you have any questions, comments, or suggestions.

*ARMOR* Magazine and Armor Association Staffs

BG Donald M. Campbell, Jr.  
Commanding General  
U.S. Army Armor Center



## Armor Warfighting Conference Highlights the Path to Our Future

*ARMOR welcomes Brigadier General Donald M. Campbell, Jr. as the Commanding General, U.S. Army Armor Center and Fort Knox, and bids a fond farewell to Major General Robert M. Williams.*

It is a great honor for me to address our readers as the 42d Chief of Armor. The U.S. Army's Armor force has a worldwide reputation for producing the highest performing Soldiers, leaders, and organizations. It also has a great history of mission accomplishment and one of caring, competent, and capable leaders. Our force also has a great future; we produce Soldiers and leaders who can not only close with and destroy the enemy, but who are also capable of creating clarity out of chaos and making the right decisions in tough situations. I am humbled to be just a small part of this great legacy.

As I get reacquainted with the Fort Knox community, I realize how many changes have occurred in my absence. Major General Bob Williams and the entire Fort Knox team have done truly remarkable work in developing a comprehensive base realignment and closures (BRAC) plan that addresses organizations moving to and from Fort Knox over the next 5 years, as well as assisting in developing the new Maneuver Center of Excellence. I am extremely fortunate to have inherited a team of professionals who understand the requirements of the mounted force and work extremely hard to make those requirements a reality.

I am extremely grateful to Major General Williams and his wife, Deb, for taking such good care of our Soldiers and their families. I will continue to focus on our Soldiers and their families as we lead the way to training innovations, combat developments, and creating both the Human Resource Center of Excellence here at Fort Knox and the Maneuver Center of Excellence at Fort Benning.

The Armor Center's initiatives reach well beyond BRAC—we are creating better training methodologies for both institutional and operational training; we are testing equipment, gear, vehicles, and training methodologies that will form the foundation of the future force—we are hard at work, ensuring the current force has the capabilities to stay viable well into the future. I have no doubt that our force will continue to be successful as we meet the challenges of the future.

Our mounted force has excelled throughout its history because it has always been a learning organization. The Armor force, originally created to break the deadlock of no-man's land has certainly seen a few mission changes throughout its history. It goes without saying that our Cavalry force has seen even more variations in its mission scope throughout its distinguished history. The adaptability required for a tank battalion or cavalry squadron to succeed in the current environment stems from a combination of visionary leaders, intelligent and hard-working Soldiers, and an overall desire to accomplish the mission. It is in the long-standing spirit of learning from each other and a desire to continue to grow as a force that I invite all mounted leaders to attend our upcoming Armor Warfighting Conference, during the week of 4-8 May, here at Fort Knox.

The theme for this year's conference is "Forging the Thunderbolt in an Age of Persistent Conflict." We have an impressive panel of keynote speakers lined up, to include the U.S. Army Training and Doctrine Command (TRADOC) Commander, General William S. Wallace; Sergeant Major of the Army, Kenneth Preston; and the Chief of Infantry, Major General Walter Wojdakowski, who will provide an update on the Maneuver Center of Excellence.

In addition to our speakers, we are hosting a number of exciting panel discussions and work groups on relevant topics, such as emerging doctrine, Armor and Cavalry core competencies, materiel developments, future reconnaissance requirements and capabilities, and influence operations. Of course, Skidgel Hall will be packed full of commercial vendors who will be on hand to demonstrate the latest in technologies and developments that may certainly have an impact on our future capabilities.

I also want to ensure that everyone has the opportunity to nominate a deserving individual for this year's Frederick M. Franks Award. With all the great work going on in the Armor and Cavalry force there are plenty of deserving awardees—please take the time to submit your nomination. The award will be presented at the annual Armor Association Banquet, which will be held on 7 May. Details for the award and updates on the conference agenda and guest speakers can be found at the conference website at [www.knox.army.mil/armorconf](http://www.knox.army.mil/armorconf).

Finally, I would like to thank all of you who are currently serving our Nation at war. It is a challenging time to be a Soldier, but it is also an exciting time. I am learning everyday about new technologies, doctrine, and training capabilities we will bring to the force that will make us an even better fighting team. I understand the sacrifices you and your families make daily—I appreciate your service and your sacrifices.

Forge the Thunderbolt!

CSM Otis Smith  
Command Sergeant Major  
U.S. Army Armor Center



## Today's Soldiers and Leaders are Battle Tough and Proven

In keeping with the theme of this year's Armor Warfighting Conference, "Forging the Thunderbolt in an Age of Persistent Conflict," I would like to pay tribute to our Armor and Cavalry Soldiers and leaders — they are the toughest fighters on the battlefield and have proven their resilience time and again throughout this age of persistent conflict. It is the commitment of the Armor Center to enable its force to continue to accomplish its mission — by building and maintaining the capabilities Soldiers need to remain relevant and ready; to train and equip our Soldiers to fight as warriors; to grow adaptive and competent leaders capable of handling new and changing battlefield challenges; and to maintain a quality of life and well-being for our Soldiers and their families.

Our first priority is to sustain the Armor force's increasing global commitments that extend across the full range of military missions, well beyond those associated with the current operating environment. Today, our Armor force is providing forces and capabilities for Operation Iraqi Freedom, Operation Enduring Freedom, and other global requirements; it continues to deter aggression and keep peace elsewhere around the world, as well as provide support for numerous humanitarian assistance missions globally.

Not only is our Army committed to fighting a "global" war on terror and executing current operations, but we are in the process of resetting our forces and building a modular Army. To meet this goal, the Armor force must position itself in terms of mindset, capability, effectiveness, efficiency, training, education, and leadership — all of which determine how the force will operate in the foreseeable

future, which brings us back to this year's Armor Warfighting Conference.

The Conference will begin on Sunday, 4 May, with an Armor Trainer Update breakfast, briefing, and evening social. Monday, 5 May, kicks off with the "Dominant Land Power" subtheme, which is accompanied by the commanding general's opening remarks, followed by various events, including guest speakers, the master gunner panel, an FBCB2 briefing, a PEO soldier update briefing, the command sergeant major's update, the week-long static vehicle and vendor's display, an all-day shotgun/skeet shoot at French Range, and an evening Stable Call at the Patton Museum.

Tuesday, 6 May, the subtheme, "Persistent Conflict," includes guest speakers, the Armor Association briefing, CMETL/CATS briefing, heavy forces in irregular warfare panel discussion, NCOES transformation briefing, core competency training strategies work group, HBCT validation gunnery briefing, Stryker MGS update briefing, and the commanding general's evening garden party.

On Wednesday, 7 May, the subtheme, "Forging the Thunderbolt," offers an influence operations panel, BNCOC briefing, ANCOB briefing, reconnaissance squadron lessons learned briefing, HBCT modernization briefing, an Armor School update, and an afternoon speech by Sergeant Major of the Army, Kenneth Preston.

Thursday, 8 May, wraps up with working group backbriefs in the morning, the golf tournament in the afternoon, and the Armor Association Banquet in the evening.

This year's conference places a heavy emphasis on where the Armor force is headed and the changes we will expect along the way. The conference's agenda is jam-packed with guest speakers, informative discussion panels, and briefings that offer invaluable information for all Soldiers on the "way ahead." Noncommissioned officers and Soldiers of all ranks are encouraged to attend — this is a once-a-year opportunity for our Soldiers to share invaluable lessons learned with their brethren.

Our Soldiers will always remain our primary focus; they are the centerpiece of all that we do as an Army. Throughout our history, Armor Soldiers have answered the call to end tyranny, to free the oppressed, and light the path to democracy for struggling nations. Armor Soldiers, imbued with the Warrior Ethos, are, and will always remain, the foundation of the Armor force.

As a reminder, the new Order of Saint George Black Medallion is now available for staff sergeants and below; the criterion for the medallion is available on the Armor Association's homepage at [www.usarmor-assn.org](http://www.usarmor-assn.org). To celebrate the achievements of outstanding Soldiers in the ranks of staff sergeant and below, leaders are encouraged to nominate them for the new medal.

This year's Armor Warfighting Conference promises to be the best yet! I look forward to seeing you there.

"Teach our young soldiers and leaders how to think; not what to think."



# Using Tactical Site Exploitation to Target the Insurgent Network

by Michael Thomas

*“All units collect and report information. Combined with the mosaic nature of insurgencies, this means that the intelligence flow in counterinsurgency is more bottom-up than top-down. Conducting aggressive intelligence, surveillance, and reconnaissance (ISR) operations and pushing intelligence collection assets and analysis down to the tactical level, sometimes as far as company level, therefore benefit all ‘echelons.’”<sup>1</sup>*

Today’s Army has adapted to meet the counterinsurgency threats in Iraq and Afghanistan. At the same time, certain requirements have escalated; specifically, to identify, collect, and preserve targeted material and personnel for potential intelligence value and host-nation prosecution. One result of this adaptation process has been an increased scope of responsibility, at the maneuver company level, to conduct a detailed exploitation on an objective. This exploitation, combined with an increased requirement for bottom-up intelligence-driven operations, has led to multiple ad hoc solutions and expanded roles for combat arms soldiers. Platoon- and company-level organizations now conduct tasks previously discounted or performed by supporting agencies.

To meet the increased requirement of supporting the intelligence process and targeting the threat network through effective exploitation, company-level and below formations are conducting a type of exploitation referred to as “tactical site exploitation” (TSE). Development of multiple ad hoc organizations, such as company intelligence support teams, further exemplifies the increased burden on company commanders to manage operations and intelligence, as well as expand the skill sets and warfighting capabilities of soldiers at the lowest level. Traditionally, soldiers have been adept at meeting emerging requirements;

however, the increased roles executed by soldiers within maneuver units are beginning to exceed their capabilities. Understanding the basic requirements of TSE, and evaluating the enduring requirement to exploit objectives, specifically when facing an asymmetric threat, requires a thorough analysis to determine an optimal solution. To understand the evolution of TSE and evaluate the enduring requirements, we need to view the basic threat context that initiated TSE developments.

## The Threat Scenario

*The small home enclosed within a courtyard was isolated by the security element of first squad, setting the conditions to clear the objective and conduct the search. The platoon leader directed that the search element, second squad (+), look closely for hidden improvised explosive device (IED) components. As the reserve, third squad was observing the exfiltration route back to the combat outpost (COP).*

*The cordon and search mission was based on intelligence developed primarily through interrogation of two insurgents at the brigade detention facility (BDF). The platoon apprehended the two insurgents earlier that week when it observed the insurgents emplacing an IED. The interrogation revealed information regarding a third insurgent. This insurgent was expected to be on the objective, coordinating another IED emplacement. Upon investigation, however, the third insurgent was not found in the targeted house. The only personnel observed by the search element were three small children and two women dressed in full burkas. After conducting a 15-minute search, the search element had found nothing. The two women stood passively in one cor-*



ner of the room clutching the children. Frustrated, the platoon leader called the company commander and reported the situation; just another dead-end lead. He requested that the platoon leave the area immediately rather than risk contact with an IED or sniper during retrograde back to the combat outpost.

Once the platoon left the area, the targeted bomb builder took off his burka and recovered the detonation devices hidden under his sister's garment. The insurgent had concealed his identity, and more importantly, he prevented the search team from finding the new trigger device he had developed. He waited until dark that evening, and then moved his operations to another location to avoid the risk of another search of his sister's home. He was able to link up with another explosives courier and continue developing IEDs for the jihadist zealots that would replace them during the following days.

Three days after the unsuccessful cordon and search mission, the platoon suffered three casualties due to an IED attack near the same area previously searched. Months later, the Combined Explosives Exploitation Cell (CEXC) linked the explosives and the trigger devices to the same bomb maker previously identified in the brigade detention facility. The Counter-Explosive Hazards Center (CEHC) matched a fingerprint lifted at the attack site by the weapons intelligence team (WIT) team to that of an individual enrolled in the biometrics database during a routine patrol. The IED maker was later apprehended by coalition forces.

### Is this a Typical Scenario?

Similar and recurring scenarios have triggered efforts to enhance the capability of forces operating in Iraq and Afghanistan. Initially, recommended solutions to this challenge ranged from treating every objective like a crime scene to integrating search training efforts at basic, intermediate, and advanced levels. The scenario above highlights some of the many challenges tactical forces face regarding the threat when combined with cultural environment considerations. Specifically, the scenario relates to counterinsurgency operations where IEDs and sniper attacks emphasize the asymmetric threat. Soldiers must initiate TSE on initial contact to effectively attack IED and sniper networks, and ultimately eliminate this insurgent capability. Recent efforts have spanned a broad range of issues, which include:

- Developing doctrinal resources as a framework for site exploitation.
- Fielding identity management tools, such as biometric automated toolsets (BAT) and handheld interagency identity detection equipment (HIIDE), down to the squad level.
- Proposed force design updates (FDU) to increase intelligence analysis capabilities at both the brigade and joint levels, and shift some of that capability to the company level.
- Enhanced cultural understanding and awareness through counterintelligence seminars.
- Improved search techniques for tactical forces through training and organization.

The Army has two primary issues to address regarding TSE, which include determining if the current brigade combat team (BCT) organization is capable of conducting TSE within the structure, training, and skill sets available when facing future adversaries; and identifying the Army's enduring requirement relating to TSE.

Collectively, the Army and the entire joint community have established ad hoc organizations and implemented "stove pipe" solutions to provide the BCT with the appropriate TSE capabilities. The doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) solutions

to the problem are as vast as the diverse opinions regarding actual requirements.

The U.S. Army Training and Doctrine Command's (TRADOC's) improvised explosive device defeat (IEDD) integrated capabilities development team (ICDT) is supporting the joint IEDD effort. The ICDT leads the Army's collaboration to solve the challenges related to attacking the IED network, defeating the IED, and training the force. The ICDT efforts have resulted in the development of skills and capabilities that have reduced the IED threat.

The Department of the Army (DA) G3 directed the establishment of an IEDD integrated process team (IPT) to conduct a holistic look at the IEDD proposed solutions and identify the enduring requirements for the Army, which includes a site exploitation (SE) working group. The SE working group identified the need for a capabilities-based assessment (CBA) to determine enduring requirements for TSE within the BCT and subordinate formations. Efforts are currently underway to conduct this CBA. Additionally, the sniper defeat (SD) ICDT has identified TSE as an area of focus in supporting their efforts.

The Army assigned the U.S. Army Combined Arms Center (CAC) as the proponent for SE because it is the organization best aligned to lead the effort to solve SE issues. The U.S. Army Armor Center, as a supporting effort, is the lead organization for TSE. CAC and the Armor Center, working with a number of other schools and centers, are initiating efforts to determine the Army's enduring TSE requirements.

### Doctrine and Organizational Developments

A primary problem relating to TSE and SE was identified by Brigadier General Joe Ramirez, Deputy Commanding General, Combined Arms Center, during the Directors of Training (DOT) Conference held at Fort Leavenworth in mid-2007. Ramirez referenced the initial draft TSE appendix for U.S. Army Field Manual (FM) 3-90.5, *The Combined Arms Battalion*, which the Armor Center developed, and determined that the absence of a doctrinal foundation inhibited the development and integration of various DOTMLPF solutions.<sup>2</sup> Such doctrine must describe the integrated concept of site exploitation and the exploitation process, and must clearly define and differentiate terms used to



*"To meet the increased requirement of supporting the intelligence process and targeting the threat network through effective exploitation, company-level and below formations are conducting a type of exploitation referred to as 'tactical site exploitation' (TSE). Development of multiple ad hoc organizations, such as company intelligence support teams, further exemplify the increased burden on company commanders to manage operations and intelligence, as well as expand the skill sets and warfighting capabilities of soldiers at the lowest level."*



*"Biometric automated toolset (BAT) is an accurate, timely, and efficient automated personnel enrollment and tracking system that collects and saves biometric data in a database that can be searched or queried. It incorporates iris scan, fingerprints, photographs, and biographical information of any individual, and stores the collected data on a central server located on a secure network."*

address TSE and sensitive site exploitation (SSE), thus avoiding misuse and confusion.

Following the conference, the site exploitation working group, members from multiple centers of excellence (COEs), and the Combined Arms Doctrine Division (CADD), drafted and staffed a proposed definition for site exploitation operations. The result defined site exploitation operations as: "Related activities that gather and make use of the personnel, information, and/or material found during the conduct of operations in order to support tactical, operational, and strategic objectives."

Within the context of SE, the two distinct areas addressed are SSE and TSE. Soldiers supporting Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) often incorrectly use these terms synonymously, which has led to some confusion in various Army organizations as to their true definitions, as well as the exploitation activities themselves (what elements conduct the exploitation).

SSE is best described in the context of a "sensitive site," which is "a designated geographically limited area with special military diplomatic, economic, or informational sensitivity to the United States."<sup>3</sup> SSE is currently defined in Joint Publication (JP) 1-02, *Department of Defense Dictionary of Military Associated Terms*, as "A related series of activities inside a captured sensitive site to exploit personnel documents, electronic data, and material captured at the site, while neutralizing any threat posed by the site or its contents."<sup>4</sup> Examples of sensitive sites are described in FM 2-0, *Intelligence*, and may include war crime sites, critical hostile government facilities, areas suspected of containing persons of high rank in a hostile government, storage areas for enemy classified files, or research and production facilities involving breakthrough technologies. Although still used, "sensitive site exploitation" is considered a legacy term relating to specialized teams formed during initial OIF operations to support the exploitation of suspected sensitive sites to locate Iraqi weapons of mass destruction (WMD). The term proliferated and was subsequently used throughout Central Command (CENTCOM) to describe the actions by any agency attempting to exploit an objective for information.

The Armor Center's Directorate of Training, Doctrine, and Combat Development introduced the term "tactical site exploitation," or TSE, and defined it as "the actions taken to ensure that personnel, documents, electronic data, and other material at a site are identified, evaluated, collected, and protected in order to facilitate follow-on actions."<sup>5</sup> This term was included in the initial draft of FM 3-90.5, *The Combined Arms Battalion*, and

subsequently published in the Center for Army Lessons Learned (CALL) Handbook 07-26, *Tactical Site Exploitation and Cache Search Operations*.<sup>6</sup>

Equally important and integrated in both TSE and SSE is technical exploitation, which CADD's draft definition describes as, "the application of specialized means to assess personnel, documents, electronic data, and other material in order to generate intelligence to support follow-on actions." Technical exploitation primarily supports BCT operations through agencies and specialized assets not normally organic to the BCT, such as weapons intelligence teams (WIT), CEXC, or other task force elements organized under joint tenets within CENTCOM to support theater IED defeat efforts.

Site exploitation has emerged as the overarching concept in the absence of current doctrine outlining the interaction of existent and emerging technical intelligence (TECHINT) agencies and on-site exploitation requirements. CADD is currently developing doctrine to codify these concepts and agency relationships. TECHINT has not historically provided the immediate direct support to tactical operations that we see today. The need to support tactically based targeting operations to remove various IED (bomb maker, funding, and emplacement) networks has influenced the efforts of multiple centers of excellence in developing concepts and capabilities, which range from every soldier is a sensor (ES2) to law enforcement programs (LEP). These programs support the BCT's analysis of criminal activity linked to funding or supporting insurgent activity. As an example, the TECHINT effort in OIF was also supported by other government agencies such as the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF). Since March 2005, ATF has deployed special agent certified explosives specialists and explosives enforcement officers to support the Iraq CEXC within CENTCOM.<sup>7</sup>

### Site Exploitation Advances

The integration and linkages within the exploitation process have evolved exponentially over the past few years, as the Army moves to improve the integrated exploitation process. The Army has improved its ability to effectively search for, identify, and properly collect documents and media of value for subsequent exploitation by joint organizations. The resulting intelligence analysis and dissemination tempo for these products has expanded to include support to tactical operations, which has increased support to the BCT, enhancing the military decision-making process (MDMP) and threat network targeting.

Military search operations are focused at the tactical level to ensure that tactical units can effectively identify, preserve, and collect material during tactical operations (for subsequent analysis or criminal prosecution). The improved search focus can be attributed to early OIF challenges in the Central Criminal Courts of Iraq (CCCI), and the inability to consistently identify, collect, and preserve evidence along with corroborating witness state-

ments for prosecution. Initial TSE efforts focused on ensuring that soldiers were cognizant of evidentiary requirements for CCCI prosecution. Military search, a key TSE task, has evolved beyond that to the point where various agencies provide “search” training with emphasis ranging from systematic routine search techniques to forensic collection to support biometric identification.

The shift from major combat operations to irregular warfare has identified the importance of supporting the criminal prosecution of detainees for various crimes, including crimes against humanity and war crimes. The document and media exploitation (DOMEX) process, particularly through its captured documents, media, and material chain of custody procedures, provides direct support to the criminal intelligence (CRIMINT) process through preservation of potential evidence.

Technical exploitation support has been enhanced by employing personnel with specific skills who can effectively search/analyze specific sites or incidents and subsequently evaluate and exploit the related findings. This effort has been centered on the capacity and capabilities supported by WIT and their availability to support the BCT commander, as well as the integration and employment of specialized joint assets. Jointly staffed WIT teams are currently employed in direct support of maneuver BCT commanders, with one team per BCT assigned to joint task forces in Iraq and Afghanistan.

Explosive ordnance disposal (EOD) assets and organizations support the collection and evaluation of IED-related material by rendering IEDs safe and by providing first-line tactical exploitation, collection, and evaluation of IEDs and components. EOD exploitation supports a two-way flow of information on IEDs for tactical and technical intelligence. EOD personnel can ensure that enemy explosives and ordnance are rendered safe and subsequently exploited to facilitate effective threat analysis and targeting.

Biometric advancements and identity management equipment have improved the Army’s ability to identify and track potential insurgents. Through effective collection, exploitation assets can link individuals to material by using forensic analysis, which enables more effective targeting at the operational level. At the tactical level, the tools supporting identity man-

agement provide rapid on-site identity confirmation of high-value individuals (HVI) and facilitate enrollment of unknown personnel. The following tools are primary assets that support the BCT in identity management:

- Biometric automated toolset (BAT) is an accurate, timely, and efficient automated personnel enrollment and tracking system that collects and saves biometric data in a database that can be searched or queried. It incorporates iris scan, fingerprints, photographs, and biographical information of any individual, and stores the collected data on a central server located on a secure network. Additionally, BAT has the ability to create identification cards that aid in the timely identification or verification of personnel.
- Handheld interagency identification detection equipment (HIIDE) is a portable, battery-operated, handheld, multimodal (iris, fingerprint, facial photo, biographic contextual information) biometric device that can support biometric identification tasks and biometric enrollment tasks. The HIIDE system is interoperable with BAT.

