Infantry

Marksmanship
The Warrior's Edge

Infantry

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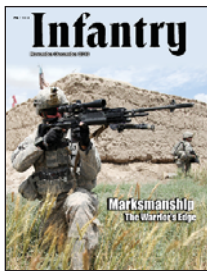
FRONT COVER:

Soldiers with Company D, 3rd Battalion, 172nd Infantry Regiment, provide security during Operation Demon Sang in Paktika Province, Afghanistan, on 16 June 2010. (Photo by SGT Jeffrey Alexander)

BACK COVER:

A platoon leader with Company F, 2nd Squadron, 2nd Stryker Cavalry Regiment, assists his radio operator across a ravine during a patrol in Zabul Province, Afghanistan, on 16 August. (Photo by SrA Nathanael Callon, USAF)

Commandant's Note

BG BRYAN R. OWENS

MARKSMANSHIP
THE WARRIOR'S EDGE

Every Infantryman lives by a set of core fundamentals that sets him apart and defines him as a true professional warrior. His leadership skills; his ability to communicate effectively; his tactical, technical, and weapons proficiency; and his willingness to take the fight to the enemy put him at the top of our profession. Marksmanship is at the heart of every Infantryman's skill set, and he must be a skillful master of it in order to survive and function under some of the most demanding conditions imaginable on today's battlefield. Marksmanship implies an ability to consistently engage and hit targets at all ranges and under varying conditions, and is a skill that American Infantrymen absolutely must develop and retain. In this Commandant's Note, I want to highlight the contributions of marksmen from the earliest days of our republic and describe some of the technological, training, and weapons enhancements that are continuing to keep the U.S. Infantry on the cutting edge.

In the battles of Lexington and Concord in April 1775 Colonial militia armed with flintlock muskets and fowling pieces engaged British regular infantry for the first time and made the forced British withdrawal back to Boston a protracted and costly fight. Although the effective range of the colonists' and British regulars' smooth bore muskets was well under 100 yards, the advent of rifled firearms in the 1740s had already begun to extend the effective range and lethality of the Infantryman's primary weapon. Aside from limited numbers of sharpshooters armed with rifled flintlocks, the Revolutionary War, the War of 1812, and the Mexican War were fought by Soldiers with smooth bore muskets. Rifled firearms came into their own during the mid-1800s, and during the Civil War a trained rifleman could engage and hit targets beyond 400 yards.

Today's units can rely upon snipers and squad designated marksmen to bring deliberate precision fire on enemy personnel, eroding enemy morale as it thins his ranks. This application of precision massed small arms fire from ever-improving weapons such as the Springfield rifle in World War I, the M1 Garand in World War II and Korea, and the M14 and M16 rifles in Vietnam continues even today. In Somalia, a task force primarily consisting of elements of the 10th Mountain Division's 2nd Battalion, 14th Infantry fought off large numbers of Somali fighters from 3-4 October 1993, allowing the extraction of surrounded elements of Task Force Ranger. More recently, on 13 July 2008 at Wanat, Afghanistan, 48 Soldiers of the 2nd Platoon, Chosen Company, 2nd Battalion, 503rd Infantry Regiment (Airborne), 173rd Airborne Brigade Combat Team, and 24 Afghan troops relied on close combat, fire, and maneuver to repel an attack by a force estimated at well over 200 enemy.

Obviously, the one common factor in these battles that always gave our Soldiers a decisive advantage was the ability to hit static or moving targets, exposed or partially exposed, close up or far away, day or night, and that is what we train here at Fort Benning. Three articles in this issue highlight innovations in rifle marksmanship training, including familiarization with the foreign weapons that tactical advisors will encounter as they pass their skills on to their counterparts. Yet another selection in this issue discusses the M855A1 Enhanced Performance Round for the M4 and M16, highlighting its superior performance over the present M855 round.

Marksmanship at the Infantry School remains one of the highest priorities. Fort Benning recently hosted the 10th Annual International Sniper Competition which featured some of the best shooters in the world. The U.S. Army Marksmanship Unit at Fort Benning has produced numerous Olympic and other world-class shooters and continues to serve as an extremely professional and experienced repository of skills that assists in training programs. The wealth of knowledge and experience gained from the operational force, and those Soldiers returning from deployment to serve as instructors, continues to infuse our ranks and bring needed tactics, techniques, and procedures to our training. Much of this experience is included in the recently published marksmanship manual, FM 3-22.9. Watch for continued marksmanship and small arms related articles in *Infantry*, and encourage your colleagues to contribute to this ever-growing database.

I encourage all of you to focus on ways we can improve and maintain the shooter's edge by addressing other factors such as range estimation, elevation, windage and intricacies of weapons' ballistics which will contribute to the lethality and survivability of the force. Incorporate marksmanship training under various conditions, especially at night, into individual and collective training and live-fire exercises at all levels of our formations, as well as making it part of team training and leadership professional development programs. A sound marksmanship program will ensure our Soldiers remain competent and confident in their marksmanship skills and ultimately even more effective down range.

One force, one fight! Follow me!

Infantry News

UPGRADED SNIPER SYSTEM COMING SOON

PEO SOLDIER

A recently awarded weapons contract means Army snipers will soon see an improved rifle with an extended range in the field.

The Army's Program Executive Office Soldier recently awarded Remington Arms Company a contract for the M24 Reconfigured Sniper Weapon System.

The award will result in the near-term fielding of 250 XM2010 weapon systems, which will be chambered for .300 Winchester Magnum cartridges. The new chambering significantly extends the weapon's maximum effective range. It's expected the Army will field the upgraded weapons to deployed Army snipers by the end of 2010.

"Within the space of a year, we were able to partner with industry to deliver a new capability for our snipers in combat," said LTC Chris Lehner, the product manager for individual weapons, part of PEO Soldier. "The upgraded weapon system provides extended range for our snipers and incorporates the latest in weapons technology."

The upgraded weapon features a five-round box magazine to make the system easier to load and reload, with the additional option to change out ammunition quickly. The system is also equipped with a rail-endowed chassis and free floating barrel that allows for easier mounting of weapon accessories and greater accuracy.

Locked on to that new rail, the XM2010 sports a Leupold Mark 4 6.5-20x50mm extended range/tactical riflescope with advanced scalable ranging and targeting reticle. The system is also fielded with the AN/PVS-29 clip-on sniper night sight. And the system's included quick-attach suppressor reduces audible and visible signature with an available thermal sleeve that reduces the mirage effect on heated suppressors.

After a full and open competition, the Army awarded the firm fixed-price, indefinite-delivery/indefinite-quantity contract for the upgrade of up to 3,600 M24 systems.

"The XM2010 had pinpoint precision," said SFC Robert Roof, the chief instructor at the U.S. Army Sniper School. "We were able to achieve shots well within the weapon's capabilities both during limited visibility and during the day. The optics were clear and easy to use and the ergonomics of the weapon made it very comfortable to shoot."

The M24 upgrade initiative is the result of an Army-directed requirement to provide snipers operating in Afghanistan with a greater capability to engage the enemy. It is expected that the XM2010s will provide at least 10 years of service, officials said.
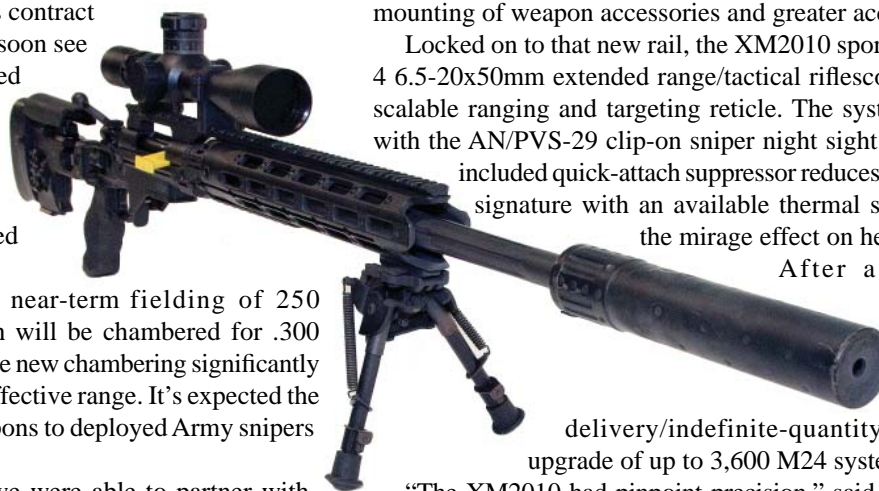
RECENT CENTER FOR ARMY LESSONS LEARNED PUBLICATIONS

VISIT THE CALL WEB SITE AT HTTP://CALL.ARMY.MIL

Newsletter #10-64: Afghan Culture —This newsletter provides information on the basics of the Afghan culture and how Soldiers should apply this information while living and working with the Afghans. The key points covered in this newsletter are:
• Background on the Taliban.
• Effects of Afghan culture on counterinsurgency operations.
• Means of acquiring an awareness of the Afghan culture.
• Components that shape the diverse Afghan culture.
• Sources for training on the Afghan culture.
• Afghanistan/Pakistan languages DVD.
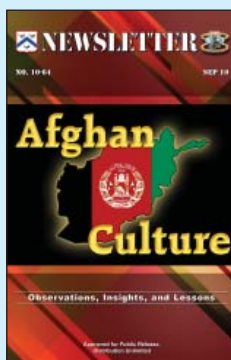
Newsletter #11-02: Complex Operations II — This newsletter focuses on a comprehensive approach to integrated civilian-military command and control (C2) and staff integration in complex operations. Interagency operations in Afghanistan, Iraq, and several other locations have revealed the requirement to address complex conflicts requiring a high level of civilian-military integrated coordination. Civilian-military integrated staffs and C2 architectures provide the frameworks to design, develop, and build C2 systems capable of greatly increasing the effectiveness of complex operations.

SPECIAL OPS TEAM WINS SNIPER COMPETITION

**S.L. STANDIFIRD AND
KRISTIN MOLINARO**

A Soldier team from the Army Special Operations Command took top honors at the 10th Annual International Sniper Competition at Fort Benning, Ga.

The competition, which was held 11-15 October, included 32 sniper teams, each gunning for the title of best sniper team in the world.

SFC Edward Hoymeyer and SFC Chance Giannelli from the Special Forces Sniper School at Fort Bragg, N.C., took top honors. The two scored 1,258 points out of a possible 1,507 during the competition. They were also the only team to receive a perfect score on the final event of the competition.

During the competition, the two-man teams competed in a total of 14 events. Those events included a sniper stalk, urban shooting and orienteering exercises, firing under stressful conditions, and other tests of marksmanship and sniper skills.

In keeping with last year's competition, the teams were divided into two categories, service class and open class. The service class competitors fired 7.62 mm or smaller rounds as a primary or secondary weapon system. The open class was for teams firing rounds in a caliber larger than 7.62 mm.

The 72-hour competition ran virtually nonstop, with only two four-hour rest breaks during its three days, said LTC J.C. Miller, commander of 2nd Battalion, 29th Infantry Regiment, 197th Infantry Brigade, whose C Company conducts sniper school training.

Six of the events were held at night, and this year's competition included a greater emphasis on real-world scenarios and limited sleep, said event planners.

The added stress and fatigue factors added a new level to the competition not seen in past years, said MSG Michael Snyder, NCOIC of the sniper school.

"We wanted to simulate what guys are doing in combat. They are going to be tired, getting little sleep and still be expected to do one mission after another," he said. "We are getting more combat-focused."

During the 2009 competition,

Michael Tolzmann

A sniper with the 25th Infantry Division finds his target down range during the 10th Annual International Sniper Competition at Fort Benning, Ga.,

competitors averaged eight hours of sleep each day of competition, Snyder said. This year, the average was 50 percent less than that, and the schedule was more sporadic — with many teams catching some shut-eye in the holding areas in between the events.

Some of the more challenging events in the competition — as cited by several competitors — included shooting on non-illuminated targets at night and the stress shoot, which included a timed run down an 800-meter lane, stopping at various points to fire on targets, collect data, and evacuate casualties.

A new event in this year's competition was the "loop hole." That event tested the snipers' ability to shoot from a third story rafter, through a three-inch hole, and strike a target 150 meters away.

"In competition, you will go at a faster pace than you would in combat," said competitor SSG Kyle Maples, a five-time combat veteran. "In some situations, you take enemy fire, you are going to get the adrenaline up, you are going to be breathing heavy. So an event like (the stress shoot) is pretty close to simulating what it would actually be like in combat."

Maples competed service class in the

competition for the 325th Airborne Infantry Regiment, 82nd Airborne Division. Maples and his partner, SSG Brent Davis, were the only pair to score 35 out of 35 points on the night range estimation event.

"It's more realistic," said Maples, of the combat scenario related events. "A majority of our operations in theater are done at night. Everybody has the saying 'we own the night,' and it's true. We have night-vision capability and the enemy doesn't right now."

U.S. Coast Guard PO2 Joshua J. Harris, also a participant, said he was glad to have the opportunity to learn from the competition.

"In every course of fire here, our training and tactics were tested and our weaknesses were exposed," Harris said.

Participants in the competition came from the Army, Air Force, Marine Corps and Coast Guard, including teams from U.S. Army Special Operations Command, 10th Mountain Division, 75th Ranger Regiment, Army National Guard, and the 1st Marine Division. Additionally, several civilian law enforcement teams participated as well as several international teams.

(S.L. Standifird writes the Joint Hometown News Service. Kristin Molinaro writes for the Fort Benning newspaper, The Bayonet.*)*

PM Soldier Weapons Pursues Dual Path Strategy to Improve Service Rifle

PEO SOLDIER

The U.S. Army is implementing the most dramatic overhaul of its service rifles in nearly 50 years. The Program Executive Office (PEO) Soldier's Project Manager (PM) Soldier Weapons division is currently pursuing a "dual path" strategy that will result in significant changes to the one system that is critical to all Soldiers — their standard issue service rifle. The dual path approach consists of the continuous improvement program for the M4 carbine, paired with a full and open carbine competition.

According to COL Douglas Tamilio, PM Soldier Weapons, the intent of the dual path strategy is to allow the Army to continue its practice of upgrading the combat-proven M4 while simultaneously challenging industry to develop the next generation carbine. With nearly 500,000 M4s in the Army inventory, it is critical to strengthen the M4 platform while the Army invests the time necessary to properly develop, test, and field a new weapon system. The Army has already made more than 60 refinements to the current M4 carbine since its introduction, and 94 percent of Soldiers rate the M4 as an effective weapon system in post-combat surveys. That said, PM Soldier Weapons will continue its search for advanced technologies to match Army requirements and better serve our Soldiers.

Our PEO, BG Peter N. Fuller, first communicated the dual path concept in October 2009 to foster a better understanding of the PEO Soldier strategy. The first path is the improvement plan for the M4, which is broken into three phases. For Phase I, the Army will purchase 25,000 M4A1 carbines with ambidextrous fire control assemblies (FCA) and is preparing additional solicitations for the fall to purchase kits to convert up to 65,000 fielded M4s into M4A1s with the new FCAs. Compared to the M4, the M4A1 has a heavier barrel and is fully automatic — improvements that deliver greater sustained rates of fire. Phase II improvements will include forward rail assemblies, bolts, and bolt carrier assemblies

to increase accessory integration while enhancing durability. Phase III will evaluate commercially available operating systems against the M4's current gas impingement system. The Army's long-term plan is to improve the entire M4 fleet. Implementation for all improvements and competitions is contingent upon funding and demonstrated performance gains over current capabilities.

The second path is the carbine competition, which received Army Review Oversight Council validation in April and Joint Review Oversight Council (JROC) validation in August. Now the final approval authority has returned from AROC to allow work to begin on the "Request for Proposal." The carbine competition is already fully funded for research, development, testing, and evaluation. With the final approvals nearly in place, the stage is set for an inspiring competition.

Small Arms Series

Considering that millions of Soldiers have carried the M16 or its M4 sibling since the 1960s, this is naturally a topic that generates great interest in the veteran community — not to mention Congress, industry, and leadership at the top levels of all the services. In light of this interest and of the significant Army small arms developments to come, PM Soldier Weapons will be publishing a series of posts (online at http://peosoldier.armylive.dodlive.mil) over the next several months that discuss the concepts inherently tied to issues of weapon selection along with deeper dives on the M4 improvements and the carbine competition itself. The series will cover the following topics:

Small Unit Armaments: Just as our Soldiers' combat activities are synchronized, so are our weapon systems. M16/M4 weapons are employed alongside larger caliber 7.62mm rifles, machine guns, and grenade launchers for a combined effect. This article is currently available.

Lethality: For decades, the "better bullet" debate has raged as to whether the 5.56mm or 7.62mm cartridge reigns supreme. While it's impossible to close the door on this debate, we will explain that there's more to the lethality story than just the bullet. This article will examine the aspects that contribute to Soldier lethality such as weapon system, ammunition, optics, training, and shot placement.

M4 Product Improvement: This article will discuss the evolution, performance, and future of the M4 carbine that is currently the standard for brigade combat teams. The article will detail the Army's three-phase improvement plan for the M4 and discuss how the Army will expand partnerships with industry to arrive at an even better M4.

Carbine Competition: The final article in the series will discuss the imminent Army test and selection of a new carbine resulting from a full and open competition among the finest weapon manufacturers in the world.

Figure 1— Carbine Path Forward
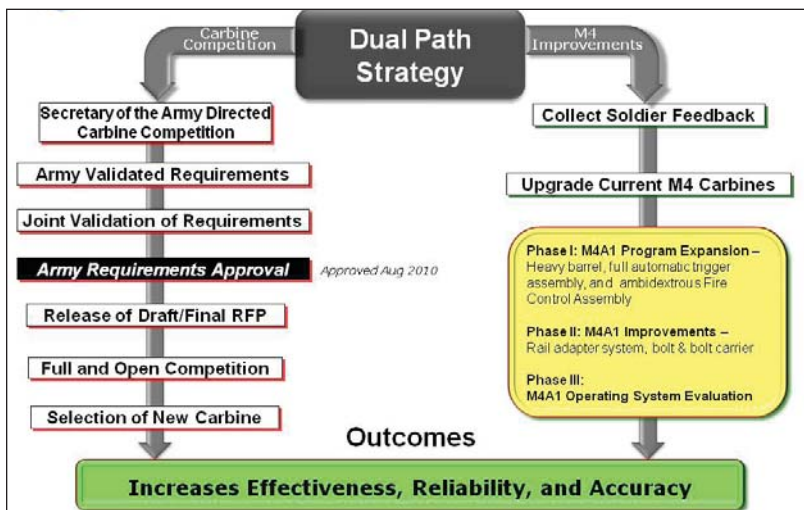
FBCB2 To Get Upgrade

KRIS OSBORN

The Army is in the midst of several high-tech upgrades to its force tracking system — Force XXI Battle Command Brigade and Below (FBCB2) — to include new, next-generation software and a new, faster satellite network, service officials said.

As part of this overall effort, the Army is preparing to deploy the high-tech, high-speed Blue Force Tracking (BFT) 2, a force-tracking satellite-communications network. Although difficult to compare, it is roughly 10 times faster than the existing BFT system, said LTC Bryan Stephens, BFT product manager.

MC2 Sandra M. Palumbo, U.S. Navy

Soldiers with the 1st Battalion, 5th Infantry Regiment, monitor the FBCB2 and Remote Weapons System screens during Talisman Sabre 2007 in Shoalwater Bay, Australia.

The current BFT uses half-duplex capability, a term which means it has only one-way transmission and cannot receive and transmit at the same time. BFT 2 data rates are exponentially faster than the current BFT.

"BFT 2 is full duplex, which means you can transmit and receive at the same time. It is an entirely different architecture," said Stephens.

In addition, BFT 2 shortens the distance information has to travel — transceivers send information up to a satellite and then immediately down to a ground station, which then quickly sends the information back to deployed units. Current BFT architecture requires that information reach a Network Operations Center (NOC) located in the United States, Stephens said.

"Today, if you transmit your position-location information in theater operations, it goes to a satellite and then to ground station. Then it is transmitted to a Network Operations Center in the (United States). The NOC sorts it all out and re-broadcasts. When you deal with satellites, you are dealing with latency, as information travels up and down a couple of different times," said Stephens.

"With the BFT 2 system, we changed that architecture. Instead of going all the way to the NOC, information is going up and down to a ground station. That is much different than going through multiple satellite hops to get processed at the NOCs."

With BFT 2, situational information can be beamed across the network in seconds, sending images to a ground station, then back up through commercial satellites to forward-deployed units.

The new system vastly improves refresh time as well. Based on a few factors, current BFT can take minutes to load new data and update position-location information, whereas with BFT 2, refresh time is reduced to a matter of seconds, Stephens said.

The new BFT 2 tracking system, which is slated to begin fielding by the end of 2011, is engineered to synch with new BFT software called Joint Battle Command-Platform, or JBC-P, designed to run on existing JV-5 computers or hardware, said MAJ Shane M. Robb, JBC-P assistant product manager.

"With JBC-P, ... we are leveraging the successes of FBCB2 and the investment in that system," Robb said.

The Army has about 95,000 BFT systems, the bulk of which are on JV-5 computers already in service, he added.

"The JV-5 computer is in most of the vehicles that are in theater, such as MRAPs and HMMWVs. Rotary-wing assets have different hardware variants. We don't want to replace all that hardware at once. We are going to use the same hardware with our new software and our new capabilities.

JBC-P also comes with improved requirements for accuracy — an icon representing a vehicle on a JBC-P screen has to be within 200 meters of its actual location.

"If you are driving down the road and you see a vehicle or a person, you can look at your screen and associate an icon with what you see on the ground. It helps to mitigate fratricide," Robb said.

The original FBCB2 screen, which was designed in the 90s, has an old drop-down graphics interface, Robb said.

"JBC-P has a completely redesigned interface, designed to be more intuitive, faster, and more collaborative. It has 'free draw' graphics — whereas in the past you had to go through a whole graphics menu. This is powerful for a platoon leader on the ground. In the past to do a change of mission on the fly, you had to go through a cumbersome graphics drawing process and send it, or you had to talk someone through everything on the radio," said Robb.

"Now, you can draw an arrow or a circle and say 'I want you to go along this route. I want a support by fire here.' You can send things easily and it is easier to collaborate on the move with chat and messaging," Robb explained.

(Kris Osborn writes for the Office of the Assistant Secretary of the Army [Acquisition, Logistics and Technology.])

Professional Forum

BATTLEFIELD FORENSICS:
Dynamic Adaptation of the Company-Level Task Force

CPT VICTOR R. MORRIS

In January 2009, the Army's authority to unilaterally apprehend and detain insurgents in Iraq expired. This mandate occurred almost seven months before the historic 30 June 2009 withdrawal of U.S. forces (USF) from Iraq's cities. These changes are encompassed in the overall United States-Iraq Status of Forces Agreement. The post-30 June contemporary operational environment (COE) rapidly catalyzed the axiom of working by, with, and through the Iraqi Security Forces (ISF).

The implementation of this axiom was a significant paradigm shift for USF operations and situational understanding and awareness of the battlefield. This principle is executed at all echelons of joint partnerships and operations, specifically with regard to expeditionary forensics. In the post-30 June COE, tactical battlefield forensic operations are decisive at the company level because they facilitate the overall execution of the brigade combat team warrant-based targeting and prosecution task force model.

The mission of Fierce Company, 52nd Infantry Regiment during late Operation Iraqi Freedom 09-10 was to execute full spectrum exploitation task force (ETF) operations. These operations were conducted primarily in western Baghdad, a dense urban area with a population of more than three million people. This mission was an evolution of months of enduring force protection patrols and joint operations in the battalion's operational environment. The company was designated as the decisive operation for Task Force Viking's quick response unit. Fierce Company was attached to TF Viking — the 2nd Battalion, 12th Field Artillery Regiment, 4th Stryker Brigade Combat Team, 2nd Infantry Division — while conducting operations.

The overall purpose of the Fierce ETF was to rapidly secure, preserve, and exploit enemy attack sites. The tactical maneuverability of Stryker anti-tank Infantry platoons accelerated the targeting model and dynamic re-tasking of various elements. Platoon leaders facilitated security and sensitive site exploitation. They were indoctrinated with the mission intent of taking full advantage of a situation for tactical and/or operational gain. This concept included the exploitation of media, documents, explosives, ballistics, intelligence, biometrics, and people of interest. The end-

> **Fierce Company, 52nd Infantry Company is the brigade Stryker anti-tank company for the 4th Stryker Brigade Combat Team, 2nd Infantry Division. The Soldiers are 11B Infantryman with an AT specialty.**

state for this operation elucidated a dual purpose. One overarching purpose was to implement an effective site exploitation model, leading to further intelligence and targeting in order to assist and protect the security forces and local population.

The second intention of the ETF was to establish an effective partnership with ISF in order to build their forensic and targeting capacities. This was intended to be a concise model that advise and assist brigades could utilize during the responsible drawdown of forces.

The standard targeting methodology that the company used was modeled after F3EAD-P — find, fix, finish, exploit, analyze, disseminate, prosecute. This model marked the first deliberate application of evidentiary-based targeting and detention at the company level. The platoon task organization changes were based on the fundamental tenants of ETF operations: analysis of the threat combined offensive operations with the ISF, maneuver element responsiveness, and sensitive site exploitation. The platoons were primarily responsible for tier I exploitation, analysis, and dissemination. In some tactical scenarios they assisted in finding, fixing, and finishing the enemy. As the quick reaction force, the platoons set the conditions for the combined exploitation cell (CEXC) and joint expeditionary forensic facilities (JEFF) tier II-III analysis and dissemination back to the brigade. The final step in the targeting model is prosecution as a result of convicting insurgents through the Central Criminal Court of Iraq. In this environment, forensics has become the key component to aid in convictions when presented as evidence to Iraqi judges.

As a result of the mission change, the company re-task organized into three concisely augmented maneuver elements. The company main efforts were the two 20-man maneuver anti-tank platoons. The headquarters platoon, led primarily by the fire support officer, re-directed intelligence analysis, enemy trend identification, and CEXC device profile tracking. Additionally, the company first sergeant, senior medic platoon sergeant, and commodities sections ensured that the platoons were resourced with mission-essential equipment and counter-IED related training. Each of the platoon special teams had specified tasks and purposes related to the overall targeting model and concept of the operation. Each platoon

was augmented with a team of battlefield forensic specialists: explosive ordnance disposal (EOD) team, weapons intelligence team (WIT), law enforcement professional (LEP), and human intelligence collection team (HCT). These external attachments were combined with the platoon special teams which included a tactical site exploitation team (TSE) and detainee operations team (DETOPs).

Next, each team integrated, rehearsed, and executed specified tasks to maneuver units. The WIT was task organized as part of an EOD team and was responsible for collecting evidence from improvised explosive devices (IEDs) and other explosives sites. This was done as a subsequent measure of the overall EOD post-blast analysis and assessment of the attack and type of munitions involved. The WIT also conducted technical analysis of recovered materials for biometric collection and analysis. The LEP was attached to the platoon special teams and brought a developed understanding of forensics to the platoon. On the objective, the LEP was integrated into the DETOPs team. His experience allowed him to see a target's house/attack site as a crime scene. Typically, the LEP advised the special teams and platoon leader after the EOD/WIT conducted their analysis. He focused the teams on local national witnesses and guided the tactical questioning. He was also the subject matter expert with regard to point-of-capture operations and adherence to the security agreement.

While conducting ETF operations, the HCT's mission is to conduct tactical questioning, atmospherics gathering, and military source operations (MSO) at the site of recent significant actions (SIGACTs). Tactical questioning was aimed towards providing the unit with a more thorough understanding of the event and enemy actions related to it. Source operations, when practical, allow the identification and initial evaluation of potential sources, establishing relationships to build on through future engagements or meetings. The long-term goal is to provide actionable intelligence to U.S. forces or ISF. The DETOPs team was a transformation of an enemy prisoner of war (EPW) team. This team specialized in security and small unit tactics as they related to biometric identification. At the

SSG Kyle Ficara, a squad leader in 1st Platoon, F Company, 52nd Infantry Regiment, supervises his squad as they secure the site of an IED.

platoon level, they secured the HCT and LEP as the mission dictated and deployed biometric identification-related equipment on the objective.

With that being said, the company ETF was re-configured as an autonomous battlefield multiplier, capable of dynamically reacting to various SIGACTs in the OE. After initial company-level mission analysis, tactical scenarios were outlined and brought to realization after 13 weeks of ETF operations. The company ETF model was based on QRF responses to tactical scenarios involving troops in contact or react-to-contact battle drills (unilateral and bilateral responses). The following bullets outline the tactical scenarios that the ETF encountered during operations:

• Brigade and/or battalion task force element in contact requiring ETF support.

• Brigade and/or battalion route clearance patrol identification of threat and requesting ETF support.

• Non-organic brigade and/or battalion task force element in contact requiring ETF support.

• ISF/host nation security force in contact requiring ETF support.

• ISF/local national agency in contact requiring ETF support; Government of Iraq support with regard to high profile attacks in Baghdad during 2010 election period.

• Special operations element requiring

EOD support after joint raid or close target reconnaissance.

• Non-military logistical convoy element in contact requiring ETF support or vehicle recovery.

• ISF battlespace owner link-up after a successful cache seizure, in order to facilitate higher echelon exploitation. This includes the link-up, reception, and transfer of explosive material from an ISF location to CEXC laboratories for analysis.

This particular mission set required a variety of coordinating instructions. During the execution of the ETF mission, platoons conducted 24-hour QRF rotations staged at an IA division joint security station, further enabling partnership, access, and an opportunity for joint responses. The staging time was based on threat analysis and enemy IED emplacement windows. The company headquarters remained at the command post and executed command and control operations as required. The CP facilitated higher echelon reporting, enabler support, intelligence and surveillance asset management, and logistical synchronization. A more frequent and detailed utilization of the Tactical Ground Reporting (TIGR) system also enabled post-operation site exploitation reports (SERs), SIGACT mapping, enemy trends, and overall CEXC case tracking. The company HQ and company intelligence

support team remained at an elevated readiness status, in the event that multiple platoons were deployed to multiple SIGACT locations. Fierce Company ETF operations spanned the limits of the battalion sector. During multiple operations, F/52 Infantry platoons crossed adjacent battalion boundaries and coordinated with adjacent units. This freedom of maneuver allowed the company to partner with multiple Iraqi Army battalions across two Iraqi Army brigade sectors and foster a positive working relationship. This eventually led to requests for support and information dissemination from Iraqi Army battalion commanders. Through this interaction, the company was able to coordinate directly with the battlespace owner, while simultaneously relaying information to the joint operations center and battalion tactical operations center. The vertical and parallel reporting via multiple mediums directly contributed to the efficacy of the mission.

The full-time execution of this mission set was decisive to the brigade and battalion campaign plans for a myriad of reasons. After the inception of the mission set, the company began to immediately exploit IEDs and explosively formed penetrators along one of the main supply routes in the battalion sector. These devices presented a significant threat to U.S. forces traveling on the route. This mission shift was a brigade initiative to target the network and get "left of the boom" in the post-30 June operational environment. Both the brigade and battalion commanders were adamant about expeditionary forensics and their relationship within the brigade prosecution task force model. This directly corresponded to ISF partnership and capacity building. Their intent was translated at all levels as platoons responded to SIGACTs in the OE.

The sensitive site exploitation by Infantry platoons offered a dual purpose. The first purpose was to secure the site and support the unit in contact. Next, the platoon special teams were deployed to exploit the site. The special teams exploited a plethora of sources in order to get a concise assessment of the attack. From the exploitation of the site, the ETF was able to assess the type of device, method of emplacement angle, method of initiation, location of initiation, battle damage associated with the device, and biometric evidence.

The HCT and LEP also exploited local national witnesses and received reports from ISF in the area. Once the site was cleared, any forensic material from the attack was confiscated by the ETF for analysis. After the tier I analysis was completed, the materials were turned in to CEXC for additional analysis. Depending on the priority of the incident, a CEXC case could be populated in 24-36 hours with biometric analysis following. In the event that there is a biometric match, the unit began the additional phases of the targeting cycle and prepared for warrant facilitation.

The role of the ETF was not limited to quick response to SIGACTs. The ETF also partnered

with an Iraqi Army EOD battalion and executed joint training and responses. The primary function of the ETF exploitation focus was to liaise with the EOD battalion in order to coordinate the transfer and follow-on analysis of cache materials seized during offensive operations. One particular event led to the analysis and exploitation of the largest IED cache found in the battalion OE.

In conclusion, company-level ETF operations offer a tactical way to accelerate the targeting model through its rapid response and organic SSE capabilities. The ETF is also trained by JEFF personnel in current SSE procedures and crime scene analysis. The NCOs act as trainers for the remainder of the platoon. Biometric training is also executed during the platoon rotational cycles. Soldiers are trained on the operation of Handheld Interagency Identity Detection Equipment (HIIDE).

From 13 April to 19 July 2010, the company ETF facilitated the creation of 29 CEXC cases for follow-on exploitation in conjunction with technical analysis for protection against remote-detonated IEDs. One of the platoons biometrically confirmed the identity of an al-Qaeda in Iraq (AQI) leader after he was detained by the IA and transported to the hospital. The quick response mission enabled higher echelon leaders to coordinate joint interrogation and transfer of the high value individual for prosecution. A company is able to exploit priority events at a faster rate and offer tactical solutions to enemy-related problem sets. This mission is vital during the responsible drawdown process in order to set the conditions for the ISF, proliferate rule of law, and maintain situational awareness of the battlefield. Through close working relationships with expeditionary forensics specialists, the rifleman becomes a forensic analyst coupled with his dismounted maneuver expertise.

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Iraqi Security Forces and Soldiers from 2nd Platoon, F Company, 52nd Infantry Regiment, respond to an IED strike against an Iraqi Police convoy.

INTEGRATING THE BCT HUMAN TERRAIN TEAM WITH THE MANEUVER COMPANY

LTC JONATHAN D. THOMPSON

In late March 2009, Iraqi Security Forces (ISF) went into the small enclave of Al Fadhl in east Baghdad to arrest Adel Mashadani, the local Sons of Iraq (SoI) leader and a popular Sunni figure in that neighborhood. The unilateral action by the ISF caught the U.S. forces in the area somewhat by surprise. The strategic implications were serious as an action by a Shi'a-led Iraqi government against an influential Sunni personality could ignite smoldering sectarian tensions in Baghdad, and those could spread to a much larger area. Locally, the main concern at the tactical levels was that the tightly knit, predominantly Sunni neighborhood would erupt in a mini-insurgency against the Iraqi Security Forces (ISF) involved with the arrest. The specter of house-to-house fighting in a densely populated zone with narrow streets loomed large. At the brigade combat team (BCT) headquarters, the staff updated estimates and prepared for the worst case scenario.

Two days after the arrest, the Cavalry troop commander who owned that battlespace conducted patrols through the neighborhood. His purpose was not to conduct combat operations but to measure the residents' reactions to the arrest. His main resource in collecting this information was the attached human terrain analyst (HTA) from the BCT's human terrain team (HTT) IZ5. For more than a month before the arrest, the HTA had worked closely with the troop's Soldiers to learn about the dynamic human terrain of Al Fadhl and surrounding areas. By accompanying the troop commander or platoon leaders on almost daily patrols, she engaged Iraqis throughout the area. Tasked to provide relevant socio-cultural knowledge to all levels of command, she had specific information requirements from the BCT down to troop command. Additionally, as a female HTA, she also was able to talk freely with Iraqi women and provide their unique viewpoints to the command. These daily patrols and access to the people greatly increased situational understanding of the Al Fadhl area and the surrounding neighborhoods.

In the aftermath of Mashadani's arrest, the troop commander's priority was to understand the second and third order effects of his apprehension. The commander viewed the embedded HTA as an integral part of his unit and the key asset to answering questions about the locals' perceptions of Mashadani's detainment. In the days following the arrest, the HTA talked with many different people (male/female, young/old), and she determined that the people were actually glad that Mashadani was gone. Though a popular figure, he also ruled the area as a local warlord and used his own private militia to enforce his will upon the people. The HTA also learned that the Sunni inhabitants were pleased with the actions of the ISF that conducted the mission. The HTA's analysis of the discussions allowed the BCT to shift away from a possible lethal course of action to one that involved bringing in humanitarian assistance (HA) and medical teams to the people on

MC1 Lynn Friant, USN
Members of a human terrain team survey an Iraqi man in Basra on 7 July.

the ground. The Government of Iraq (GoI) was at the forefront of these actions and gained the support of the people. Soon after, the remaining members of Mashadani's militia surrendered to the authorities. Key to allowing this smooth transition was the work of the HTA on the ground. Al Fadhl clearly illustrates the value that the HTT can provide to not only the BCT commander but all the way down to the company commander. While ultimately a BCT asset, the HTT is an enabler that maneuver company commanders can and should use.

In 2006, the U.S. Army Training and Doctrine Command (TRADOC) started the Human Terrain System Project that would apply civilian social science research methodology to understand the local populace. From this, HTTs evolved as elements that could provide this research capability to the BCT level of command for the first time. Each HTT comprised five to nine people and a mix of military and Department of Defense civilians. The initial employment concept for an HTT was to conduct field research as a single element throughout the BCT operational environment (OE), focusing on the specific requirements from the BCT commander.

However, HTT IZ5 realized that sending most, if not all, of the team into a company HQs at a combat outpost (COP) or joint security station (JSS) would strain the resources of the unit to support them. Furthermore, it would also restrict the team's ability to cover a broader part of the BCT OE. Thus, the team implemented a concept of embedding individual members of the

team down to the company/battery/troop level. These embeds lived and worked out of the company area for several weeks or, in some cases, several months. At the same time, as the team leader, I realized that if a company commander was going to take a HTA out on a patrol, there would have to be some benefit to the company and not expect all information to flow directly to the BCT headquarters. With team members of IZ5 working throughout the BCT OE and with most companies, the team developed tactics, techniques, and procedures (TTPs) that enabled the HTT to be a valuable asset to the company commanders as well. The purpose of this article is to outline these TTPs so that other maneuver companies can also use HTTs effectively.

Preparation Phase

In order for successful teamwork to develop between the HTT and the company (including troop and battery commands), the commander needs to understand the capabilities of the HTT and determine how these can benefit his unit. The troop commander in the Al Fadhl area understood the purpose of the HTT and developed some key questions that he wanted answered. The main reasons he wanted an embedded HTA was to have another asset to confirm/deny what he was seeing and hearing and also to ensure he had an accurate depiction of the battlefield. He then formulated specific information requirements:

• Determine the socioeconomic, sectarian, and political diversity in the OE;

• Understand the political dynamics between personalities, especially Mashadani;

• Understand how the local Sons of Iraq were perceived by Al Fadhl residents;

• Gain truthful opinions of the people towards Mashadani;

• Evaluate citizens living in such a dynamically congested area of operations (AO);

• Learn how the violent history of Iraq shaped the OE and could that history possibly defeat a potential insurgency; and

• Confirm or deny that Mashadani was involved in multiple nefarious activities.

After the commander developed this list of information requirements, he submitted them through his squadron commander to the BCT and over to the HTT leader. With the HTA already working for an

> **"In order for successful teamwork to develop between the HTT and the company (including troop and battery commands), the commander needs to understand the capabilities of the HTT and determine how these can benefit his unit."**

adjacent troop commander, the team leader discussed the move with the squadron commander and approved the switch based on the commander's priorities.

The troop commander's population-centered inquiries were clearly HTT relevant areas. Upon approval to support the troop, the HTA conducted preliminary research to gain situational understanding of the new area. She reviewed patrol reports, recent mission storyboards, unit assessments, and intelligence reports. She recorded the names of all relevant local leaders (formal and informal) as well as their contact information. She then interviewed an interpreter who had worked with U.S. forces for several years in that area. He provided a wealth of knowledge that could only come from a local national who had spent a lot of time in those neighborhoods. When she arrived at the unit, she continued learning the OE from the Soldiers. Because her preliminary research provided the situational understanding and context of the area, she was able to relate to the Soldiers and could ask them more focused questions.

Integration Phase

Once the HTA linked up with the unit at the JSS, it was important for her to become an integral part of the unit. The critical aspect was for her to not only attend but participate in the nightly sync meetings held by the troop commander and attended by all platoon leaders and other key troop personnel. These meetings discussed operations that would occur the next day as well as any upcoming key events. The commander allowed the HTA to have input on missions. At the same time, she was able to see where her presence on the battlefield would be most helpful the next day.

In addition to the nightly sync meetings,

the troop commander and the HTA had frequent one-on-one dialogues. There were several purposes for these discussions. From the commander's viewpoint, he wanted to be able to get feedback from her on what he felt was going on in the area. Additionally, he wanted to know her analysis of the human terrain, especially as it pertained to perceptions of Mashadani. He also valued her non-military viewpoint, which gave him a different perspective on the area. Additionally, she was able to provide insights into the perceptions of the Iraqi females with whom she talked. The female viewpoints were a source that the unit had never been able to use before.

From the HTA's perspective, these almost daily discussions with the commander allowed her to tailor her questions to ensure that she was answering the information requirements for the unit. As the HTT leader, one of my priorities was to ensure that all embedded members provided value to the units with whom they lived. Answering the company information requirements was the key way to get this done.

Integration did not stop at the company level. The HTA directly sought out and engaged members of the platoons as well. Platoon members conducted many of the low-level key leader engagements (KLEs) that allowed her to gather important data that in some cases was not as biased as that coming from the higher level KLEs conducted by the commander. Additionally, many informal leaders were identified through the platoon-level KLEs. Piecing all of these leaders together into a network is a key HTT task, and the Soldiers on the ground provided a wealth of information.

Operations Phase

Probably the most important aspect for any HTT is to gain access to the population. There are many avenues through which the HTT can do this. HTT IZ5 used civil affairs units, State Department embedded provincial reconstruction teams (ePRTs), BCT commander and deputy commander engagements, and attached transition teams as means to get out and talk with various Iraqis. However, the majority of contacts came while accompanying elements from company-level units on patrol. While all HTT members conducted KLEs, it was

primarily through company-level patrols that HTT members gained access to people on the street. With very few restrictions, almost every mission that a unit conducted was a target of opportunity for the HTA to talk to people. As the team leader, my only guidance was that the HTT not accompany any raids specifically targeting an individual for capture. The reason for this is that the HTT is prohibited from engaging in any specifically lethal events to include soliciting information regarding enemy combatants. Outside of these missions, members of HTT IZ5 went on just about every other kind of mission conducted by the BCT.

In the Al Fadhl area and adjacent regions of the troop's battlespace, the HTA went on almost daily patrols with the troop. Prior to going outside the wire, she would review her questions with the unit so they understood what she wanted to ask. Thus they could focus on getting her access to the specific kinds of individuals with whom she needed to talk. As habitual teamwork developed between the HTA and the troop, the need to go over these questions lessened. The commander and HTA also reviewed the information requirements at the nightly sync meetings, and this also enhanced the teamwork between the unit and the HTA.

On the ground, the HTA would use different approaches depending on the individual with whom she needed to talk. While the HTA could not collect intelligence on individuals at times that was the platoon's purpose for the mission. However, in a case where the platoon leader needed information for targeting purposes, she would ask to talk to the person first to get what she needed. In some cases, this would make them more open to talking with the platoon's Soldiers. In other cases, she would approach a person with the platoon leader, and they would tag team asking questions. With one using a more indirect, softer approach and the other being more direct, they were generally effective in getting people to open up.

After returning from a mission, the HTA would write up her field notes. These would include who she talked to, what was discussed, and her analysis of the situation. She would then send these electronically to the troop and squadron commanders. At the same time, she would forward her notes to me at the BCT HQs. We would then update information and reports as needed. Of particular concern at the BCT was identifying social networks within the BCT's OE and surrounding areas, and her interviews helped build these network diagrams.

Shifting Focus

Some information requirements tended to be constant. However, as the situation on the ground changed, the troop's requirements also changed. A key example is what the commander needed to know after Mashadani's arrest. The strong teamwork developed between the HTA and the unit enabled her to shift focus immediately and start collecting answers to those questions. Again, the commander specified what he wanted to know. These included:

• Who was filling the power vacuum left after Mashadani's arrest? How did the people feel about the remaining SoI forces and also GoI forces in Al Fadhl?

Human terrain team analysts speak with an Iraqi man in Basra as part of an atmospheric survey.
MC1 Lynn Friant, USN

• How did the people view the ISF in the aftermath of the arrest? Was the ISF "winning the hearts and minds?"

• How would the populace react to unity and reconciliation events? This was a big part of what Mashadani did, which helped elevate his importance in the area. Would the Shi'a-Sunni cooperation now end and revert back to sectarian strife?

• What would be the impact of internally displaced people who were returning?

• With an upcoming move of U.S. forces out of the city, how would the people view that move and would they continue to have trust in the ISF to provide security?

Again, having clear information requirements allowed the HTA to collect the necessary information and answer what was needed.

Support Issues

One final note about integrating an HTT member into a company element is that the HTT is almost completely dependent on the unit for everything. Outside of the unique interviewing and research skills, the HTT has very limited resources. Thus, a company-level unit will have to provide all life support for the HTAs. Key requirements include transportation and security during missions. HTT members may be armed, but due to the nature of their work, their concern is talking to people, not security. At the JSS/COP, the HTA will require living space and connectivity to the network. Furthermore, HTTs are a combination of male and females so units need to be cognizant of requirements if a female team member embeds with them.

Conclusion

The troop commander in Al Fadhl maximized the effectiveness of the HTT, and this benefited not only the BCT with its understanding of the area, but more importantly, those on the ground where his Soldiers patrolled every day. Getting the HTA out in the field immediately after the Mashadani's arrest was critical in determining what approach the troop, squadron, and BCT would use. When I asked the troop commander what made the HTT/troop combination work so well, he had three main points:

• Leadership's understanding of capabilities and being able to use the right asset at the right time;

• Close teamwork between the HTA and all members of the command; and

• Allowing the HTA the opportunity to provide feedback and making her feel like a member of the team.

This case in east Baghdad clearly illustrates the value that the HTT can provide to the company commander. While they still have a priority to answer BCT information requirements, an HTT can provide valuable insights to the company. With a good understanding of this unique enabler and specific information requirements, a company commander can use the HTT to better know the people in his battlespace and thus unite with them to defeat the insurgency.

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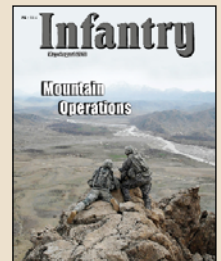
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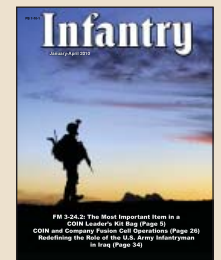
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Effective Use of the Platoon FO in Humanitarian Assistance Operations

1LT JAROD TAYLOR

The well-trained Infantry platoon leader knows that his assigned forward observer (FO) is a combat multiplier and a crucial asset to his unit. FOs are attached to light, airborne, and air assault Infantry platoons (organic to the maneuver battalion), and their core competency of coordinating and adjusting indirect fires is a significant complement to the supported unit's lethal potential in non-permissive operating environments. FOs have a well-defined role in combat; as their platoon's fire support representative, they employ indirect fires under the direction of the platoon leader. However, their role is much less defined in permissive operating environments in which the delivery of lethal fires, both direct and indirect, may be inappropriate or unnecessary or both. While the FO is trained principally in synchronizing indirect fires and controlling other munitions delivery or intelligence, surveillance, and reconnaissance (ISR) assets, the nature of his training as an "observer" makes him just as crucial an asset in the aforementioned types of permissive operating environments.