With an increased scope of responsibility and capabilities to support effective exploitation, with an emphasis on tactical-level organizations, challenges exist within the Army as to the training strategies needed to promote these efforts. TRADOC’s zero-growth policy regarding institutional training, combined with the systematic approach to training development within the institutional domain, constrain the ability to find effective solutions to current problems. Multiple agencies not normally as-



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*"Search should be viewed as a supporting task for TSE and other collective tasks, and integrated at various levels. Additionally, search requirements and capabilities need to be clarified by task and condition to encompass the range of search skills such as personnel, area, vehicle, and building search. Quantifying what type of search skills are required by soldiers is a key to resolving this issue."*

sociated with training the force, such as the National Ground Intelligence Center (NGIC) and Asymmetric Warfare Group (AWG), have developed training products and provided mobile training teams (MTTs) to address the operational requirements that have emerged based on the threat and the truncated Army force generation (ARFORGEN) model.

### Improving the Army's Search Techniques

While the integrated efforts outlined above may be complex and require linkages to joint agencies and processes, emerging requirements for search may have the most impact on BCT forces, their current structure, and the training requirements based on the capabilities we now expect infantry, reconnaissance, and armor soldiers to execute. An evaluation of recent efforts to improve search training exemplifies the problems across the institutional and operational training domain. The CEHC has aggressively argued for the formal assignment of a search proponent in an effort to ensure uniformity of search training to meet Forces Command (FORSCOM) requirements.

The premise is that one agency serves as the coordinating lead or proponent for search, since there are a number of agencies teaching search with different agendas, equipment lists, and focus. Currently, NGIC trains two separate search MTTs. One focuses on biometrics support and forensic collection, which is taught by the biometrics department; and the other focuses on properly handling and collecting material and media, which is taught by the DOMEX department. Each MTT teaches a skill to support their subsequent portion of exploitation. The Joint Center of Excellence (JCOE) at the National Training Center (NTC) is attempting to expand the existing search training to link integrating tasks, such as tactical questioning and employment of biometric tools, into the training. JCOE training supports current requirements for the collective task of conducting TSE, but does not solve the requirement of defining the tasks and responsibilities in relation to the various soldiers within the BCT. This limits the subsequent development of training that will ensure all the search requirements are achieved.

Search should be viewed as a supporting task for TSE and other collective tasks, and integrated at various levels. Additionally, search requirements and capabilities need to be clarified by

task and condition to encompass the range of search skills such as personnel, area, vehicle, and building search. Quantifying what type of search skills are required by soldiers is a key to resolving this issue. However, what is being intimated is that every soldier requires search skills and training, which sounds like an institutional training requirement that will not simply be solved by MTT. Reports from joint task forces indicate that units operating in theater require effectively trained search personnel. This report should be quantified within the context of the unit's specific mission — is Task Force Troy looking for basic search requirements, media collection for exploitation, and/or forensic preservation for exploitation, or perhaps there's a gap in training within the EOD and WIT teams who support collection and analysis efforts? This leads back to the root question: are we expecting entry-level 11B/19D/19K soldiers to become forensic evidence collectors? Until we quantify the requirement from the bottom up, by skill set required, we will continue to flounder in this area. All existing search training initiatives may be valid, but the target audience requires clear delineation.

One solution is to ensure specifically trained personnel with specialized search skills that are resident with military police, EOD agencies, chemical personnel, and other specially trained assets are integrated into mission sets. Meanwhile, basic capabilities and an understanding of basic search skills and evidence handling could be taught to standard for maneuver company-level soldiers and linked to an integrated capability within the BCT; however, we should not expect entry-level 11B/19D/19K soldiers to become forensic evidence collectors.

### The Process — Practical Application Considerations

Currently, TSE is focused on meeting three primary purposes for the maneuver commander:

- Answering information requirements.
- Facilitating subsequent operations (through intelligence, analysis, and targeting).
- Facilitating criminal prosecution by host-nation authorities.

**Answering information requirements.** All operations are founded in effective reconnaissance, and every soldier can make observations that answer the commander's informational requirements and support the development of situational awareness, which drives planning and execution. The commander should provide clearly understood commander's critical information requirements (CCIR), which can be supported by effective TSE. Forces can use TSE to answer CCIR through a range of tools from tactical questioning to DOMEX.

Effective planning for patrols, cordon and searches, raids, and other counterinsurgency operations can yield information that answers CCIR. When conducted effectively, TSE can protect valuable information that is properly collected and analyzed, and can answer higher headquarters' CCIR. The value of information is further emphasized in FM 3-24, *Counterinsurgency*: "Counterinsurgency (COIN) is an intelligence-driven endeavor. The function of intelligence in COIN is to facilitate understanding of the operational environment, with emphasis on the populace, host nation, and insurgents. Commanders require accurate intelligence about these three areas to best address the

issues driving the insurgency. Both insurgents and counterinsurgents require an effective intelligence capability to be successful. Both attempt to create and maintain intelligence networks while trying to neutralize their opponent's intelligence capabilities.”<sup>8</sup>

**Facilitate subsequent operations.** The information gained from TSE can lead to immediate follow-on actions on or near the objective, or may require detailed analysis to support the targeting process. Effective TSE provides critical data for inclusion in the intelligence process that subsequently supports targeting. Soldiers identify material and personnel of interest, collect these items and, after the operation is complete, conduct a debrief with the S2. The material that was collected is processed and analyzed; appropriate agencies conduct personnel interrogation; and the intelligence process develops information for inclusion in the targeting process.

**Facilitate host nation prosecution.** Stability operations often support attempts to establish local governance and control. These operations may focus on assisting local law enforcement with the capture and subsequent prosecution of criminal/insurgent targets. Collection of material that can be associated with criminal/insurgent activity and provided to the local government for prosecution is critical to the success of operational and strategic Army objectives. Generally, the collection of material for prosecution purposes coincides with the collection of material for exploitation in the intelligence and targeting cycle. Commander's guidance for handling this type of material dictates the priority. At the battalion level and above, the judge advocate general (JAG) can assist the staff and subordinate elements in coordinating the collection of material for criminal prosecution.

From an execution perspective, TSE falls along four basic tasks, which when effectively integrated, support the exploitation objectives. These basic primary tasks include:

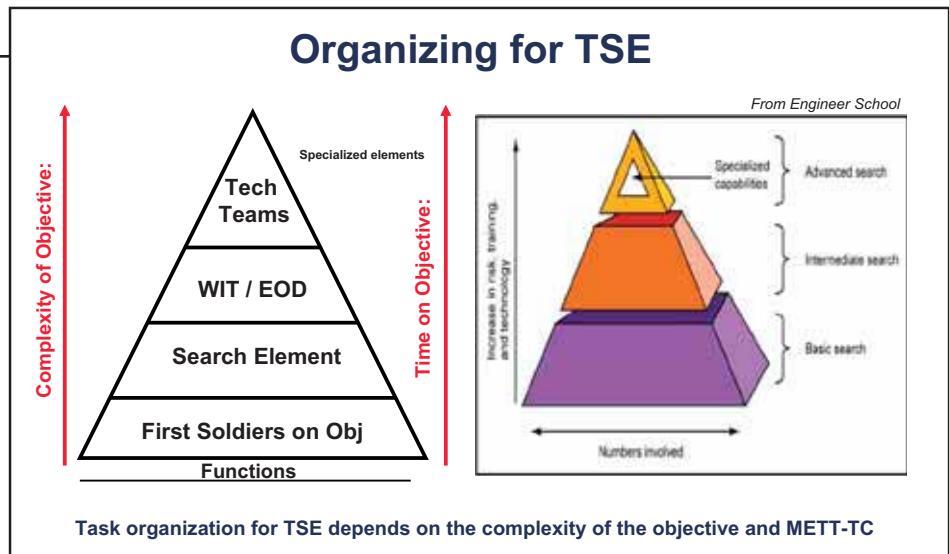
- Search.
- Collection.
- Tactical questioning.
- Analysis.

Also nested within these tasks are the preservation considerations within the context of the tactical situation.

To effectively execute TSE, planning must be fully integrated within the MDMP or troop leading procedures (TLP). The analysis of mission requirements is the prevailing tenet that will support effective exploitation of a site or objective. In a counterinsurgency environment, almost every tactical mission will require, or lead to, some form of exploitation, and leaders should plan accordingly. The requirement to conduct a detailed exploitation based on criticality or expected value of a site will dictate how an organization will task organize elements for the operation. Triggers and decision points for routine operations executed at the small-unit level still require coordinating instructions to subordinate elements and effective use of CCIR. When staff analysis of the mission dictates that TSE is a critical or primary task, the planning considerations and level of detail should escalate appropriately.

The concept and organization of a formalized exploitation team or element within an organization established solely to respond to an objective or an event to conduct exploitation tasks is heavily

## Organizing for TSE



debated. From a maneuver BCT perspective, TSE should be planned, organized, and executed in the same context as a combined arms breaching operation. In the deliberate planning process, the appropriate TSE elements should be task organized to meet the exploitation requirements anticipated on the objective and tasked/resourced accordingly. This technique is similar to task organizing a breach force with the assets required to reduce an obstacle. Assignment of a specified task and purpose to elements conducting TSE operations at all levels will clarify responsibilities and ensure the commanders' end-state objectives are met. If resources are not available to execute the required tasks or mission, specialized support should be requested through higher headquarters. All specialized support elements must be integrated into the plan, or coordinated as a reactionary capability based on specific criteria or triggers, with planning considerations for response times and security requirements.

Hasty TSE should be considered synonymous with the manner in which an infantry squad would conduct a hasty breach of a blocked entryway. A hasty breaching operation will be executed based on the tenets and principles of the breaching operation. TSE should be executed using basic standard organizational requirements and tasks. When facing a hasty exploitation, soldiers should be tasked via fragmentary orders to conduct the exploitation based on training and capabilities and within the prescribed context of SE. Small unit standing operating procedures (SOP) should be developed outlining exploitation team organization, requirements, and tasks by element. Priority intelligence requirements (PIR) should be clearly disseminated and associated with decisions (triggers) that require external support from specialized exploitation agencies.

### BCT Deliberate TSE Operations Scenario

*The BCT has determined through collaborative analysis that a group of individuals are coordinating development of IEDs in a small neighborhood, which includes a storage building. Intelligence developed over time has indicated that three individuals linked to specific IED events are involved in IED construction. There are three buildings on the objective where the IED components are stored and constructed. The storage building is used as a distribution point for the individuals emplacing the IEDs. The components are delivered from multiple sources, therefore, while suspected insurgent personnel located on the objective are targeted for apprehension, the material may also be exploited in an attempt to trace the components to the point of origin and link the material to the supplier (the higher network).*

This operation, a standard cordon and search mission, will include a critical and deliberate TSE requirement, with the efforts



"The concept and organization of a formalized exploitation team or element within an organization established solely to respond to an objective or an event to conduct exploitation tasks is heavily debated. From a maneuver BCT perspective, TSE should be planned, organized, and executed in the same context as a combined arms breaching operation. In the deliberate planning process, the appropriate TSE elements should be task organized to meet the exploitation requirements anticipated on the objective and tasked/resourced accordingly."

- A specified search element with leadership, assigned all assets required to conduct an effective search, including collection and protection of the material on the objective or site.
- An appropriate tactical questioning element with corresponding linguist capabilities.
- Personnel capable of conducting a search of individuals located on the objective.
- A documentation element (or assistant element leader) responsible for supervising or conducting the documentation of the objective with photographs and site sketches documenting where personnel and material were located and recovered.

*"Anticipatory planning is essential to seizing and retaining the initiative. It involves projecting thoughts forward in time and space to determine how to influence events before they occur, rather than responding to events dictated by others. To seize the initiative, commanders must anticipate events and act purposefully and effectively before enemies do, starting with the initial commander's visualization."*<sup>9</sup>

linked to operational and potentially strategic objectives. Integration of the entire suite of BCT capabilities should be coordinated to conduct effective exploitation of the objective. The staff evaluates all assets available during mission analysis, along with their capabilities and limitations, prior to developing courses of action (COA). Additionally, the integration of the WIT and CEXC should be considered for this mission and potentially requested from the joint task force. Traditional cordon and search considerations apply. Additionally, when specifically looking at the exploitation of the objective, the staff should consider the following:

- Available EOD assets.
- Detainee handling.
- Integration of HUMINT teams with tactical interrogation capability.
- Availability and classification of linguists.
- Forensic collection capacity.
- Biometric asset availability.
- WIT/CEXC integration if available.
- Joint, interagency, and multinational asset availability.
- Documentation asset availability; for example, the combat photographer may assist in site documentation.
- Time on the objective (time required to fully exploit the importance of the site).

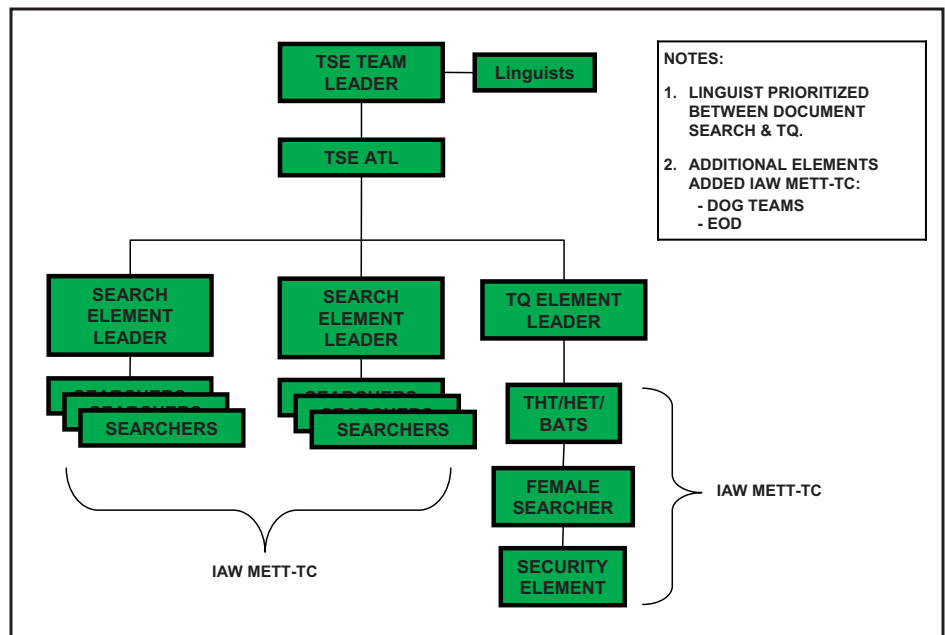
Within the identified assets and capabilities, the element tasked with conducting TSE is configured to meet the following basic requirements:

- A unit leader specifically tasked to complete the TSE requirements.

### Company-Level Tactical Site Exploitation Scenario

Referring to the threat scenario at the beginning of this article, the basic requirements ensuring successful TSE can be identified. When the company commander initiates TLP, specifically upon receipt and analysis of a mission and while making a tentative plan, the tasks associated with successful TSE execution should be identified. The majority of these tasks remain the same for every mission that includes a TSE requirement; they should be specifically assigned during the orders process and coordinated through rehearsals and SOP. Below is a list of tasking requirements and tasks:

- Assign a TSE team leader (TL). It is imperative that one individual be responsible for the overall TSE portion of the mission. During basic cordon and search missions, this could be the



search element leader, or a specific squad leader, within the platoon tasked as the search element.

- If available based on the size and scope of the mission and troops available, an assistant TSE team leader (ATL) can support the following documentation tasks:

- Complete a sketch of the site, annotating where personnel and material collected from the site were located; and
- Coordinate video collection of the site (digital camera or video), chain of custody, and documentation procedures.

- Assign photographer/recorder who is responsible for video documentation of the site. Include 360-degree panoramic photos when possible, along with photographs of every item in its original location before collection. Additionally, items collected should be photographed with the suspected insurgent to support subsequent prosecution.

- Designate a search element, size and scope based on mission, enemy, terrain, troops, time available, and civilians (METT-TC). At a minimum, the search element should be prepared to execute building, area, personnel, and vehicle searches as required, along with employment of the materials that will support search efforts, such as explosive detection assets, metal detectors (both personnel and ground), and other technical assets that will enhance the search. When available, include female soldiers in search team organization to mitigate cultural hurdles.

- A tactical questioning (TQ) element organized, on the basis of linguist availability and number of personnel anticipated on the objective. The TQ element may be one soldier with a linguist (interpreter), or may be organized with personnel prepared to handle detainees using the tenets of segregate, search, silence, safeguard, speed, and tag. The individual employing the HIIDE or BAT for identity management should be incorporated within this element.

Commanders at all levels conduct analysis to determine the events or “triggers” that would indicate the requirement of specialized exploitation resources. Company commanders must effectively inform subordinates on their “limit of advance” relating to their exploitation capabilities and the specific information requirements that imply external resources may be required. Leaders ensure subordinates understand the commander’s PIRs, specifically PIR that indicate the presence of critical, exploitable documents, media, weapons related material, or personnel exceeding their exploitation assets.

Effective dissemination of PIR and soldiers’ effective recognition and reporting provide the commander with the information

required to support effective decisionmaking. When developing a plan, the commander must consider modified requirements for an escalated exploitation by reactionary forces with specialized capabilities such as WIT or military police investigators. These considerations include increased security requirements, increased time on the objective, and coordination requirements for battle handover. The collective task developed by the Armor Center, “conduct tactical site exploitation,” outlines the integrated procedures for conducting TSE.<sup>10</sup> To ensure effectiveness of TSE, a thorough debrief must be conducted to ensure successful exploitation.

## The Way Forward

While today’s soldiers are intelligent, aggressive, and adaptable, the increased spectrum of tasks that infantry, reconnaissance, and armor soldiers are expected to execute is rapidly approaching a task saturation point. Additionally, the institutional training domain, while focused on training fundamental soldier tasks, may be behind the curve in meeting the current task requirements to counter today’s increased asymmetrical threat. With the Army’s force generation model taxed in an abbreviated cycle, the institutional training domain may be required to radically modify traditional programs of instruction to meet training requirements traditionally conducted within the operational domain at home station during force generation.

Until the Army can establish a baseline for all soldiers, development tasks, and subsequently implement soldier training (entry level and noncommissioned officer education system), the operational force cannot effectively expand the training to support brigade/battalion search teams. Additionally, the ability to identify the transition points for integrating specialized or “advanced” search skills while simultaneously identifying which soldiers should possess those skills is inhibited. The way forward requires a thorough task analysis and a collaborated capability-based assessment to ensure that the requirements are integrated into future training and force structure.



## Notes

<sup>1</sup>U.S. Army Field Manual (FM) 3-24, *Counterinsurgency*, Headquarters, Department of the Army (HQDA), U.S. Government Printing Office (GPO), Washington, DC, December 2006.

<sup>2</sup>FM 3-90.5, *The Combined Arms Battalion (Draft)*, Directorate, Training, Doctrine, and Combat Development, U.S. Army Armor Center, Fort Knox, KY, TBP.

<sup>3</sup>FM 2.0, *Intelligence*, HQDA, GPO, Washington, DC, May 2004.

<sup>4</sup>Joint Publication 1-02, *Dictionary of Military and Associated Terms*, Department of Defense, GPO, Washington, DC, 12 April 2001 (As Amended through 17 October 2007).

<sup>5</sup>FM 3-90.5; and Center for Army Lessons Learned (CALL) Handbook, *Tactical Site Exploitation and Cache Search Operations*, No. 07-26, CALL, Fort Leavenworth, KS, May 2007.

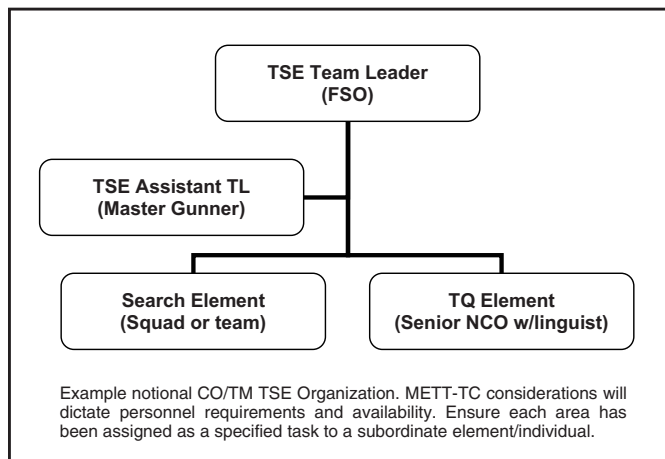
<sup>6</sup>Tactical Site Exploitation Training Support Package, Directorate, Training, Doctrine, and Combat Development, U.S. Army Armor Center, Fort Knox, KY, August 2007.

<sup>7</sup>Statement of Michael J. Sullivan, Acting Director Alcohol, Tobacco, and Firearms, before the U.S. Senate Committee on Appropriations, 19 April, 2007.

<sup>8</sup>FM 3-24, *Counterinsurgency*.

<sup>9</sup>FM 5-0, *Army Planning and Orders Production*, HQDA, GPO, Washington, DC, January 2005.

<sup>10</sup>Collective Task 17-2-9400, “Conduct Tactical Site Exploitation,” Directorate, Training, Doctrine, and Combat Development, U.S. Army Armor Center, Fort Knox, KY, TBP.



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# Human Terrain Mapping: A Critical First Step in Winning the Counterinsurgency Fight

by Lieutenant Colonel Jack Marr, Major John Cushing, Major Brandon Garner, and Captain Richard Thompson

According to counterinsurgency (COIN) doctrine, the struggle for a population's support is the core of the counterinsurgency fight. To truly get to know the population, you must really understand its culture. One could argue that the U.S. military was not attuned to this at the outset of Operation Iraqi Freedom, but soldiers and leaders with the experience of multiple rotations in Iraq and Afghanistan understand and actively accept these two ideas as central to our current fight. The population is the center of gravity and must be considered first in everything we do. The key to success is finding ways to separate the insurgents from the population; therefore, it is critical that we understand the human terrain in which we operate. The important question is no longer "why" or "if" we need this information — but "how" we gather it. How does a tactical-level military unit amass the necessary information about the area in which it operates?