The techniques for the employment of FOs are clear in offensive and defensive operations (defined in FM 3-0, *Operations*), since these involve the employment of lethal fires to achieve the intent and purpose of the unit's assigned mission. However, stability operations (defined in FM 3-0 and FM 3-07) may or may not involve the employment of lethal fires. Stability operations, such as foreign humanitarian assistance, are often conducted in permissive operating environments in which the use of lethal fires — especially indirect fires — is restricted or nonexistent. In these types of stability operations, everyone assigned to the unit, including the FOs, must identify the appropriate tactics, techniques, and procedures that will allow the achievement of the mission in accordance with the commander's intent and endstate. The platoon FO's role does not have to disintegrate and, in fact, does not need to change much at all. Instead of managing and coordinating lethal fires for his platoon, he can manage and coordinate stability operations equivalent of fires — nonlethal effects. A skilled and trustworthy platoon FO can assume these responsibilities and remain a force multiplier while his unit is engaged in stability operations.

During Operation Unified Response, the "Orphans" of 2nd Platoon, C Company, 2nd Battalion, 325th Airborne Infantry Regiment, used their platoon FO in such a manner while deployed to Port-au-Prince, Haiti, from January through April 2010. This operation primarily involved delivering or supporting the delivery of humanitarian aid supplies and disaster relief services and was thus categorized as foreign humanitarian assistance. The Soldiers, Sailors, Airmen, Marines, and Coast Guardsmen assigned to Joint Task Force-Haiti focused on the mission to prevent massive loss of life and mitigate suffering following the 12 January earthquake. While other platoons in the battalion used their FOs mainly as an additional radio-telephone operators, 2nd Platoon effectively employed its young but highly skilled 13F — SPC David Williams — as

Photos courtesy of author

Soldiers with C Company, 2nd Battalion, 325th Airborne Infantry Regiment, visit a makeshift school set up in an internally displaced person (IDP) camp.

Soldiers with C Company, 2-325th AIR talk to displaced persons at College St. Pierre in Port-au-Prince about an upcoming aid distribution mission.

an effects coordinator and an ISR asset at the platoon level. This greatly increased the platoon's effectiveness in gathering, managing, and organizing the information that helped form a complete operational picture for the company commander and battalion intelligence section.

The platoon FO is a true human sensor because he is trained and proficient at lethal fires observation. He is conditioned to think at the company and platoon levels of operation. These distinctions from untrained observers (i.e., the average Soldiers in a platoon) are important, because they set apart the FO as an asset with unique capabilities. In an environment such as Port-au-Prince during Operation Unified Response, which exhibited the absence of a declared hostile force and a list of strict theater-directed rules of engagement, the only transition that SPC Williams needed to perform in order to be effectively used to coordinate non-lethal effects was to understand the unit's priority information requirements (PIRs), the public affairs officer's top-line messages, and the key personnel and terrain in the operating environment. Instead of tracking indirect fire targets, SPC Williams tracked non-lethal targets such as key contacts and infrastructure. He became the platoon's primary ISR asset and was still an important member of the team despite not being used to call for and adjust fires.

During Operation Unified Response, SPC Williams was initially used primarily as a link to the company intelligence support team (CoIST). Other typical tasks for him included taking pictures to provide context with patrol reports and assisting the PL with managing key contacts. The PL and FO worked as a team to manage the information that was gathered during patrols in Port-au-Prince in order to "answer" the company and battalion PIRs. Initial PIRs included the location of key infrastructure (such as police stations, fire departments, government building, hospitals, and other essential services), internally displaced person (IDP)

camps, and key leaders for each identified location. As C Company and the battalion pieced together an accurate picture of the OE, we leveraged the information it had been gathering to make its missions in the operating environment more effective. With a complete operational picture and specific guidance from higher headquarters, 2nd Platoon and the rest of C Company began to operate within four explicit lines of effort directed by the 2-325 AIR headquarters: security, governance, information operations, and transition to United Nations forces.

As the battalion developed the OE and settled into a sustainable tempo of operations, the PIR list grew to include 10 separate items, which was further subdivided into more than 50 separate specific information requirements (SIRs) and specific observation requirements (SORs). It would be difficult, regardless of how detailed and complete a patrol debrief was conducted, to answer many of those PIRs, SIRs, and SORs without an organized effort and detailed ISR collection synchronization. While the rest of the platoon was pre-briefed for patrols to remain vigilant in detecting the major indicators that answered the most important PIRs, the PL and FO focused on specific intelligence requirements that required a detailed understanding of the collection imperatives. As a trained observer, SPC Williams was skilled at understanding these PIRs and collection requirements and, with a camera, was adequately equipped to enable the platoon to accomplish these information collection tasks. With this division of labor, SPC Williams was a significant contributor to ongoing information and intelligence collection efforts and enabled 2nd Platoon to be C Company's most effective ISR asset. In this capacity, the platoon rapidly identified more than 30 IDP camps soon after arriving in OE WHITE, compiled the required intelligence packets for future operations, and continued to affect these camps in accordance with the battalion's lines of effort throughout the operation.

By liaising with the company fire support officer (FSO) and CoIST, SPC Williams kept the company's list of contacts ("targets") up-to-date and reconciled what pertinent information still required collection. This list was passed along to the PL in order to synchronize collection efforts with current and future operations. The "target packets" that the CoIST maintained were crucial in preparation for key leader engagements. They included profile photos and photos of the location where the contact worked or resided to facilitate identification. C Company assigned key leaders to contacts and organizations in order to simplify recurring interaction (necessary with contacts who may not understand the military's organizational structure) and to facilitate reporting requirements. While the ultimate goal was for a designated

C Company key leader to handle all the engagements with his assigned contacts, this was frequently impossible or inefficient due to the tempo and geographic dispersion of operations. The target packages were especially helpful in preparing for missions when alternate leaders within the company were selected to engage key contacts.

The target packets that the CoIST cell maintained and to which SPC Williams contributed were one of the ways the FO helped the PL manage key contacts. Additionally, in 2nd Platoon's key leader engagements, SPC Williams was always present to take pictures (of the engagement and the contact) and to take notes during the meeting. This method was used and found to be effective in key leader engagements including those with the French Ambassador to Haiti, Haitian and UN police leaders, representatives of various nongovernmental organizations, high-ranking U.S. military leadership, the Port-au-Prince mayor and other city officials, representatives of the government of Haiti, and representatives from the U.S. Agency for International Development and the U.S. Secret Service.

Between the memory of the PL and SPC Williams taking copious notes, each leader engagement could be recreated in narrative and submitted as a report for higher headquarters' digestion and further analysis at the platoon level. Often, these notes and pictures were crucial in maintaining awareness of what had been said to who, by whom, and where — keeping the platoon relevant by improving the efficiency and effectiveness of the key leader engagements.

Undoubtedly, SPC Williams was used in a unique fashion. Instead of being utilized only as an additional RTO, the platoon maximized the use of its trained observer as an ISR asset and a skilled coordinator of effects. Non-lethal effects are not harder to coordinate than lethal fires, they are just different. In addition, observation in permissive environments is understandably easier than when engaged with a hostile force. In these circumstances, the FO can accomplish similar duties in stability operations as he does in offensive and defensive operations, and remain an important member of the platoon team. Fire supporters are easily flexible and agile enough to transition to an effective role in stability and support operations; this has already been proven by the Field Artillery branch's willingness to embrace non-lethal effects in addition to its core competency of indirect fire delivery and control. However, it must be recognized that this flexibility does not only manifest itself in senior NCOs and officers — the sergeants and specialists filling the role of platoon FOs in light Infantry units can adjust and adapt just as well as their senior leadership. Their ability to understand how to affect the battlefield for friendly forces in a positive manner in stability operations is essential to maintaining the effectiveness of the maneuver battalion. The "Orphan FO" from 2nd Platoon, C/2-325 AIR accomplished this in distinguished fashion during Operation Unified Response and carved a niche for FOs in foreign humanitarian assistance missions of the future.

At the time this article was written, **1LT Jarod Taylor** was serving as an airborne rifle platoon leader with 2nd Platoon, C Company, 2nd Battalion, 325th Airborne Infantry Regiment at Fort Bragg, N.C. He currently serves as the executive officer for B Company, 2-325 AIR. 1LT Taylor graduated from the U.S. Military Academy at West Point in May 2008.

The Battalion LNO in HA, Disaster Response Operations

1LT MATT MCMILLAN

Infantry officers don't want staff jobs, and they often consider the liaison officer (LNO) duty as one of the worst of the lot. However, the usefulness and relevance of an LNO depends on that officer's professional competence. The following proven practices, compiled from the experience of six liaison officers who served on the 2nd Brigade, 82nd Airborne Division staff during Operation Unified Response, showcase easy-to-implement means by which an LNO may turn a staff penance into an opportunity for success.

Carbon Copy: Essential

If two headquarter elements communicate heavily via e-mail, as they did in Haiti, the LNO gains crucial situational awareness through carbon copy (CC). An LNO should request a CC of every piece of e-mail moving between battalion and brigade and should take action when the same issue bounces back and forth unanswered. Reading these masses of e-mail day after day — the drudge work — is an LNO's job.

Know When to Eschew E-Mail

The point of constantly reading e-mail, however, is that the LNO knows how to seek an answer in person and from whom. A battalion's requests for information (RFIs), for example, often went unanswered thanks to the daily deluge of e-mail in brigade staff officers' inboxes. An LNO intervenes in these situations, seeking face-to-face contact with the intended recipient. Fortunately, overwhelming anecdotal experience demonstrates that staff officers can answer RFIs "on the spot."

In general, the phone should be the default means; e-mail the secondary means. If an issue requires more than three lines in an e-mail, it should be handled by phone. Consider the "hard times" — it takes at least five minutes to write a message, and sent/received time varies from immediate to several hours. It takes at least 15 minutes to read and write a response, and sent/received time to the response varies as much as before. Assuming a best-case scenario, the loop takes half an hour. An LNO tapping a staff officer on the shoulder produces results more quickly.

Brevity and Clarity

In Haiti, the battle update brief became the humanitarian assistance update brief. The principle is unchanged. The LNO summarizes the activities of the

day for the brigade commander. Any officer knows that briefing preferences vary widely according to the audience, but there are some principles specifically relevant to an update.

Notes (what the LNO speaks) should match bullets (what the slide displays). Accordingly, part of every note read aloud should repeat a part of a slide verbatim. If a slide bullet reads "Shelters Distributed," an LNO should say, "you'll see under 'Shelters Distributed' that we gave out 4,000 shelters today …" Don't put your audience to sleep by reading directly from the slides, but don't make them hunt for the information either.

This is not condescension. Brigade commanders are busy. They don't have time to hear an LNO's briefing, ponder its meaning, and deduce how it applies to a confusing array of charts and graphs. They need their hands held, not for clarity's sake but for brevity's. It's easy to foul up a briefing with flowery language. It's almost impossible to oversimplify.

To put it another way, each spoken topic should "leash" one bullet. Simplicity and directness, combined with directional phrases ("you'll see on the slide," "in the top right corner of the slide," "in the lower graph on the slide") get the point across quickly and cleanly. The presentations themselves are also useful — cataloguing them in a single share-drive folder makes for easy retrieval if necessary.

General Organization

An LNO writes down everything that requires action. Memory is unreliable; he may be pulled away from the topic at hand for several hours. When he returns, he might not remember the name of the neighborhood where a shooting occurred or the grid coordinates to a drop-off point. Written, consolidated information in one place — usually a green leader's book — precludes this problem. The written format is nothing revolutionary: the five W's and how.

Digital Tracking

Using a Microsoft Word file as a digital information catalogue is extremely useful. Everything that does not go into the green leader's book should go into this document. The names of Excel tracker sheets, file paths on share-drives, points of contact, and similar bits of information don't require action, but forgetting them forces an LNO to seek the same information twice (to duplicate effort). By keeping the file open and using it as a notebook, an LNO can record all information that he might have to reference later. The digital format makes searching for a topic easy, using "CTRL+F" to find key terms.

This method also ensures that another LNO can pick up the task at hand without searching for the party originally responsible for the request, eliminating further duplication of effort and vital time loss.

LNO issues might seem petty, or at least the degree of seriousness in which this article takes them. Fair enough. Certainly e-mail procedure is less important than daily patrols. But consider the effects — in any large organization, there will be a large amount of coinciding paperwork. Someone has to do it, and that someone shouldn't have to split attention between their Soldiers and their e-mail. The more effective an LNO is, the easier it is for the rest of the staff to focus on doing their jobs. The end result is tangential but no less vital — an effective LNO saves lives, or at least makes the lives of those doing the saving easier.

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MSGT Jeremy Lock, USAF

Soldiers with the 2nd Battalion, 325th Airborne Infantry Regiment unload food and water for Haitian earthquake victims in Port-au-Prince on 20 January 2010.

Operation Unified Response — Joint Task Force-Haiti

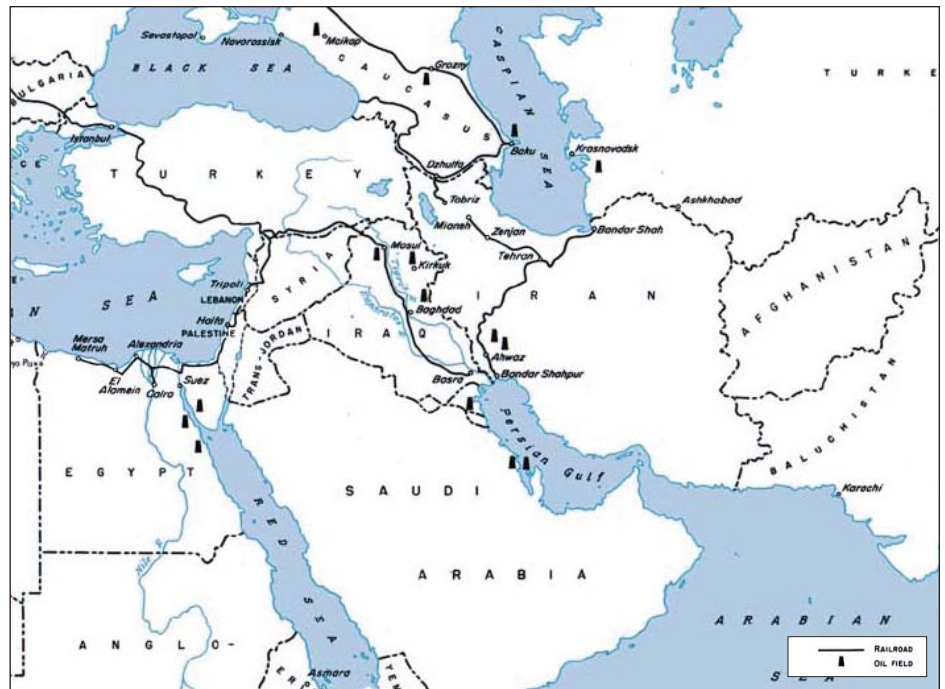# Axis and Allied Intervention, Collaboration in Iran

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J.D. THORNTON

Great Britain had a vested interest in Iran long before the onset of World War II. A key interest was obtaining and maintaining steady petroleum supplies, a strategic interest that existed before the beginning of World War I. The British, with their large and strained empire, were concerned that American, Dutch, or French oil companies were attempting to gain a favorable foothold in Persia as petroleum suppliers and that the British claim may be jeopardized. In 1908, the British Empire discovered a large oil reserve in Persia not far from where French archaeologist Jacques de Morgan first spotted oil seepages in southwest Persia in 1892. It was not until 1901 that attempts were made to exploit them. The fact that Winston Churchill, as first Lord of the Admiralty, converted the British Navy from coal to petroleum engines by 1912 was another important element in the United Kingdom's need to secure a key position in the oil market. Iranian prospects led to the establishment of the Anglo-Persian Oil Company (APOC — later the Anglo-Iranian Oil Company which

The Persian Corridor and Aid to Russia, U.S. Army Center of Military History

Figure 1— Approaches to the Middle East

then became British Petroleum) in 1914. The British government maintained a majority stock in APOC. Furthermore, given the German war machine's threats to North Africa, the British felt it might lose a main source of oil — Egypt — to the advancing Afrika Korps.

The primary objective for the British forces, along with the Soviet Union, in invading Iran was to secure the Abadan Oil Refinery, which was owned by the Anglo-Iranian Oil Company. Abadan's location was in close proximity to the Iraqi border. Iraq and its neighbor Syria were influenced by pro-German intrigue. Even though much of the pro-Axis agitation had been thwarted, it was still possible for the Axis to continue waging their propaganda war and sabotage the Allies by using the Arab population as pawns. Capitalizing on anti-colonial feelings, and through the Iraqi government under Arab nationalist Rashid Ali Gaylani, the Nazis did their best to curry favor among Arab leaders in Syria, Iraq, and the Gulf.

Anglo-Soviet Policy Before World War II

British and Soviet involvement in Iran predates both World Wars. In 1800, Captain John Malcolm, a representative of the British East India Company was sent to Persia to gain friendship with the Fat'h

Ali Shah. This was to counter the ruler of neighboring Afghanistan, Dost Mohammad Khan, who showed a propensity in attacking British interests in India. Within a decade, an agreement between Persia and the British was reached, allowing Britain to train Persian troops in an effort to aid in containing Afghan tribes.

Soviet interests in Iran, by contrast, had existed since the days of the ascendancy of military and economic influence of the Russian Empire. Tsarist Russia focused on building its landmass, military, and economic hegemony over eastern Europe and central Asia, and this naturally brought it into conflict with its neighbors. As European influence began spreading in North Africa and the Middle East, Russia felt it needed to assert itself in the region. Persia was east of the Ottoman Empire, and like the Ottoman Empire, had a land boundary with Tsarist Russia. Russia began putting economic and diplomatic pressure on Persia during the late 19th and early 20th centuries.

Eventually, both British and Russian desires for Persian economic influence converged. This was marked by the 1907 Anglo-Russian Convention that divided Persia into three zones of influence: a Russian sphere in the north, a British sphere in the southeast, and a neutral zone in the west and center of the country.

(Russian and British officials agreed to this without consulting Persian officials.)

Naturally, Britain and Russia exerted considerable influence on Iran's trade and internal politics. The Anglo-Russian Convention declared that British and Russian governments would have exclusive rights over the natural resources contained within their respective spheres of influence.

Policy in Iran on the Eve of WWII

At the outbreak of WWII, Iran had officially declared its neutrality; however, at the same time, in order to break the continuous Soviet and British hegemonies and assert its own sovereignty, Reza Shah Pahlavi chose to establish economic ties with a rival power – Nazi Germany.

During this time, Operation Barbarossa was underway, and Britain felt that its Iranian interests were threatened by Iran's neutrality and economic relationship with Nazi Germany. This gave the newly Allied Soviets and the British impetus to invade Iran. The two Allies rationalized that they needed to invade Iran in order to protect Allied oil interests and to prevent the Iranians from capitalizing on German technological ties that might undermine the Allies.

In addition, with the word Iran meaning "Land of Aryans," the Nazis, as part of their philosophy, were in search for the origins of the Aryan people and thus blurred history and etymology to enhance Iranian-Nazi ties.

On 25 August 1941, the British and Russians invaded Iran. Iran deployed nine divisions of troops; the Allies deployed the 44th, 47th, and 53rd Soviet Armies along with the 8th and 10th Indian Infantry Divisions, the 21st Indian Infantry Brigade, the 2nd Indian Armored Brigade, and the 9th Armored Brigade. The Shah's army was ill-prepared for such an invasion. Less than four weeks later, the invasion (code-named Operation Countenance) was over, with the Allies securing their supply line to the eastern front.

Another objective of Operation Countenance was the removal of Reza Shah to abdicate in favor of his son, the young Mohammed Reza. The new Shah signed the Tripartite Agreement with England and the Soviets in January of 1942. A key clause in the Tripartite Agreement stated that: "The forces of Allied powers shall be

Reza Shah Pahlavi

withdrawn from Iranian territory not later than six months after all hostilities between the Allied powers and Germany and her associates have been suspended."

This agreement re-asserted Iranian sovereignty only after World War II. The Russians and the British, having several decades of almost unquestioned influence in Iran, sought to keep it that way especially during World War II. Even during the agreement's enforceability dates, the Russians were supplying Iranian separatists to prolong their influence over Iran. The Anglo-Iranian Oil Company had valuable concessions in Khuzestan, which Moscow criticized, due to the proximity to the Soviet sphere of influence. In addition, both London and Moscow saw a development they did not approve of — the encroachment of American oil companies into Iran in 1944.

Lastly, the Russians delayed in withdrawing their troops after hostilities had ended. Though hostilities between the Axis and Allies had ended in 1945, in March 1946, some Russian troops still occupied Iran. They justified this under Article Six of a 1921 treaty between the Persians and the Russians, which allowed for Soviet military presence and intervention in Iran in the case of Soviet territory being threatened by a third power occupying Iranian soil.

After the war, the Soviets, British, and Americans were competing for economic influence over Iran. These powers exerted internal influence over Iranian politics and would continue this activity until the toppling of the Shah in 1979.

Iranian Ties with Nazi Germany

Reza Shah Pahlavi had fostered close economic and cultural ties with Germany since the Weimar Republic in 1921. Iran's trade with them rose from 8 percent to 60 percent. Persian exports of cotton, barley, wood, rice, silver, gold, and other goods attracted German trade. In exchange Germany supplied Iran with industrial equipment, machinery, and motor vehicles. The Iranian railroad system boasted 2,100 bridges and 224 tunnels. The 900-mile railroad stretched from Bander-e Shahpur on the Persian Gulf to Mianeh near the Russian border. The airline system was operated by German capital, equipment, and personnel. German engineers, technicians, and architects comprised the majority of the foreign expatriates in Iran.

In 1935, Reza Shah asked foreign delegates to use the term Iran (the historical name of the country, used by its native people) in formal correspondence. Iran's military had 40,000 men by 1926 and swelled to 126,000 by 1941, which included 14 divisions and five independent brigades. Tanks and armored vehicles were provided by the Czech firm Skoda, which was under Nazi control after 1938. Iran's air force was composed of 200 obsolete British biplanes and small navy patrolling craft delivered in the Persian Gulf.

German diplomacy became considerably more active in the Near East. During the late 1930s Nazi officials paid good-will trips to Middle Eastern capitals. Dr. Hjalmar Schacht, Minister of Economics, paid official visits to Istanbul and Tehran in 1935. Reichsjugendführer (Minister of Education) Baldur Von Schirach, toured Ankara, Damascus, and Tehran in December 1937. Nazi propaganda played on the alleged Aryan origins and ties between the two countries. An active element of the *Abwehr* (German military intelligence) existed in northwestern Iran. The mission of this active German organization in Iran was to gather intelligence on Soviet oil facilities and military activities in the Caucasus. German agents were to infiltrate labor and

government circles, thereby sabotaging the production of British oil interests in Abadan. Many of these agents operated under the direction of Dr. Fritz Grobba, German ambassador to Iraq and Saudi Arabia, who moved his office to Tehran after the outbreak of the war. British intelligence and Sir Reader Bullard, London's minister in Tehran, estimated the spy network of Germans in Iran to be around 3,000. Agents were consistently infiltrating the Soviet border on surveillance missions.

Iran During WWII

At the outbreak of World War II, the Iranian government explained the country's stance to German intelligence agent Bernhard Schulze-Holthus:

"You must understand the situation in this land (Iran) properly. For decades we have been living in a high tension field of international politics between Russia and England. The Russians have exploited our earlier weakness and have taken the Caucasus from us ... the British ... [act like] white lords who look upon us as colonials and treat us with unbearable arrogance... what remains to us then, except to play the one off against the other? The Russians against the British and vice versa. But today we are expecting a great deal from a third power, which can be either the USA or Germany" (Howard Sachar, *Europe Leaves the Middle East 1936-1954*).

With Iran's neutrality declaration, a British naval blockade took effect immediately, and German merchant ships were barred from the Persian Gulf port of Bander-e Shahpur. The economy of Iran weighed heavily on continued trade with Germany. On 28 September 1939, German goods were passed to Iran via the Soviet Union despite the inner circles of the Shah's cabinet who urged him to move away from Iran's reliance on Germany. The Iranian government deeply expressed its concerns to the United States over the Soviet invasion of Finland and began hastily constructing fortification lines with six Iranian divisions stationed along its northern borders, but they were ill-equipped to handle a Soviet attack.

The Middle East Command in Cairo, headed by General Sir Archibald P. Wavell, presented to the War Office a detailed analysis of the Soviet threat to Iran and recommended British counter-measures. Wavell advocated deploying one division and a fighter squadron to defend the Iranian oil fields and the port of Basra in Iraq. The War Cabinet agreed with Wavell's proposal. However, with the initial successes of Germany's campaign against the Soviet Union and the danger of a potential German infiltration in the Middle East, a new mutual struggle

brought the two Allies together. On 7 July 1940, Italian Foreign Minister Count Ciano presented Hitler with Mussolini's plan for reorganizing the Near East. The plan was summarized as follows:

*Egypt and the Sudan: Italy to take over Britain's politico-military, juridical position. Elimination of the Suez Canal Company and the establishment of a special regime for the Canal Zone.

*Independence for Syria, Lebanon, Palestine and Transjordan; Italian occupation of strategic points; treaty of exclusive alliance with Italy.

*Military joint occupation of Aden, Perim, and Socotra (Islands strategically located near the southern entrance into the Red Sea off the southwestern coast of Yemen and Somalia).

*Cession of British Somaliland and Djibouti to Italy.

No word was mentioned in Mussolini's plan regarding Iraq or Iran. It was presumed that both Iraq and Iran were to be allocated to the German sphere of influence.

On 26 June 1941, the Soviet ambassador in Tehran, Alexei Smirnov, delivered a note to the Iranian foreign ministry stating that his government had "serious evidence" of a planned German coup d' etat. The U.S. Ambassador to Tehran, Louis G. Dreyfus Jr., replied to a query from Washington, D.C., that neither he nor the British possessed reliable information on the internal organization of a Nazi "Fifth column" in Iran. Britain's Ambassador to Tehran, Sir Reader S. Bullard, informed his government that "Iranians generally are delighted at the German attack on ... their ancient enemy Russia." As Nazi successes in the Soviet Union accelerated, Iranians gathered in Tehran's Sepah Square to cheer loudly each time the media announced the fall of a Soviet city. The German military high command in Berlin ordered that after the collapse of the Soviet Union, plans should be drawn that addressed the British presence in the Near East and it would be subject to a "concentric attack" that would include a motorized advance through Iran.

General Edward P. Quinan (left) meets with General Sir Archibald P. Wavell in the Middle East in April 1941.

In Cairo, General Claude Auchinleck's Middle East Command was drafting plans to address a potential German breakthrough in Turkey or the Caucasus by defending northern Iraq and advancing Allied forces north of Iran. Details of this plan against Iran were being leaked to both German intelligence and the Shah by Egypt's anti-British King Farouk. The Egyptian monarch made secret contacts with Berlin through his father-in-law Zoulfikar Pasha, Egyptian Ambassador to Tehran. Farouk stated that he had reliable information about a British decision to occupy not only the Anglo-Iranian Oil Company concession area and the ports of the Persian Gulf but also Kermanshah. With the Afrika Korps poised on the Egyptian frontier, Farouk attempted to undermine the British position in Egypt. British chiefs of staff were concerned that the *Wehrmacht* (German armed forces) might reach the Caucasus by mid-August, at which point the Germans might attempt to deny Britain its use of the northern airfields in Iraq and assumed that Iran would actively cooperate with Germany and allow Axis use of Iranian airfields. The British planners estimated that the Germans would launch a land offensive against Iraq from either Iran or southern Turkey utilizing four divisions from Tehran and one division from Tabriz. They stated that such an attack would most likely develop before April 1942.

In July 1941, General Wavell stated his view:

"It is essential to the defense of India that the Germans should be cleared out of Iran now. Failure to do so will lead to a repetition of events, which in Iraq were only just countered in time. It is essential that we should join hands with Russia through Iran, and if the present Government is not willing to facilitate this, it must be made to give way to one which will. To this end the strongest possible pressure should be applied forthwith while the German-Russian struggle is in doubt" (Winston S. Churchill, *The Grand Alliance*).

The British War Cabinet agreed on 22 July to prepare for a joint Anglo-Soviet military action.

American Minister to Tehran Dreyfus emphasized:

"I do not minimize the fifth column danger. I am convinced, however, that

At the Tehran Conference 28 November to 1 December 1943, Joseph Stalin, Franklin D. Roosevelt and Winston Churchill met at the Soviet embassy in Iran to discuss war plans. They also reaffirmed their commitment to Iran's independence and offered economic assistance.

the British are using it as a pretext for the eventual occupation of Iran and are deliberately exaggerating its potency as an isolated arm. I have come to the conclusion that the British and Russians will occupy Iran because of overwhelming military necessity no matter what reply the Iranians make to their demands. I must add emphatically to avoid misunderstanding that I am in full agreement with the British action and believe it to be a vitally necessary for the furtherance of our common cause" (Richard Stewart, *Sunrise at Abadan: The British and Soviet Invasion of Iran, 1941,* page 55)**.**

Wavell instructed General Officer Commanding General Edward P. Quinan, to be prepared to occupy and secure the Abadan refinery as well as the Khuzistan and Naft-e shah oil fields. Quinan's plan was code-named Operation Countenance.

Operation Countenance

The 22 August 1941 *New York Times* front page headline declared "British and Russians poised to move into Iran." Iran attempted on several occasions to persuade the U.S. government to invoke its respected moral authority. Iranian Minister to Washington Mohammed Shayesteh cited how Secretary of State Cordell Hull and other U.S. officials proclaimed the principles of peaceful international relations. The Iranian ministers

asked what the U.S. government planned to do to prevent the imminent British invasion of Iran. Hull replied that "British military authorities plan all of their strategy without any consultation with officials of the American government." Hull warned that the Germans had no respect for neutrality and would hurl any state into "serfdom and semi-slavery." Shayesteh replied in meek desperation: "If your government would say but one word to the British, I believe they would not invade Iran" (Stewart, page 94).

Reza Shah appealed directly to American President Franklin Roosevelt using the Atlantic charter as leverage. He wrote:

"...on the basis of the declarations which Your Excellency has made several times regarding the necessity of defending principles of international justice and the right of peoples to liberty. I beg Your Excellency to take efficacious and urgent humanitarian steps to put an end to these acts of aggression. This incident brings into war a neutral and pacific country which has had no other care than the safeguarding of tranquility and the reform of the country." (Stewart, page 168).

President Roosevelt replied:

"Viewing the question in its entirety involves not only the vital questions to which Your Imperial Majesty refers, but other basic considerations arising from Hitler's ambition of world conquest. It is

certain that movements of conquest by Germany will continue and will extend beyond Europe to Asia, Africa, and even to the Americas, unless they are stopped by military force. It is equally certain that those countries which desire to maintain their independence must engage in a great common effort if they are not to be engulfed one by one as has already happened to a large number of countries in Europe. In recognition of these truths, the Government and people of the United States of America, as is well known, are not only building up the defenses of this country with all possible speed, but they have also entered upon a very extensive program of material assistance to those countries which are actively engaged in resisting German ambition for world domination." (Stewart, page 168-169).

Operation Countenance began with an attack by the British warship HMS *Shoreham* on the harbor at Abadan, which destroyed the Iranian sloop *Palang* on 25 August 1941. The Allied plans had been carefully worked out to conform to the historic spheres of influence of the 1907 Anglo-Russian Entente. From the west and southeast, concentrated at Basra, the British Iraq Command known as Iraqforce (renamed Paiforce) was under the command of Quinan. Paiforce was composed of the 8th and 10th Indian Infantry Divisions, 2nd Indian Armoured Brigade, 9th Armoured Brigade and the 21st Indian Infantry Brigade, and one bomber and a fighter squadron. The Russians entered the north with their 44th, 47th and 53rd Armies. The Persian Army mobilized nine infantry divisions. The objective was to seize the oil refinery at Abadan, which was 50 miles down river from Maqil. Local Iranian troops, though armed with the heavy caliber Skoda artillery, lacked training. The refinery was captured without damage with little to no British casualties. The 10th Indian Division entered Khanaqin from the west under the command of Major General Sir William Slim. Iranian troops retreated at the sight of Blenheim bombers overhead by 27 August. On 28 August, Tehran called for a truce. British casualties included 17 killed and 42 wounded.

The Russians in the northwest found their campaign even easier. A mechanized column from Tiflis (Tbilisi) and another from Baku converged on the town of Qazvin, Bandar-e Pahlavi and Maku on the Caspian coast, north of Tehran. At 1500 on 31 August, Iranian

Prime Minister Foroughi informed the British and Soviet legations that his government accepted the Allied terms. The British and Soviet forces met in Tehran on 17 September with the oilfields safeguarded and the strategic Trans-Iranian Railway undamaged. The Shah and his family boarded a British steamer bound to Johannesburg, South Africa, which is where he died on 26 July 1944. On 17 September, his son, Mohammed Reza ascended to the throne and took a pro-Allied stance for the duration of the war assuring war materiel supply routes were conveyed to Russia.

Conclusion

Following Operation Barbarossa, the struggling British swiftly gained a crucial ally against the seemingly unstoppable Nazi war machine. The pro-Nazi coups in Iraq led by Rashid Ali Gaylani and the Vichy French control of Syria had left Iran open to potential harassment by Axis involvement. With Iran firmly in the hands of the Allies, the utilization and pooling of a supply route to the Soviet Union was established.

The Nazis were desperate in sealing additional fronts to divert the British from concentrating their efforts with the Soviets. A German conquest of the Caucasus, Persian oil fields and an outflanked British position in North Africa, linked up with Japanese forces in India, would have been disastrous. The beleaguered Red army was saved from defeat, and German plans for the Middle East were thwarted, thus later creating forthcoming conditions of the Cold War.

As stated by Lord George Curzon, British Viceroy of India, "It should be a cardinal axiom of British policy that her Majesty's Government will not acquiesce in any European power, and more especially Russia, overrunning central and southern Persia and so reaching the Persian Gulf, or acquiring naval facilities in the latter even without such territorial connections" (Stewart, page 4).

Today, being the chief financier of Hezbollah and with its hand in the development of atomic energy and its growing nuclear program, originally endorsed by the United States under Eisenhower's Atoms for Peace program, Iran has become a major player in the grand political arena of the Near East that the U.S. can no longer afford to overlook.

National Museum of the Air Force

U.S. planes stand ready to be picked up at Abadan Field, Iran. During World War II, the Soviet Union received almost 15,000 U.S.-built aircraft under the lend-lease program.

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A list of references is available through *Infantry* Magazine.

EVOLUTION OF THE M855A1 ENHANCED PERFORMANCE ROUND

LTC JEFFREY K. WOODS

Editor's Note: *This article was first published in the October-December 2010 issue of* Army AL&T *Magazine.*

Perhaps no subject is closer to the hearts of Soldiers than their weapons and ammunition. For decades, this intense interest in "guns and ammo" has sparked sharp debate over the best weapons and ammunition on the battlefield, a debate that continues to the present day.

Today, Program Executive Office Ammunition (PEO Ammo) at Picatinny Arsenal, N.J., manages the Department of Defense's conventional ammunition programs for all of the military services. PEO Ammo has life-cycle responsibility for the many different types of ammunition used by the joint warfighter, including general-purpose small-arms ammunition.

In 1960, when *Army Research and Development News* magazine — the forerunner of *Army AL&T* Magazine — first appeared in print, a major controversy was raging over the relative merits of the then-standard 7.62mm round and a lighter, higher-velocity 5.56mm alternative. The Army adopted the 5.56mm M16 rifle in 1967; it fired the M193, the first 5.56mm round.

Nevertheless, the controversy continued through the years over which caliber was better — 5.56mm versus 7.62mm — as the magazine noted through the years. In 1982, a review by *Army Research, Development, and Acquisition* Magazine (as it was then called) of small-arms ammunition development praised the lighter weight and lesser recoil achieved with the smaller round, yet observed that, "One of the inferiorities is, however, its penetration capability."

In 1982, the Army adopted the 5.56mm M855 round to replace the M193 in an effort to achieve better performance at longer ranges with the M249 Squad Automatic Weapon (SAW). A steel penetrator in the front end of the M855 provides increased hard-target performance.

Development of the M16A2 rifle, which matched the twist of the M249 SAW, also allowed use of the heavier M855 round. The M193 is still produced today, largely for foreign military sales.

From 2003 to 2006, the Army conducted a study of available bullets, commercial and military, and found none that provided improved performance over the M855 against the target sets required of a general-purpose round.

Ensuring Consistency and Environmental Responsibility

In post-combat surveys and field reports from Iraq and Afghanistan, most Soldiers have indicated that the M855 round works fine, delivering the desired effects against threat targets. But some Soldiers have reported that the round did not perform consistently, causing concern in the ammunition community.

In parallel, mounting environmental concerns drove the Army to consider replacing environmentally unfriendly materials such as lead. The Army's ammunition community, led by PEO Ammo, saw an opportunity to address the two concerns associated with the M855 round — lead and consistency.

The Army's solution is the new M855A1 Enhanced Performance Round (EPR). This round offers better performance than the M855 against all targets likely to be engaged with small arms. This is quite a feat, considering the long-standing, solid performance of the M855.

While it's true that a number of bullets (such as armor-piercing bullets) can penetrate hard targets well, they don't provide the needed effects against soft targets. Conversely, some bullets (such as hunting rounds, hollow-point, and other bullets) work well
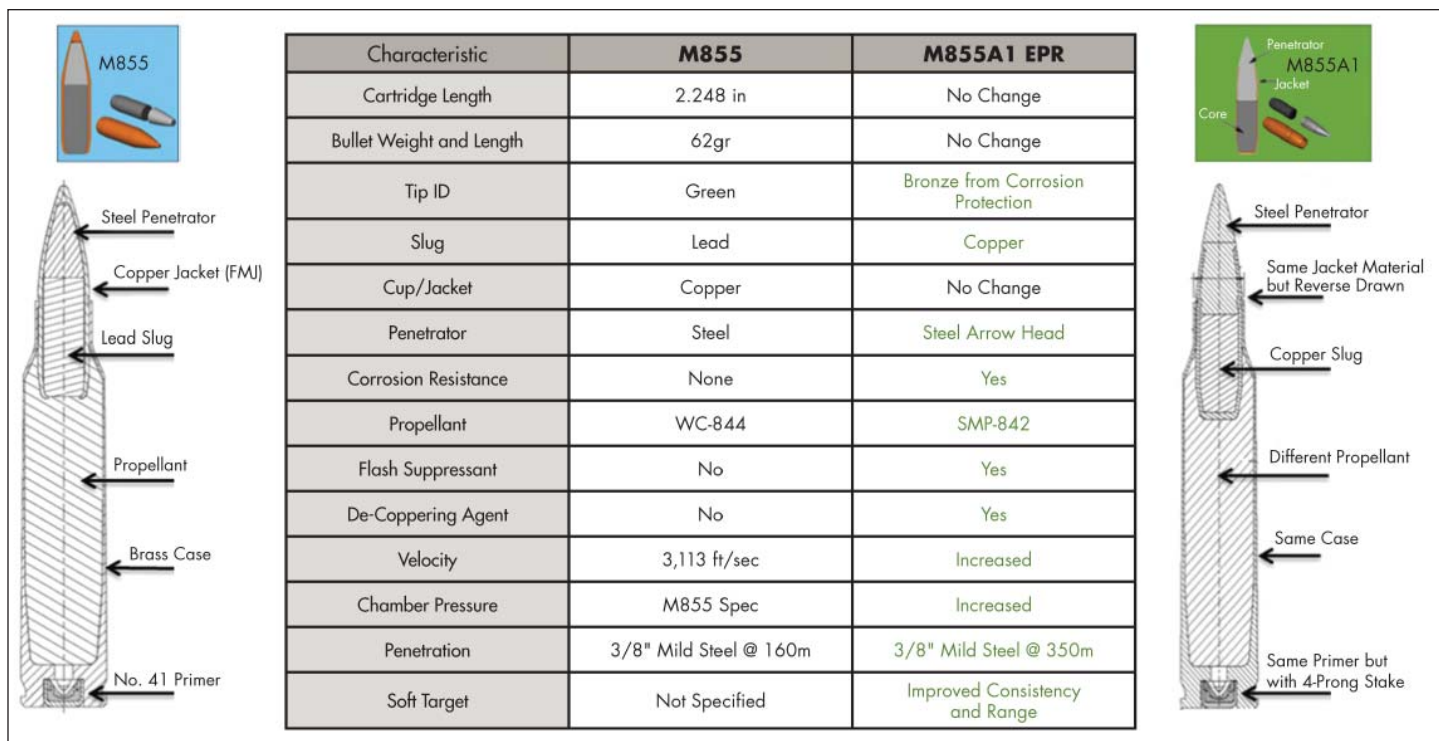
Figure 1— Comparison Chart: M855 and M855A1 EPR

Characteristic	M855	M855A1 EPR
Cartridge Length	2.248 in	No Change
Bullet Weight and Length	62gr	No Change
Tip ID	Green	Bronze from Corrosion Protection
Slug	Lead	Copper
Cup/Jacket	Copper	No Change
Penetrator	Steel	Steel Arrow Head
Corrosion Resistance	None	Yes
Propellant	WC-844	SMP-842
Flash Suppressant	No	Yes
De-Coppering Agent	No	Yes
Velocity	3,113 ft/sec	Increased
Chamber Pressure	M855 Spec	Increased
Penetration	3/8" Mild Steel @ 160m	3/8" Mild Steel @ 350m
Soft Target	Not Specified	Improved Consistency and Range

against soft targets but can't penetrate harder barriers. Nor do hollow points meet the Army's requirement to adhere to the Law of War, defined as "[t]hat part of international law that regulates the conduct of armed hostilities. It is often called the 'law of armed conflict'" (DoD Directive 2311.01E, DoD Law of War Program). Even today, we have found no other round — other than the new EPR — that can outperform the M855 as a capable, general-purpose round.

Why the M855A1 Excels

So what makes the EPR so good? It uses the same components as the M855 — a jacket, a penetrator, and a metal slug. But the new round contains some subtle changes (see Figure 1). The copper cup, from which the jacket is formed, is reverse-drawn, the opposite of how the M855 jacket is drawn. The hardened steel penetrator is almost twice as heavy as the one used in the M855 and is fully exposed instead of hiding beneath the softer copper jacket.

The slug is made of copper, making the projectile nonhazardous to the environment while delivering needed performance. Since the EPR is similar to the M855, the Army can use the same manufacturing equipment now used for the M855, providing additional savings and large-scale manufacturing capability. Once the M855A1 replaces the leaded M855, it will reduce the amount of lead in production by approximately 2,000 metric tons yearly, based on the amount now used to make the M855.

There are three main areas in which the new round excels: soft-target consistency, hard-target penetration, and the extended range at which it maintains these performance improvements.

> **"There are three main areas in which the new round excels: soft-target consistency, hard-target penetration, and the extended range at which it maintains these performance improvements."**

This is not to imply that the EPR increases the maximum effective range of the M4 or M16. Its trajectory matches the M855's, which aids in training, lessens the need to re-zero the weapon, and allows it to link to the current tracer round (the M856) for eventual use in the M249 SAW. So while the maximum effective range does not increase, effectiveness at range does, meaning the round greatly extends the range of desired effects along its trajectory.

The Army tackled the consistency issue by focusing on the yaw of a projectile and how differences in yaw can influence results when striking soft targets. The M855 round, similar to the Army's M80 (7.62mm ball round), is a "yaw-dependent" bullet. As any bullet travels along its trajectory, it "wobbles" in both pitch and yaw, causing the projectile to strike its target at different attitudes with virtually every shot.

For a yaw-dependent bullet such as the M855 or M80, this results in varying performance, depending upon where in the yaw/pitch cycle the bullet strikes its target. For example, at a high angle of yaw, the M855 performs very well, transferring its energy to the target in short order. At a low angle of yaw, however, the bullet reacts more slowly, causing the inconsistent effects observed in the field.

The M855A1 is not yaw-dependent. Like any other bullet, it "wobbles" along its trajectory. However, the EPR provides the same effects when striking its target, regardless of the angle of yaw. This means the EPR provides the same desired effects every time, whether in close combat situations or longer engagements. In fact, the U.S. Army Research Laboratory (ARL) verified through live-fire tests against soft targets that, on average, the M855A1

surpassed the M80 7.62mm round. The 7.62mm, although a larger caliber, suffers from the same consistency issue as the M855, but to a higher degree.

Hard-target performance is a second area where the EPR really shines (see Figure 2). The exposed, heavier, and sharper penetrator, along with a higher velocity, allows Soldiers to penetrate tougher battlefield barriers than is possible with the current M855. Although it's not an armor-piercing round, the EPR can penetrate 3/8 inch-thick mild steel at distances approaching 400 meters (based on the range at which 50 percent of the rounds can pass through the barrier). The M855 only penetrates this material out to approximately 160 meters.

Not only is this performance much better than the M855's with its smaller steel penetrator, it is vastly better than the M80 7.62mm round.

Additionally, the EPR can penetrate concrete masonry units at ranges out to 80 meters with the M16 and 40 meters with the M4. The M855 can't penetrate this type of battlefield barrier at any range.

Also notable is the EPR's excellent performance against softer intermediate barriers such as car doors, windshields, or Kevlar fabric. The thinner metal found on car doors poses no problem. When engaging targets behind windshields with the EPR, ARL has shown an increase in the probability of hitting the occupant, due to both the steel penetrator and the copper slug remaining intact through the glass. Furthermore, ARL tested the round against 24 layers of Kevlar fabric out to 1,000 meters, but discontinued the test as the Kevlar showed no sign of being able to stop the EPR. The EPR also penetrates some lesser-quality body armors designed to stop 7.62mm ball rounds.

Another benefit Soldiers will see from the new round is its effectiveness when engaging soft targets at longer ranges.

As a small-caliber projectile's velocity decreases, it eventually will reach a point at which it can no longer transfer most of its energy to its target. Below this velocity, which equates to range, the round is more likely to pass through its target with little effect. The M855A1 can maintain consistent, desired effects at a much lower velocity, resulting in excellent effectiveness at far greater ranges along its trajectory.

In addition to the above-mentioned performance improvements, the EPR is more accurate than the M855. Accuracy testing during production lot acceptance has shown that, on average, 95 percent of the rounds will hit within an 8 x 8-inch target at 600 meters. It also uses a flash-reduced propellant optimized for the M4's shorter barrel.

The good news is that all of these performance improvements come with no weight increase to the Soldier.

Soldiers Are the Focus

Soldiers will surely discuss the M855A1 EPR during their ritual debates on guns and ammo. The new M855A1 will greatly increase Soldier performance on the battlefield, but inevitably, Soldiers will have the final vote as they must maintain their weapon systems, train, aim, and engage their targets. As always, good marksmanship skills are critical for success in small-arms engagements. No matter how good the bullet, it can't do its job if it doesn't hit the target.

During the past 50 years, 5.56mm general-purpose ammunition has evolved to a level of performance that addresses all of the major warfighting needs of our services. The M855A1 EPR is a significantly improved 5.56mm round that provides excellent soft target consistency and vastly better hard target performance; it also increases our Soldiers' effectiveness at extended ranges with better accuracy. It does all this without increasing a Soldier's load.

The M855A1 represents the most significant performance leap in small-arms ammunition in decades. Our Soldiers deserve the best, and with the M855A1 EPR, they get it.