Task Force (TF) 1st Battalion, 15th Infantry (TF Dragon), 3d Heavy Brigade Combat Team, 3d Infantry Division from Fort Benning, Georgia, inherited an area southeast of Baghdad during Operation Iraqi Freedom V that had not seen a consistent coalition presence in nearly 2 years. TF Dragon's operational environment straddled a Sunni/Shia sectarian fault line with the majority of the Sunnis living along the Tigris River (our western boundary), and Shia areas in the north (close to Baghdad) and the east (along the Baghdad-Al Kut highway). The information gap between what we knew and what we needed to know was fairly significant.

To fill this gap, the entire battalion began focusing on the systematic collection of information about the local people in our assigned area of operations (AO) through a process we described as human terrain mapping. As a result of conducting

human terrain mapping, TF Dragon was able to better understand the population, gain the trust of local leaders, and demonstrate our commitment to local communities. This, in turn, led to the development of actionable intelligence on insurgent activities, the construction of a biometric census of military-age males, and improved security.

## The Importance of Having Human Terrain Mapping

The center of gravity in all counterinsurgency operations is the population; controlling the population is essential to the isolation/dislocation of insurgents. Isolating the insurgents facilitates a unit's efforts to deal effectively with both the enemy (through lethal targeting) and the local population (through nonlethal targeting). This enables units to drive a wedge between the insurgents and the population within which they hide. At the tactical level of this fight, this is the critical ac-



tion. We discovered that developing a human terrain map of the task force's AO was the best way to enable control of the population, defined in U.S. Army Field Manual (FM) 3-24, *Counterinsurgency*, as "determining who lives in an area and what they do." In simple terms, a human terrain map outlines who the players are.<sup>1</sup>

As any veteran, leader, or student of this war recognizes, insurgents hold the upper hand with their better understanding of local customs and politics, their ability to speak the language, their freedom of movement within the society, and their better comprehension of the population's interests. Unfortunately, the enemy in this war does not wear a uniform; this war comes without a program outlining the players.

In preparation for our current combat tour, TF Dragon's leaders looked hard at the examples of units that were enjoying success on the battlefields of Iraq. Overwhelmingly, the units that seemed to be winning the fight had made significant inroads with local leaders and found proactive ways to understand and respect local cultural norms and address specific community needs. Although we recognized and understood this lesson, when we arrived in our AO, we found that very little of this data had been collected, and the information that was available was spread out across the continuity files of nearly every staff section. Furthermore, when we tried early on to verify the information, we found that people had moved, opinions had changed, and, in many cases, not much was known.

Therefore, TF Dragon's commanders and staff outlined a plan by which we could capture the human terrain mapping information in a medium that all soldiers could monitor and understand. Once the formatting and baseline information requirements were set, we leveraged the shared situational awareness enhancing capabilities of the command post of the future (CPOF) to maintain a visual database. Each company in our task force was allocated a CPOF to post the results of their human terrain mapping. Each company identified the specific data points about their AO, which included religious boundaries, key economic structures, mosques, and sheiks. When incidents occurred in specific areas, all companies could plot the location and contact the local sheik to gain intelligence or ask critical questions.

### Screenshot of Human Terrain Mapping

We saw the first step of the counterinsurgency fight as determining the human

dynamics of a particular area. We identified each tribe, town, city, or village within which the enemy might have sought refuge. We determined who supported the insurgents and their needs and wants. In essence, a human terrain map is the physical manifestation or tool to collect and catalog cultural and ethnographical information encapsulated in the historical counterinsurgency principle of understanding the environment.

### Defining Tactical Human Terrain Mapping

The human terrain mapping effort that TF Dragon began in the early summer of 2007 was a deliberate process designed to gain ethnographic information about our operating environment. With nearly 400,000 people in the Dragon's AO, and little coalition presence over the past 2 years, there was a critical requirement for ethnographic information. To accomplish this, we planned and executed a deliberate process of decentralized patrols to answer specific questions about the population we secured. The goal was to answer specific information requirements about each separate village and town, which included:

- Defining (graphically) each tribal area with specific attention to where they adjoined or overlapped with neighboring tribes.
- Location and contact information for each sheik or village mukhtar and

any other important people such as government officials, Iraqi Security Forces (ISF), etc.

- Location of mosques, schools, and areas of commerce/markets.
- Identification of the population's battle rhythm or pattern of life such as when they wake up, sleep, shop, etc.
- Nearest ISF locations/checkpoints.
- Economic driving forces and employment histories.
- Employment/unemployment levels.
- Determining if people are moving in or out of the AO.
- Identifying anti-coalition presence and/or activities.
- Access to essential services such as fuel, water, emergency care, fire response, etc.
- Local population concerns/issues.

Human terrain mapping information was gathered by platoon-level combat patrols, conducted during daylight hours. To avoid pattern-setting and predictability, companies planned these terrain mapping missions in a systematic, yet unpredictable to the enemy, pattern. In this way, all areas would be covered without making it obvious to the insurgents which areas might be visited next. For example, our B Company used the main road in their AO (running between Jisr Diyala and



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Salman Pak, near Baghdad) as the focal point, and began with the villages on the east and west side of this main thoroughfare. Each day, they would alternate direction, moving north or south of the villages they had previously visited. After 2 or 3 days of patrolling, they would schedule a day with no patrols to further disrupt any patterns they may have been setting.

Patrols were planned and organized with specific objectives and purposes for each sub-element. Our three critical tasks included security, information gathering, and relationship building. As the composition of most patrols was centered on a mechanized infantry or tank platoon, some augmentation was required. Generally, the company commander was present on patrol to ensure a first-hand look at the AO. Additionally, the company's fire support officer (FSO), acting as the company's intelligence officer, accompanied the commander on every patrol, which enabled us to build a framework to address the three critical tasks. The commander focused on building relationships with key individuals, while his FSO (augmented by part of the platoon) focused on answering specific information requirements and the platoon leader concentrated on security.

In addition to these three sub-element tasks, everyone within the patrol contrib-

uted to the delivery of information operations themes and messages. Generally, these themes included the rewards program (money for information of extremist activities), examples of the positive steps taken by the local government and/or ISF, and the benefits of cooperation with the coalition. Whenever possible, these messages were delivered in the form of pamphlets or handouts given to local citizens. Knowing these messages and having handouts prepared was considered TF Dragon's information operations basic load, and was the responsibility of every soldier on the patrol.

During a typical human terrain mapping patrol, the platoon would move tactically and establish a cordon around the specific area to be mapped. As this was being set, the commander/FSO would move to the likely center of the town or begin immediately talking with citizens to determine the residence of the local sheik or village leader. While the commander met with these citizens, the FSO (and any augmentees) talked with as many of the military-age males as possible. The commander asked the sheik or village elder for permission to enter the military-age men of the village into our biometric-data system (HIIDES/BATS). Depending on the reaction to this request, the platoon might establish a centralized location and begin this process. If the sheik/elder ap-

peared to be uncomfortable with this request, the unit would arrange a date to return to the village and revisit the biometric-data system entry process. However, most local leaders immediately agreed with the request and viewed the biometric census as evidence of their innocence and willingness to cooperate with coalition forces. Throughout the entire patrol, soldiers talked to as many people as possible to pass on specific information operation themes/handouts. On average, these patrols took about 2 to 4 hours to complete.

Oftentimes, patrols were reinforced with civil affairs teams, human intelligence collection teams, psychological operations (PSYOP) teams, and/or additional medical personnel. These military specialists provided specific areas of expertise to assist the patrols, and were leveraged to enhance the perceived importance of the tactical unit. For example, having a unit medic treat a civilian, especially a child, with an acute problem provided direct evidence of our unit's goodwill, as well as added the tangible benefit of cooperation with the coalition. Additionally, having special teams along increased the overall number of people we could talk with in the village and increased the number of human sensors that could report on our information requirements. This augmentation also provided excellent start points for "Team Village," an element combining civil affairs, human intelligence collection, and PSYOP teams, which targeted specific effects for follow-on visits.

Special care and planning was taken to ensure that these special teams did not interrupt or interfere with the relationship between the company/platoon and the population that was being mapped. We placed a lot of importance on the supremacy of the responsible company commander (the landowner) as the primary point of contact for each village leader. We worked to preclude any confusion among local leaders as to who would make decisions regarding projects or future support. This is especially critical when dealing with civil affairs teams, who are often seen in the eyes of the population as the "money guys." Through a deliberate effort, we made it clear that these teams supported the company commander, not the other way around.

Following every patrol, the responsible platoon/company would prepare a detailed analysis of the area that was mapped, and links were made to other villages based on sect, tribes, and terrain. The results were a census-like compilation of data that was collated by the task force staff.



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The primary actors at the battalion level were the S2, the effects/information operations cell, and the S5. This helped in developing and refining both lethal and non-lethal targeting. Human terrain mapping also provided a graphical depiction of where potential sectarian fault lines may be located, which gave us a focal point to begin our efforts to quickly establish security so other logical lines of operation could be worked.

We used this approach to deliberately develop our human terrain map. The overall process took more than 2 months when balanced with other tactical missions. Of note, information contributing to our overall human terrain map was also gathered on offensive missions. During intelligence-driven raids, cordon and searches, and attacks, the platoons/companies used the same information requirements used on our human terrain mapping patrols.

Our unit's biggest success was getting all military-age males entered into the biometric data system, which enabled an additional data point for piecing together the intelligence picture on the extremist groups in TF Dragon's AO. It also allowed the intelligence officer to cross reference the person against the database built during previous human terrain mapping missions. For example, if we had met an individual during a human terrain mapping patrol in Baker Company's AO and he turned up on the objective during a Crusader Company mission, we were immediately alerted to this person's presence in two different areas of the battlefield. Cross referencing allowed the intelligence officer to possibly link the person to an extremist cell that may reside in one part of AO Dragon, but is conducting missions in another portion, thus allowing us to create an initial link diagram of possible extremist activities.

### The Importance of Doing Human Terrain Mapping

In retrospect, *having* a human terrain map is not nearly as valuable as *doing* human terrain mapping. Human terrain mapping provided an effective technique to learn and begin to understand the battlespace for which we were responsible. In other words, if the type of information we gathered had been available when we



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first arrived (for example, in a database), we might have had a false sense of how well we understood our environment. There is a tremendous advantage gained in the actual process of gathering ethnographic information. By way of analogy, having a ready-made database would be similar to doing math on a calculator instead of actually learning the hard way how to solve math problems — in conducting human terrain mapping, we learned to multiply the hard way.

### Specific Benefits of Human Terrain Mapping

The benefits of human terrain mapping are numerous; however, there are seven significant benefits worth mentioning:

**Human terrain mapping provides a practical start point for gathering human intelligence (HUMINT).** Human terrain mapping affords coalition forces the opportunity to become acquainted with leaders of the different tribes, towns, villages, and cities of a particular AO. If a unit earns the respect and trust of village sheiks and elders, the locals are more willing to provide intelligence. As our units moved through the various villages and towns of AO Dragon, they consistently found local citizens more than willing to provide information, but who were hesitant to call our "tips hotline" or visit our combat outposts.

As often as possible, we tried to integrate our supporting HUMINT collection teams into human terrain mapping patrols, which provided an excellent opportunity to make initial contacts and develop sources. It also provided good in-

side knowledge of local citizens and a ready-made cross-reference capability, providing a better framework for determining the reliability or motivations of informants.

**Human terrain mapping puts a human face on contact with the population being secured.** An intended second-order effect of human terrain mapping is to enable a unit to move into unfamiliar territory and begin separating the insurgents from the population. In the words of one company commander, "I believe it was vital to the initial impression of the locals in our AO that they saw us out walking amongst them, knocking on doors,

shaking hands, and asking questions specific to that family/tribe. I feel it put a human face on *our company* and opened the door to many of the initial dialogues that we are currently exploiting with great success."

**Human terrain mapping is critical to building trusted networks.** The number one tenet of the 3d Infantry Division's counterinsurgency philosophy is "It's all about the people." Building a trusted network involves personal relationships between coalition leaders at the tactical level and the leaders of the population they secure. Once these relationships are built, units are better able to deliver and assess the effects of information operations messages and PSYOP products, determine if local governments are talking to their constituents, and, if necessary, minimize unrest among the population through consequence-management procedures.

**Human terrain mapping has an indirect effect on the enemy.** Having soldiers out in the village conducting foot patrols among the civilian population was vital to the initial tone set by 1st Battalion, 15th Infantry. If the enemy tested our strength, we were out of our vehicles with a gun barrel and set of eyes in every direction, prepared to maneuver instantly on contact. We approached every human terrain mapping patrol as if the enemy was watching and assessing our every move. Human terrain mapping brought us closer to the locals and deterred enemy contact.

**Human terrain mapping provides unforeseen opportunities to demonstrate our resolve to the population.** During the process of getting to know local leaders

and meeting with them in their villages, the companies of TF Dragon oftentimes conducted hasty raids on weapons traffickers and improvised explosive device (IED) emplacements. These raids proved to local leaders that our soldiers were dedicated to making their villages more secure. Furthermore, these raids also proved to local leaders that when given critical intelligence information, coalition forces act on it.

***Human terrain mapping provides ground-level insight into local politics, motivations, and differences — and this can be the start point for reconciliation.***

Understanding the differences between Sunni and Shia areas is easy; finding the start point for reconciliation is not. However, once a unit has met and befriended leaders from separate areas, those leaders now have a common association — a partnership with us. For example, in one particular TF Dragon area, Sunni and Shia families living as neighbors had different sheiks as their leaders. Unfortunately, the sheiks in these areas were not eager to work together to reconcile their differences. To add further confusion to the situation, al-Qaeda forces often attacked both the Shia and the Sunni as a means to keep their foothold. After working numerous human terrain mapping patrols in these areas to outline the villages and actually identify the leaders, the company commander earned the trust of both the Sunni and Shia leaders. Using this as leverage, he facilitated discussions between the two sheiks based on the common goals of security and economic development.

***Human terrain mapping gives tactical-level units significantly improved first-hand knowledge of their areas of operation.*** Nothing can replace the importance of personal reconnaissance — this principle has existed in our doctrine for decades. Even though the data entered into biometric databases includes addresses and street names, this information is often difficult to include/catalog on map overlays. Furthermore, different people may refer to streets/locations by different names, and roads in rural areas are not generally trafficable by coalition vehicles.

As the U.S. Army continues to examine this aspect of counterinsurgency warfare, we would warn, based on experience, against relying on an automated solution to this problem, or against creating a singular special-staff section to provide human terrain insight. From what we learned, a unit must either physically go out and collect this information initially, or devel-



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op a process to continuously reassess the information they have, if they inherited a developed map from a previous unit.

Counterinsurgency is probably the most difficult form of warfare because it forces military professionals out of their “comfort zones,” and into the complex realm of interacting with human beings. Central to this is gaining the population’s support, which often requires a simultaneous effort to drive a wedge that will isolate the insurgents. Human terrain mapping enables units to better understand — and exploit — these complex human relationships, which is time and energy well spent.



**Note**

<sup>1</sup>Headquarters, Department of the U.S. Army Field Manual (FM) 3-24, *Counterinsurgency*, U.S. Government Printing Office, Washington, DC, December 2006.

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# How Information Operations Enable Combatant Commanders to Dominate Today's Battlefield

by Lieutenant Colonel Scott K. Fowler

In a world of asymmetric warfare, one area gaining a great deal of attention is information operations (IO). Joint Publication (JP) 3-13, *Information Operations*, defines IO as: "the integrated employment of electronic warfare (EW), computer network operations (CNO), psychological operations (PSYOP), military deception (MD), and operations security (OPSEC), in concert with specified supporting and related capabilities, to influence, disrupt, corrupt, or usurp adversarial human and automated decisionmaking while protecting our own."<sup>1</sup>

## The Necessity to Integrate IO into Battle Planning

*"For the coalition to make significant progress toward winning the information*

*war, it needs to address two central issues; providing Iraqi media security and, more importantly, facilitating access to the most relevant stories-of-interest. Should the coalition continue to overlook these two fundamental issues, the insurgents will remain the dominant and most influential group having an impact on the Iraqi population's perceptions and behavior."*<sup>2</sup>

Obtaining information superiority is critical to achieving success, especially in Iraq. With the citizens of Iraq having access to media through outlets such as Al-Jazeera, Al-Iraqiya, Al Hurra, and other Arab television stations, positive portrayal of information pertaining to coalition forces (CF) is necessary to win the local population's hearts and minds.

According to JP 3-13, "Adversaries are increasingly exploring and testing nonlethal or symmetrical warfare tactics that can thwart U.S. military objectives, especially those that are heavily reliant on information systems. This requires the U.S. military to employ defensive technologies and utilize leading-edge tactics and procedures to prevent our forces and systems from being successfully attacked."<sup>3</sup>

Combatant commanders must realize the necessity to integrate IO into battle plans; well-planned and synchronized IO assists the commander in achieving an endstate devoid of enemy kinetic strikes in the near term, while simultaneously fostering better relationships with local nationals in the long term. To accomplish this goal, leaders at company and bat-





*“With the local media in attendance, they can cover the event and broadcast it on the local Iraqi news that afternoon. Perhaps another example would be to invite the local media to a veterinarian operation where the unit provides services to a rural community that has livestock.”*



talion levels should use their brigade S7, public affairs office (PAO), combat camera, and tactical psychological operations (PSYOPS) teams; these entities have access to their counterparts at division who have reach back to their corps sections.

The commander should make certain that the local media accompanies his units when they are conducting operations that emphasize positive coalition forces activities and efforts, thereby placing a “good face” on coalition forces. For example, the command should invite the local me-

dia to a cooperative medical engagement where the unit provides medical services to a community in need. With the local media in attendance, they can cover the event and broadcast it on the local Iraqi news that afternoon. Perhaps another example would be to invite the local media to a veterinarian operation where the unit provides services to a rural community that has livestock. This requires a major effort, which begins with the brigade S7, PAO, and tactical PSYOP team leader, all of whom collectively coordinate with their division counterparts. By doing so, the local media fills airtime with “good-news” stories that show what the coalition is doing to enhance the Iraqi people’s standard of living. This also serves to eliminate potential negative airtime while reinforcing coalition forces’ activities, which are directed toward winning the population’s “hearts and minds.”

#### **Iraqi Media Section**

*“Contrary to what many doctrine writers and military scholars might believe, this out-of-box approach has worked extremely well. As of October 2007, the IMS has conducted 38 battlefield circulations, bringing Iraqi media crews to the story, translated and disseminated over 300 good-news stories in Arabic. Market penetration for IMS-translated articles remains constant at just over 50 percent and battlefield circulations average over 98 percent.”<sup>4</sup>*

I personally witnessed the creation of an Iraqi media section (IMS) in the Bagh-

dad Province from May to September 2007. In this short time period, I watched Task Force Marne resource and implement a division-level Iraqi media section whose sole function was to engage the local media to promote good-news stories in the division's operational environment. This was a huge task as there were no clear-cut doctrinal publications to provide guidance. Furthermore, aligning Iraqi media with IO is contrary to current public affairs doctrine.

### How It Gets Done

Coordinating and integrating local media begins with the commander's understanding of his operational environment. Good troop commanders use IO to their advantage; by knowing their operational environment and the local population and leaders, these commanders were better able to exploit positive events. Their success began by working closely with the brigade S7, who, in turn, worked with the division G7, who possessed assets to get the Iraqi media to the scene.

Close and constant coordination would see the arrival of the division Iraqi media section and the Iraqi media crews just in time to capture the high pay-off event and then, under the protection of the soldiers and supervision of the Iraqi media section lead, the Iraqi media crews would return to home base where they broadcasted the good-news story. Using IO in the commander's operational environment creates closer relationships between coalition forces and local leaders and citizens.

I also witnessed a maturing phenomenon known as "concerned local citizens," who are local nationals working to provide security within their neighborhoods. These concerned local citizens will eventually become members of the Iraqi Security Forces or work force where they will become productive citizens, providing a myriad of services to the Iraqi people. Creating concerned local citizen groups leads to the reduction in violence throughout much of Iraq. A U.S. Army cavalry officer outside Baghdad commented that, "IED strikes and small-arms fire against [his] patrols was down 72 percent for the month of June 2007."<sup>5</sup>

### See Yourself, See the Enemy, and Know Your Local Nationals

*"The BCT S7s synchronize planning efforts with each of their maneuver battalions and nominate events for Iraq media coverage."<sup>6</sup>*



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The first step in using available assets is to know those assets (see yourself). Knowing there are brigade, division, and corps assets available to assist commanders during daily missions is vital. Commanders who know their enemy will be better prepared to employ available assets and tailor correct messages to reach out and win the hearts and minds of the local nationals (see the enemy). Commanders who know their local population will not only be better prepared to tailor messages, but more importantly, determine the correct delivery mechanism, such as radio, television, newsprint, leaflet, handbill, or tactical loudspeaker operations, for those messages.

By using all available assets — brigade, division, and corps — commanders enhance their ability to deliver the right message, by the best means, at the right time, to the widest audience, achieving the greatest results. The end-state of good IO is to reduce the number of kinetic strikes against coalition forces and local nationals, as well as the instruments of the government of Iraq.



### Notes

<sup>1</sup>Chairman, Joints Chief of Staff, Joint Publication (JP) 3-13, *Information Operations*, U.S. Government Printing Office, Washington, DC, 13 February 2006, p. ix.

<sup>2</sup>Lieutenant Colonel Francisco Decarvalho, "Reaching Out to an Influential and Overlooked Population: Task Force Marne Partners with Iraqi Media," unpublished manuscript, p. 1.

<sup>3</sup>JP 3-13, *Information Operations*, p. 1-10.

<sup>4</sup>"Reaching Out to an Influential and Overlooked Population," p. 4.

<sup>5</sup>Author's personal conversation with a brigade executive officer, 30 June 2007.

<sup>6</sup>"Reaching Out to an Influential and Overlooked Population," p. 8.