LTC Jeffrey K. Woods is the Product Manager for Small-Caliber Ammunition in the Office of the Project Manager Maneuver Ammunition Systems, PEO Ammo. He holds a bachelor's degree in business administration from the University of Texas and a master's degree in operations research from the Florida Institute of Technology. Woods is also a graduate of the U.S. Army Command and General Staff College and Defense Systems Management College; he is a U.S. Army Acquisition Corps member.

Figure 2 — Hard Target Performance
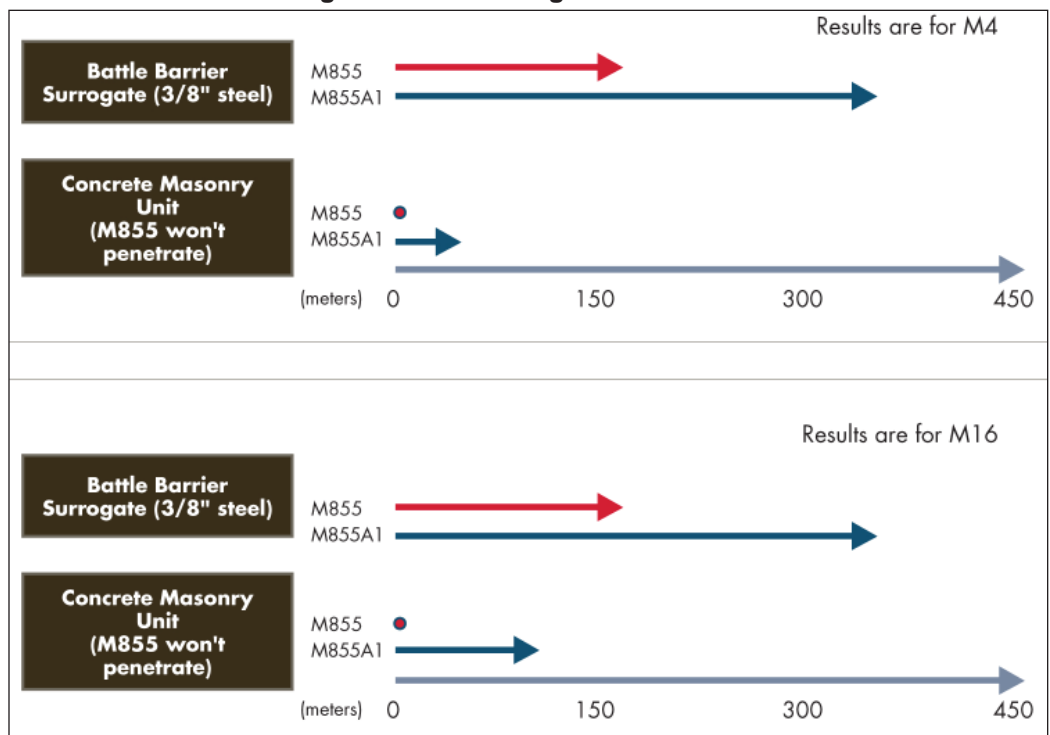
Staff Sergeant Salvatore A. Giunta

MEDAL OF HONOR
OPERATION ENDURING FREEDOM

RELUCTANT HERO BECOMES FIRST LIVING MoH RECIPIENT SINCE VIETNAM

ELIZABETH M. COLLINS

Don't call SSG Salvatore "Sal" Giunta a hero. Don't say that he went above the call of duty when he single-handedly stopped two terrorists from kidnapping his wounded buddy during a ferocious firefight in Afghanistan in 2007.

Because as Giunta sees it, he was just doing his job. He didn't do anything that any other paratrooper in 1st Platoon, Battle Company, 173rd Airborne Brigade Combat Team — or anyone in the United States military for that matter — wouldn't have done, and he can't quite understand what all the fuss is about.

He certainly doesn't think he deserves the Medal of Honor, which President Barack Obama presented to Giunta in a White House ceremony on 16 November — making the seven-year Army veteran the first non-posthumous recipient of the medal since Vietnam.

"This could be any of us," Giunta said of receiving the nation's highest award for valor. "Right now, the Medal of Honor, I'm the one sitting here, but it could be any one of my buddies. It could be anyone in any of the services who are out there doing it every day.

"As for someone calling me a hero, I try not to think about it. I let the words fall away. It seems strange."

Giunta, now 25, visited an Army recruiter while working at a Subway in Iowa in 2003, after a radio commercial promised free T-shirts to anyone who came by.

"I like free T-shirts," he joked. "They've got to give you the spiel. That's how they give you the free T-shirt and kind of over the course of a couple days, (I) started really thinking about what the recruiter had said. We are a nation at war and I am 18 and I am an able-bodied male." He went back, found out he could jump out of helicopters, and he was hooked.

Before he knew it, Giunta was on his way — pumped — to southern Afghanistan with the 173rd in March of 2005. He was excited to put his training to use and see some action, but quickly realized that war wasn't a game — that friends got hurt, or they went away and didn't come back.

After coming home at 19, he had tasted his own mortality and didn't like it. Giunta was ready to get out, perhaps get an education, and spend time with his girlfriend Jennifer. But like many other Soldiers, including five others from 1st Platoon, Giunta was stop-

lossed.
The only
place he was going
was back to Afghanistan.

Valley of Death

Now a specialist, Giunta arrived in
Afghanistan's remote Korengal Valley in June 2007.
Near the Pakistan border, it is a smuggling route for weapons
and insurgents, and one of the most dangerous areas of the country.
Dubbed the 'Valley of Death,' the 10-mile valley has seen some
of the fiercest fighting of the war and cost dozens of American
casualties. (U.S. and NATO forces withdrew from the Korengal in
April 2010.)

"When we got off the helicopter, it didn't look like any
Afghanistan I had ever seen before," Giunta remembered. "The
mountains were hard and sharp, and also really, really steep. They
had a lot of foliage. I think the trees were some sort of holly tree,
so the wood was hard, the leaves were sharp."

The steep terrain and high altitude, he added, would often turn
a walk of a few kilometers into a march lasting six to eight hours,
especially in the beginning of the deployment.

For the next 15 months, home would be tiny Korengal Outpost
(KOP) and a series of smaller primitive bases, like 1st Platoon's
Firebase Vegas. They never had running water but were able to get
electricity after a few months.

The Soldiers spent much of the summer in multiple firefights
a day with an enemy who might hide in mountain caves one day
and in village houses with human shields the next. It was constant,
unrelenting stress that Giunta said the men dealt with by leaning on
each other and laughing at things that wouldn't be funny anywhere
but a remote mountaintop in Afghanistan.

Operation Rock Avalanche

On 19 October 2007, the men of Battle Company were dropped
deep into insurgent territory, on a mission to not only look for
weapons caches but also to win a few hearts and minds. Firefights
were to be expected, Giunta said, "but if you get shot at every day,
how much worse can it get?"

A lot, it turned out, but no one could have predicted the intensity
of bombings and fighting that followed, including a fierce battle
that left several 2nd Platoon Soldiers injured or dead.

When what remained of 2nd Platoon entered the village of
Landigal on 27 October to look for weapons, Giunta and the rest
of 1st Platoon were assigned an overwatch position, guarding the
high ground on Honcho Hill. Radio chatter indicated insurgents
were out for more American blood, but, as Giunta explained, radio
chatter always indicated that insurgents were out for American
blood.

"This is why we're there," he said. "Let's help (the Afghan
people) when we can and if (insurgents) attack us, perfect. Now
we can shoot back."

They didn't expect a trap, he added, or they
would have taken a different route back to the
KOP when 1st Platoon began walking single file
down the narrow crest of the steep Gatigal Spur
shortly after sunset.

Ambush

The men didn't make it far, only 350 or 400
meters, before a hail of AK-47, PKM and RPG
fire from around 15 meters away stopped them
cold. About 15-20 enemy fighters had lain in
wait behind a crest in the hill and parallel to
the trail in a devastating "L-shaped" ambush
that cut Giunta's squad off from the rest of
the platoon.

SGT Joshua Brennan, who had been
walking point, and SPC Franklin Eckrode
were wounded and separated from the rest
of the men, who desperately tried to get
to them, returning fire with M4s, SAW
automatic weapons, and grenades.
Apaches watched from the sky,
but the fighting was too close for
the pilots to separate friend from
foe and launch the ordnance that
would have finished the attack.

"Every single man next to me
did exactly what he could, which was get down
and return fire," Giunta said of the Soldiers'
response. "There wasn't really much cover, so
you've got to take the fight back to them. The more
rounds you shoot at them, hopefully the less rounds they
shoot at you. The less rounds they shoot at you, the less chances
you have at getting hit. You've just got to play with what you've
got. And that's all we had."

Squad Leader SSG Erick Gallardo took a round in the helmet,
and watching him fall to the ground, Giunta believed the worst
because "only one thing happens when your head moves like that."
He raced through enemy fire and dragged Gallardo, who was only
stunned, back to cover and helped him up.

know that, nor did he expect to find Brennan, a good friend, grievously wounded and being dragged away by two enemy fighters.

"I didn't understand what was going on," Giunta recalled. "I'll think about that moment a lot. That was something I never thought I would see in the military. It was difficult to see. Just reaction — that's all you really have time to do, but after sitting on it for three years, it's more emotional to me now than I think it was to me then."

It was a part of the Warrior Ethos Giunta didn't have to think twice about, because it went without saying that he wouldn't leave Brennan and that Brennan wouldn't leave him, that any of the Soldiers in the unit would have done the same.

So yelling for help and still under heavy fire, Giunta charged forward alone and fired the 15 or 20 rounds remaining in his M4, killing one of the insurgents and wounding the other. But he did more than save Brennan, Gallardo later explained. The true nightmare of any leader is a Soldier missing in action, and Giunta prevented that.

"They would have definitely, definitely taken him to a lot worse place," Gallardo said. "There's no way we would have come out of that valley without Brennan. We would have fought tooth and nail to find his body or find Brennan. Giunta definitely saved a lot more lives that night."

While Clary stood guard, and the fight continued around them, Giunta and Gallardo, who had come running, found a slight dip where they could protect Brennan, and feverishly went to work on him, going through all of their first-aid kits before cutting apart their own clothing, doing anything and everything to stop the bleeding. He was covered with gunshot and shrapnel wounds, but worst were the injuries to his face, and he couldn't breathe. His wounds were far above their basic lifesaving skills, so they comforted him by talking of home while they tried to get help.

Aftermath

As 1st Platoon finally seized control, Soldiers brought other casualties to where Brennan lay, including the platoon's beloved medic, SPC "Doc" Hugo Mendoza. He had been shot in the leg trying to help another Soldier and bled out through his femoral artery. He was already dead.

"And that's when I knew the (expletive) had hit the fan. We were in a position we didn't want to be in. We don't have our medic. I have a severe casualty," Gallardo remembered, looking down. Third Platoon had come running when they heard RPG fire, but with the rough terrain, it was another 10 or 15 minutes before they arrived. Their medic gave Brennan a tracheotomy on the spot, buying enough time for the medevac helicopter to arrive, and giving the paratroopers hope.

They still had a long two-and-a-half-hour walk back to the KOP,

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At one point, enemy rounds also hit Giunta, who had always complained about wearing body armor. The rounds impacted both his vest and the rocket launcher he carried across his back. He barely flinched, but noticed something was off: the bullets hadn't come from the same direction as the bulk of the fighting.

"That's something to always keep in the back of your mind," he said.

With SPC Kaleb Casey "laying waste" with his M249 SAW automatic weapon, Giunta recalled, Gallardo, Giunta, and PFC Garret Clary, who also had an M203, threw grenades and then bounded forward in the aftermath of the explosions. Each time a wave of enemy fire stopped the men. Casey later reported that every man in the squad had bullet holes in their clothing or equipment. They dropped to the ground and prepped more grenades before bounding forward again.

'I Will Never Leave a Fallen Comrade'

When they finally reached Eckrode, he was wounded, but conscious and had been firing his weapon until it jammed. Brennan, however, was missing. While aiding Eckrode, Gallardo put Casey in charge of security and turned to order Giunta to continue the search for Brennan.

But Giunta was already gone, figuring that because he was "lazy" and out of grenades, he might as well keep running and link up with Brennan, "because it's better to shoot with a buddy than be shooting alone."

Clary was trailing him by about 10-15 meters, but Giunta didn't

SPC Hugo Mendoza, SGT Joshua Brennan, and SPC Sal Giunta at Firebase Vegas on 15 October 2007, just a few days prior to Operation Rock Avalanche.

but as far as they knew, Brennan was in surgery. He would make it. That's what they told themselves, at least, and most of the Soldiers, even Giunta, didn't know about Mendoza. Everyone only knew his own small piece of the battle, which had been chaotic and overwhelming and is even now a blur for many of the Soldiers.

"I just hoped and prayed," said Giunta. "We got back, and the first sergeant had the cook cook us up some wings and corn dogs, which, awesome, you know, and you talk to your buddies. 'OK, you're good. You're OK,' like that," but it wasn't long before Battle Company's commander, now-MAJ Dan Kearney, came and broke the devastating news.

"They were better Soldiers than me," Giunta said with a catch in his voice. "That's part of what gets me so much. I was with Brennan for the deployment before, and he's always been a better Soldier than me. He was Alpha Team leader. I was Bravo Team leader. There's a reason for that. SPC Mendoza was a combat medic. He did everything we did; plus, when we came back dehydrated, 'Oh I'm this, oh I'm that, I have this blister Doc,' he would fix it. He went above and beyond every single day."

Giunta explained that after a Soldier died, his buddies normally leaned on each other for support, but this time was different. The Army wanted a lot of the men of 1st Platoon, and particularly SPC Sal Giunta. There were sworn statements and investigations and interviews with the reporters who were embedded in the valley with Battle Company.

"And by the time you're done, you know, we're Infantry — we're not good writers, we're not good storytellers — and by the time everyone was done with their sworn statements and turned those in, no one wanted to talk about it. We joked about the good times. There's still people I've never talked about it to," Giunta said.

He called his now-wife, Jennifer, and his mother, Rose, as soon as he could for the distraction, but he couldn't tell them the details. Both knew from his voice that something terrible had happened, and Jennifer had heard the basics from another spouse, but it would be years before either had a clear picture of what had happened on that mountainside, and then, really only from media reports.

First Since Vietnam

MAJ Kearney originally decided to put Giunta in for the Medal of Honor three years ago, the same night as the ambush, saying that if Giunta's actions weren't worthy of the Medal of Honor, then he doesn't know what is.

"It started sounding like some story I had read about in World War II with Audie Murphy," he remembered. "You don't hear about single individuals taking on the responsibility to leave their squad when they're a specialist, treat their squad leader after they've been shot and then go repatriate their best friend from behind enemy lines, then to run back into the kill zone to start treating his men and leading them out of the kill zone."

Still, it was something that Giunta refused to believe would ever happen until he heard the president's voice on the phone congratulating him.

"For almost three years, someone's like 'Hey, you're in for the Medal of Honor,'" he said. "'Oh, no. I don't think that's me.' Just deny. It's not worth it. That's something that's going to be a big thing, and that's not what I need right now. I've got enough stuff going on. And to hear President Obama on the phone, that was a moment of 'Ohhohh.'

"It was good. It was very positive and it was exciting and it was thrilling and my heart was beating and my ears were closing and I had my wife Jen by my side and she's squeezing my hand. And it was positive, but at the same time, it almost seemed unreal," he remembered, adding that as hard as he tries, he can't remember exactly what the president said.

Even now the experience is surreal and bittersweet, as Giunta tries to grasp that he will stay forever in the pages of history for helping his friend and doing his job. It's an honor, of course, but it's not one that he ever asked for or wanted.

"I have never gone to war alone," he said. "I have never been in a firefight alone and I've never felt alone in the Army. There were a lot of other guys who did incredible stuff. The only reason I was able to do what I did is because they were doing everything they could do.

"They make it sound like so much of the bullets were focused on me. No. Bullets don't discriminate. They were on every single man who was there. And now, you're going to put a medal around my neck and shake my hand and congratulate me, and everyone's going to be proud of me? And I didn't do anything other than what I was supposed to do? And I know two men personally gave every single tomorrow they'll ever have?"

Giunta hopes that the medal will remind Americans that brave young men and women are still out there in Afghanistan, sacrificing their blood, sweat and tears every day.

"I hope I can spread that with this," he said. "This is for everyone who has been to Iraq, everyone who has been to Afghanistan, everyone who has to suck it up for awhile without their family, and it's about the families who have to suck it up when their husband or wife is deployed. This is for all of us. This is for everyone who sacrifices for their country, who sacrifices for America."

Elizabeth M. Collins writes for the Defense Media Activity-Army.

MARKSMANSHIP TRAINING — SCREAMING EAGLE STYLE

LTC DONN HILL, MSG JEFFREY FENLASON, BG STEVE TOWNSEND

Fort Anywhere, USA — *The S3 briefed the battalion commander on the results of the previous week's range density. The commander was satisfied to hear that by the end of the two weeks 98 percent of the battalion's Soldiers had qualified with their M4 carbines and that 40 percent of the battalion had qualified expert. Apparently their hard work had paid off…or had it? What neither the S3, the CSM nor the commander knew, despite several visits to the ranges, was that many of the battalion's veteran Soldiers had to fire the qualification course more than once to even qualify marksman. In fact, more than 40 percent of the Soldiers failed to qualify on their first attempt and had to re-fire one or more times to achieve marksman. If their first qualification attempt was reflective of their performance during their first firefight of the next deployment, would the commander have slept as soundly that night? How many units in our Army today only measure marksmanship proficiency at the end of their training densities? How many commanders measure the number of Soldiers that qualify on their first attempt, or better still, the average scores for first-time qualifiers?*

During the past nine years, the Army has made countless improvements to units, equipment, and training methodologies based on the constantly evolving nature of the current operating environment. Prior to 2003, the Army required units to qualify with their rifles only once a year. The Army now requires rifle qualification twice a year. Marksmanship programs and techniques developed by Special Operations Forces over the previous decades have migrated into general purpose forces, and the Army has adopted these programs for short-range marksmanship (SRM) as an Army-wide standard.

In 2008, the Army updated Field Manual 3.22.9, *Rifle Marksmanship*. The Army has significantly increased its resourcing for simulations and ammunition to facilitate a greater proficiency in marksmanship with all weapons. In a welcome development, with a program called Initial Military Training Marksmanship (IMTM), the Army is moving to significantly increase the number of rounds fired by trainees as well as increasing the rigor and realism of marksmanship training for all new Soldiers during Initial Entry Training (IET).

Despite all of these improvements, many units and leaders still struggle to find a coherent training methodology for producing a highly skilled and confident marksman with any of the various small arms available to American Soldiers. The 101st Airborne Division (Air Assault) has developed a deliberate, doctrinally sound, easily resourced, training path that will produce just this type of marksman. Our goal is to raise our foundation of marksmanship proficiency by teaching Soldiers how their weapons work, how their bullets fly, and measuring progress by assessing average scores for first-time "Go's" on rifle qualification rather than total number of Soldiers qualified by the end of the range density.

A unit's rifle marksmanship program typically starts with preliminary marksmanship instruction (PMI) and concludes with a record qualification range. What happens between PMI and qualification is addressed in FM 3.22.9 but in most units has not been institutionalized in the same manner as a similar training path for a tank or Bradley crew. This article explores the positive benefits realized when a similar progressive training methodology is used for small arms marksmanship. This article will show how one battalion applied the division's over-arching strategy to its marksmanship program and significantly improved its performance. By using this program, the benefits in first-time qualifications, increased weapons proficiency and Soldier confidence, and the ability of Soldiers to evolve to graduate-level marksmanship training have been significantly improved.

The 101st is taking a nested education-based approach from division through brigade, battalion, and company level that attempts to maximize our benefit from every round, dollar, and minute spent by using PMI, simulations, iron sight zero and practice, optics zero and practice, standard qualification, and scenario-based training (short- and long-range marksmanship, action scenarios).

Our marksmanship strategy has four main components:
1. Education
2. Practice
3. Qualification
4. Scenario-Based Advanced Marksmanship Training

Phase I: Education

The first component of the marksmanship strategy — education — consists of PMI, borelighting, educating Soldiers on ballistic theory (how their bullet flies in relationship to their line of sight/aim), and training NCOs on the Engagement Skills Trainer (EST) 2000. PMI is the foundation for any quality marksmanship program, and ours is no different. Table 4-1 in FM 3-22.9 outlines the minimum requirements for PMI (see Figure 1). Too often this training is put on a training schedule and only given lip service. Leaders often assume that NCOs and Soldiers are proficient in these simple tasks. Unfortunately, that is not often the case, and time not spent on PMI will mean time wasted correcting deficiencies on the range that good PMI would have prevented. The tasks outlined in Table 4-1 will ensure Soldiers are confident and competent in the functions of their weapons. The fundamental notion in this phase is that a Soldier will shoot better if he truly understands how his weapon works and how bullets fly. The goal should be for a Soldier to view his weapon as an extension of his body.

Boresighting with a borelight should be integrated into the education component since it forces the Soldier to manipulate his iron sights and/or optics of the weapon before he ever gets to the range.

Borelighting is proven to reduce the number of rounds required for zeroing by getting a Soldier "on paper" faster, saving ammo, and allowing for more time to be spent on other tasks.

The EST 2000 is a home station, indoor, multi-purpose, multi-lane, small arms gunnery simulator with superior accuracy and state-of-the-art graphics that make it very realistic. At first glance, the EST 2000 can be overwhelming. Without proper education the leaders who will use the EST will not know the capabilities or limitations of the system. There are more than 600 possible firing "tables" that go from M4 zero to squad in the defense: 209 validated marksmanship exercises from zeroing through record fire; 178 squad collective tactical exercises with 3D animated opposing force troops and vehicles in woodland, desert, urban, or mountain terrain; 40 video-based, live-action, judgmental scenarios, which were originally designed for Military Police and Infantry Soldiers but are applicable to any Soldier. Leaders operating the EST should attend a course to be certified and then observe its use in actual training before they are assigned duties as primary EST instructors.

Phase II: Practice

Tables 4-2 and 4-3 in FM 3-22.9 outline the subsequent tasks listed for PMI.

In our training strategy, these tasks fall into the second component — practice. This component is more focused on the specifics of putting the bullet on the target through the application of what was learned in the education component. Dry fire, using dime-washer drills and shadow boxes, reinforces the various firing positions and marksmanship fundamentals. Follow-on training using the EST 2000 further reinforces this dry fire and provides realistic down range feedback. For example, we spent three days on professional development with platoon sergeants through field grades determining exactly how to best integrate the EST into our marksmanship program and which tables we would use.

Figure 2 outlines how we progress through the second phase of our marksmanship strategy. It includes using the issued carrying handle with iron sights or backup iron sights. This is especially important since less emphasis is placed on shooting with iron sights and more with optical sights now in IET. When a Soldier trains in the EST during Phase II, he brings and uses his issued optic to ensure he can mount/remount the optic and understands the appropriate holdovers or reticles whether he's using an M68 close combat optic, a holographic sight, or an Advanced Combat Optical Gunsight. The Soldier won't actually manipulate the optic in the EST; the EST's computer zeroes the laser to the point

INTRODUCTION TO BRM AND MECHANICAL TRAINING

Period 1 (4 hours)
Instructional Intent
❑ Introduce the Soldiers to BRM and teach them how to maintain, operate, and correct malfunctions on a M16-/M4-series weapon.
❑ Teach peer coaching responsibilities and sight manipulation, while emphasizing safety.
Observables
Soldiers—
❑ Emphasize safety throughout training IAW TM 9-1005-319-10.
❑ Clear their weapons IAW this manual and TM 9-1005-319-10.
❑ Identify all components of their weapon IAW TM 9-1005-319-10.
❑ Handle and identify 5.56-mm ammunition IAW TM 9-1005-319-10
❑ Understand the eight cycles of function IAW this manual.
❑ Understand the modes of fire IAW this manual.
❑ Disassemble and assemble their weapon IAW TM 9-1005-319-10.
❑ Perform a function check on their weapon IAW TM 9-1005-319-10.
❑ Maintain, load, and unload their magazines IAW TM 9-1005-319-10.
❑ Maintain, load, unload, and clear their weapons IAW TM 9-1005-319-10.
❑ Perform SPORTS on their weapon within five seconds IAW TM 9-1005-319-10.
❑ Correctly manipulate their sights without assistance IAW TM 9-1005-319-10.
❑ Are taught peer-coaching techniques and responsibilities IAW this manual.