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# Win the Battle — Lead to Peace

by Colonel Bruno Duhesme, French Army

*“Our armed forces must continue to update and expand their educational programs. This means broadening the curricula of formal schools to reflect the complexity of the modern operating environment and increasing opportunities — and rewards — for leaders to serve in assignments outside the traditional military structure.”*

— Lieutenant General Peter W. Chiarelli

Though it remains a confrontation of will, which still breeds suffering and violence, war has fundamentally changed, as well as its place in today’s world. Military confrontation, which once led to immediate political success, is no longer sufficient to achieve today’s strategic objectives. Moreover, destroying the adversary sometimes proves to be an inappropriate response to a situation of conflict. The battle is no longer the sign of final victory or definitive failure for the protagonists. From now on, battle is only the first step of the overall process of conflicts. The last step is normalization and in between is stabilization, which is the decisive phase because it sets the conditions for the return of peace.

War has also changed with the introduction of new belligerents, whose behavior is miles apart from traditional military logic, and who live and operate among the population, which is a major and decisive player.

In this changing environment, military action must adapt. Lethality is no longer the supreme capacity for the military, which is no longer the only player in achieving the strategic objective. Armed forces are required to coordinate with a large number of players who share the responsibility for success or failure. Initial intervention, with the use of powerful and lethal assets, is required to prepare the stabilization phase — the core

of the global engagement and the decisive phase of the engagement, which takes place essentially on the ground. The French Army Doctrine Command has launched a reflection on these evolutions and has issued a capstone document to that purpose.<sup>1</sup>

This article presents and summarizes the pamphlet and attempts to underscore the main challenges western ground forces are likely to face in the contemporary operational environment (COE).

## **The New Face of War: New World; New Conflicts**

**Setting conditions for strategic success.** For a long time, war was used to





solve conflicts among powers promoting their own interests and will for conquest. But in the modern age, war entered an international legal framework, which no longer recognizes the use of force as a way to solve conflicts and differences between states. In this new framework, our armed forces operate within systems characterized by chaos and violations of international laws or threats on peace to restore order, which supposes, in most cases, to reestablish a stable social and political system. Therefore, while the accomplishment of the strategic objective relied yesterday on the outcome of an armed confrontation, military success on today's battlefield contributes solely to establish the minimum conditions for the achievement of political goals.

**Stabilization: the decisive stage of today's three-phase conflict.** Following the decisionmaking and planning processes, today's military commitments in armed conflicts roughly consist of three phases: intervention, stabilization, and normalization. All three phases include periods of coercion, violence control, and high- or low-intensity operations.

The intervention phase is essential and must lead to tactical success, which will enable the achievement of the strategic objective through a smooth transition with the next phase. This raises two concerns. First, a modern force has to have all the capacities to deter, defeat, and even destroy an enemy who has decided to oppose the force deployment. In other words, lethality remains a "must-have" capacity. Second, the need for a smooth and steady transition between phase 1 (intervention) and phase 2 (stabilization) has important planning consequences. For example, while preparing the intervention, planners have to endeavor to limit destruction of infrastructure to the strict necessities, keeping in mind that the force will have to reconstruct in the next phase.

The stabilization phase is the decisive phase in which military forces operate in close coordination with their entire environment to restore stability through global control of the area. This phase aims at establishing conditions for achieving the strategic objective. Even if this phase relies on civilian skills, military presence remains essential to support the organization and individuals involved in the reconstruction process. Depending on the security level, armed forces lead or support the entire interagency operation. In this phase, armed forces have to conduct full-spectrum operations, which range from combat and security operations to

crowd control or humanitarian actions. Planning considerations are crucial for this phase as well. To enable the transition between phase 1 and phase 2, all potential players have to be involved in the planning process. A successful transition generally augurs well for the future.

The stabilization phase precedes the normalization phase, which is typically the return to peace, with a durable political, legal, and social system, that all protagonists accept. Due to cultural differences, the "norm" is likely to differ with the "norm" to which intervening nations are accustomed. In this respect, cultural awareness is an important issue, not only for the military, but for all agencies involved.

### **From Symmetric War to Asymmetric Conflicts**

The David vs. Goliath concept of conflict is nothing new; however, it is more likely to occur today due to the huge operational supremacy of western armies which have to adapt to "small wars," as Clausewitz described them.

Symmetric/dissymmetric conflicts are those that oppose institutional armed forces with similar objectives, means, and courses of action (COAs). The distinction between symmetric and dissymmetric conflict reflects the difference of power among the warring parties. Symmetric conflicts oppose comparable adversaries and dissymmetric reflects the military superiority of one of the belligerents. Dissymmetry often leads the weaker belligerent to shift to asymmetry to maintain his chances of success against the stronger opponent.

In an asymmetric conflict, one of the belligerents will deliberately avoid direct confrontation and/or the domain in which his adversary has an obvious superiority and will emphasize and take advantage of the disparity of means and COAs. In these conflicts, the weak will attempt to transform the technological and operational superiority of his opponent into powerlessness or vulnerability, thus highlighting his assets that are materially, psychologically, and culturally superior to his opponent's.

The huge military superiority of western countries should normally result in more asymmetric conflicts, which are nothing new to military history. Dissymmetry and asymmetry are the most predictable forms of war for the next decades. But in some cases, such as insurgency, terrorism, guerrilla, or population

manipulation, certain capabilities that suit the conventional art of war (symmetric/dissymmetric conflicts) are somewhat inadequate to asymmetric warfare.

### **The New Enemy**

Yesterday, our armed forces fought an enemy of regular forces belonging to nation states. Today, new adversaries are emerging and are using an asymmetric approach. These new enemies include:

- Predacious systems mostly linked to organized crime and dedicated to the search for profits. These systems essentially concern police and justice.
- Claiming systems aimed at achieving political objectives by using armed force against the state they oppose to gain political influence through the conquest of territories or populations.
- Subversive systems that are revolutionary in nature and use unbridled violence to serve their global political objective, which generally relies on the foundation, without any compromise, of a new society.

### **The New Environment**

Even if it is necessary to win the tactical battle, defeating the enemy is not sufficient to achieve the strategic objective. In modern theaters, all actions are mixed and tangled in what U.S. Marine General Charles Krulak refers to as the "three-block war," in which soldiers simultaneously conduct combat operations, humanitarian aid, and reconstruction efforts.

The three-block war is conducted in cities and is the preferred battlefield for enemy forces who intend to inflict significant damage on western armies, whose main effort will be placed in cities while attempting to control the rest of the battlespace. On this new battlefield, the population is both an actor and a major stakeholder in the conflict. All military efforts are dedicated to populations who aspire to order, security, and respect. To prove its efficiency and credibility, the force must satisfy these needs simultaneously. Although security remains the top priority, the population is also seeking respect.

Since the use of force is essentially exerted among human societies, controlling the ground is essential in stabilization; it enables the transition from military to political control. This control must be permanent and sustained, because it takes a long time to consolidate. It also requires a large number of ground forces that are appropriately trained, deployed, and re-



***“...a modern force has to have all the capacities to deter, defeat, and even destroy an enemy who has decided to oppose the force deployment. In other words, lethality remains a ‘must-have’ capacity.”***

lieved, which supposes a huge capacity to endure and sustain.

### **A New Role for Soldiers**

Today, western soldiers belong to societies in which the demand for security is increasing. The new operational framework is largely influenced by law, which is omnipresent and rules over the conduct of operations. In addition, our fellow citizens are very eager for immediate information; electronic media provide information 24/7. Today's soldier must know how to deal with the press and understand that the journalist's mission does not necessarily promote military actions, but relates perceived facts. Anyway, like it or not, press is part of the terrain in which soldiers operate.

Given the multiplicity and variety of players involved in stabilization and normalization business, soldiers at every echelon must display their ability to communicate. While geographic proximity with the population has become a must for stabilization operations, the soldier, ironically, must maintain a certain distance to remain vigilant and impartial. Compassion and understanding are two notions that somewhat differ.

Although stability operations use less lethal power than conventional combat operations, soldiers still need to be morally and mentally tough to maintain control and good judgment. The “no-shoot”

option is sometimes much more difficult to implement than the indiscriminate use of fire. As a consequence, force protection is one of the major requirements generated by the new operational environment.

### **New Challenges**

**Adapt or die, but keep your conventional warfare intact.** Western armies were organized, equipped, and trained to confront Warsaw Pact forces, not insurgents, rioters, or angry citizens. Adaptation was imperative, but when one enters the world of stability and counterinsurgency, one realizes this is much more than a couple of minor adjustments. The new environment needs new doctrine and new training strategies. Leaders have to be grown differently; organizations must be adjusted and innovative equipment developed to meet today's operational requirements. In short, one has to create a new system, which has to be well balanced so it can manage the intervention and stabilization phases. In other words, modern soldiers do not have to get rid of their conventional combat skills; they just have to add other competencies and know-how to their military knowledge.

### **Training**

Training units and individuals for both high- and low-intensity conflict is a major challenge; however, training soldiers on counterinsurgency and stability oper-

ations is time-consuming and may consequently degrade conventional skills. Therefore, it is essential to maintain branch core competencies even when current requirements are essentially stability and counterinsurgency operations. Prior to the stabilization phase is the intervention phase, which ends with tactical success; this success relies on conventional warfare skills.

### **Equipment and Organization**

In this domain, the challenge is, once again, to equip soldiers with the appropriate weapons, vehicles, and other materials in accordance with planning. This means that western armies still need heavy armor to accomplish the intervention phase and a sufficient dismount capability, appropriately equipped, to control the ground system during the stabilization phase. There is also a need for sensors, unmanned aerial vehicles, and non-lethal munitions during the stability phase; however, modernizing tanks, artillery and aviation assets, and infantry vehicles is of paramount importance, as well as maintaining supremacy in a conventional warfare area. On the other hand, stability operations need boots on the ground, and technology cannot replace human intelligence in such complex environments. A tragic mistake would be trading human strength for technology. To face the contemporary environment, a modern army needs both technology and strength.

## The Cultural Confrontation

In asymmetric conflicts, western soldiers must deal with a cultural gap; we have watches, our enemies have time. Therefore, while we are counting long term with months or even years, their unit of measurement for time is eternity. In the same sense, western countries attach a high value to human life, while other cultures do not. Casualties are painful for westerners, but can fuel an insurgency — enemy casualties are glorified and used as an incentive for recruiting.

## National Support

As previously mentioned in this article, the host-nation's population is a possible center of gravity. Fine! What about ours? The French armed forces received no support from its fellow citizens during the Indochina War and lost national support during the Algerian War. As a consequence, despite some tactical and operational successes, both conflicts ended with a strategic defeat for France. From my perspective, this is probably the most challenging aspect of stability operations. I am not talking about supporting troops, but supporting the operation. Stability operations are protracted wars that need time, patience, and dedication. They are sometimes frustrating because results are slow, making it easy for the enemy to exploit our impatience and our fellow citizens'

frustration. In this respect, the enemy is much more aware of our culture than we are of theirs. Maintaining national support is not easy during these protracted conflicts — this issue must be addressed by an effective and sustained communications campaign.

## Conclusion

Obviously, this type of conflict is very challenging. For the French army, the time to rethink doctrine, organization, equipment, and training to meet the requirements of the new operational environment has arrived. But this approach has to be appropriately balanced between high intensity and low intensity. The tragic mistake would be sweeping away the conventional capacity to the exclusive benefit of "small wars" capabilities. One must keep in mind an important thing:

prior to the stability phase, there is a tactical battle to win.

As for me, educating and training tactical leaders constitutes the main effort in the adaptation process. In this respect, I strongly recommend Lieutenant General Peter Chiarelli's article, "Learning from our Modern Wars: The Imperatives of Preparing a Dangerous Future."<sup>2</sup> I am convinced this principle could apply to the French armed forces.



## Notes

<sup>1</sup>The French Land Forces Doctrine, *FT-01 Winning the Battle, Building Peace, Land Forces in Present and Future Conflicts*, Ministère de la Défense, 2007.

<sup>2</sup>Lieutenant General Peter W. Chiarelli and Major Stephen M. Smith, "Learning from our Modern Wars: The Imperatives of Preparing a Dangerous Future," *Military Review*, September-October 2007.

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# An Approach to Route Security

by Captain Nicholas C. Sinclair




*The only feature of the Iraq conflict that is consistent is its inconsistency. The battlefield, the threat, and the social environment are ever changing. What worked in Ramadi during 2004 or in Mosul during 2005 did not work in east Baghdad during 2006. Soldiers who operated within the same sector during their previous tours to Baghdad hardly recognized it when they returned. During our tour of duty to Iraq, my unit conducted route security operations, which worked reasonably well in this sector; however, the recommendations in this article are not the end-all solution to combating deadly roadside bombs coalition soldiers face daily.*

In mid-December 2005, 3d Battalion, 67th (3-67) Armor Regiment, 4th Infantry Division, deployed to Iraq. As an infantry company executive officer, I took over the battalion's scout platoon, which was attached to the engineer company. The situation in east Baghdad was very different from my previous deployment to central Baghdad in 2004. The Iranian intervention, largely unknown in 2003 and early 2004, was operating at full strength by 2005. The proxy used by the Iranians to fight against

U.S. forces was the Mahdi Militia, led by Shiite cleric Muqtada al-Sadr. As H. John Poole points out in his book *Tactics of the Crescent Moon*, Sadr was supported by Iran from the onset of the 2003 invasion, and his militia received intense training from the Iranian Revolutionary Guards.<sup>1</sup> The Iranians provided great sums of money, equipment, and military training to the Shiite militias in Iraq to counter the mission of coalition forces.<sup>2</sup>

The Mahdi Militia favored ambushes over direct-fire contact. They rarely stood and fought; instead, they opted for hit-and-run tactics. Roadside bombs have been a constant theme in the Iraq conflict since its inception; however, the roadside bombs we faced in east Baghdad were hardly improvised explosive devices (IEDs); they were manufactured pieces of weaponry whose basic form has been around for more than a century.

Whether it is a shaped charge, a platter charge, or an explosively formed projectile (EFP), the fundamental concept is the same — sizeable amounts of explosives detonated behind a plate of metal sent hurling at a target. The contemporary catch-all phrase



*“Whether it is a shaped charge, a platter charge, or an explosively formed projectile (EFP), the fundamental concept is the same — sizeable amounts of explosives detonated behind a plate of metal sent hurling at a target. ... These weapons are difficult to identify because they can be disguised as ordinary debris scattered along the roadside. Often insurgents place the device in a wooden box, wrap it in foam, and roll it in the dirt, making it look like a misplaced curbstone.”*

used by the Army for these types of bombs is “armor-defeating device” (ADD). The weapon is hardly revolutionary; armies have used it since World War II, and the idea dates back even further. Most armies, including our own, use this type of weaponry to defeat enemy armor. These weapons, often equipped with passive infrared laser beams, detonate when vehicles pass in front of them — the same technology used to open automatic entrance and exit doors at the grocery store. These weapons are difficult to identify because they can be disguised as ordinary debris scattered along the roadside. Often insurgents place the device in a wooden box, wrap it in foam, and roll it in the dirt, making it look like a misplaced curbstone. These weapons have a terrifying psychological effect.

We arrived in theater and conducted a relief in place with 1st Battalion, 64th (1-64) Armor Regiment, 3d Infantry Division. The soldiers of 1-64 Armor were the first to experience the wide-scale use of ADDs and immediately began developing ways to counter the device. Our steps to defeat the roadside bombs began prior to our unit’s deployment. Based on information and

advice from our counterparts in theater, our battalion commander gave the task of route security to the battalion’s engineer company. This differed from most engineer companies, who were given a sector and operated much the same way as an infantry or armor company. Instead of being given a piece of land, our engineers were given the roads. The battalion engineer’s mission was to provide route security to make the roads safe for coalition vehicle travel. The mission was three-fold: sanitizing, protection, and clearance. This turned out to be a Herculean task that literally reshaped the battlefield in east Baghdad.

### **Route Sanitizing**

Our first mission was to physically remove trash and debris from the sides of the roads. Anyone who has been to Iraq will tell you the country looks like a landfill. The country is devoid of any organized trash-removal system, so residents simply take a few steps outside their homes and throw their garbage on the roadside. Additionally, the infrastructure is in a miserable state of disrepair, to include curbstones and concrete strewn alongside



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the roads. These nauseating conditions provide insurgents with the perfect camouflage in which to hide bombs.

Cleaning the roadsides was no easy task; we operated at night, during curfew, which allowed us to work unhindered from civilian traffic and during hours when attacks from insurgents were least likely. We literally began walking from the front gate of the forward operating base (FOB) down both sides of the road, loading pieces of concrete onto trailers and pushing trash far away from the roadside. We made good use of the armored combat earthmover (ACE) and Bobcat tractors. We also tore down the remaining guardrails in the battalion's area of operations. The guardrails had become a popular location for insurgents to hide



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artillery shells intended to detonate on vehicles as they drove past. To remove the rails, we simply wrapped chains around them and ripped them off their beams with an ACE or Bradley fighting vehicle (BFV).

The work was backbreaking and foul; raw sewage from slit trenches flowed into roadside debris, making removal arduous and unhealthy. To protect our soldiers from diseases, we wore surgical gloves underneath work gloves, but getting splattered with raw sewage was unavoidable. The most difficult part of the mission was keeping our soldiers motivated; after all, soldiers enlist to fight, not pick up Iraqi trash. They often referred to themselves as "combat garbage men" and "combat janitors," and dubbed the missions as "community service detail." Moreover, they were teased by others in the battalion for having the unenviable task.

Following precautionary measures, we cleared as far as we could from 2100 hours to 0500 hours, yielding to morning traffic and physical exhaustion. Using this method, we cleared the major routes in our area of operations, which included 32 kilometers of a two- to four-lane divided highway, in roughly three months. Once we accomplished this task, we continued performing route maintenance missions to ensure the roads remained free of debris. Although not nearly as difficult as the initial clean up, it was still demanding physical labor.

In addition to clearing the routes, there were more than 100 large concrete sewer pipes abandoned on the main route in our sector. These sewer pipes were placed there, but never installed and served as a great location to hide explosives. Together with the battalion's support platoon, the engineers removed all of these sewer pipes, greatly reducing the enemy's opportunity to emplace roadside bombs.

We also opened contracts to fix the roads, which included removing broken and loose curbs and replacing them with new ones. The curbs were freshly painted, which allowed us to identify any curbs that may have been tampered with or removed. Local contracts allowed us to put money into the Iraqi economy by hiring local construction businesses to fix the roads.

Every night, we faced the danger of booby-trapped debris. We were limited to a night's work, which forced us to pick up the next day where we left off the night before, so it was very probable the enemy could have emplaced a bomb. Oftentimes, a soldier would hesitate, taking an extra long drag on his cigarette before lifting an odd-looking piece of concrete. Luckily, we did not encounter any bombs during our clean-up efforts.

**Route Protection**

Throughout our mission in Iraq, we aggressively pursued the enemy in an effort to prevent roadside bomb emplacement. We conducted long- and short-term observation posts (OPs), overwatching sections of road and intersections that were historic locations for

roadside bombs. Long-term OPs were conducted from 24 hours to several months, while short-term OPs were conducted from 1 to 24 hours. The theory was simple: a sniper overwatching an area would shoot and kill insurgents emplacing roadside devices, making emplacement virtually impossible.

East Baghdad was a sprawling urban slum composed of mostly buildings, 2.4 million people, and heavy traffic flow. Finding a good OP site without being seen was challenging — we were under constant surveillance the moment we left our FOB. The insurgents had counterreconnaissance OPs in depth throughout our sector and used cell phones or gunshots to warn of our presence. Just by the nature of the city, there was always someone alert and watching us everywhere we went. When we were seen, word spread quickly, alerting everyone to our location and activities. We tried various deception methods to insert sniper teams, but we never fully knew if we had been seen.

Many of our OP sites were empty buildings or, with the homeowner's consent, occupied residential buildings. If our team entered an occupied home, the residents could not leave, which posed problems because family members and neighbors quickly realized something was amiss when they did not see or hear from the residents of the home. This, coupled with rumors that we had recently been in the area, made it relatively easy for locals to piece together the two events. Residents feared our presence would cause them to be viewed as coalition force collaborators and they would suffer serious consequences by the Mahdi Militia. These complications meant that most OPs could not be used for more than 24 hours. During OP operations conducted for more than 24 hours, the teams either occupied locations devoid of civilian presence or they occupied overt OPs such as checkpoints.

During short-term OP operations, we had limited time to find and kill enemy emplacement teams. Furthermore, the enemy's presence was unpredictable; they were patient, and if they knew we were in the area, they were not compelled to emplace devices. They would patiently wait until conditions were perfect before emplacing devices. The enemy had a large area in which to work and any chance of them emplacing a device while we were watching was slim to none.

Acquiring these emplacement teams was made even more difficult by the enemy's use of the natural chaos of busy intersections and roads. In a single day, there were thousands of vehicles travelling on the major roads. At any moment, there were dozens of cars lined along the roadside while their drivers fixed flat tires, bought bread, or waited at fuel stations. Pedestrians were everywhere selling cigarettes, emptying trash, or digging; from a soldier's perspective, everyone looked suspicious. As John Nagl points out in *Learning to Eat Soup with a Knife*, insurgents used this to their advantage because they wanted to elicit the "Army's inappropriate use of force."<sup>3</sup> One of the core fundamentals of counterinsurgency is to win the people's support; to indiscriminately shoot any Iraqi who appeared suspicious would not only contradict the purpose of winning the people's trust and confidence, but it would also draw thousands to the insurgents' side.



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In protecting the route, the battalion also took on the construction and manning of several checkpoints. Throughout our tour, the battalion's maneuver companies occupied two to three checkpoints at major intersections in sector. The battalion commander referred to these checkpoints "as key terrain" because they formed the "tactical breach" through which units moved into sector. Historically, these were preferred locations for insurgents to target coalition force vehicles. These checkpoints were occupied around the clock and their constant presence deterred insurgents from emplacing bombs. These checkpoints were a precursor to the combat outposts now common in theater.

To supplement our checkpoints, Iraqi Security Forces had checkpoints spread along main routes. These checkpoints were scattered haphazardly throughout sector, seemingly without thought to their tactical locations, which offered little protection. The haphazard checkpoints provided substandard living conditions for Iraqi soldiers who were expected to stay there for a month at a time. Their poor locations and dreary conditions destroyed the morale in these units, leaving them totally ineffective.