MARKSMANSHIP FUNDAMENTALS I

Period 2 (8 hours)
Instructional Intent
❑ Reinforce BRM I, and train the four fundamentals to standard with hands-on training, simulation, and dry-firing during circuit training with an M16-/M4-series weapon.
❑ Teach and reinforce range and safety procedures.
Observables
Ensure that —
❑ All equipment (helmet, IBA) is fitted properly to maximize training IAW the local SOP.
❑ Live-fire range procedures are replicated and enforced IAW the local SOP.
❑ The four fundamentals are being integrated into all exercises IAW this manual.
❑ All dry-firing is well-aimed using 25-meter zeroing targets, EST, and LMTS.
❑ Peer coaching is being emphasized IAW this manual.
Tasks
❑ The four fundamentals (IAW with this manual).
❑ Dominant eye training (IAW with this manual).
❑ Basic firing positions (IAW with this manual).
❑ Range and safety procedures (IAW with the local SOP).
❑ Demonstrate the integrated act of shooting during dry-fire exercises utilizing simulators and training devices (IAW this manual).

MARKSMANSHIP FUNDAMENTALS II

Period 3 (8 hours)
Instructional Intent
❑ Reinforce BRM I and II and the four fundamentals, while demonstrating the integrated act of shooting on the EST or LMTS.
Observables
Ensure that—
❑ All fundamentals are emphasized and applied on the EST or LMTS.
❑ Weapon safety is reinforced on the EST or LMTS.
❑ Peer coaching is emphasized during EST or LMTS firing.
❑ All Soldiers who fail to hit six out of nine shots at the 300-meter EST target receive remedial training.
Tasks
❑ Demonstrate the integrated act of firing while using the EST.

Figure 1 — Tables 4-1, 4-2, 4-3 from FM 3-22.9

of aim, but he will at least become familiar with its use. The Soldier will start in "slick" ACUs with eye protection and gloves to allow him to focus on the fundamentals of marksmanship and get comfortable with the weapon. This technique is taught by the U.S. Army Marksmanship Unit at its Squad Designated Marksman Course and by the Asymmetric Warfare Group in its courses. Once a Soldier has fired enough that he is comfortable and consistently hitting the pop-up targets at varying distances (Field Fire I), we put him in full combat gear and continue the practice. Practice in the EST continues through qualification and NBC fire. Results are recorded, and until a Soldier achieves a 27 out of 40, he doesn't progress to the next component — qualification. By the end of the process, a Soldier has fired a minimum of 338 simulated rounds and executed a full dress rehearsal of the qualification tables. When that Soldier gets to the range, the positive results are significant.

Phase III: Qualification

The third component — qualification — follows the same methodology as our approach to the EST. Zeroing is conducted slick, first with iron sights and then with the optic. The next task is probably one of the most important keys to success in qualification. Once zeroed, the Soldier moves to the firing line on the qualification range and fires a total of 30 rounds, five rounds at each of the qualification targets in a modified known distance or field fire. This helps the Soldier confirm his point of aim and understand his point of impact at each of the six targets he will engage during qualification. It is an incredible confidence builder. Qualification then follows. If a Soldier does not qualify with the desired score, he can shoot one more time before he is pulled from the line. Continuing to attempt to qualify or to improve a score will only result in "shooter's fatigue" with a significant decrease in scores after the second attempt. Soldiers are pulled off the line for at least an hour and conduct concurrent marksmanship training, without combat gear, in order to allow them to physically rest prior to attempting a subsequent qualification.

This program has been proven to improve first-time experts by 30 percent on average in Infantry companies and first-time qualification is almost guaranteed. Taking out any step of the process has proven for

WHITE CURRAHEE EST TRAINING PATH: M4		
EST LANGUAGE	**ARMY TRANSLATION**	**EQUIPMENT**
Table I-VI	Group and Zero	Iron Sites, Eye-Pro, Gloves
Field Fire I	Engage Pop-up Targets at Varying Distances	Iron Sites, Eye-Pro, Gloves
Tables I-VI	Group and Zero	Optic, Eye-Pro, Gloves
Down Range Feedback	KD, Point of Aim/Point of Impact	Optic, Eye-Pro, Gloves
Field Fire I	Engage Pop-up Targets at Varying Distances	Optic, Eye-Pro, Gloves
Field Fire II	Engage Pop-up Targets at Varying Distances	Optic, ACH, IBA, Eye-Pro, Gloves
Practice Qualification	Standard Army Qualification (Prone Supported/Unsupported, Kneeling)	Optic, ACH, IBA, Eye-Pro, Gloves
Qualification	Standard Army Qualification (Prone Supported/Unsupported, Kneeling)	Optic, ACH, IBA, Eye-Pro, Gloves
NBC	Standard Army NBC Fire	Optic, ACH, IBA, Eye-Pro, Gloves, Pro Mask

* STANDARD: Score 27/40 on qualification before processing to live-fire range. Soldiers not achieving 27/40 will retrain until they achieve 27/40 or greater.
* Soldiers will fire 20 rounds while wearing their Pro Mask. The standard for NBC fire is 10/20 or greater.
* Soldiers will qualify using their assigned optic.

Figure 2— Example EST Training Path

us to have a negative effect on the progress of the Soldiers. Instead of spending a day at the range, expending tens of thousands of rounds of ammo and merely getting Soldiers qualified, we can now spend half the time and a fraction of the ammo to get Soldiers qualified the first time and a great many qualified as sharpshooters, or even experts, rather than just marksmen.

Our program focuses on maximizing the EST and does not include firing on a longer known distance (KD) range (although the standard rifle qualification range is a known distance range) although that could easily be inserted if the commander desires and if the ranges and ammunition are available. Tasks that have high payoff on the KD range are zero confirmation and grouping at 200 meters and confidence shooting at ranges beyond 300 meters. The end result is a more confident, competent, and proficient Soldier. Units will use significantly fewer rounds than what they have historically, ensuring maximum economy of an expensive and limited resource as well as allowing those saved rounds to be used for more advanced marksmanship and maneuver live-fire training.

Phase IV: Scenario-Based Advanced Marksmanship Training

Phase IV is the culmination of our marksmanship strategy. Everything up to

this point is designed to prepare a Soldier for this phase. Combat seldom looks like a standard record qualification range. To best train for combat, Soldiers must engage multiple targets from various positions, in various conditions and under stress. This is done in scenario-based advanced marksmanship training. One key example of this kind of training is close quarters or SRM using reflexive firing techniques. This training is now an Army standard and its benefits have broad acceptance across the force. However, combat experience in Afghanistan points to the need for proficiency at long-range marksmanship (LRM) as well. A commander expecting to deploy to Operation Enduring Freedom might allocate time and resources for LRM and shooting at targets at differing elevation.

Another example is engaging moving targets. More installations now have moving target ranges available. Still another example is stress shoots where Soldiers perform battlefield physical tasks such as rushes or casualty carries to elevate their heart and respiration rates immediately prior to shooting. This demonstrates the effects of physical stress and forces the Soldier to learn to steady his firing position and gain control of his breathing prior to shooting.

A final test is putting all of these skills

into a "graduation" scenario that requires the Soldier to use all these skills to solve multiple combat problems with little guidance from an instructor or coach once the scenario begins. This type of shooting exercise is an important addition to the Army's new IMTM program. An example would be a Soldier starting the scenario, locked and loaded in the TC seat of a HMMWV. When signaled to begin, the Soldier would react to his HMMWV being engaged by the enemy. He would exit the vehicle; use it as cover to engage multiple targets; move to more cover to engage other targets, possibly engaging targets on the move and discriminating between threats and noncombatants; and end at a final covered position to engage his last targets. Once done, his hits would be scored and divided by the time to establish a "hit factor." Targets would be scored using IPSC (International Practical Shooting Confederation) targets that have higher points for critical area hits (head, center mass on the torso). Standard scenarios can be used as a benchmark to measure improvement. Competitions can also be staged to determine who is truly the expert in the unit.

This type of scenario-based advanced marksmanship training requires drill training, focusing on the various firing positions that will be used ,and should follow the same methodology as qualification:

education, practice, qualification (drills). The EST can be used for stationary firing using alternate firing positions and various forms of cover (barriers).

We recommend two drills for every scenario-based exercise. This ensures Soldiers are properly executing the alternate firing positions and are proficient on different types of barriers. This also serves as a rehearsal for the exercise. This type of training provides a realistic evaluation of the marksmanship skills of the unit as well as challenging the Soldiers under combat conditions. Distances and scenarios are only limited by the range and imagination of the leadership. Soldier feedback from this kind of marksmanship training is extremely positive. The adage that "if you make it fun, they'll do it better and more often" definitely applies. This component then becomes the payoff for efforts put forth in the first three. Results will show who cut corners in the previous steps.

Conclusion

Our system is neither revolutionary in nature nor a radical departure from other existing systems. All of the elements of a successful marksmanship program are captured in FM 22-9 or the field manuals for other weapons systems. This article focuses on the M4, but we have applied
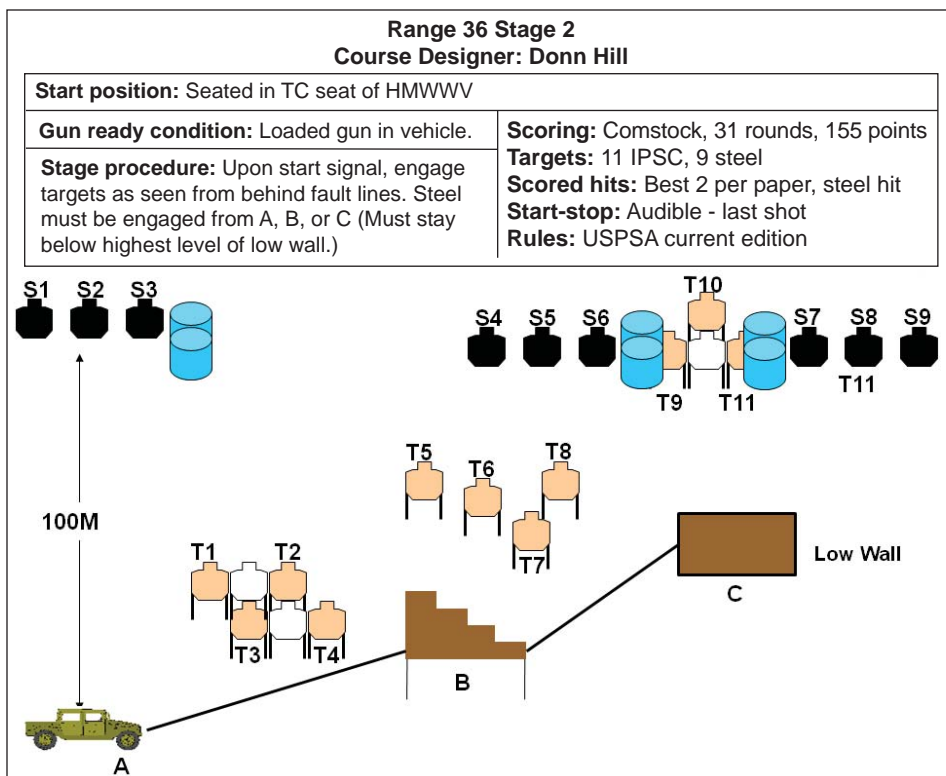
the same principles and approach to all of our small arms training. The challenge for any unit is putting those elements together into a comprehensive program that takes a Soldier from the basic level gained in IET to the advanced level required of Soldiers deploying to known combat.

This program requires a lot of time to progressively institute through an entire battalion. A program like this requires buy-in from the entire chain of command from squad leader to battalion commander. Some units will likely say they cannot find space on the calendar for all of this — especially the EST portion which can reasonably only train 10-20 people at a time — unless it is one of the commander's top three priorities. We think this program should be one of those top three priorities.

The 101st Airborne Division defines marksmanship excellence as almost every Soldier qualifying on the first attempt with a solid sharpshooter/first class score, with a large percentage of Soldiers qualifying expert (40-50 percent and even higher). More importantly, it is defined by Soldiers who competently handle their weapons and confidently execute challenging, mission-based, combat-focused shooting scenarios that test every element of their marksmanship skill. That's marksmanship excellence — Screaming Eagle style.

Final Note: The 101st Airborne Division recently deployed for its fourth overseas tour in this war, and it is taking two concrete steps to further improve its Soldiers' marksmanship skills. First, we are providing some of our education-based approaches to marksmanship training for every new replacement that will train at Fort Campbell before shipping out to join the division in Afghanistan. Second, we are creating a marksmanship leader's course, using our out-of-hide individual readiness training cadre, to educate leaders on implementing our marksmanship strategy as our brigades return from deployment and enter re-set for our next rendezvous with destiny.

LTC Donn Hill commands the 2nd Battalion, 506th Infantry Regiment, 4th Brigade Combat Team, 101st Airborne Division (Air Assault) and shoots competitively as a hobby.

MSG Jeffrey Fenlason is the division master gunner for the101st Airborne Division (Air Assault) and instructs leaders and units on marksmanship using an "outcome-based education" approach.

BG Steve Townsend currently serves as the Deputy Commanding General (Operations), 101st Airborne Division (Air Assault).

Figure 2 — Example Scenario-Based Advanced Marksmanship

Range 36 Stage 2
Course Designer: Donn Hill

Start position: Seated in TC seat of HMWWV

Gun ready condition: Loaded gun in vehicle.

Stage procedure: Upon start signal, engage targets as seen from behind fault lines. Steel must be engaged from A, B, or C (Must stay below highest level of low wall.)

Scoring: Comstock, 31 rounds, 155 points
Targets: 11 IPSC, 9 steel
Scored hits: Best 2 per paper, steel hit
Start-stop: Audible - last shot
Rules: USPSA current edition

Training Notes

ARMY REINVIGORATES INITIAL MILITARY TRAINING BASIC RIFLE MARKSMANSHIP

COL RYAN KUHN AND COL TERRY L. SELLERS

The Army has reinvigorated marksmanship. Leading this effort were the TRADOC Deputy Commanding General for Initial Military Training (DCG-IMT) and the Maneuver Center of Excellence (MCOE). Today's operational environment, characterized by full spectrum operations, (offense, defense and stability operations) demands that Soldiers are well trained, competent, confident and prepared to immediately integrate into their units of assignment. The enemy is often a fleeting target mixed into urban settings along with the civilian populace. Alternatively, the enemy may attack and engage from covered and concealed positions at significant distances. Soldiers must be prepared to react quickly, accurately and lethally when the situation requires. This article provides an update on the Initial Military Training Basic Rifle Marksmanship Strategy.

The first goal, achieving standardization across U.S. Army Training Centers (ATCs), required development of the Basic Rifle Marksmanship (BRM) Strategy. The strategy is codified in the approved Basic Combat Training (BCT) and One Station Unit Training (OSUT) programs of instruction (POI), lesson plans and training support packages. Basic Officer Leaders Course (BOLC) POIs are presently being modified to incorporate all aspects of the approved BOLC BRM strategy.

A second milestone, increasing the frequency and volume of shooting, was achieved by formally adding Advanced Rifle Marksmanship (ARM) periods to BCT. Therefore, BCT Soldiers shoot more and more frequently by executing 10 periods of BRM and six periods of ARM over the 10 weeks of BCT.

The BCT Strategy, Figure 1, is designed to train competence and confidence in fundamental marksmanship skills for all BCT Soldiers. The focus is on achieving the maximal qualification proficiency prior to moving on to more advanced and difficult advanced marksmanship techniques.

The Infantry OSUT Strategy, Figure 2, is designed train competence and confidence in fundamental marksmanship skills and produce a more proficient, and versatile Infantryman, utilizing their professional tools, the M4, Close Combat Optics (CCOs), and laser aiming devices.

The third goal of the program, increasing effectiveness and realism, is achieved through the addition of Combat Field Fire (CFF), Figure 3, conducted on a range that simulates the current operational environment with barriers. The outcomes include:

• Conduct target acquisition and make combat relevant choices.

• Demonstrate weapons proficiency without coaching/assistance.

• Use available cover and transition to alternate firing positions.

• Clear stoppages/malfunctions, change magazines, and continue to engage/kill the enemy.

CFF is evaluated on a "GO/NO-GO" basis. To receive a "GO," a Soldier must "KILL" seven of the 15 targets exposed during CFF. While this appears easy, several of the target exposures require multiple hits to achieve a "KILL." Targets are programmed to bob until the correct number of programmed hits is registered or presentation time expires. Task complexity increases with the requirement to manage multiple magazines loaded with 30 live and a set number of dummy rounds that will induce stoppages and require magazine changes. CFF is evaluated and the results are forwarded to the first unit of assignment. CFF is not a graduation requirement.

The BOLC Marksmanship Strategy is designed to train competence and confidence in fundamental marksmanship skills for all newly commissioned junior officers regardless of branch. BOLC BRM periods mirror BCT periods with the exception of the number of iterations for Period Nine (Practice Record Fire) and Period Ten (Record Fire). BOLC students will only fire each period one time. Two critical ARM (advanced) periods were added after BRM Period 10 (Record Fire). The Barrier Shoot and Combat Field Fire provide lieutenants with experience firing in combat equipment from combat relevant positions.

The strategy was approved at the April 2010 BOLC B Common Core Task List Conference in Newport News, Va. The 199th Infantry Brigade at Fort Benning is completing the required lesson plan revisions based on the BCT/OSUT lesson plans. Upon completion the lesson plans will be staffed with the BOLC and IMT Enterprise for DCG-IMT approval.

Basic Rifle Marksmanship for Initial Military Training is standardized across BCT, OSUT, and BOLC. The revised program of instruction, lesson plans, and training support packages raise the bar for BRM and bring the institutional force into alignment with the requirements of the operational force. Soldiers depart IMT with competence, confidence, imbued with the Warrior Ethos and prepared to be the versatile Soldiers and Leaders that the Operational Army requires in the deployed operational environment.

COL Ryan Kuhn is commander of the 197th Infantry Brigade, Fort Benning, Ga.

COL Terry L. Sellers previously served as the Maneuver Center of Excellence G3 and is now its Chief of Staff.

Figure 1— BCT Marksmanship Strategy

Period/Day	BRM STRATEGY Training	Ammunition
1/1	Introduction to Basic Rifle Marksmanship ACU / SC / Iron Sights	None
2/2	Range Procedures and Marksmanship Fundamentals I ACU / SC / Iron Sights	None
3/3	Marksmanship Fundamentals II ACU / SC / Iron Sights	None
4/4	Group and Zero (300m zero - 25 m) ACU / SC / Iron Sights /25m	
4/5	Group and Zero (300m zero - 25 m) ACU / SC / Iron Sights /25m	Total: 30 rounds per firer
4/6	Group and Zero (300m zero - 25 m) ACU / SC / Iron Sights /25m	
5/7	Confirm Zero (300m zero) ACU / SC / Iron Sights KD Rng or LOMAH	Total: 40 rounds per firer
5/8	Confirm Zero (300m zero) ACU / SC / Iron Sights KD Rng or LOMAH	
6/9	Field Fire I (75/175/300 meters) ACU / SC / Iron Sights	Total:40 rounds per firer
7/10	Simulated Field Fire (EST2000) ACU / SC / Iron Sights (EST)	None
8/11	Field Fire II (75/175/300 meters) ACU / SC / Iron Sights	Total:80 rounds per firer
9/12	Practice Record Fire I / II ACU / SC / Iron Sights	Total:80 rounds per firer
10/13	Record Fire ACU / SC / Iron Sights	Total: 40 rounds per firer
		310 rounds per Soldier

Day	ARM STRATEGY Training	Ammunition
1	Combat Equipment Familiarization Fire IBA / MOLLE / ACH (EST)	None
2	Introduction to Optics, Lasers and Quick Fire IBA / MOLLE / ACH	None
3/3N	Zero an M68 CCO and an AN/PAQ-4 IBA / MOLLE / ACH	40 rnds/Soldier
4/4N	Engage targets with the M68 CCO (DAY) and AN/PAQ-4 (Night)	40 rnds/Soldier
5/5N	Reflexive Fire (day and Night) IBA / MOLLE / ACH	50 rnds/Soldier
6	Barrier Shoot IBA / MOLLE / ACH	30 rnds/Soldier
7	Combat Field Fire IBA / MOLLE / ACH	30 rnds/Soldier
		190 rnds/Soldier

Total: 500 rounds

Figure 2 — OSUT Marksmanship Strategy

Period/Day	IN OSUT BRM STRATEGY Training	Ammunition
1/1	Introduction to Basic Rifle Marksmanship ACU / SC / Iron Sights	None
2/2	Range Procedures and Marksmanship Fundamentals I ACU / SC / Iron Sights	None
3/3	Marksmanship Fundamentals II ACU / SC / Iron Sights	None
4/4	Group/Zero BUIS / M68 (5 Rnd) ACU / SC / 200m	
4/5	Group/Zero BUIS / M68 (5 Rnd) ACU / SC / 200m Zero	Total: 70 rounds per firer
4/6	Group/Zero BUIS / M68 (5 Rnd) ACU / SC / 200m Zero	
5/7	100/200 Meter M16 Group/Zero ACU / SC / KD Rng	Total: 60 rounds per firer
5/8	100/200 Meter M16 Group/Zero ACU / SC / KD Rng	
6/9	Field Fire I (75/175/300 meters) ACU / SC	Total: 40 rounds per firer
7/10	Simulated Field Fire (EST2000) IBA / MOLLE / ACH (EST)	None
8/11	Field Fire II (75/175/300 meters) IBA / MOLLE / ACH (LOMAH)	Total:80 rounds per firer
9/12	Practice Record Fire I / II IBA / MOLLE / ACH	Total:80 rounds per firer
10/13	Record Fire IBA / MOLLE / ACH	Total: 40 rounds per firer
		370 rounds per Soldier

Day	IN OSUT ARM STRATEGY Training	Ammunition
1	Reflexive Fire (EST) IBA / MOLLE / ACH	None
2	Reflexive Fire IBA / MOLLE / ACH	60 rnds/Soldier
2N	Night Fire (Intro PAQ-4) IBA / MOLLE / ACH	40 rnds/Soldier
3	Barrier Shoot: Kneeling, Standing, Prone IBA / MOLLE / ACH	60 rnds/Soldier
3N	Night Fire IBA / MOLLE / ACH	40 rnds/Soldier
4	Movers IBA / MOLLE / ACH	40 rnds/Soldier
5	Barriers: Cover to Cover IBA / MOLLE / ACH	60 rnds/Soldier
6	Combat Field Fire IBA / MOLLE / ACH	60 rnds/Soldier
		360 rnds/Soldier

Total: 730 rounds

Figure 3 — Combat Field Fire

Kneeling Unsupported — 50m-L (31 Sec, 2 Hits), 50m-R (31 Sec, 2 Hits), 100m (45 Sec, 1 Hit), 150m (60 Sec, 2 Hits) — 4 Targets / 10 Rounds / 60 Sec

"Seek Cover / Change Position" Barricade Supported — 50m – L or R (26 Sec, 3 Hits), 100m (40 Sec, 2 Hits) | 100m (19 Sec, 1 Hit), 150m (21 Sec, 2 Hits), 200m (40 Sec, 1 Hit) — 2 Targets / 5 Rounds / 40 Sec; 3 Targets / 5 Rounds / 40 Sec

"Seek Cover / Change Position" Prone — 100m (23 Sec, 2 Hits), 200m (36 Sec, 2 Hits), 250m (50 Sec, 1 Hit) | 150m (21 Sec, 2 Hits), 250m (37 Sec, 2 Hits), 300m (50 Sec, 1 Hit) — 3 Targets / 5 Rounds / 50 Sec; 3 Targets / 5 Rounds / 50 Sec

FOREIGN WEAPONS TRAINING

A NECESSITY FOR TACTICAL ADVISING

CPT MICAH J. SHOCKLEY

In the early 1950s, the forefathers of Special Operations Forces (SOF) saw a need to develop competency with the weapon systems they would train foreign forces to use. They also saw the need for small groups of men with limited supplies and ammunition to be able to effectively employ the weapon systems of their counterparts and enemies, since ammunition and supplies would be more readily available for those weapons. For nearly 50 years, SOF stood alone in manning, equipping, and training foreign security forces (FSF), as they did in their need for competency with foreign weapons.