Throughout the year, my company conducted a complete overhaul of the Iraqi checkpoints in the battalion area. The company commander conducted a careful analysis of the terrain and replaced the older, ineffective checkpoints. He placed the checkpoints in tactical locations, providing mutually supporting sectors of observation with neighboring checkpoints. For checkpoint construction, we used privately contracted cranes, ACEs, Bobcat tractors, dozers, bucket loaders, graders (from corps), and hundreds of concrete barriers. The new checkpoints provided much better protection and increased the Iraqi soldiers' quality of living; however, getting them to do their duties was another enterprise altogether.

### Route Clearance

The term "route clearance" was nonexistent in Army field manuals prior to this current conflict. It is another "Iraqism" that found its way into the Army lexicon and refers to the act of actively searching for and destroying roadside bombs. Route clearance is by far the most dangerous mission in Iraq; insurgents



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specifically target clearance teams because without the roadside bombs, coalition convoys have freedom of maneuver throughout the area.

About 7 months after our arrival in Iraq, we took over the route clearance mission from the engineers of 101st Airborne's 506th Regimental Combat Team (RCT). Our route clearance equipment included a package of BFVs, HMMWVs, the RL-31 Cougar hardened engineer vehicle, and the Buffalo mine-protected clearance vehicle. The Cougar, with its elevated V-shaped carriage, offers better blast protection than the HMMWV. It also provides excellent observation for its crew with large windows, which wraps around all four sides of the vehicle. The Buffalo is similar to the Cougar, but is much larger, and its most obvious feature is a giant mechanical arm. The arm is equipped with a metal claw, which is used to interrogate suspicious objects on the road. It also hosts a complement of cameras that can be used to scan the road.

Our continuous route sanitization efforts made our route clearance mission all the more effective. Before we cleaned the roads, the enemy could hide bombs among the abundant trash and clutter. With the roads clear and clean, EFPs became obvious to the most casual observer.

Throughout the major routes in sector, a single engineer platoon could accomplish the route clearance task. Along these routes, there was considerable distance between the edge of the road and the buildings lining the routes, which allowed easy identification of anything within this buffer area. On other routes, however, there was little buffer area between the edge of the road and adjacent buildings and market areas. Stacked bricks, vendor kiosks, and dirt mounds offered numerous locations to hide bombs. These roads, though used daily by our forces, were not as well traveled and could not be observed throughout most of the day. The roads posed an even greater danger because they ran directly through neighborhoods that had intense Mahdi Militia followings.

The route clearance teams were bound to the roads, which meant the enemy enjoyed freedom of movement and observation from

the flanks in neighborhoods. The enemy became so bold that upon identification of the route clearance convoy, they would emplace ADDs specifically to attack the engineers. Since most of the engineer vehicles were elevated, the enemy adjusted the trajectories on their weapons to target the Cougars and Buffalo. Our company commander quickly realized that we needed security on our flanks to clear high-risk routes. My scout platoon was tasked to provide dismounted flank security while the engineers cleared the routes.

As with our route sanitization mission, we conducted route clearance at night during curfew hours. The engineers would clear approximately 20 kilometers of route during every mission. Due to time constraints and distance covered by the clearance team, my platoon could not provide flank security throughout the entire mission. Instead, we focused on the historic ambush positions. The engineers cleared one side of the road at a time, moving up one side and back down the other. A concrete median roughly one meter high provided additional protection to the clearance teams.

The clearance mission involved three phases: movement, security, and clearance. Movement to the objective was achieved through two different methods. In one approach, our platoon left shortly after the engineers began their clearance mission and traveled secondary routes, swinging wide left or right of the primary route being cleared. This technique was designed to confuse the enemy because my team moved through neighborhoods disguised as random patrols and not linked to the nearby route clearance mission. While the enemy was focused on the route clearance team on the main road, my team moved in from the rear. With the two forces converging simultaneously, we achieved mass on the objective, overwhelming the enemy.

The second movement method we employed was less discreet, but useful in breaking up the routine. Our platoon followed directly behind the engineers, much like a tailback following a blocker. Shortly before the engineers reached a likely ADD area, we would drive off the road left or right, moving through the neighborhoods to the flanks. After the engineers had completed their mission, we collapsed our security and moved back to the FOB in a similar fashion, either through sector or trailing the engineers.

The second phase of the route clearance mission was security. On these missions, our platoon was composed of four HMMWVs, with three-man crews (driver, gunner, and truck commander), an interpreter, a medic, and a five-man sniper team. A day or two prior to the mission we conducted a reconnaissance of the area with the sniper team leaders, identifying possible OP locations. Once on mission, the sniper team dismounted about 500 meters from their OP site and moved to their location on foot. The sniper team overlooked the most likely ADD locations, providing constant surveillance throughout the mission. They were prepared to engage any insurgent emplacing ADDs, but primarily reported suspicious activity along the road or in the neighborhoods along the street. My four trucks were split into two sections and moved to two separate lateral routes oriented



on the road. We provided more coverage by dismounting the truck commanders, who performed local surveillance immediately outside of the HMMWV. We ensured the OP and trucks had overlapping sectors of observation, so there was no space in the road that was not being watched.

The third phase was the actual clearance mission. While my platoon overwatched the road, the engineers could move through and clear the area without being worried about what was on their flanks. Our presence alone either disrupted or scared off any insurgent triggermen in the area, leaving us to search for bombs. If enemy forces were committed to emplacing devices in our area of operations, which was rare, their freedom of maneuver and ability to operate was severely hindered due to our presence.

The lead engineer vehicles scanned the sides of the road and when they identified a suspicious object, the Buffalo was called to investigate. ADDs were somewhat easy to identify because the claw on the Buffalo's hydraulic arm could tear through the foam and wooden camouflage that concealed the bombs; however, concrete or curbstone would stay intact. If there was any question about a suspicious object, my trucks would move to location and the truck commanders would dismount and take a closer look at the object. We looked for wires leading from the device, which was a sure sign of a roadside bomb.<sup>4</sup> If the object was positively identified as a bomb, the wire was traced back to its source, where residents in the immediate area were questioned and their homes were searched. Finally, we cut the wire, secured the area, and requested the explosive ordinance disposal (EOD) unit to either recover the device or detonate it in place.

### Positive Outcomes

The roadside bombs restricted our freedom to maneuver through sector, giving control to the insurgents. However, our route sanitization, route protection, and route clearance operations were mutually supporting efforts that enabled our forces to move into sector and provide security to the population, and thus restore the legitimacy of the local Iraqi government. The operations were physically and mentally exhausting, but they paid off. We reduced ADD activity in our sector by an amazing 60 percent overall and entirely in several previously targeted areas. Route sanitization operations created a buffer area that allowed us to readily identify devices placed on the side of the road, which gave confidence to soldiers moving through sector. Before these operations, soldiers reluctantly passed by roadside clutter, bracing for impact. Stretches of road previously considered too hazardous to traverse became frequently used by our forces. Route sanitization also had a pleasing aesthetic effect. Instead of the stomach-turning eyesore of trash and debris, the area had a neat and clean appearance, which showed progress in the area.

Route protection operations allowed us to hold the ground we had reclaimed through route sanitization. It also allowed our forces to work side by side with Iraqi Security Forces, which built trust and understanding between the two forces. Using sniper OPs demonstrated we were no longer targets and we were going on the offensive, which boosted confidence among our soldiers. The route

clearance operations saved countless lives through acquiring and recovering deadly ADDs that littered the sector. Taking control of the major roads allowed us to move freely into sector and take the fight to the enemy. The successes of our operations were stunningly obvious compared to battalion sectors that had not focused on route security; these routes were littered with trash and debris, offering ample locations from which to ambush coalition forces.

### Negative Outcomes

Our route clearance efforts, though successful, did not defeat the enemy in our sector. The insurgents adjusted to our countermeasures and found other ways to attack our forces. Once we took back the major routes, the insurgents shifted to placing their bombs on secondary roads, deep in their neighborhoods where the same level of route clearance was impossible. About midway through our tour, insurgents began targeting our units, which were conducting checkpoint security operations, with sniper fire and rocket propelled grenade (RPG) attacks. Although we went to great lengths building checkpoints for the Iraqi Security Forces, many went unmanned due to their personnel shortages. These checkpoints, constructed to secure the routes, became areas in which to hide ADDs. Moreover, the quality of some Iraqi Security Forces was poor and their allegiances were questionable.

Insurgents began burying ADDs in the side of the road, making them all the more difficult to identify. The enemy probed our blind spots, finding places to hide roadside bombs in areas we thought were protected. On one occasion, an insurgent was seen crawling on his belly, pulling an ADD attached to his waist by a length of rope. The vehicle crew at a nearby checkpoint could see him, but they were too far away to engage. However, one crew pushed the limits of their BFV's coax machine gun by knocking down two members of an emplacement team from



*"Throughout the major routes in sector, a single engineer platoon could accomplish the route clearance task. Along these routes, there was considerable distance between the edge of the road and the buildings lining the routes, which allowed easy identification of anything within this buffer area. On other routes, however, there was little buffer area between the edge of the road and adjacent buildings and market areas. Stacked bricks, vendor kiosks, and dirt mounds offered numerous locations to hide bombs."*

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a distance more than twice the maximum effective range of the weapons system.

Most obvious was the fact that we could clear the road every day; however, the moment we left, it was no longer secure. It would have been impossible for the battalion to secure every meter of road in our sector with the limited number of forces we had at our disposal. Even more startling was that the enemy was placing all of his energies toward targeting the engineer clearance teams and destroying the Buffalo.

### Lessons Learned

Route security is a three-fold operation that cannot be achieved without one or more of its elements: sanitization, protection, and clearance. Sanitization, although the most physically intensive of the three operations, was the easiest to achieve and maintain. Route protection was the most difficult because we did not have enough forces to secure every route. The only secure roads in sector were the ones our forces were immediately standing on; once we left an area, it was no longer secure.

The enemy was gifted at blending in with the everyday activities of the population, which enabled them to openly emplace bombs. As with any insurgency, differentiating insurgents from the population remained most difficult. We learned that until a competent, hardworking, and loyal Iraqi Security Force is created, it is difficult to rely on them to maintain security on their own. If any routes were to be protected, our troops had to do it. Route clearance teams saved countless lives, but their successes made them high payoff targets for the enemy. We also discovered that on the more dangerous roads, the engineers needed flank security to accomplish their mission.

Roadside bombs remain a challenge for coalition forces in Iraq. As Hezbollah demonstrated against the Israelis in the Lebanese conflict during 2006, it is a trend that is likely to be seen in future conflicts. The U.S. Army is a force carried into battle on trucks and tracked vehicles; our logistics are especially dependent on roads to sustain our force. Controlling the roads will be the decisive operation in future conflicts — without the ability to move, it is difficult to fight the enemy and protect the population. Route security operations must be a priority for any unit deployed to a hostile theater in current and future conflicts.



### Notes

<sup>1</sup>H. John Poole, *Tactics of the Crescent Moon*, Prosperity Press, Emerald Isle, NC, 2004.

<sup>2</sup>James Glanz, "U.S. Says Arms Link Iranians to Iraqi Shiites," *New York Times*, 12 February 2007.

<sup>3</sup>John A. Nagl, *Learning to Eat Soup with a Knife*, University of Chicago Press, Chicago, IL, 2005.

<sup>4</sup>Command wire was preferred by the insurgents over remote-control detonation due to the success of our jamming systems.

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*"Route security is a three-fold operation that cannot be achieved without one or more of its elements: sanitization, protection and clearance... Route protection was the most difficult because we did not have enough forces to secure every route. The only secure roads in sector were the ones our forces were immediately standing on; once we left an area, it was no longer secure."*



# Ground School XXI — The Next Step in Combined Arms Simulation Training

by Colonel Robert Valdivia

*“Take off the blinders; show me the realm of the possible.”*

— General William S. Wallace  
Commander, TRADOC

Ground School XXI (GSXXI) is a Maneuver Center of Excellence (MCoE) initiative co-chaired by the armor and infantry centers. This program establishes training strategies that employ combinations of live, virtual, and constructive simulations to train future soldiers, leaders, commanders, and staffs in conducting military operations in the contemporary operating environment (COE). Simulation capabilities have continued to improve and the Army must leverage the emerging capabilities in training to meet the challenges of an Army at war.

The U.S. Army Training and Doctrine Command (TRADOC) has implemented a campaign plan to meet the challenges of training an increasing number of warfighters as the Army continues operations in Iraq. Efforts are moving forward to field more combined-arms forces (grow) and simultaneously improve the Army’s ability to

conduct joint full-spectrum operations. The MCoE, as a critical part of the “Generating Force,” was tasked by TRADOC to determine the need for new families of simulations and simulators that will enable more efficient and cost-effective individual and collective training and education. In other words, “use virtual and constructive simulations and other tools in conjunction with live training to conserve resources, use available resources more efficiently, and produce more ef-

fective warfighters.” GSXXI is on point with two imperatives as a guide: align training with how soldiers fight and operate; and ensure soldiers see it first during training.

The genesis of GSXXI is the Flight School XXI (FSXXI) program at Fort Rucker, Alabama. FSXXI was developed to solve an urgent need to improve pilot training at the Aviation Center. FSXXI contracted with industry to provide commercial off-the-shelf flight simulators and training in a contractor-owned facility. In one respect, it followed the Stryker program model of accelerated procurement to cover a critical Army capability gap in the COE. This allowed the Aviation Center to immediately address a critical training shortfall while forgoing the traditional Army development and acquisition model. The Fort Rucker program has two distinct advantages: leveraging state-of-the-art simulations; and rapid fielding, which makes it attractive to TRADOC leaders.

GSXXI incorporates the FSXXI lessons and successes



*“The explosion of digital technologies and the potential to effect how we train and equip the force make GSXXI a training imperative. GSXXI has tremendous implications for the entire force as we look to develop immersive training scenarios that reflect the challenges of full-spectrum operations.”*

to overcome new and different challenges. Major issues addressed by GSXXI include a requirement to support dismounted soldier tactical training, as well as mounted (platform-based) training; train leaders to plan, prepare, and execute combat operations; train full-spectrum operations; and incorporate new weapons and systems. As with FSXXI, lessons learned at the MCoE likely have broader application across the institutional and operational Army.

The explosion of digital technologies and the potential to effect how we train and equip the force make GSXXI a training imperative. GSXXI has tremendous implications for the entire force as we look to develop immersive training scenarios that reflect the challenges of full-spectrum operations.

Another key issue is the rapid change in warfighting requirements, environments, and technology. Training solutions should be synchronized with the expansion in overall requirements across the spectrum of conflict, especially the challenges of fighting with a combined-arms team in urban environments.

The GSXXI program also evaluates maneuver training requirements for both the generating and operating forces to determine what type of simulators are required to best support the force. The current systems were designed to train mounted forces to defeat a Cold War adversary. The close combat tactical trainer (CCTT) currently trains mounted platforms and does not integrate dismounted elements. Current and near-future threats require a mounted force to work closely with dismounted elements, which is another factor to consider in the maneuver force training requirements. The technology base continues to produce new systems that will challenge our current family of simulations to remain relevant. Fielding advanced munitions with extended ranges and incorporating unmanned aerial systems (UAS), unmanned ground systems (UGS), handheld laser designators, and precision-guided munitions will require imbedded or simulator training.

To support the GSXXI vision — training the way we fight/operate, see it first in training,

and train first in simulation — the MCoE team is developing requirements, which include a system of systems that replicates/simulates platforms and weapons systems that can be used to train soldiers on core competencies with primary weapons systems and crewmembers on combat platforms during combined-arms operations. The system must have the capability to provide gunnery/weapons and maneuver training to resident MCoE students and units across the full spectrum of conflict. It must also support training for individuals, crews, and units up to the brigade combat team level, beginning with a target date in 2012.

This new system of systems would ideally immerse soldiers in tactical environments by replicating the sight, sound, and smells of conflict, weapons effects, and temperature, which is controlled to replicate stressful conditions, to include climate conditions in potential areas of operation. The system must also have the capability of being updated with new weapons technology as new weapons systems are fielded to the Army.

The GSXXI systems must include semi-automated forces (SAF) that can be programmed to either supplement Blue Force (BLUEFOR) units or serve as opposing forces (OPFOR). The SAF OPFOR must be robust enough to support the entire spectrum of conflict to include asymmetric threats and local populations. BLUE-

FOR SAF will provide basic officer leadership course (BOLC) students, as well as noncommissioned officer

course students, with the opportunity to lead a virtual platoon during tactical operations. Imagine a simulator that offers immersive scenarios that provide students a virtual platoon of avatars that enables them to interact with, and role play in, challenging scenarios.

The system of systems must interface with live combined-arms training/support operations, which allows the force to train in a live environment using a full array of available weapons that are otherwise prohibitive because of cost, space, or both. This new system should include a training management system that records and demonstrates the performance of the student in the associated task. It must also provide measured feedback and record the completion of gates as a student progresses through each gate. This system would also track student progress, training schedules, and performance, which would include access to a library of student texts, test, and reference materials, as well as provide and capture necessary data for student administration and management. It would also support unit after-action reviews (AAR), and as such, serve as a tool to predict both individual soldier and unit performance.

Part of the program will be to provide a library of training support packages (TSP) designed to support tables and gates for selected weapons qualification. The TSP library will also support local commander's needs by providing a reservoir of scenarios available to units Armywide.

An exciting insight in how we can achieve the GSXXI vision can be gleaned from the Defense Advanced Research Projects Agency's (DARPA's) *RealWorld* project. *RealWorld* consists of three components: air, ground, and maritime combat. In essence, the DARPA project simulates an environment that models the physics of the real world. This is a marked departure from current simulations that “cheat” to achieve a specific effect for an application.

*RealWorld's* earth is modeled from maps and digital terrain



elevation data (DTED) provided by the National Geospatial Intelligence Agency and its software has tools that allow users to modify the simulations to meet their own requirements. The tools are designed so users without special training can change the simulation by constructing buildings or modifying terrain. For example, a company/team defense that includes fighting positions and tank ditches could be added to a piece of ground.

DARPA has already built a radio plugin, which has a single-channel ground and airborne radio system (SINCGARS) radio emulator that allows users to display a SINCGARS radio that requires correct frequency, hopping sets, and encryption codes. The radio emissions are modeled to include the effects of terrain on transmitting range. The model is so sophisticated that electronic warfare officer students at Randolph Air Force Base, Texas, are using it to train. The Air Force also uses *RealWorld* to provide low-cost, portable simulation training for pilots transitioning to the A10C, and DARPA is working on a Force XXI Battle Command Brigade and Below (FBCB2) module that will be available soon.

The initial ground version of *RealWorld* will be available to Department of Defense users in March 2008. *RealWorld* is a government-owned simulation, which allows government agencies to use the program anywhere it would be useful. With traditional vendor-owned models, the government pays for the initial development, as well as user licensing fees and upgrades. *RealWorld* is designed to use a variety of three-dimensional models, which provides a large library of existing vehicle and weapon models ready for use with the simulation. *RealWorld* is also scalable, allowing students, instructors, and small-unit leaders to run the program on laptops in a classroom environment or in the field to assist in training.

There are many existing simulation technology functions that can be applied to a training simulation, such as *RealWorld*, to quickly meet COE training requirements for the mounted force. Dismounted controllers, which allow infantrymen to communicate with hand and arm signals during conduct of fire and maneuver, are just one example of what is currently available.



Simulations to support classroom tactical instruction are another area GSXXI has identified as a potential area of improvement. Since the late 1980s, instructors have occasionally used commercial off-the-shelf (COTS) gaming software to supplement tactical instruction. An after-duty-hours walkthrough of any Army barracks will likely discover soldiers locked in deadly combat using any number of available game titles. Whether the scenario is World War II, Vietnam, or the current Global War on Terror, commercial industry produces realistic combat simulations that can be networked with other players. Soldiers are drawn to these games because they are realistic and challenging.

The Army has leveraged gaming industry products to produce effective training. *DARWARS Ambush* was delivered in September 2004 to assist in training the operational Army on how to react to a convoy ambush. Additional scenarios were developed to train soldiers on how to conduct an assault on a suspected weapons cache and surveillance of a suspected suicide bomber. *DARWARS Ambush* is a modification of *Operation Flashpoint*, a commercially available game. *Operation Flashpoint* includes a scenario builder that allows users to develop scenarios using a wide selection of U.S. and OFPOR equipment and entities. Equipment includes M1 Abrams tanks, Bradley fighting vehicles, and Strykers, to name just a few.

*DARWARS Ambush* is currently being evaluated for integration into the Advanced Noncommissioned Officers Course at Fort Knox. While commercially available games offer new opportunities for training tactical operations, there is not one game that meets all the requirements for instruction in professional development courses. An adaptation of *RealWorld*, or a similar simulation, that is tailored for tactical operations at the squad

through brigade levels could be issued to every student. As government-owned software, it would also be available to operational units. Students could take their software and training scenarios to their next duty assignment. New platoon leaders could run scenarios with their tank commanders and new company commanders could train their platoon leaders. The MCoE could provide one-stop

shopping for software updates, scenarios, and related training material on the Army Knowledge Online (AKO) website. The MCoE would synchronize new scenario and software releases that would match changes in doctrine and material fielding.

GSXXI will provide the Maneuver Center of Excellence with a road map to the future using simulation-assisted training to keep pace with an ever-changing COE and evolving technologies. The Army has a number of initiatives and existing programs that may provide the solutions for its emerging training requirements. GSXXI will provide the MCoE with clearly defined requirements and a vision of the future. These requirements and vision will assist Army agencies and commercial vendors in producing the tools we will need to train in 2012 and beyond.



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# Predator Palace: Gaining a Foothold

by Captain Peter J. Young Jr.

*“I hear the war drums pounding again,” remarked Sergeant First Class (SFC) Patrick Thompson, referring to the rumors he heard in the dining facility that morning about a possible upcoming deployment. War drums already? It was 24 November 2004.*

*Barely two years ago, SFC Thompson heard those same “war drums” pounding as he packed his bags and joined 3d Infantry Division’s March 2003 invasion into Baghdad. He and the brave men of third platoon, Bravo Company, 307th Engineer Battalion, 82d Airborne Division endured a long year of austere living conditions. Ten days after SFC Thompson made the comment about the war drums, he and I were tightly packed on a C17 transport aircraft taking off from Fort Bragg, North Carolina, headed for Baghdad, Iraq. Ironic, I thought to myself; Sergeant Thompson is a prophet.*

I had assumed the coveted position of sapper platoon leader (PL) just five months prior to our deployment. It was sobering to think that just 12 months ago, I had earned my commission as a second lieutenant. My Army experience amounted to the Engineer Officer Basic Course, the Sapper Leader Course, Ranger School, and Airborne School, which wasn’t too shabby for a lieutenant. Compared to my men, however, I might as well have been

a private; it was humbling to stand before them. The men of third platoon were combat-proven, battle-hardened warriors, wearing combat patches on their uniforms to prove it. Sadly, their platoon leader was the only member of the platoon without a combat patch — I had much to learn.

Several days into our deployment, we discovered why we were so desperately needed. Third platoon had been called on to support the 3d Battalion, 325th Airborne Infantry Regiment (3-325 AIR) (Blue Falcons), 82d Airborne Division in its efforts to seize and secure a series of violent insurgent strongholds north of Baghdad. Interim Iraqi Prime Minister Ayad Allawi, with the U.S. Army’s help, planned to initiate a democratic election process that would lead Iraq to political stability. This election process would select a government to provide security and peace in what was now a war-torn country. Prime Minister Allawi could not, however, elicit voter participation without first providing security to the Iraqi populace — security so desperately needed.

At the onset of election efforts, Baghdad’s citizens lived in a constant state of fear and abject horror. Days before third platoon arrived in Iraq, three Iraqi election officials working for Allawi were pulled from their car and executed.

Terrorists committed similar incidents throughout the city on a weekly basis, broadcasting their message with poignant clarity — support for Iraq’s election processes would not be tolerated. *Cable News Network (CNN)* and *Fox News* were quick to publicize pictures of the executions, labeling Haifa Street and the surrounding area north of Baghdad “an all-out war zone.”<sup>1</sup>

Haifa Street, we would later discover, was one of the insurgent strongholds the Blue Falcons were called on to help seize and secure. The street, which has a long history of violence, is roughly 2 miles in length and surrounded by high-rise, densely-populated apartment buildings. It serves as a main high-speed avenue of approach northwest from Baghdad’s Green Zone and is frequented by U.S. troops. Haifa Street was the site of several massive car bombings (one of which killed 47 civilians) and countless improvised explosive devices (IED) and grenade ambushes, which claimed the lives of at least 12 American troops.

Luckily for us, the Blue Falcons were not the only U.S. Army unit assigned such a daunting mission. The 1st Squadron, 9th Cavalry Regiment, 4th Brigade Combat Team, 1st Cavalry Division, (Task Force 1-9), a mechanized cavalry outfit from Fort Hood, Texas, had been attempt-

ing to secure Haifa Street for the past five months. During their brief stint, the battle-weary soldiers conducted over 100 patrols up and down Haifa Street, which they renamed “Grenade Alley” and “Purple Heart Lane,” ripping down Zarqawi banners and collecting abandoned Iraqi security force uniforms.<sup>2</sup> They received AK-47, rocket-propelled grenade (RPG), and mortar fire during nearly every patrol. Three soldiers were killed in action and 60 out of 118 men qualified for Purple Heart medals, which were awarded for wounds sustained during combat.<sup>3</sup> On a positive note, Task Force 1-9 accumulated intimate knowledge of the terrain and enemy situation, especially near Haifa Street’s most notorious neighborhoods. They provided the Blue Falcons with satellite imagery depicting areas of significant activity, known enemy locations, and ideal patrol routes to maximize presence while minimizing risk to maneuvering forces. The men of Task Force 1-9 were tremendously helpful and happy to welcome us to their team.

### The Events

A thorough satellite imagery reconnaissance of Haifa Street and the surrounding area revealed an old fortress rumored to once have been occupied by Saddam Hussein’s third and youngest daughter Hala.<sup>4</sup> The fortress, affectionately dubbed as “Predator Palace,” seemed like an ideal location for a combat outpost (COP). Americans and Iraqis could jointly establish a base of operations from which they could conduct daily patrols, engaging and winning the trust of the local populace, while simultaneously gathering intelligence on insurgent locations and activities. This intelligence would facilitate raids and ambushes, during which we would capture or root out terrorists and thus quell the violence on Haifa Street, thereby setting the conditions for a peaceful and productive election process.

Task Force 1-9’s engineer company commander, Captain (CPT) Horsey, was one step ahead of us; he had also identified Predator Palace as suitable and ideal, but was unable to personally visit the site to conduct an engineer reconnaissance. SFC Thompson and I met with CPT Horsey and explained our ideas and concerns. CPT Horsey suggested that all three of us visit the site together to conduct a force protection assessment, and we agreed.

During our reconnaissance, we identified a few areas of interest. The walls surrounding the fortress were made of thin non-reinforced concrete which, we as-

sessed, were currently unable to protect palace occupants from vehicle-borne improvised explosive devices (VBIEDs) and RPG attacks. The three high-speed avenues of approach leading into the palace required machine gun positions from which to observe and engage the enemy with direct fire weapons systems. The riverbank to the north and east required anti-personnel blocking obstacles to prevent swimmers from infiltrating the palace undetected from the Tigris River. Finally, Predator Palace required several hundred sandbags to wall up the open doorways and windows, and also to protect future occupants from AK-47, RPG, and mortar fire.

Once we returned from the reconnaissance, CPT Horsey alerted his company while SFC Thompson and I began platoon-level troop leading procedures. The platoon’s leadership gathered to deliver a warning order with the satellite imagery we used for our engineer reconnaissance. Our squad leaders had plenty of questions, mostly about supplies and barrier material, but SFC Thompson was one step ahead. Before issuing my warning order, SFC Thompson met with Task Force 1-9’s logistics officer (S4) and gave him a “shopping list” of supplies and barrier material needed to complete our force protection plan.

To match SFC Thompson’s prowess, I had to be one hell of a platoon leader. I

made sure to coordinate with several of Task Force 1-9’s maneuver elements to make this force protection plan happen. Simultaneously, CPT Horsey contacted the task force commander and initiated the military decisionmaking process (MDMP) for what was now dubbed, “Operation Field of Dreams.” To sum up the order, Operation Field of Dreams tasked Charlie Company, Task Force 1-9, to provide armored transportation (M2 Bradley tracked vehicles) from Camp Independence north along the deadly Haifa Street to Predator Palace gate. SFC Thompson coordinated with Task Force 1-9’s S4 to provide palletized load system (PLS) trucks equipped with downloadable “flat rack” trailers to transport concertina wire; fence pickets; sandbags; meals, ready to eat (MREs); fuel; and bottled water to the palace. Operation Field of Dreams also tasked the attack aviation unit attached to Task Force 1-9 to provide overhead security and close air support (CAS) for the barrier plan.

CPT Horsey’s engineer company was tasked to provide two M9 armored combat earthmovers (ACEs) from his assault and obstacle section to clear the heavily wooded areas surrounding the palace, which would prevent insurgents from approaching the palace undetected and lobbing grenades over the wall at friendly forces. The engineer company would also provide two M60A1 armored vehicle launched bridges (AVLBs) to block traf-



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fic on Haifa Street several hundred meters to the north and south of the palace to prevent VBIEDs from interdicting our force protection efforts. CPT Horsey's idea to use two of his expandable bridges to block traffic was sheer brilliance.

Task Force 3-325 AIR volunteered its Bravo Company, commanded by CPT Massey, to provide security and additional manpower for our engineers. Bravo's infantrymen would help us transport and stack thousands of sandbags to reinforce windows, doors, and other weak spots

within the palace. They would also pull local security for us as we pounded hundreds of fence pickets into the ground, strung concertina wire fences, and built machine gun nests.

Since local Iraqi workers were unwilling to operate cranes and drive barrier transport trucks for fear of being executed, a U.S. Army National Guard engineer company attached to Task Force 1-9 volunteered to help. The company supplied two cranes with operators and several long-bed trucks that would transport

concrete barrier trucks to and from Camp Independence.

The Iraqi government was already enforcing an 8:00 p.m. nightly curfew in an effort to curtail violence, so we capitalized on the curfew and maneuvered forces to Predator Palace under the cover of night. This was ideal because it minimized civilian interference with our movement and it also rendered curfew-breaking insurgents easier to identify and target. Once at the palace, we would quickly establish local security, set AVLBs



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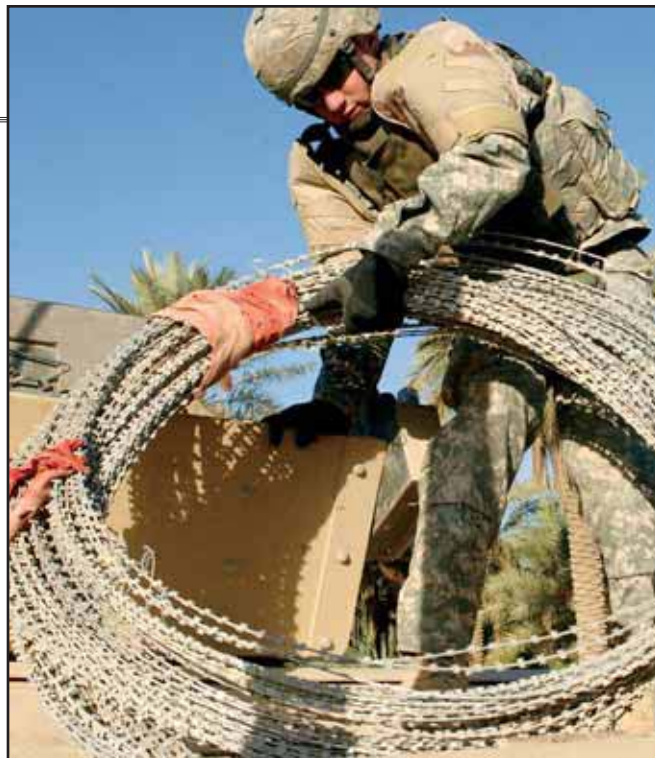


down to block the roads, and then call supply trucks and crane operators forward to begin working. We would continue working together as long as it would take, focusing the majority of our heavy lifting during hours of limited visibility to minimize risk.

Surprisingly, our plan worked better than we imagined. Operation Field of Dreams began at 8:00 p.m. on 22 December 2004. Our tactical combat patrol from Camp Independence to Predator Palace was quiet and without incident, and AVLBs were already blocking the road when we arrived. After a quick sweep of Predator Palace, infantrymen set a tight security perimeter around the courtyard and gave us the “thumbs up.” I, in turn, called CPT Horsey and gave him the “thumbs up” for his assault and obstacle section (Reaper 6) to begin clearing the heavily wooded area outside the east gate. His ACE blade team plowed over trees and shrubs up to 6 inches in diameter, leaving nothing but dirt in their tracks.

The National Guard crane-barrier team was hot on the heels of CPT Horsey’s ACE blade team, emplacing tall concrete barriers around the palace to reinforce its walls. They began at the east gate and worked their way clockwise to the south gate. Soon after the ACE blade team began working, I saw the first PLS truck arrive at the south gate to drop off its first load of sandbags. The PLS truck backed up as close as possible to Predator Palace’s north entrance to minimize carrying distance for the heavy sandbags. Once the PLS flat rack was downloaded, infantrymen and sappers unfastened the cargo straps and began carrying sandbags inside the palace. The sandbags were stacked neatly and carefully, blocking windows, doors, and other weak areas using an overlapping pattern (brick-laying technique), reinforced every five layers with wooden 2x4 beams.

Once satisfied that the sandbag detail was under control, I headed back to SFC Thompson and retrieved my radio. I then sent SFC Thompson to check on our first squad, who were pounding fence pickets and stringing a triple-strand concertina wire fence outside the east gate. At this point, the National Guard crane-barrier team was picking up speed; the first 8 to 10 concrete barriers had taken the longest to emplace, but the crane operator and the



*“Bravo’s infantrymen would help us transport and stack thousands of sandbags to reinforce windows, doors, and other weak spots within the palace. They would also pull local security for us as we pounded hundreds of fence pickets into the ground, strung concertina wire fences, and built machine gun nests.”*

truck driver quickly fell into a rhythm, speeding up the process as they worked. At one point, the crane team was emplacing barriers so fast that the truck driver could not supply them quickly enough!

The moan and whine of tracked vehicles, combined with the chop-chop of Apache helicopter teams patrolling overhead, kept the night from being too quiet. ACE teams plowed over tree after tree and M2 Bradleys patrolled back and forth along Haifa Street; their 25mm barrels pointed toward the Carter Apartments. As I watched the Bradleys patrol, I reflected back to Task Force 1-9’s intelligence officer (S2) who briefed enemy composition, disposition, and activity. The S2 predicted sniper fire, RPG attacks, and sporadic AK-47 gunfire originating from the Carter Apartments. He also predicted heavy mortar fire from the surrounding alleyways and grenades being lobbed from the balconies of Carter Apartments. Yet, throughout the first night, there was no activity reported whatsoever; nor was there any sign of anyone, anywhere. Maybe the insurgents were sleeping, or maybe they were watching us — making careful observation of our patterns and waiting for the perfect moment to strike. Maybe they fled the area, intimidated by U.S. forces and fearful for

their own lives. Whatever the reason, they didn’t attack us at all that night.

Time flew by. With so many things going on all at once, I quickly lost track of time. Before long, the sun began to rise and the skyline began to light up. Morning light would signify the end of Operation Field of Dreams, day 1.

Once Baghdad’s nightly curfew was lifted, the National Guard crane-barrier team and the Task Force 1-9 resupply team did not feel safe working outside the palace walls or traveling on Haifa Street. To mitigate risk and keep from losing more soldiers to the insurgent cause, the Task Force 1-9 commander ordered all force protection efforts to cease during daylight hours. CPT Massey worked out a plan with me and SFC Johnson to rotate shifts — B Company’s infantrymen would patrol during the day while we slept. In reciprocation, we would conduct force protection upgrades to B Company’s fortress at night while its men slept. It was a great plan and would work out quite well over the next few days. However, on this particular day, we decided to continue working inside the palace walls to improve survivability within the fort.

Staff Sergeant (SSG) Runkle and his first squad continued to erect triple-strand concertina fences within the gates of the fortress, focusing their efforts on the banks of the Tigris River. Once complete, they shifted their focus to constructing another triple-strand concertina wire outside the gates of Predator Palace, running generally southeast from the east gate to Haifa Street. Sergeant (SGT) Travis and his second squad, with the help of some exhausted infantrymen, managed to continue downloading the last flat-rack that was delivered prior to dawn. They reinforced and improved the existing sandbag walls that protected Predator Palace’s occupants from shrapnel and small-arms fire. SGT Weiczorek and the majority of his third squad shifted their focus to building machine gun nests atop the south gate arch. Two sappers from SGT Weiczorek’s squad were detached to cut down trees outside the south gate,

providing an unobstructed view of Haifa Street from the machine gun positions.

At noon, around the same time CPT Massey sent out his first dismounted patrol, I put my platoon to sleep. They had spent all of the previous day planning and preparing their equipment for last night's mission, and had worked all night to improve the fort's survivability. Their rest was well-deserved — I would wake them at sunset for day 2. SFC Thompson and I were also exhausted, but first, we had to take care of our men. CPT Massey's patrol departed without a hitch, while the remainder of his company manned guard posts and the machine gun nests we built — they were more exhausted than we were.

Operation Field of Dreams, day 2 began at 8:00 p.m. that night with the arrival of the crane-barrier team and the first sandbag-laden PLS flat-rack of the day. The crane-barrier team emplaced over 50 tall concrete barriers the night prior, reinforcing the palace perimeter from the east gate to south gate. Tonight would be an easier night for the wary National Guard unit, as they only had 25 concrete barriers and three scud bunkers to emplace. Their focus would be on reinforcing the palace wall from the south gate to west gate, then reinforcing Predator Palace's northern entrance from small-arms fire aimed from across the Tigris River. Finally, three scud bunkers would be emplaced near the palace and surrounding

guard positions to provide overhead cover from mortar and rocket attacks. Before sunrise on the second night, the crane-barrier team was "mission complete" and had departed safely. They did tremendous work.

SGT Travis's second squad, with some help from CPT Massey's infantrymen, erected a machine gun nest guarding the east gate from the palace courtyard. Simultaneously, SSG Runkle and his first squad made last-minute improvements to the sandbag walls within Predator Palace. SGT Wieczorek and his third squad shifted their focus to "safety construction," building handrails around the second- and third-story ledges to prevent soldiers from accidentally falling off. By and large, third platoon was "mission complete" midway through the night and was catching up on sleep and eating MREs by sunrise.

By sunrise on day 2, SFC Thompson and I ran out of things to improve — there wasn't much else we could do to improve the already massive force protection efforts surrounding Predator Palace. We decided to leave SGT Travis and his second squad behind for any additional engineer support, with the solid guarantee that my platoon was "on call" and would return if needed. CPT Horsey and the sappers of A Company, 8th Engineers were also heading out, so SFC Thompson asked about empty seats. CPT Horsey requested a platoon of Bradleys that

were outside the gate conducting a patrol of Haifa Street; they happily obliged. As my platoon boarded the Bradley, I heard sporadic gunfire outside the gate — the first gunfire I'd heard since we began Operation Field of Dreams. "Great," I thought. "Here they come, just as I'm leaving."

## Outcomes

The ramifications of the Predator Palace fortification mission were immediately apparent. Later that week, I heard that insurgents had fired exhaustively at our machine gun positions, simultaneously launching mortars and grenades over the wall and inside the palace's courtyard. It was the first of many failed attempts to influence CPT Massey and the brave men of Bravo Company. Each and every time they attacked, insurgents met their fate at the hands of his infantrymen.

Later that week, CPT Massey increased the intensity and frequency of his patrols. He escalated from low-intensity reconnaissance and security patrols along Haifa Street to high-intensity raids of the Carter Apartments and surrounding buildings. Sometimes he would send his entire company after someone who sprayed a few rounds at his reconnaissance patrol and ran into a nearby building to hide. On several instances, CPT Massey's patrols located weapons caches and IED-making material, though each time in a different area. The more his company patrolled, the more the Iraqi citizens began to trust him. Sometimes, Iraqi citizens would come out to greet him personally and give him information about insurgents hiding in the area, which was unheard of prior to Operation Field of Dreams. Though CPT Massey felt successful at times, he was also frequently dumbfounded that the more he patrolled his area of operations, the more his patrols were greeted with gunfire and grenade attacks — it should have been the opposite.

CPT Massey and his Blue Falcons maintained the intensity and ferocity of their patrols for more than 3 months. In March 2005, the Blue Falcons relinquished responsibility of the fortress to 1st Battalion, 1st Brigade, 6th Iraqi Army Division.<sup>5</sup> Six months later, Dennis Steele, a writer for the *Association of the United States Army (AUSA) Magazine*, visited Haifa Street to do a follow-up story on Iraqi progress since CPT Massey's hand-over. During his visit, he marveled at the lack of violence that supposedly made the street famous. Haifa Street was, as he explained, "a showcase of Iraqi security."<sup>6</sup> Steele credits the pacification of violence



*"The Iraqi government was already enforcing an 8:00 p.m. nightly curfew in an effort to curtail violence, so we capitalized on the curfew and maneuvered forces to Predator Palace under the cover of night. This was ideal because it minimized civilian interference with our movement and it also rendered curfew-breaking insurgents easier to identify and target."*

*"The ramifications of the Predator Palace fortification mission were immediately apparent. Later that week, I heard that insurgents had fired exhaustively at our machine gun positions, simultaneously launching mortars and grenades over the wall and inside the palace's courtyard."*



to CPT Massey's aggressive patrolling technique, perpetuated by the Iraqi army unit emulating CPT Massey's techniques, and currently occupying Predator Palace. He explains that violent neighborhoods can be quelled through the use of continuous "overwhelming forces" and consistent, aggressive action.<sup>7</sup>

Michael Hastings, a *Newsweek* reporter, following in Steele's footsteps, did a follow-up of the infamous "Purple Heart Alley" two years after CPT Massey's unit relinquished control. What Hastings discovered is quite the opposite. Consequences of the lack of aggressive patrolling were evident in his January 2007 *Newsweek* article, "The Battle for Haifa Street."<sup>8</sup> Upon arrival, Hastings discovered that recently, 27 dead bodies (later found to be family members of Haifa Street's Iraqi police chief) were dumped in an alleyway next to a police station. The scene seems disturbingly reminiscent of the Iraqi election official executions: once again, the insurgents broadcasted a crystal clear message — although this time 24 dead bodies stronger — that support for Iraqi stability and security will not be tolerated. The Iraqi police chief looked on in horror as he saw 27 mem-

bers of his family reduced to lifeless corpses. Iraqi army advisor Lieutenant Colonel (LTC) Steve Duke made a move to diffuse the situation; he attempted to persuade locals to help him remove the bodies.<sup>9</sup> The locals refused for fear of their lives, a situation that was all too familiar. LTC Duke attempted to move the bodies himself and was greeted with a hail of bullets from insurgents in a nearby apartment complex. Insurgents once again had the initiative; once again, the citizens of Haifa Street were petrified with fear and abject horror. One can theorize that the aggressive and relentless pace CPT Massey and his unit set as a precedent must have lost momentum over the years. How could this happen?

#### **Lessons Learned**

David Kilcullen, author of the famous publication, "Twenty-Eight Articles: Fundamentals of Company-level Counterinsurgency," echoes three essential lessons to be learned from Operation Field of Dreams. In my opinion, Kilcullen's most non-negotiable and relevant lesson is counterinsurgency principle 10: You must "be there." He states that, "Your first order of business is to establish presence

... living in your sector, in close proximity to the population."<sup>10</sup> That's exactly why the engineers built up and reinforced Predator Palace. Instead of commuting to Haifa Street from Camp Independence daily to conduct patrols, we built a combat outpost on Haifa Street so we could live with and win the trust of the local populace.

When the troopers of Task Force 1-9 first arrived in country, they patrolled neighborhoods much like Haifa Street in armored convoys several hours a day. Unfortunately, they paid for that mistake with blood.<sup>11</sup> Commuting to combat from a super forward operating base, Kilcullen says, "degrades situational awareness, makes you a target, and is ultimately more dangerous."<sup>12</sup> Put another way, it doesn't win any hearts and minds, nor does it gain the trust of the local populace. Insurgents were one step ahead of Task Force 1-9, well aware of their tactics, techniques, procedures, and patterns. Our enemies know they cannot defeat us head on; this is exactly why they attack us asymmetrically. Insurgents will go into hiding when we patrol through their areas in force and they will return once our patrols are complete. After all, we may own the street and

the neighborhood for 4 hours a day, but that means they own it for the other 20. The heavily-fortified Predator Palace outpost, combined with CPT Massey's aggressive, frequent, and unpredictable patrolling procedures denied the insurgents neighborhood ownership and influence.