With the deployment of combat advisors (CA) and the implementation of counterinsurgency (COIN) theory in modern warfare, SOF is no longer the singular force operating by, with, and through FSF. Since the onset of Operation Enduring Freedom and Operation Iraqi Freedom, the responsibility for training and operating with FSF has expanded to combat advisors and conventional Army units. With the expansion of this mission, foreign weapons training has become a more vital part of pre-deployment training for brigade combat teams (BCTs) and CAs to allow them to gain and maintain credibility while training, planning, and operating with their FSF counterparts.

In the current theaters of operations, host nation security forces (HNSF) carry a wide variety of weapons: M4s, M16s, AK-47s, AK-74, PKMs, RPKs, SVDs, RPG-7s, M9s, and Glock pistols. Now, everyone in the U.S. military is, at the very least, familiar with the function and capabilities of the M4, M16, and M9. However, only a few service members are, at a minimum, familiar with the function and capabilities

Photo courtesy of 1LT Travers Doane

1LT Travers Doane teaches basic rifle marksmanship during Afghan National Police basic training.

of the Soviet family of weapons listed above. The issue here lies in the fact that in a COIN fight, general purpose forces — not just SOF — are expected to partner, train, plan, and fight with HNSF. This creates a few problems for U.S. forces.

First, how can a unit expect to gain and maintain credibility while training their HNSF counterparts with little or no knowledge on the weapon systems being trained? Now, some will make the argument that if you know how to use one weapon system, then you know how to use them all. However, anyone who has fired an American series weapon and an AK series weapon knows that they behave drastically differently and, therefore, require significant training to become proficient. With that being said, the basics are still the same. Sight picture, breathing, trigger squeeze, and body position never change. However, applying the basics to control and become proficient with a different weapon system takes time and training — something that should not happen for the first time in front of HNSF counterparts, if you want to maintain your credibility while advising and fighting with the HNSF.

Planning, executing, and advising combined operations with HNSF also

requires familiarization with the HNSF weapon systems. The capabilities of those weapon systems will play an integral part in their effective employment. If the primary planner/advisor has no understanding of the capabilities of those weapon systems, then he will not be able to effectively emplace them or advise his counterpart in their use. Again, two things that will result in a loss of credibility for the advisor and more importantly could result in the loss of life.

Currently, the 162nd Infantry Brigade FSF-CA trains and deploys combat advisors on a weekly basis. Most of these advisors receive a minimum of a four-hour weapons familiarization course on foreign weapons. During the course of instruction, advisors receive training on the function and capabilities of the AK series of rifles, the RPK, the PKM, the SVD and the RPG series of grenade launchers. They are taught how to assemble, disassemble, load, fire, and reduce stoppage on each weapon system. They also receive instruction in proper sight picture and employment of each weapon system. Teams that perform tactical duties in country also receive a familiarization fire. While at the range, the advisors apply all of the knowledge

> **"While a combat advisor or a conventional unit will not have the time or resources to become an expert on a foreign weapon system, the recommended training will provide them with a minimum level of competency that will make them a more effective element in the COIN fight."**

Day 1	Classroom Familiarization	Function and Capabilities (6 hrs): AK-47 AK-74 PKM RPK SVD RPG-7
Day 2	Familiarization Fire (Company-Level and Non-Tactical Combat Advisors) Zero and Familiarization Fire(Platoon Level and Tactical Combat Advisor)	AK-47 (Co, NTCA, Pl, TCA) AK-74 (Co, NTCA, Pl, TCA) PKM (Co, NTCA, Pl, TCA) RPK (Co, NTCA) SVD (Co, NTCA) RPG-7 (Co, NTCA)
Day 3	Zero and Familiarization Fire Continued (Platoon Level and Tactical Combat Advisor)	RPK (Pl, TCA) SVD (Pl, TCA) RPG-7 (Pl, TCA)

Figure 1— Recommended Training Levels

they gained during the classroom portion of training. They also receive additional instruction on the different intricacies of each weapon in order to better prepare them for possible future situations. While this training is absolutely valuable, it is not necessary for everyone.

Advisors on strategic-level teams or advisors on combat service support missions need only basic foreign weapons training. For these advisors, foreign weapons training should not be a priority task; however, if they have the time in their training schedule and the resources available, these advisor teams should attempt to at least go through a familiarization class.

Combat advisors deploying to train and partner with HNSF tactical level units should receive significant instruction in the weapons they will encounter, especially if they are not U.S. military weapon systems. Before deploying, combat advisors with this mission should be proficient with their counterparts' weapon systems. They should be able to accurately fire and maintain each of the weapon systems their counterparts will be carrying. Tactical-level advisors should attend a thorough and detailed classroom portion of instruction where they will become intimately familiar with the functions and maintenance of those weapon systems they will encounter. The second portion of training should consist of at least two full days of live fires. Here, the advisors need to learn to zero and effectively engage targets on a modified qualification table. They should also test the capabilities of each weapon system, to see exactly how the weapons react at the maximum range of the weapons' limits. This training would provide the combat advisors with a level of credibility and capability that would allow them to gain rapport with their counterpart quicker than normal. This competence would also prove valuable for the combat advisors during combined planning with their counterparts and possibly during the execution of an operation if the advisor must directly employ the weapon system.

Unlike combat advisors, conventional units partnering with HNSF will probably never be in the situation where they are required to fight with a HNSF weapon system. However, their ability to employ these weapon systems could make their partnership significantly more effective. The leaders of these units, from team leaders to company commanders at a minimum, should be able to effectively maintain and employ the weapon systems they will encounter.

At the company level, it is not as important that the company level leadership be experts with each weapon system; however, they do need to become intimately familiar with the capabilities and limitations of each weapon as that will play a major role in the planning and execution of combined operations. At this level, leadership should attend at least a one-day familiarization class. If time and resources allow, they should also attend a familiarization fire.

At the platoon level, team leaders to platoon leaders should be competent with the weapon systems they will encounter. The platoon leadership should also attend the familiarization class along with the familiarization fire. They should also attend the live-fire exercises described above for the combat advisors, since these individuals are, in effect, tactical level advisors.

Figure 1 shows the recommended training for company-level leadership, non-tactical combat advisors, platoon-level leadership, and tactical combat advisors. Once trained and proficient, these leaders can return to their units and train their subordinates on these skills.

While a combat advisor or a conventional unit will not have the time or resources to become an expert on a foreign weapon system, the recommended training will provide them with a minimum level of competency that will make them a more effective element in the COIN fight. The abilities gained from training with and becoming competent with foreign weapons will pay dividends for both the combat advisor and conventional units. While foreign weapons training should not be the primary focus of a deploying unit, it should be an integral part of its training. The skills and knowledge gained from this training could be the difference between gaining and losing credibility, and in the most extreme cases, it could determine the condition in which you bring your Soldiers home.

CPT Micah J. Shockley is currently the commander of Barbarian Company, 1st Battalion, 353rd Infantry Regiment, 162nd Infantry Brigade, FSF-CA. B Company is one of two companies in 1st Battalion that trains security force assistance brigade combat advisors. He has deployed twice in support of Operation Iraqi Freedom with Blackfoot Troop, 3rd Squadron, 89th Cavalry Regiment, 4th Brigade Combat Team, 10th Mountain Division, Fort Polk, La. He holds a Bachelor's of Science in Systems Engineering from the U.S. Military Academy.

IMPROVING ARMY SMALL ARMS TRAINING AND QUALIFICATION

MAJ JONATHAN A. COWEN

The current standard Army qualification provides a basic means of evaluation and training for Soldiers on individual assigned weapons. Unit training provides the remainder of individual small arms instruction, training, and evaluation with live fires and close quarters marksmanship or reflexive fire managed at the unit level. In the fall of 2009, I had an opportunity to attend an EAG Tactical carbine course and learned a great deal from the experience about my skills with and training on individual weapons.

One event I found especially valuable was an exercise known as the "modified Navy qualification" or Navy qual., for short. Originally developed by former Navy SEAL Jeff Gonzales and refined by instructors like Pat Rogers of EAG Tactical, this simple qualification requires a target, a 50-meter flat range, timer, and 15 rounds of ball ammunition in addition to a rifle and three magazines. Its simple and challenging design stresses accurate shooting under stress at realistic distances and involves three shooting positions and two mandatory reloads.

Task: Conduct modified Navy qualification course of fire

Conditions: Gives an individual weapon and combat equipment, three magazines of five rounds, a 50m flat range with one target and a timer/ score keeper per shooter and an appropriate target. (at a minimum, standard Army M9 25m alternate target)

Standards: Fire five rounds from standing, sitting or kneeling, and prone positions with two magazine changes with a par time of 25 seconds without missing the target and score as a marksman or higher. (Beginning iterations may be fired without full combat gear at targets closer than 50m)

The shooter steps to the line and makes ready with one five-round magazine in his rifle and two additional five-round magazines in his fighting kit keeping his weapon in the low ready position with the safety on. Upon the timer signal or audible command, the shooter fires five rounds standing from a stationary position, conducts a reload and shoots five rounds kneeling or sitting, and then conducts a final reload and fires five rounds in a prone position, all at 50 meters. Par time for all this is 25 seconds. If this sounds easy, I assure you it is not.

Each second over 25 adds 2 points to the shooter's score; each second under

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JEFF COOPER'S RULES OF GUN SAFETY

RULE I: ALL GUNS ARE ALWAYS LOADED

RULE II: NEVER LET THE MUZZLE COVER ANYTHING YOU ARE NOT WILLING TO DESTROY

RULE III: KEEP YOUR FINGER OFF THE TRIGGER UNTIL YOUR SIGHTS ARE ON THE TARGET
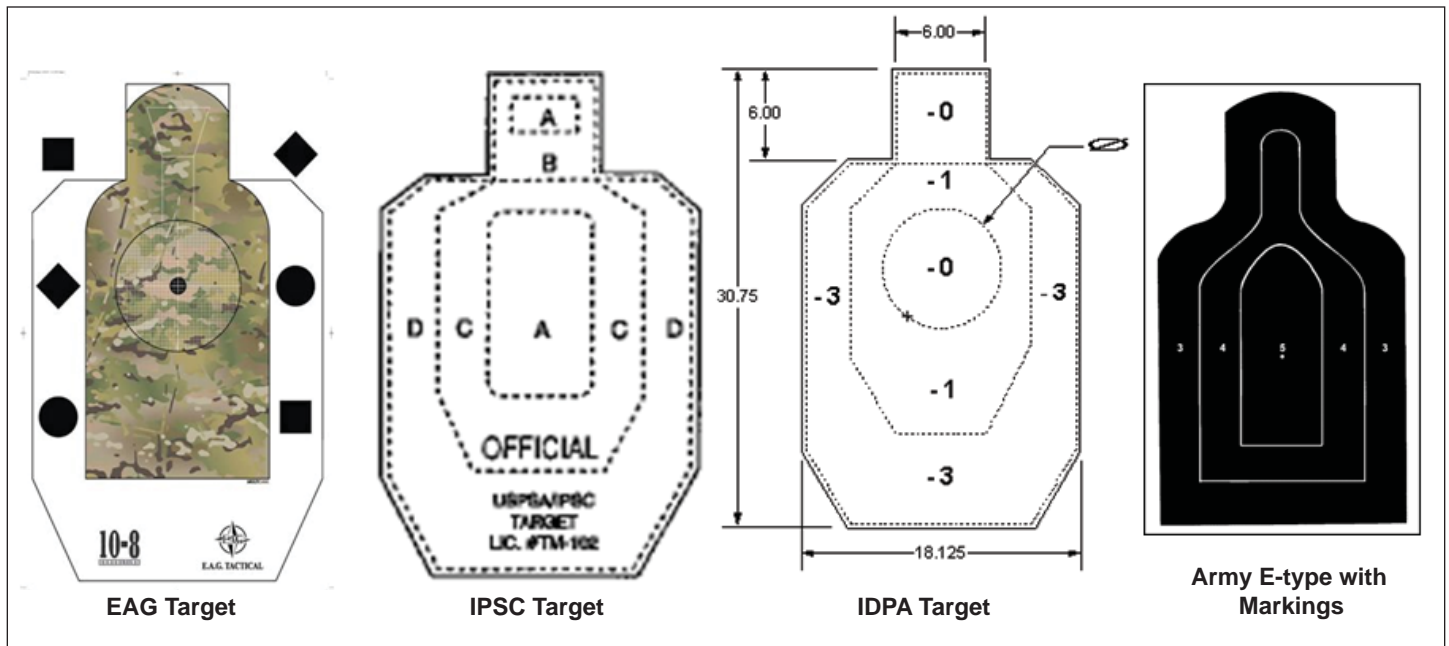
RULE IV: BE SURE OF YOUR TARGET

Figure 1— Example Targets

EAG Target   IPSC Target   IDPA Target   Army E-type with Markings

subtracts one point. Each hit on paper at 50m outside the 8-inch inner ring adds one point. Any miss off paper is a failure to qualify. A Soldier who shoots all 15 rounds in the 8 inches at 50m and finishes right at 25 seconds score a zero. A Soldier who shoots 14 rounds in the zone with one on paper in 20 seconds would be -4 (25-20= -5 for time, +1 for the hit on paper outside the zone). Figure 2 illustrates the recommended qualification standard, and it is important to keep the standard high to promote improvement and track progress. This is not an easy course of fire to shoot.

To train for the Navy qualification, start by shooting standing, kneeling or sitting, and prone at 25m, then 35m and finally 50m. Start slow and speed will come. Shoot 5-10 rounds and move down range to get good feedback. Modify your combat gear so you can get into and out of position. Work reloads until it's second nature.

Targets used for the qualification are critical. Some of the best targets are available from EAG Tactical and are well worth it as they can be used to zero and other drills. Other good targets include International Practical Shooting Confederation (IPSC — use the A zone), International Defensive Pistol Association (IDPA — use the 0 zone) and Army (M9 25M Alt qualification target) E type with additional markings. Commercial shooting timers are available from several sources, and digital watches can be used if required with one scorekeeper/timer/coach per shooter.

Quality training involves solid target feedback. Fewer rounds with quality feedback is more beneficial to a Soldier than more rounds with less target feedback. Utilizing a small scoring zone emphasizes and rewards quality hits on target that are more likely to achieve first round incapacitation.

This qualification reinforces several key aspects of individual small arms proficiency at the same time — speed and accuracy are both important; reloads are mandatory from a shooter's kit; and three positions are required. Soldiers who have not mastered the fundamentals of reloading their rifle will suffer. In short, this is a fantastic training and diagnostic tool for any military unit.

TIME (sec)	HITS IN CENTER ZONE (with all hits on target)														
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
15	-10	-9	-8	-7	-6	-5	-4	3	-2	-1	0	1	2	3	4
16	-9	-8	-7	-6	-5	-4	-3	2	-1	0	1	2	3	4	5
17	-8	-7	-6	-5	-4	-3	-2	1	0	1	2	3	4	5	6
18	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7
19	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8
20	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9
21	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
22	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11
23	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12
24	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
25	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
26	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
27	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
28	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
30	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
31	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
32	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
33	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
34	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
35	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Master	Expert		Sharp-shooter		Marksman										

Figure 2— Recommended Qualification Standard

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BCTP Full Spectrum Exercises:
Observations of an Observer/Trainer

MAJ KEITH W. WILSON

The purpose of this article is to identify fundamental training opportunities and keys to success when conducting a brigade full spectrum exercise with the Battle Command Training Program (BCTP). While this article specifically focuses on battalion commanders and staffs, it has application for brigade commanders and staffs as well.

In the past few years, Operations Group Charlie (OPSGRP-C) of the BCTP has transitioned its focus for full spectrum exercises (FSX) away from primarily National Guard units, and has taken a whole-army approach to conducting these training events with a renewed emphasis on active component units. These days it is common in OPSGSRP-C for more than two-thirds of a year's exercises to be active component brigade and regimental combat teams. As more and more active component units conduct the full spectrum exercise, formerly known as warfighter exercise (WFX), many commanders and staffs remain unfamiliar with the opportunities available to them during this training event.

As units prepare to execute their full spectrum exercise, competing requirements often pull them in multiple directions both in the field and in garrison. This creates a challenge for commanders and staffs to allocate significant time and resources into adequately preparing for their FSX. A battalion commander does not have many opportunities to conduct a collective training event where the brigade headquarters is manned, passing and receiving information, and integrating all digital systems. Not capitalizing on this training opportunity is a failure of leadership and often attributed to a lack of understanding as to what the FSX offers.

It is important to understand that the BCTP typically conducts FSXs for brigade combat teams early in the Army Force Generation (ARFORGEN) cycle and prior to deployment to any other combat training center (CTC). Generally, a brigade will conduct their FSX prior to their leaders training program (LTP) and dirt rotation at the National Training Center (NTC), Joint Readiness Training Center (JRTC), or Joint Military Readiness Center (JMRC). Young staffs with limited to no experience working with each other typically execute the FSX. This is not to say that the staffs do not have experience. On the contrary, battalion staffs typically have a significant amount of operational experience. My boss likes to say, "It's new people on a new team doing new things with new stuff."

There are the four fundamental areas that battalion commanders and staffs can focus their efforts to maximize their participation in a full spectrum exercise. These include:

(1) Validate and refine the tactical standard operating procedure (TSOP), the tactical operations center standard operating procedure (TOCSOP), and plans standard operating procedure (PLANSOP) as applicable;

(2) Establish a tactical operations center;

(3) Conduct the military decision-making process (MDMP) in accordance with (IAW) FM 5-0, *The Operations Process*; and

(4) Exercise mission command.

Validate and Refine the TSOP, TOCSOP, and PLANSOP as Applicable

Although somewhat self-explanatory, this is one of the greatest challenges observed during my time at BCTP and NTC. Oftentimes, units do not have standard operating procedures (SOP) or have them, but are unfamiliar with their content. This is understandable. New staffs are being formed, new commanders at all levels may be coming on board, and new tactics, techniques, and procedures (TTPs) are learned on a regular basis. The best thing a unit can do is start with something and use it as the basis for refinement. I recommend the staff print at least one hard copy to post in the tactical operations center (TOC) and refer to, make changes to, or add to the document throughout every training event and exercise. This is one easy way to capture lessons learned and carry them over from one training event to another. The commander must insist that his staff — throughout the exercise — identify, validate, or refine a baseline SOP.

Establish a Tactical Operations Center

First and foremost, the TOC (or command post) should be set up IAW the unit's SOP. If the SOP does not describe the components and ergonomics of the operations center, then capture them in the SOP once an initial standard is established. The definition of a command post is "a unit headquarters where the commander and staff perform their activities," but a TOC is much more than this simple definition portrays. It is the nerve center of a unit. For a battalion or squadron, it is the lowest level at which a full staff exists to conduct planning and synchronization for combat operations. A company/troop has nowhere near the capabilities or resources as a battalion/squadron staff, which is significantly limited compared to a brigade or higher headquarters.

Early in my career, I learned six functions of a command post: receive information, distribute information, analyze information, submit recommendations, integrate resources, and synchronize resources. While rather simplistic, they are still very applicable. Oftentimes, executive officers or S3s will state that their TOC set up for the FSX is different from their expected TOC set up for NTC that is different from their expected TOC set up once they deploy to Iraq or Afghanistan. My response is: I do not care. I am less interested in how you will display information and more interested in what information you will display. Understanding what to display is still a struggle for many units. There is later discussion, in this article, as it relates to developing a common operational picture (COP). Having a fully established and operational TOC during the FSX allows the commander the ability to assess whether the TOC is able to function as he requires and whether

the staff is creating options, preserving options, or forfeiting options based on the set-up and functionality of the TOC. The commander must insist that his TOC set up and configuration is exactly as they intend on deploying and fighting.

Integrate Army Battle Command Systems (ABCS) across all warfighting functions. Seldom do units have the ability to set up and employ all their ABCS in a training environment that fully exercises the digital architecture. Oftentimes, the full spectrum exercise is the first time a brigade/regiment will establish ABCS connectivity across the brigade. Integrating ABCS across the brigade is the equivalent of the signal officer's Tank Table XII. Do it right and do it early, or the entire exercise will suffer. Too often, staffs rely on the old PowerPoint stand-by for mission analysis (MA) and course of action (COA) development because it is what they are familiar with. It is inefficient and adds significantly more time to the planning and execution process. While one could write an entire article on the merits of using ABCS, units typically resort to PowerPoint due to a lack of understanding of the capabilities provided by ABCS. The commander must insist that all Army Battle Command Systems are set up, configured, able to "talk to each other" as designed, and understood by the primary staff.

Develop and maintain a COP. As previously mentioned, the TOC serves as the nerve center of a unit. It is a critical source of information management for the commander, higher headquarters, and subordinate units. FM 3-0 defines a common operational picture as a "single display of relevant information within a commander's area of interest tailored to the user's requirements and based on common data and information shared by more than one command." While the definition states that a COP is a "single display" it arguably can be better described as a "display" of products consisting of multiple screens, maps, and printouts that allow a commander to gain situational understanding. An effective COP will differ for each individual. I often describe the ideal COP this way: a commander walks into his TOC with coffee cup in hand, looks around at all the products (both digital and analog), and achieves an 85-90 percent understanding

Photos by SGT Timothy Chatlos

A brigade targeting officer shows his targeting plan to an observer/controller from the Battle Command Training Program during the 1st Strkyer Brigade Combat Team, 25th Infantry Division's full-spectrum training exercise 12-26 August at Fort Wainwright, Alaska.

of everything that is happening in his area of responsibility. A few pointed, direct questions should get him to the 100-percent solution. If the commander has to spend more time interpreting the information portrayed, then it is not an effective COP. The commander must insist that his staff establish and maintain an effective COP throughout the exercise, and then capture how to portray the COP in the unit SOP.

Manage information horizontally and vertically (force reporting). The FSX provides a great opportunity for commanders and staffs to begin developing or validating their knowledge management plan. One of the greatest challenges that battalions/squadrons address is how to determine what information is important and how to transfer information between FM radio, command post of the future (CPOF), and blue force tracker (BFT) as well as all the other forms of information dissemination (e-mail, chat, phone calls, etc.). The commander addresses this in a unit SOP and exercises it whenever the opportunity arises. Additionally, most battalions will not conduct routine reporting (such as a sensitive items reporting or personnel status reporting) during an FSX. The FSX is one of the easiest opportunities

to conduct these reports (no sensitive items are actually issued and the computer generates the personnel numbers), yet units do not execute this standard reporting requirement. These reports force the staff and TOC personnel to "battle track" simple reporting requirements based on an established battle rhythm and demonstrate how to process the multitude of other reports. The commander must insist that his staff exercise their knowledge management plan and force reporting across all echelons.

Execute battle drills IAW SOP. Battle drills are "the general and detailed methods used by troops and commanders to perform assigned missions and functions." In a TOC, these battle drills may consist of a counter-fire drill, a downed aircraft (UAV) drill, or a "blue-on-green" battle drill. Battle drills are only effective when they are understood and rehearsed. A technique for executing TOC battle drills is to post the drill on a screen and have the battle captain or battle NCO walk the TOC personnel through the drill. The other option is to have a "battle book" in each section that contains the battle drills. Again, the battle captain or battle NCO is responsible for leading the TOC personnel through these drills. The FSX provides a

great opportunity to execute battle drills and if the commander and staff do not conduct them in conjunction with the exercise, they should conduct them as rehearsals. At a minimum, a TOC should conduct two-to-three battle drills per hour (either "real world" in conjunction with the exercise or as a rehearsal). The XO or S3 should provide the results to the commander in his daily update. Another opportunity to exercise battle drills is during the "Mini-Ex" conducted two days prior to actual mission execution when all systems are up and running (theoretically) and TOC personnel are available to make adjustments prior to the actual conduct of operations. The commander must insist that his TOC exercise a set number of battle drills over a specified period throughout the FSX.