Equally relevant is Kilcullen's counterinsurgency article 13, which states that "building trust networks" will "displace enemy networks, bringing him into the open to fight you."<sup>13</sup> At one point, CPT Massey was dumbfounded at the increased frequency of attacks that did not seem to coincide with the increased security he thought he was providing. In actuality, the insurgency network had been

finished once the neighborhood goes quiet. Once you quell the violence in a hostile community, you must continue to aggressively patrol and engage the local populace. Michael Hastings' *Newsweek* article about Haifa Street highlights the consequences of complacent patrolling.<sup>15</sup>

There are several engineer-specific lessons to be learned from Operation Field of Dreams. First, it is possible to use the armored vehicle launch bridge as a traffic-blocking obstacle, which is definitely outside-the-box thinking. Secondly, never underestimate the motivation, teamwork, and competence of a National Guard engineer company. The crane-barrier team blew me away with their pro-

tions outside the palace (to include CPT Horsey's tree-clearing ACE missions) would not have been possible without attack aviation overhead and Bradleys patrolling up and down Haifa Street; and B Company's infantrymen guarded the inside perimeter of Predator Palace to allow engineers to construct triple-strand wire fences along the Tigris riverbank.

As mentioned earlier, the ultimate purpose of Operation Field of Dreams was to set the conditions for CPT Massey and his men to root out the terrorists on Haifa Street. The outpost we fortified for his men would allow him to conduct aggressive, intense, and unpredictable patrols through Haifa Street to quell the violence, which, in turn, would set the conditions for Prime Minister Allawi's peaceful and productive election process. I think we did one hell of a job.

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*"Operation Field of Dreams was a success because of all-around teamwork, coordination, support, and a solid understanding of why Predator Palace needed to be occupied and fortified..."*

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#### Notes

<sup>1</sup>Lisa Burgess, "Patrols Turn Ugly on Baghdad's Haifa Street," *Stars and Stripes*, 22 September 2004.

<sup>2</sup>Gretel C. Kovach, "U.S. Soldiers Dig In at Baghdad Palace," *Dallas Morning News*, January 3, 2005.

<sup>3</sup>Lisa Burgess, "Patrols Turn Ugly on Baghdad's Haifa Street."

<sup>4</sup>Scott Peterson, "A Violent Street Finds Calm," *Christian Science Monitor*, May 26, 2005.

<sup>5</sup>Dennis Steele, "Haifa Street: Purple Heart Boulevard Redux," *Association of the United States Army (AUSA) Magazine*, September 2005, p. 24.

<sup>6</sup>Ibid.

<sup>7</sup>Ibid.

<sup>8</sup>Michael Hastings, "The Battle for Haifa Street," *Newsweek*, January 12, 2007.

<sup>9</sup>Ibid.

<sup>10</sup>David Kilcullen, "Twenty-Eight Articles: Fundamentals of Company-level Counterinsurgency," *Military Review*, May 2006, p. 4.

<sup>11</sup>Lisa Burgess, "Patrols Turn Ugly on Baghdad's Haifa Street."

<sup>12</sup>David Kilcullen, "Twenty-Eight Articles: Fundamentals of Company-level Counterinsurgency," p. 5.

<sup>13</sup>Ibid.

<sup>14</sup>Ibid.

<sup>15</sup>Hastings, "The Battle for Haifa Street."

disrupted by the fortification and occupation of Predator Palace and by CPT Massey's frequent patrols. Civilians were initially fearful and skeptical of U.S. forces occupying Predator Palace, as they thought it would bring more violence into their community. Although incidents did initially spike, the locals felt a tremendous sense of security knowing there was now an American presence in their community and their neighborhoods were being continuously patrolled.

Finally, Kilcullen's counterinsurgency article 16 highlights the importance of practicing "deterrent patrolling," which he defines as "flooding an area with numerous small patrols working together to keep your enemy off balance."<sup>14</sup> CPT Massey's enemy was, indeed, knocked off balance as he continually sent out patrols at erratic times and in small numbers. Instead of sending his infantrymen out in company- or platoon-sized formation, he spread his men out across a wide area to keep them from becoming targets. This paid huge dividends during one particular grenade attack, when SGT Travis sustained superficial shrapnel wounds. Had he and the other squad members been closer together, SGT Travis might not have been so lucky.

Another lesson learned from Operation Field of Dreams was that the work is not

professionalism and work ethic. Thirdly, always personally conduct an engineer reconnaissance whenever possible. Satellite imagery, while remarkably detailed and exceptionally helpful, is just that — a view of a portion of the earth's surface seen from above. Satellite imagery cannot tell you where to place machine guns or where the enemy can and cannot engage you with small-arms fire. A proper engineer reconnaissance/force protection assessment must be done in person, with your own eyes. I credit much of our success during Operation Field of Dreams to the leader's reconnaissance we performed days earlier.

Operation Field of Dreams was a success because of all-around teamwork, coordination, support, and a solid understanding of why Predator Palace needed to be occupied and fortified; the sandbag walls and machine gun nests were made possible by engineers and infantrymen building and sweating side by side; Task Force 1-9's support company kept sandbags, MREs, bottled water, concertina wire, pickets, and building materials in constant supply with frequent PLS truck visits and flat-rack deliveries; the concrete barrier plan outside the palace was successful because of the National Guard's unparalleled sense of urgency, teamwork, and "esprit de corps;" engineer opera-

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# Team Enabler: Combining Capabilities During the Execution of Full-Spectrum Operations

by Captain David J. Smith and First Lieutenant Jeffrey Ritter

The current operational environment in Iraq is more dynamic than ever, as we work to transition lines of operation, such as security and governance, to the government of Iraq. Units must have the ability to conduct full-spectrum operations across their entire area of operations. Battalion- and brigade-sized organizations are challenged by the numerous tasks associated with providing security to the local populace, creating effective government systems that work within the government of Iraq's structure, providing or improving essential services, creating enduring employment, and bolstering the local economy. Combining attachments, such as civil affairs teams, tactical psychological operations (PSYOP) teams, and human intelligence collection teams, into a cohesive, separate maneuver element under command and control of the battalion allows units to attack problem sets across all lines of operation (see Figure 1). Our unit, 3d Squadron, 1st Caval-

ry Regiment (3-1 Cavalry), 3d Heavy Brigade Combat Team, 3d Infantry Division, formed an element, Team Enabler, that combined these capabilities during the execution of full-spectrum operations in the Mada'in Qada (southeast of Baghdad) during Operation Iraqi Freedom V.

Team Enabler allowed line companies/ troops and platoons to focus on the security lines of operation and the critical tasks of securing the local population from extremist elements and preventing sectarian violence. Team Enabler supplemented traditional combat forces by providing a venue to build initial trust and relationships with local civil and tribal leaders. This was accomplished through combined spheres of influence engagements with maneuver or "ground-owning" commanders and focused efforts to improve local government organizations and essential services. Within a few months of implementing the Team Enabler concept,

3-1 Cavalry saw a visible improvement and an increase in trust between coalition forces and the Iraqi population.

Building or improving Iraqi government institutions is critical to the success of our mission in Iraq. The Team Enabler organization allows units to not just conduct spheres of influence with leaders, but to devote the time necessary to build and improve government structure and efficiency. Civil affairs teams are experts in assisting civil leaders in making community improvements using existing government structures and promoting efficiency in executing basic governance tasks. They also provide the support channels to coordinate directly between brigade-level partners at the Qada level and Iraqi provincial reconstruction teams (PRT) that coordinate efforts with the Iraqi provincial and national government. This partnership allows maneuver commanders to focus on establishing security and



keeping pressure on extremist elements who may try to disrupt coalition force and Iraqi government efforts.

Team Enabler successfully developed a project plan by using water delivery contracts and drilling artesian wells along Butler Range Road, a key line of communication (LOC) that connected the entire brigade combat team (BCT) with logistics support from division and corps, which significantly improved the quantity and quality of drinking water for several villages. This rapid and visible improvement created a relationship with local leaders and citizens that greatly enhanced the security environment along that vital LOC.

Tactical PSYOPS teams conducted aggressive information operations (IO) campaigns that focused on building support for local government institutions and agendas as they began the process of “winning hearts and minds” by reducing popular support for extremist elements. Through a close working relationship with local leaders, human intelligence collection teams were able to provide units with information that allowed for the accurate targeting of high-value individuals. During multiple operations, the human intelligence collection team that was embedded with Team Enabler engaged and developed sources that provided significant intelligence on squadron targets. This information was used to kill or capture extremist leaders and greatly reduce the security threat to coalition forces and local citizens. The synergistic effect of the reduced security threat encouraged locals to come



“...the team made enormous progress in the small village of Hollandia by securing medical treatment for a 3-year-old boy whose intestines were outside of his body at birth. He was the darling of the village, but his life expectancy was very limited due to his condition. Team Enabler coordinated surgery for the young boy with an Iraqi medical clinic in Najaf, and by doing so, won over the village’s entire population.”

forward and provide useful information to Team Enabler and the collection team.

Multiple tailgate medical operations (MEDOPs) and larger medical capacity (MEDCAP) operations involving Iraqi doctors and medicines provided by the ministry of health were particularly effective. These operations, along with water and school-supply drops, provided opportunities for the human intelligence collection team to engage local citizens in a secure environment without endangering themselves or their sources.

Providing essential services, creating enduring employment, and building the local economy were key tasks that Team Enabler had the greatest ability to affect. Civil affairs teams, through project development and prioritization, identified what was needed to achieve the desired effects of the unit and the local government. These teams have trained individuals with-

in their organization to provide the right amount of knowledge, time, and energy to properly develop economic near- and long-term plans within an area of operations. Additionally, this relieves maneuver commanders at the company/troop and platoon level from having to provide combat power to escort these teams. It also allowed a singular focus on achieving “visible improvement” throughout the area of operations. Tactical PSYOPS teams collected atmospheric and determined the problem areas in which projects were necessary to deny extremists sanctuary and safe haven. They were also able to determine if a unit was achieving its effects on a pop-

ulation over time. Human intelligence collection teams once again provided information on extremists in an area through a nonthreatening environment. We found that information is sometimes easier to collect by a Team Enabler organization using the “carrot” instead of the “stick,” which validates the human intelligence collection team being a part of Team Enabler.

Team Enabler was extraordinarily successful at making connections with local citizens that the more kinetically oriented combat forces were unable to make. For example, the team made enormous progress in the small village of Hollandia by securing medical treatment for a 3-year-old boy whose intestines were outside of his body at birth. He was the darling of the village, but his life expectancy was very limited due to his condition. Team Enabler coordinated surgery for the young boy with an Iraqi medical clinic in Najaf, and by doing so, won over the village’s entire population. The entire atmosphere and attitude of Hollandia permanently changed as a result of Team Enabler’s efforts, paving the way for the ground-owning commander to develop a relationship with the village leader, who provided significant intelligence on extremist activities.

Team Enabler was not without potential drawbacks, which, unless properly identified and mitigated, could have caused serious problems within our area of operations. Team Enabler, as its own maneuver element, increased the risk of “spheres of influence fratricide” and “broken promises” in the event the maneuver commander and the civil affairs team leader were not synchronized — the ma-

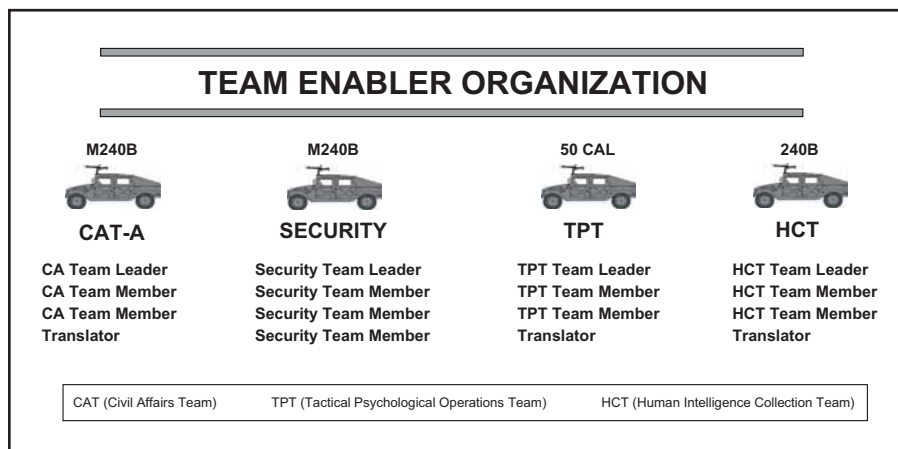


Figure 1

maneuver commander promises one thing and the civil affairs team leader promises another. Iraqis are quick to identify seams in the command structure and when they do not get what they want from one person, they will go to another. It is imperative that civil affairs team leaders and maneuver commanders work closely together through detailed reporting and regular meetings to achieve desired effects.

There is also a risk of maneuver commanders not being completely involved in their areas of operation because they see Team Enabler and the lines of operation that do not relate to security as “their responsibility.” In the end, conducting full-spectrum operations in an area of operations is the maneuver commander’s re-

sponsibility and Team Enabler supported the ground-owning commander. When correctly employed, combining capabilities, such as civil affairs teams, tactical PSYOP teams, and human intelligence collection teams into a cohesive, separate maneuver element is a powerful combat multiplier.



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*Team Enabler successfully developed a project plan by using water delivery contracts and drilling artesian wells along Butler Range Road, a key line of communication (LOC) that connected the entire brigade combat team (BCT) with logistics support from division and corps, which significantly improved the quantity and quality of drinking water for several villages. This rapid and visible improvement created a relationship with local leaders and citizens that greatly enhanced the security environment along that vital LOC.*



# Training the Warrior Mechanic to Meet Challenges of the 21st-Century Battlefield

by Captain David Campbell

As our Army continues to fight the war on terror and simultaneously transforms, 1st Battalion, 81st (1-81) Armor Regiment, 194th Armored Brigade, continues to train Abrams and Bradley systems maintainers to support maneuver forces. For the first time in a generation, many of our leaders and cadre are combat veterans with significant operational experience. We leverage this leadership experience to shape soldiers who are soundly grounded in the warrior ethos and build units based on standards and discipline.

As we train our soldiers to fight and win against an adaptive enemy in a full-spectrum environment, 1-81 Armor embraces a culture of innovation. Our efforts on staying current and relevant constantly in-

fuse insight, lessons, and best-practices gained from hard-won experiences into our training methodology.

## Today's Warrior Mechanic Program of Instruction

The reality of today's Army assumes that a soldier's first field training exercise (FTX) will be combat. The current program of instruction for Abrams and Bradley systems maintainers trains technically and tactically proficient soldiers who are ready to contribute immediately on arrival at their first unit.

Today's warrior mechanic program of instruction for Abrams and Bradley maintainers trains 6 days a week and focuses on the critical task list for their particular

vehicle. There are four major phases of the warrior mechanic training. All maintainers begin with classroom blocks of instruction on subjects common to all maintenance personnel, such as shop and vehicle safety, technical manuals, principles of engines, and basic electronics. Students are then broken down into groups of four, each with their own instructor in a laboratory environment for hands-on training. Fault verification, troubleshooting, and replacing parts on critical power plant, hull, and turret systems are presented and demonstrated by instructors and executed by students until the standard is met. The same methodology is continued as students move to the turret systems and armaments packages. Students' information retention and







*“All maintainers begin with classroom blocks of instruction on subjects common to all maintenance personnel, such as shop and vehicle safety, technical manuals, principles of engines, and basic electronics. Students are then broken down into groups of four, each with their own instructor in a laboratory environment for hands-on training.”*

task proficiency are evaluated with performance-oriented testing procedures.

Students who excel throughout the course are provided additional training through the battalion excellence in maintenance program, which develops students’ task proficiency at the next higher level. In addition to the combat platform, students are taught to maintain other types of vehicles, such as the M88, M113, forward repair system (FRS), light medium tactical vehicle (LMTV), and high-mobility, multipurpose wheeled vehicle (HMMWV), they will likely see in their operational units.

Warrior tasks and drill reinforcement training is key to developing warrior mechanics. Small groups from classroom instruction are formed in tactical squads and led by instructors through a series of tactical exercises. Students are taken to a multipurpose range complex where they execute a mounted combat patrol live-fire exercise using armored personnel carriers and crew-served weapons. Instructors lead the students through a 3-day urban operation train-up, where they begin with basic tasks and culminate with a tactical mission at the collective level. Individual and crew-served weapons proficiency is further reinforced with mechanical training, as well as the engagement skills trainer. All of the warrior mechanics technical and tactical skills are brought into application during a 3-day field training exercise in a simulated combat environment.

### Ready to Meet the Challenge

The warrior mechanics trained by 1-81 Armor are ready to meet the challenges of the 21st-century battlefield. During training, students are transformed into soldiers capable of accomplishing their mission in the full-spectrum environment. Now, and in the future, 1-81 Armor remains fully committed to providing the mounted community with soldiers who are prepared to contribute technically and tactically to a values-based Army from day one.

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*“The reality of today’s Army assumes that a soldier’s first field training exercise (FTX) will be combat. The current program of instruction for Abrams and Bradley systems maintainers train technically and tactically proficient soldiers who are ready to contribute immediately on arrival at their first unit.”*

# REVIEWS

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**General James Longstreet – The Confederacy’s Most Modern General** by Lieutenant Colonel Harold M. Knudsen, Word Association Publishers, Tarentum, PA, 2007, 110 pp., \$14.95 (softcover)

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You have got to like an author who quotes the works of Jomini, Mahan, and Guderian. Knudsen has written an intriguing study on the innovative contributions that James Longstreet made not only to the campaigns during the Civil War but to future battles as well. In *General James Longstreet*, Knudsen details several key contributions and decisions that Longstreet made during campaigns with the Army of Northern Virginia and the Army of Tennessee, which were discounted and/or mischaracterized in the aftermath of the Civil War by biographers and historians who disliked Longstreet’s political opinions during the reconstruction period.

Following a brief narrative of Longstreet’s pre-Civil War military career and how the “lost cause” political actions damaged Longstreet’s military reputation, the book leads the reader through the battles of Antietam, Fredericksburg, Gettysburg, Chickamauga, and the defense of Petersburg. Knudsen uses each of these campaigns to highlight the innovative tactics that Longstreet used, or attempted to use, including his recognition of how the proliferation of rifles made Napoleonic tactics obsolete, and that the Confederacy needed to pursue a “defensive-offensive” strategy to shepherd their limited resources and inferior numbers.

The author makes several very interesting points in his book. First, he uses Longstreet’s successes at the Battles of Antietam and Fredericksburg to demonstrate how the general recognized that using terrain would allow his forces to successfully defend their positions against attacks from superior Union forces, while many other commanders suffered heavier casualties using irrelevant Napoleonic tactics. Second, Knudsen notes that Longstreet’s advice to Lee on conducting a defensive campaign proved successful at the Battle of Chancellorsville, and when not heeded, proved unsuccessful at the Battle of Gettysburg. Third, the author uses Longstreet’s support of an ineffective General Bragg at the Battle of Chickamauga, and how his campaign in eastern Tennessee in 1863 demonstrated his aptitude for independent command.

Knudsen does an effective job demonstrating Longstreet’s military skills and also defends his subject well against attacks on his character and abilities following the Civil War, specifically by demonstrating how the concept of the “defensive-offense” influenced combat leaders in subsequent conflicts. The author uses correspondence between Lee and Longstreet to illustrate the relationship the two had during the war, which significantly supports his argument that Lee had great confidence in Longstreet’s ability and advice.

Knudsen is an active duty field artillery officer, who has served in a wide variety of positions at the tactical level, including assignments with 3d Army and the Army Staff. He has maintained a life-long interest in General Longstreet and the American Civil War. He completed the bulk of his research and writing while stationed in the Alexandria, Virginia, area with easy access to several of the battlefields that he refers to in his book.

While I very much enjoyed reading Knudsen’s study of Longstreet, the book has two areas that could be improved. The publisher needs to do a better job of proofreading and correcting errors that distract from the reader’s ability to move easily through the book. Readers may also find Knudsen’s hypothetical vignette of how the Battle of Vicksburg might have ended if Longstreet had been in command, or if his concepts had been implemented, a bit of a stretch.

Those who are interested in Civil War leaders and how they impacted the battles and campaigns they fought will certainly enjoy reading Knudsen’s work. Most *ARMOR* readers will find this well-written book worthwhile and enjoyable, and at slightly over 100 pages, it can be read in just a few hours.

DALE MURRAY  
MAJ, U.S. ARMY

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**All Roads Lead to Baghdad: Army Special Operations Forces in Iraq** by Charles H. Briscoe, Kenneth Finlayson, Robert W. Jones Jr., Cheryl A. Walley, A. Dwayne Aaron, Michael R. Mullins, and James A. Schroder, U.S. Government Printing Office, 2006, 517 pp., \$45.00 (hardcover)

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*The Americans are not there. They’re not in Baghdad. There are no troops there. Never. They’re not at all!*

– Mohammed “Baghdad Bob” Saeed al-Sahaf,  
Iraqi Minister of Information

Operation Iraqi Freedom (OIF) is one of the most controversial operations conducted by the U.S. military since Vietnam. However, one must not forget that while post-hostility (phase IV stability operations) may not have gone as envisioned by departments of defense and state planners, the first three phases, preparation, shape the battlespace, and decisive operations were, in fact, so successfully executed that the opening phases of OIF will rank in history with the 1940 German lightning invasion of the low countries during World War II. U.S. Army Special Operations Forces played a large role in the initial success of this operation, as shown in *All Roads Lead to Baghdad*, which provides a detailed account of how U.S. Army Rangers, Special Forces, and Army Special Operations Aviation units helped redefine the modern battlespace during the first 5 months of OIF.

Much like its predecessor, *Weapon of Choice*, explained what Army special operations ac-

complished in Operation Enduring Freedom in Afghanistan, this book shows how Special Forces supported a U.S.-led conventional air and ground offensive to collapse the regime of Saddam Hussein and capture Baghdad. Army Special Forces performed its traditional role, serving as a dynamic force multiplier, in support of the major offensive effort. Army Special Operations Forces were responsible for three fronts during the U.S. Central Command campaign against Iraq: scud missile/weapons of mass destruction hunt in the west; the Kurdish unconventional warfare mission in the north; and the psychological operations mission. They also directly supported the other two fronts: the air campaign and the ground offensive to seize Baghdad.

Army Special Operations Forces spearheaded ground operations in Iraq; they were assigned special reconnaissance missions and were infiltrated into the Karbala Gap by the 160th Special Operations Aviation Regiment, the “Night Stalkers,” while other members of the Night Stalkers attacked border posts and anti-aircraft systems. The 75th Rangers assaulted by parachute and helicopter deep inside Iraq after psychological operations had successfully completed broadcasts and dropped leaflets all over the country. Signal, support, and civil affairs soldiers rounded out the Army special operations team; their stories are well documented in this book.

*All Roads Lead to Baghdad* does an excellent job of explaining what Army special operations elements accomplished during the U.S.-led coalition offensive to collapse the regime of Saddam Hussein in Iraq. As a 5-month snapshot of OIF, the book covers the period of major combat operations when Army Special Forces were most active. This current operations history, according to the authors, is not intended to capture operational lessons learned, resolve special warfare doctrine issues, or clarify definitions for Army Special Forces; rather, the book seeks to show the actual events and planning that occurred during the run-up phase to capture Baghdad, presenting an unclassified version of classified operations and planning. Especially useful in this book is the inclusion of a timeline at the bottom of chapters 4 through 10, which overlays operational and strategic events with tactical stories detailed in each chapter.

*All Roads Lead to Baghdad* does not intend to resolve the Army’s special operations doctrinal issues nor clarify military definitions; it was written to provoke discussion and promote analysis and comparisons. The book is also not intended to be the definitive history of the unconventional war in Iraq — that war is still ongoing.

*All Roads Lead to Baghdad* was written as a collaborative effort by historians from the U.S. Army Special Operations Command History Office at Fort Bragg, North Carolina. The authors’ access to classified documents, personal and unit histories, and personal interviews with the officers and soldiers make this book both entertaining and informative. This book is a must read for students of unconventional war-

fare and commanders who may someday deploy Special Forces in harm's way.

JAYSON A. ALTIERI  
LTC, U.S. Army

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**FIASCO: The American Military Adventure in Iraq** by Thomas E. Ricks, Penguin Press, 2006, 496 pp., \$27.95 (hardcover)

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Thomas Ricks, the senior Pentagon correspondent for *The Washington Post* delves deeply into the planning and execution of the war in Iraq in his book, *FIASCO: The American Military Adventure in Iraq*. Ricks' position in the Pentagon afforded him access to some of the most senior-level planners and leaders within the U.S. military. The result is a work that is both introspective and brutally honest regarding mistakes made by military planners and policymakers in handling the situation in Iraq.

*Fiasco* begins with the first Gulf War in 1991, analyzing the United States' policy of containing Iraq, and ends in mid-2006 with the latest post-Saddam Iraq situation. During the journey from 1991 until recently, Ricks highlights numerous key events such as 9/11 and the dramatic shift in national policy regarding Iraq.

From 1991 until 2001, U.S. policy effectively contained Iraq and many considered it not a threat of any sort, including the former Central Command (CENTCOM) commander, General Zinni. Ricks draws a large portion of his initial research from Zinni and his experiences as a combatant commander. Zinni and his staff developed numerous plans and estimates for an invasion of Iraq, including an in-depth assessment of the post-invasion requirements. This post-invasion analysis called for hundreds of thousands of troops to stabilize Iraq for numerous years. However, when Zinni spoke to the planners who were getting ready to launch Operation Iraqi Freedom in early 2003, none of them had seen or read the previous CENTCOM assessment. Ricks does an excellent job highlighting these discrepancies in planning and focuses on the "hawks" within the Bush administration. After 9/11, the once quiet, but steady, drumbeat for war with Iraq became a deafening crescendo. Ricks, masterfully paints this picture for the reader and brings out the inconsistencies in the national strategy and the post-invasion civil/military plan.

Ricks briefly, but effectively, takes the reader through the invasion and downfall of Iraq in 2003. The book then enters into what I consider the best part: in two chapters, both titled "How to Create an Insurgency (I + II)," Ricks vividly describes missed opportunities for the United States to mitigate a potential insurgency, instead fueling it. It is clear that Ricks has a firm understanding of both U.S. doctrine and the basic tenets of counterinsurgency operations. He highlights the ineffectiveness of the Coalition Provincial Authority (CPA) and their discord

with the military chain of command. In a frustrating series of events, the reader watches helplessly as the United States' chances for a quick and clean exit from Iraq rapidly bogs down into the quagmire of today. Ricks' writing continues up until mid-2006, demonstrating how a lack of planning, foresight, and accurate intelligence resulted in the current situation in Iraq today.

There is little doubt Ricks has issues with the current political administration and their handling of the Iraqi war. Additionally, his constant attacks on some of the senior military leaders involved in Iraqi Freedom distracts slightly from the overall effectiveness of the book. These minor problems aside, Ricks had access to many of the key military and political players planning for the invasion and through the subsequent policy blunders. His description of the strategic failure to match ends, ways, and means is about as perfect as any strategist could ask for. Additionally, every military planner and leader should read his assessment of both the lack of planning for a post-Saddam Iraq and how the U.S. policies fueled instead of mitigated the current insurgency.

*Fiasco* combines the military planning expertise found in Gordon and Trainor's *Cobra II*, and the political insight of Bob Woodward's *Plan of Attack*. There is little doubt that Ricks' work is a worthy read for all interested in gaining a better understanding of how the United States ended up in Iraq and how to avoid the same mistakes in the future.

MICHAEL D. SULLIVAN  
MAJ, U.S. Army

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**America at the Crossroads: Democracy, Power, and the Neoconservative Legacy** by Francis Fukuyama, Yale University Press, New Haven, CT, 216 pp., 2006

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The debate about America's national security in the 21st century is too important to relegate it to slogans and mischaracterizations of different approaches to U.S. foreign policy. One group that has been the subject of much debate and frankly wild conspiratorial charges is the neoconservative movement. Francis Fukuyama's new book, *America at the Crossroads: Democracy, Power, and the Neoconservative Legacy*, is part of a 3-day lecture series sponsored by Yale University's Program in ethics, politics, and economics. His book cuts through the noise of what characterizes a neoconservative and places it in proper perspective. Fukuyama is the director of the International Development Program at Johns Hopkins University, and worked for former Deputy Defense Secretary Paul Wolfowitz, both at the U.S. Arms Control and Disarmament Agency and the State Department. The author places neoconservatism amidst four approaches to American foreign policy; the other three are realists, lib-

eral internationalists, and Jacksonian (a reference to Senator Henry "Scoop" Jackson American Nationalists). Fukuyama argues for an alternative to these four trends.

The book traces neoconservatism to its roots in the City College of New York of the 1930s among Americans shaped personally by the events of European fascism and encroaching communism. Its first foray into public advocacy came in its fight against Stalinism, not as a World War II ally, but identifying the regime for what it really was. They also opposed the 1960s counter-culture in the United States, but balanced this with a desire to address the underlying causes of social inequity.

Pages dispel the unconstructive hype about Leo Strauss, an academic at the University of Chicago, who stressed the study of political classics and a serious approach to western philosophical thought. Strauss never imparted public policy theory, but a passion to understand western classical political philosophy as a means seeking a rationalization of nature and its relationship to political life. Strauss also preferred liberal democracy to communism and fascism, and admired Winston Churchill's stand against totalitarian regimes. The pure view of Strauss is that humans are political by nature and realize their full potential by participating in the life of the city (polity). This is Aristotle rediscovered, and typically clashes with those who argue for freedom from government power.

Fukuyama lays out a few common themes of neoconservatism that are not a mystery and are widely published in the open media, including beliefs that the internal character of regimes matters, that American power can be used for moral purposes, a distrust of social engineering projects, and skepticism that international law and institutions (such as the United Nations) can achieve security and justice between nations.

*America at the Crossroads: Democracy, Power, and the Neoconservative Legacy* contains an interesting discussion on the nature of the Islamist extremist threat. Fukuyama is a proponent of the theories of Olivier Roy, a noted French researcher on Islamist extremism. The central ideas state that the threat is not from observant Muslims in the Muslim world, but from alienated groups located in the Middle East and Western Europe who are cut off from authentic local traditions. From a counterterrorism perspective, this means the battle lines are not only in Afghanistan, but in the slums of Paris and Hamburg. Ideologically, jihadists mix Islam with western political theories of the extreme right and left, such as fascism and Marxism, of the 20th century. The book ends with appeals for the United States to shape international institutions, such as the United Nations and World Bank, and not withdraw from them, and consider not only power, but legitimacy in pursuing American goals around the globe. Fukuyama offers an excellent book that draws focus to the idea of America's future role as the sole superpower.

YOUSSEF ABOUL-ENEIN  
LCDR, U.S. Navy

# LETTERS

from Page 3

U.S. Army then and now. Swift's premise was that completely average officers working in concert were better than the rare genius, such as Napoleon. In line with this doctrine of safe leadership, he instituted a rigorous system of map exercises—essentially elaborate tactical decision games—in the hopes of eventually revealing an appropriate doctrine through multiple iterations of the process of problem, discussion, and synthesis—the underlying assumption was that all officers could come to agree on a relatively tightly defined best solution to any tactical problem. The accumulation of many such solutions would lend itself to an inductive doctrine built from the bottom-up. With such a notion, the purpose of a decisionmaking process was very different from ours today—it was not to choose from one of several feasible options, but to unearth the true path buried somewhere in the depths of our collective mediocre minds. Of course, our present MDMP is not solely about determining courses of action, but Swift devoted little attention to its other facets such as synchronizing different elements of combat power. To a great extent, he was limited by the lack of a set divisional structure, which did not come until 1905. Without a standard table of organization or staff structure, many of the procedural elements formalized in the MDMP could not have been addressed by Swift, even had he been so inclined.

However, I think Swift would find great fault with probably the most important element of the MDMP—its implications for the relationship between the commander and staff. For Swift, who drew his inspiration primarily from the American Civil War with its active commanders and small staffs, commanders did just what their titles imply—they commanded. He assumed that the captains and majors who made up the bulk of his Army War College classes would be promoted to colonel or higher in the event of a major war. Indeed, this would happen with the decade, but World War I staffs were significantly larger than their Civil War counterparts. A colonel in the Civil War was almost inevitably a unit commander, but in World War I, they were just as often a chief of staff or primary staff officer at the division level or above. But Swift's method was essentially to train all his students to think like commanders, which would lead to some problems during World War I, when the inevitable unlucky combination of strong personalities, who saw things differently, would lead to ruptures between commander and chief of staff. Although some instructors at Fort Leavenworth at the time had anticipated and wrote about this problem, I found no indications that Swift gave any serious thought to dividing responsibilities between the commander and staff.

As a colonel in the Philippines, Swift commanded his cavalry regiment from the front of the column and would not likely have given any thought to having his staff develop courses of action. A battalion commander, recently back from Iraq, commented that our present MDMP diffuses responsibility away from the commander to the staff. Another field grade of-

ficer has pithily described it as a sub-hand receipt of responsibility from a commander to his subordinates. I would not go that far, but I have noticed in some of my past units of assignment that the most confident (and very often more competent) battalion commanders have very often short-circuited, or even discarded, the MDMP outright, which brings me to my final point—only once have I observed a battalion where I regarded all three field grade officers to be fully competent in their jobs. I do not believe that my experiences in this regard have been unusual. With current promotion rates, this unfortunate trend will only continue. Because of this reality, and its strengths in providing a framework for incorporating all elements of combat power that provide our Army with a great advantage over our current and prospective opponents, the MDMP retains great utility.

Captain Humpert's article also highlights several areas that should be addressed. Certainly, the process should be pared of its more cumbersome accretions. Likewise, we might place too much on the process at the expense of content in both education and training. Although the MDMP might well be a burden for the great commander who possesses the wonderful inner light that illuminates the proper course of action, the process can be readily modified to fit the individual commander's taste. We should refrain from being mindlessly doctrinaire in how we evaluate such individuals, whether in training or combat. Yet, for the remainder, who may either prefer or need its structure, there is something to be said for safe leadership.

J.P. CLARK  
MAJ, U.S. Army

## “Stand and Fight” Author Clarifies Reference

Dear *ARMOR*,

I received a few inquiries on my article, *Stand and Fight: Lessons for the Transition Mission in Iraq*, which appeared in the November-December 2007 issue. One inquiry in particular requested clarification of the following reference: “*The Spartans observed their NPQRF leaders in action, they stopped younger policemen from playing Mukhtadah Sadr’s (a national militia leader) propaganda music at checkpoints, they settled a fuel dispute between the NPQRF and the local SWAT, and they ordered subordinates to camouflage the REVs, which were painted police colors of blue and white, with local mud.*”

“*Does the reference to ‘they’ refer to the Spartans; if so, then the Spartans stopped the JAM music and ordered subordinates to camouflage the REVs. If this is true, then why didn’t the Spartans get the NP commanders to stop the music, rather than doing it themselves, and why is the word ‘subordinates’ used to describe the relationship between the Spartans and the NP? (We normally use the word ‘counterpart’ or ‘partner’ to describe the Iraqis rather than ‘subordinates’). I might be missing something here. Would you please clarify? I’m wondering if the ‘they’ is actually the NPQRF leaders.*”

I would like not only to clarify, but emphasize that *they* refers to the Iraqi NPQRF leaders, specifically company-grade officers, who were enforcing discipline on their subordinates. For the most part, we only observed the NPQRF leaders taking these actions.

PAULO SHAKARIAN  
CPT, U.S. Army

## Defensive and Evasive Driver Training — Good, Old Fashioned Training

Dear *ARMOR*,

Major Rich Rouleau and Captain John Hawbaker's article, *Defensive and Evasive Driver Training*, in the September-October 2007 issue of *ARMOR*, is an excellent article that proves leaders across the Army are applying their combat experiences and lessons learned to all aspects of our training to make our Army more lethal and survivable.

It is often said that the three most important things deal with the ability to shoot, move, and communicate. I believe this to be true, but it is also true that the shoot and communicate fields often overshadow the move field, and when the move field is addressed, it is usually a technological solution for a training issue. This is clearly not the case in Major Rouleau and Captain Hawbaker's article. The authors note and identify, based on their experiences, a definite training deficit in the area of current driver training and their war-time mission. They tackled the problem from a training standpoint, rather than from a technological one, by addressing areas they could fix from their current position, rather than just criticize the current system. The training model and certification system they developed is one I would recommend all units adopt.

Just as the required standard rifle qualification does not equate to trained marksmen, neither does the required standard vehicle licensing procedures equate to trained drivers. I have seen master driver courses at several military installations. I think it is time for the Army to get serious about driver training and develop a true COE-centric master driver course, just as we have done for almost every other system, such as Bradley fighting vehicles, Abrams main battle tanks, artillery vehicles, air defense systems, and even aviation master gunner courses. Not only would this course allow us to be more prepared, survivable, and safer in combat, but it would make our soldiers more survivable and safer in training.

Survivability and force protection are constantly emphasized in our Army—it is imperative that we not forget that the best answer to an issue is not always system focused, but sometimes just good, old-fashioned training that gets to the heart of the issue, as the authors have done with their article. Job well done and Sua Sponte

MARK S. LESLIE  
MAJ, U.S. Army

## 2008 Armor Warfighting Conference:

# “Forging the Thunderbolt in an Age of Persistent Conflict”

The U.S. Army Armor Center is preparing for the 2008 Armor Warfighting Conference to be held at Fort Knox, Kentucky. This year's conference will be held from 4-8 May 2008. Registration begins at 0800 hours on Sunday, 4 May, at the Leader's Club and will be available until Thursday, 8 May.

The theme for this year's conference is “Forging the Thunderbolt in an Age of Persistent Conflict.” In keeping with this year's theme, we have a dynamic and varied agenda, which includes a mixture of subject-matter expert briefings, focused discussion panels, and work product panels. Brigadier General Campbell and Command Sergeant Major Smith have invited leaders from across the battlefield spectrum to offer presentations on current and future operations for the force.

This year's conference centers around two subthemes: dominant land power and an age of persistent conflict. These two subthemes expand to include guest speakers, discussion panels, and work product panels that cover a wide range of relevant topics, such as influence operations, contingency mission essential task lists/combined arms training strategy (CMETL/CATS), the heavy force in irregular warfare, noncommissioned officer education system (NCOES) transformation, core competency training strategies, heavy brigade combat team (HBCT) validation gunnery, Stryker mobile gun system (MGS) update, basic and advanced noncommissioned officer course (BNCOC/ANCOC) updates, reconnaissance squadron lessons learned, HBCT modernization, Armor School update, master gunner training, and a PEO Soldier update.

The heart of the conference will be the focused discussion panels and work product panels. Work product panels not only discuss key issues, but also provide detailed, documented feedback for future initiatives. Some panels will focus on the HBCT formation and future structure while others will review the current status of armor core competencies in full-spectrum operations. Topics for the discussion panels will include heavy forces in irregular warfare, influence operations, counterinsurgency operations, reconnaissance squadron lessons learned, master gunner training and issues, and NCOES transformation.

The Armor Trainer Update is scheduled on Sunday, 4 May. The update will begin with breakfast, followed by briefings, and concludes with an

evening social. The Armor Trainer Update's topics will focus on the Army National Guard (ARNG) and its role as a mounted force. Presentations include transformation of force structure; equipping the armor and cavalry force; infantry update; career management field 19-series reclassification training programs; heavy brigade combat team update; training aids, devices, simulators, and simulations (TADSS) update; and Regional Training Institute/Total Army School System update.

As always, the conference is packed full of social events, which include the Armor Association Banquet, the commanding general's garden party, Stable Call at the Patton Museum, a day-long shotgun/skeet shoot at French Range, a golf tournament, and the week-long static vehicle and vendor displays at Skidgel Hall.

As a standing tradition, the Frederick M. Franks Award will be presented during the conference. The Franks Award recognizes an active duty or reserve officer, non-commissioned officer, or Department of the Army civilian who has demonstrated a long time contribution to the warfighting capabilities of the U.S. Army. In keeping with the example demonstrated by the award's namesake, any soldier in the Army can recommend another soldier or civilian. This award is a great chance to recognize someone who has worked hard to make the armor branch and our Army better.

The Armor Warfighting Conference is a great opportunity for the Armor and Cavalry community to celebrate the achievements of the greatest mounted combat force in history. For more information please visit the Fort Knox website at:

[www.knox.army.mil/armorconf/](http://www.knox.army.mil/armorconf/)

Event	POC	Phone*
Armor Conference	MAJ Paul Peterson SSG Robert Valentino	(502) 624-1044 (502) 624-4573
Armor Trainer Update	LTC Scott Fowler	(502) 624-1315
CSM Update	SGM Thomas Klingel	(502) 624-1321
External Scheduling Conf.	Bob Stubblefield	(502) 624-2591
Vendor Displays	SFC Walter Ivory	(502) 624-1451
Armor Association	LTC(R) Mark Gavula	(502) 942-6170
VIP Billeting	Reservations Desk	(502) 624-6180
On-post Housing	Carolyn Burton	(502) 943-1000 (502) 624-3491

\* DSN Prefix: 464

# 2008 Armor Warfighting Conference and Armor Trainer Update

3 - 8 May 2008

*"Forging the Thunderbolt in an Age of Persistent Conflict"*

TIME	EVENT	HOST	LOCATION
<b>Saturday, 3 May</b>			
0900-1600	Vendor Setup		Skidgel Hall
<b>Sunday, 4 May</b>			
0800-1700	Registration		Leader's Club
0830-0900	Armor Trainer Update Breakfast	SACG	Leader's Club
0900-1700	Armor Trainer Update	SACG	Waybur
0900-1700	Vendor Setup		Skidgel Hall
1730-2100	Armor Trainer Update Social	SACG	Patton Museum
<b>Monday, 5 May</b>			
0800-1700	Registration		Leader's Club
0800-1700	Shotgun Shoot	Armor Association	French Range
0830-0930	CG's Opening Remarks	CG	Waybur
0830-1000	External Unit Scheduling Conference	DPTMS	Patton Museum
0945-1430	CSM Update	CSM, USAARMC	Leader's Club
1000-1400	Brigade and Battalion Commander's Conference *	OCOA	Leader's Club
1000-1430	Master Gunner Forum	Chief, MG Branch	Boudinot Hall
1000-1430	Subject-Matter Updates/Panels		Varied
1000-1430	Honorary Colonels and Sergeants Major of the Regiment *	OCOA	Leader's Club
1000-1700	Vendor Displays		Skidgel Hall
1445-1700	Guest Speakers	CG	Waybur
1800-2200	Stable Call	OCOA	Patton Museum
<b>Tuesday, 6 May</b>			
0800-1700	Registration		Leader's Club
0830-0930	Guest Speaker	CG	Waybur
1000-1400	Subject-Matter Updates/Panels		Varied
1000-1700	Vendor Displays		Skidgel Hall
1030-1600	Working Groups		Boudinot/Staff & Faculty
1415-1630	Guest Speakers	CG	Waybur
1700-1930	CG's Garden Party	CG	Quarters 1
<b>Wednesday, 7 May</b>			
0800-1700	Registration		Leader's Club
0830-0930	Guest Speaker	CG	Waybur
0945-1600	Subject-Matter Updates/Panels		Varied
1000-1400	Vendor Displays		Skidgel Hall
1030-1600	Working Groups		Boudinot/Staff & Faculty
1430-1645	Guest Speakers	CG	Waybur
1800-2100	Armor Association Banquet	Armor Association	Leader's Club
1900-1945	Presentation of the 13th Annual Franks Award	CG	Leader's Club
<b>Thursday, 8 May</b>			
0800-1700	Registration		Leader's Club
0830-0930	Guest Speaker	CG	Waybur
0930-1130	Working Group Back Briefs		Waybur
1000-1200	Vendor Displays		Skidgel Hall
1030-1300	Former Commandants and CSM Update and Luncheon	CG	HQ Conference Room
1315-1830	Golf Tournament	MWR	Lindsey Golf Course

\* Indicates an "invitation only" event.

An expanded schedule will be available at registration and up-to-date information is available at the Armor Warfighting Conference website: [www.knox.army.mil/armorconf/](http://www.knox.army.mil/armorconf/)



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