Conduct the MDMP IAW FM 5-0

Too often, staffs attempt to conduct the MDMP without using a reference to ensure they address all of the MDMP steps. A pilot would never fly an aircraft without conducting pre-flight checks using a checklist, so why would a staff plan complex combat operations without using a checklist? With the recent (26 March 10) publication of the new FM 5-0, it is even more important to include this reference into all MDMP steps to ensure all new concepts and ideas are integrated into the process throughout. Regardless of how much a staff "knows" about MDMP, how comfortable they are with each other or how condensed their time frame is, they should always use a checklist from FM 5-0 or one of the many available "smart books."

Develop, update, and use running estimates. FM 2-01.3, *Intelligence Preparation of the Battlefield*, defines running estimate as "the continuous assessment of the current situation used to determine if the current operation is proceeding according to the commander's intent and if planned future operations are supportable. The commander and each staff section maintain a running estimate." In their running estimates, the commander and each staff section continuously consider the effects of new information and update the following: facts, assumptions, friendly force status, enemy activities and capabilities, civil considerations, and conclusions and recommendations. Although current doctrine is replete with the term "running estimate," generally if you ask a primary staff officer what his running estimate consists of or looks like he cannot tell you. The commander must insist that his staff develop, update, and use running estimates throughout the FSX, then capture the running estimates in the SOP.

Conduct staff-integrated intelligence preparation of the battlefield (IPB) integrating civil considerations. In my opinion, IPB is the most important portion of the MDMP. It identifies whom we are operating with and against as well as where we are operating. The staff builds the rest of the MDMP upon this fundamental framework. FM 3-0 defines IPB as a "systematic process of analyzing and visualizing the portions of the mission variables of threat, terrain, weather, and civil considerations in a specific area of interest and for a specific mission." IPB consists of four steps: define the operational environment, describe environmental effects on operations, evaluate the threat, and determine threat courses of

> "Regardless of how much a staff 'knows' about MDMP, how comfortable they are with each other or how condensed their time frame is, they should always use a checklist from FM 5-0 or one of the many available 'smart books.'"

action. While the definition of threat is "nation states, organizations, people, groups, conditions, or natural phenomena able to damage or destroy life, vital resources, or institutions," it is often relegated to just the enemy. More often than not, the S2 has sole responsibility for developing the IPB. This often results in an enemy-centric IPB that minimizes or negates all together the civil considerations that may even be more important than the enemy assessment. An incomplete IPB can derail progress within the MDMP. IPB is so important, I believe it is one component of the MDMP in which the XO should personally be involved with and supervise. The commander must insist that his staff conduct a thorough staff-integrated IPB that fully integrates civil considerations and properly addresses all four steps of IPB.

Conduct MA brief, COA brief, and results of COA analysis brief. Forcing the staff to conduct these briefings allows the commander to assess the staff's performance throughout MDMP and provides better situational understanding throughout the organization. Typically, all staffs conduct a mission analysis brief. Because most commanders direct a single course of action (which is generally recommended for a time-constrained FSX), many units do not conduct a complete COA brief. The commander misses an opportunity to ensure the entire staff fully understands his concept of operations and intent. Unfortunately, many staffs do not conduct adequate course of action analysis (war game), which is arguably one of the most important steps of the MDMP (possibly second only to completing a thorough IPB as part of mission analysis). Staffs must commit a significant amount of time to the war game. This allows them to identify the additional decision points the commander may need to be aware of, problem areas, and planning gaps. Because the war game component is so important, it requires the XO's intimate involvement. The commander must insist that his staff conduct these three briefings to the entire staff to ensure situational awareness and understanding throughout the organization and to allow the commander to assess the performance of his staff throughout the MDMP as well as to gauge their understanding of his intent.

Develop a complete operation order (OPORD) and issue brief to subordinate units. During the time-constrained FSX, many staffs are still able to analyze and work through the slides and briefings associated with the MDMP to include an OPORD briefing (typically a conglomeration of slides from mission analysis and course of action development with a few additions). What staffs typically struggle to accomplish is the completion of a complete written operation order for subordinate commanders. This is too easy to "hand wave" when company commanders do not have to actually develop their own company plan and issue their own OPORD due to the nature of the FSX, so it allows the staff a "freebie" when they should be required to complete this critical step. Additionally, while competing requirements may limit the availability of actual company commanders to participate in the FSX it is truly value-added to have them receive the operations order briefing. It is one opportunity the subordinate commanders have to shape the staff who will be directing them in the future. They should ask the tough questions that force the staff to be thorough and analytical

in their planning. The commander must insist that his staff develop a complete operations order in addition to issuing an operations order briefing to subordinate commanders.

Exercise Mission Command

"The Army's preferred method of exercising command and control is mission command. Mission command is the conduct of military operations through decentralized execution based on mission orders. Successful mission command demands subordinate leaders at all echelons exercise disciplined initiative, acting aggressively and independently to accomplish the mission, within the commander's intent" (FM 1-02, *Operational Terms and Graphics*). Oftentimes, the FSX is a battalion/squadron commander's first opportunity to deploy his entire TOC with primary staff to conduct the MDMP and exercise mission command in a tactical environment with multiple sources of information flowing both vertically and horizontally. Commanders must emphasize to their staff the importance of this training event and capitalize on this unique opportunity to train in a tactical environment with all "systems" established and utilized.

Develop and maintain situational awareness and understanding within the TOC. This is easy to say, but hard to do. This is a function of how the TOC is set up and how information is managed within the TOC. Fortunately, the design of the FSX is deliberately simplistic to allow commanders and staffs the opportunity to begin establishing how the TOC will function during both the MDMP and mission command to ensure the achievement of situational understanding early and throughout the exercise. A key contributor to achieving situational awareness and understanding is the common operational picture as previously described. The commander must insist that his or her staff employ the tools and systems available to develop and maintain situational awareness and understanding within the TOC for the duration of the FSX.

Employ all ABCS. Critical to exercising mission command is the ability of a commander to harness all available Army Battle Command Systems to assist in the command and control of his formation. As mentioned previously, ABCS design makes mission command easier and more efficient. The FSX is typically the first opportunity when all systems are employed. Staffs need to maximize the opportunity. If a system is not working, the S6 should be scrambling to find the field service representatives and insist they bring the systems online. The XO and staff conduct briefings such as staff update briefs or commander update briefs through ABCS. Any PowerPoint briefings should be "returned to sender" with the expectation that ABCS is the primary method for briefing inside the TOC. If the commander does not force the issue early on, the staff will continue to fall back to the less effective and less efficient means with which they are comfortable. The commander must insist that all ABCS are set up; configured; able to "talk to each other" as designed; understood by the primary staff; and employed in the exercise of mission command.

Develop and use adequate graphic control measures via ABCS. Graphic control measures are "graphic directives given by a commander to subordinate commanders to assign responsibilities, coordinate fire and maneuver, and control combat operations." Generally developed during course of action development, the commander uses them "to convey and enhance the understanding of the concept of operations, prevent fratricide, and clarify the task and purpose of the main effort." The use of ABCS early in the MDMP allows for the building, across multiple echelons, of easily shared graphics. More often than not, staffs do not develop adequate graphic control measures to assist subordinate units in execution or TOC personnel in effectively "directing" the fight. The commander must insist that his or her staff develop and use adequate graphic control measures via ABCS throughout the MDMP and into mission execution.

Synchronize and effectively employ all available assets/ capabilities. There are generally two overarching challenges associated with synchronizing and employing assets and capabilities: knowing what is available and knowing when they are available! Commanders and staffs are typically very comfortable with their organic or habitual assets and capabilities. What they struggle with are the attachments or the "unconventional" assets and capabilities such as host nation security forces, non-governmental organizations, interagency liaisons, and provincial reconstruction teams. Additionally, the battalion/squadron may have a higher-level asset such as a Shadow or an air or scout weapons team, but have no method to effectively track when they "own" the asset or what their capabilities are. A technique is to have a constant "asset tracker" posted in the TOC that shows all assets (internal and external to the unit) currently available. When an entity such as an air weapons team moves to another area of responsibility, update this move on the "asset tracker" so at any given time the commander can see what assets he can tap into.

Oftentimes, the "combat power tracker" in the TOC is an outdated maintenance status of all organic assets and does not adequately depict the assets and capabilities available to allow the commander to conduct the fight. The definition of combat power is "the total means of destructive, constructive, and information capabilities that a military unit/formation can apply at a given time" (FM 3-0). Therefore, a combat power tracker should somehow portray to the commander all the assets and capabilities within

The commander of 2nd Battalion, 8th Field Artillery and the brigade targeting officer, discuss governance issues as part of the 1st Stryker Brigade Combat Team, 25th Infantry Division's full-spectrum training exercise, 12-26 August at Fort Wainwright, Alaska.

the eight elements of combat power (leadership, information, movement and maneuver, intelligence, fires, sustainment, command and control, and protection) available at any given time. The commander must insist that his staff fully understand all available assets and capabilities available at any given time that provide combat power to the organization.

Conduct regular TOC update, staff update, and commander's update briefs. The FSX provides significant opportunities for commanders and staffs to share information vertically and horizontally. At a minimum, the battalion/squadron conduct regular TOC update, staff update, and commander's update briefs. TOC personnel should conduct regular TOC update briefs (typically every two hours) which are simply a quick update "around-the-horn" by warfighting function of what is currently going on throughout the area of responsibility. The battle captain/ NCO should conduct the TOC update brief for TOC personnel. The staff update brief provides an opportunity for the battalion/ squadron staff to provide an update to the commander on activity throughout the area of responsibility and for the commander to provide additional guidance and direction to his or her staff. The staff update brief should be lead by the executive officer. The commander's update brief provides an opportunity for the battalion/squadron staff to provide an update to the subordinate commanders on activity throughout the area of responsibility, for the subordinate commanders to provide the commander an update on activity throughout their area of responsibility, and for the commander to provide additional guidance and direction. The commander's update brief should be led by the executive officer.

Conclusion

The figure on the right gives simple keys to success that a battalion/squadron staff can focus on to assist in progressing through a full spectrum exercise. While all are relatively intuitive and self-explanatory, they would not be on the list if the majority of units conducting their FSX did not struggle with most if not all of these.

Are any of these recommendations earth shattering? Of course not. Are they going to get my name on a building? Not likely. The fact that both active and National Guard brigade and battalion staffs continue to struggle with many if not all of these arguably fundamental components of brigade and battalion collective training should cause all leaders to take pause and determine how to ensure success in their full spectrum exercise. Measuring success in a full spectrum exercise is simple: Are we better at the end of the exercise than we were on day one? It does not matter if the objective is seized, all key infrastructure secured or the enemy is defeated. The full spectrum exercise is the beginning of a critically important training methodology that will generally take a unit into their mission rehearsal exercise and onto a future deployment. The amount of learning that takes place is proportionate to the amount of preparation and commitment that goes into the exercise. Commanders, staffs, and leaders at all levels owe it to the subordinate units and each other to maximize this critical opportunity and take the necessary steps to ensure they walk away from their full spectrum exercise much better than when they started and more confident in their ability to function as an effective organization. That is the mark of true success in a full spectrum exercise.

MDMP
  * Develop and stick to a timeline.
  * Use a checklist to conduct the MDMP to standard (FM 5-0, Battle Staff SMARTBook, SOP).
  * Identify what is expected in a running estimate.
  * Directed COA is generally best in this time-constrained environment.
  * War gaming is critical (integrate key players when possible: OPS SGM, battle captains, host nation security forces, provincial reconstruction team [PRT], and etc.).
  * Always brief civil considerations as a component of IPB.
  * Identify a staff officer to serve as the "voice of the people" to focus on civil considerations during all steps of the MDMP.
  * Ensure civil considerations are integrated into MA, war gaming, rehearsals, and briefs.
  * Integrate all assets and capabilities into planning considerations (host nation, non-governmental organization, PRT, interagency, etc.).
  * Integrate consequence management into all aspects of planning.
  * Consider the "information aspect" of all activity.
  * Develop graphic control measures in ABCS from the beginning.
  * Plan for controlling the fight in urban terrain when applicable.
  * Plan for and war game actions on the objective.

TOC Operations and Mission Command
  * TOC ergonomics are critical to effective command and control.
  * Employ an OPSCHED; synchronize and effectively employ all available assets and capabilities.
  * Decision support matrix and associated PIR and NAIs are briefed to and understood by radio telephone operators (RTOs), battle captain/NCO, etc.
  * Use graphic control measures to force subordinate units to push information (i.e., phase lines).
  * Use this opportunity to exercise/rehearse TOC battle drills (recommend clearance of fires, duty status - whereabouts unknown, mass casualty, blue-on-green, and downed aircraft; minimum of 2-3 per hour).

Information Management/Command and Control
  * Use your SOP as the foundation and always build on it; have a copy in the TOC to annotate changes/updates.
  * How do we transfer information between RTO, CPOF, and FBCB2/BFT (generally will not get to FBCB2/BFT in FSX, but needs consideration).
  * Conduct a regular (every 2-4 hours) TOC update for all players "fighting the fight "in the TOC.
  * Identify specific reporting requirements for troops (recommend Green 2, personnel status, logistics status, commander's situation report).

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The Dangers of Anti-Intellectualism in Contemporary Western Armies

CAPT G. GABRIEL SERBU, CANADIAN ARMY

"I feel a fundamental crippling incuriousness about our officers, too much body and too little head."

— T.E. Lawrence

Since time immemorial, academics and military professionals have engaged in a heated debate over the real or perceived historic bias against intellectuals in uniform.

In his book, *On the Psychology of Military Incompetence*, Norman Dixon wrote about a particularly vicious military tradition, the prejudice against education: "(...) those intellectual shortcomings which appear to underlie military incompetence may have nothing whatever to do with intelligence, but usually result from the effect upon native ability of two ancient and related traditions. The first of these, originally founded in fact, is that fighting depends more upon muscle than brain, the second that any show of education is not only bad form, but likely to be positively incapacitating."

Numerous other authors like COL (Retired) Lloyd J. Matthews (a former *Parameters* editor), condemn military degree collecting, which should not be mistaken for an evidence of intellectuality. In COL Matthews' opinion, advanced degrees are not symbols of social or professional status, but should rather "expand the recipients' intellectual capacities and hone them for professional utilization" (see his article: "The Uniformed Intellectual and His Place in American Arms" published in the July 2002 issue of *Army* Magazine).

John A. English and Bruce I. Gudmundsson briefly wrote about army intellectual poseurs in their book, *On Infantry*: "Courtiers rather than warriors, poseurs rather than professionals, they mouthed slogans but understood nothing of principles ... They were marshal in a swaggering sense without the least grasp of the professionalism necessary to the military …"

This article is not trying to prove that there is a real anti-intellectual bias in contemporary Western armies or that ambitious, career-driven false intellectuals are purposefully marginalizing the Guderians, Fullers, and T.E. Lawrences of our time. What I will prove, however, is that under the present circumstances, challenged by resourceful, adaptive and determined insurgents in places like Afghanistan, Western armies need intellectuals more than ever. The gunslinger military culture has to be replaced by a subtler approach to warfare.

Industrial-Age Armies

As Martin van Creveld eloquently explained in his remarkable book, *Command in War*, the Great War was the first conflict that upset the traditional balance between animate and inanimate objects. The war of 1914-1918 heralded the age of the machine, in which inert objects decisively enhanced martial prowess. According to Douglas Porch, in 1915 at Artois, the Germans could place 18 high explosive shells on each yard of front, which naturally requires not only an impressive number of artillery pieces but also a constant stream of ammunition (see "Artois 1915" in T*he Great War, Perspectives on the First World War*, edited by Robert Cowley). The Germans were dwarfed by the British, who at Ypres in the fall of 1917, fired 4.3 million shells with a total weight of more than a 100,000 tons. Twenty-eight years later, during the Vistula-Oder operation of January and February 1945, the Soviets lined an average of 278 artillery tubes on each kilometer of front. "There were also 22 tanks and self-propelled (SP) guns allocated to each kilometre in the initial tactical phase, with some 98 more per kilometre lined up in depth for the operational exploitation," wrote Paddy Griffith in *The Ultimate Weaponry*. Contemporary Western armies are mechanical juggernauts made vulnerable by their dependence on considerable quantities of ammunition, spare parts and fuel, since a military vehicle that runs out of gas is nothing but a hulk of metal, and so are cannons without ammunition.

A machine-age army will cease to function if the uninterrupted flow of supplies stops. Naturally, such a logistical stream requires meticulous coordination, planning, and rigorous organization. Industrial-age armies often fight their battles in the rear, with pen and paper; they fight a paper war. The direct consequence of the modern approach to warfare was that the methods of the office and of the manufacturing works would come to dominate the battlefield. The result is that, since World War I, military commanders are increasingly becoming managers turning warfare into an industrial type of operation.

Planning from above and centralized control are indicators of an approach to warfare frequently referred to as the "scientific method." It establishes specific mathematical norms for the battlefield. Under the scientific system, meticulously set plans scrupulously carried out are regarded as a way to avoid the unavoidable confusion of the battlefield. Operations are performed in phases, so as to allow for the reestablishment of proper order and control at the end of each phase. Measures of control are established, such as assault lines, assembly areas, approach routes, attack positions, axes and routes, boundaries, killing zones, lines of departure, limits of exploitation, etc.

Industrial-age mass armies are well-

organized, well-equipped, well-supplied, and strictly disciplined juggernauts, which makes them highly efficient in high intensity conflicts. They are led from the rear by competent managers supported by large staffs designing strategies and then using sophisticated communication technologies in order to enforce adherence to predetermined plans.

The Allied forces during World War II are the best example of industrial-age mass armies applying the scientific system. What these organizations need, at first glance, are managers and combat leaders, not intellectuals — in other words, men that supply the tools for other men to win battles and, ultimately, wars.

In World War II, technology was instrumental in achieving victory or, as Max Boot wrote in *War Made New*: "...technology sets the parameters of the possible; it creates the potential for a military revolution. The extent to which various societies and their armies exploit the possibilities inherent in the new tools of war and thereby create an actual military revolution depends on ... other human factors. Ultimately, a military revolution, like a scientific revolution, demands a 'paradigm shift' from one set of assumptions to another."

Intellectuals are the other human factors. Historically, they thrived first in the Prussian and then the German armed forces, pre-industrial and industrial-age armies which applied a different system in conflicts: war as art.

This method was founded by Prussian Field-Marshall Count Helmuth Karl Bernhard von Moltke (1800-1891), often referred to as Moltke the Elder to distinguish him from his nephew Helmuth Johann Ludwig von Moltke, who commanded the German Army at the outbreak of World War I. Moltke is arguably one of the greatest innovators in the history of armed conflict, an almost prophetic figure.

For Moltke, a student of Clausewitz — the great philosopher of war — rigid systems, such as the scientific method, were anathema: "...[Moltke] held that nothing in war was certain. Therefore he believed that it was impossible to lay down any firm rules. 'In war, as in art', he stated, 'exist no general rules; in neither can talent be replaced by precept' and given the uncertainties of war, he concluded that strategy could be no more than a 'system of expedients,'" wrote Gunther E. Rothenberg in "Moltke, Schlieffen, and the Doctrine of Strategic Envelopment" (*Makers of Modern Strategy*, edited by Peter Paret).

Moltke, a brilliant intellectual, recognized that the implementation of technology requires radical changes in tactics, strategy, command, and organization. However, as Martin Samuel writes in his book *Command or Control? Command, Training and Tactics in the British and German Armies, 1888-1918:* "He rejected the idea of telegraphed orders. Given a force of over one million men, as in 1870, moving as several armies spread over a previously-unheard-of front, it was impossible for Moltke to rely on a system of close control and yet still take advantage of fleeting opportunities offered by enemy mistakes. The sheer scale of the problem meant that, even if he were able to identify such opportunities (itself highly unlikely), any detailed orders he might give would long since be out of date by the time they came to be implemented."

Therefore, he did not fear disorder. He accepted it as inevitable

Moltke

and, instead of introducing measures to limit confusion in the combat zone, he decentralized the decision-making process at tactical level. Great responsibility was therefore placed on the shoulders of junior leaders with the emphasis being on flexibility, initiative and swift adaptation to the reality of the battlefield. In the command system that he inaugurated, Moltke expressed a philosophy of combat which later became the trademark of German military leadership. His forward-looking philosophy eventually led to the conception of such innovative notions as *Innere Führung* and *Auftragstaktik* (mission command or mission tactics), which were key concepts in the *Reichswehr*, the *Wehrmacht,* and the *Waffen* SS and remain as such with the *Bundeswehr*.

Moltke also created the Prussian general staff, which later became the German general staff, an intellectual powerhouse that for almost a century successfully implemented changes that were considered too radical by other Western armies. One of these radical changes was the *Blitzkrieg*.

At this point, it should be mentioned that even under the "war as art" method intellectual presence was limited to senior level positions, especially those shaping military doctrine. Junior commanders remained essentially combat leaders.

World War II was a clash of two different martial cultures of two distinct approaches to warfare: the "scientific method" and the "war as art" method. In the end, as Robert M. Citino argued in "Death of the Wehrmacht," an article published in *MHQ* (The Quarterly Journal of Military History, Autumn 2008), the "scientific method" prevailed, with managers dominating Western armies until their world of military certainties collapsed under the weight of insurgent tactics and strategies in Iraq and Afghanistan.

War as Theological Exercise

The Western inability to understand the religious man is arguably the foundation of numerous dissents in international relations that will eventually develop into low-intensity conflicts. The situation is complicated even more by the fact that religion is experienced differently in the West and in the East. Most Eastern theologies are mystical, expressing a strict, inflexible attitude, as the personal experience of God can only be institutionalized through dogma (Vladimir Lossky, *Mystical Theology of the Eastern Church*). On the other hand, the Western approach to religion is increasingly liberal, based on reason and humanistic values. Therefore, the cultural gap between East and West is increasing, leading — in the global village — to mutual resentment and suspicion.

In the thriving and abounding West, the respect for human life and its protection are one of the main preoccupations of politicians

and law enforcement officials and agencies. In the East, and such was the case for the now defunct Emirate of Afghanistan, afterlife is the main concern. Taliban institutions were geared towards preparing the Afghani citizens for the afterlife. For the Taliban, life is merely a test, hence their obsession with "moral corruption." If life is a test, then jihad is the perfect opportunity to pass it. Fighting coalition forces are, for the Taliban, a prodigious opportunity. What really makes them strong is their belief system. Training and equipment are less important to a man of faith. What really counts is the deed, acting upon one's beliefs. Not to mention the fact that their interpretation of the Quran allows them the moral luxury to identify us as monsters, and this greatly facilitates their task when it comes to combat.

Scrutinizing the Taliban's past and present successes without taking into consideration their religious beliefs will offer us only a distorted and incomplete portrayal of their true capabilities. The Taliban is much more than a group of guerrilla fighters; it is an Afghan religious — and by extension, taking into consideration the local cultural context — social, and political phenomenon. Debatably, very few non-Afghans currently fighting the Taliban know that the first government in decades to end the lawlessness and arbitrary power of the warlords was that of the Taliban. The same government managed to restore peace, security, and provide basic services.

In 1994, Mohammed Omar was the village mullah of a small place called Singesar, when: "...neighbours came to tell him that a commander had abducted two teenage girls, their heads have been shaved and they had been taken to a military camp and repeatedly raped. Omar enlisted some 30 Talibs who had only 16 rifles between them and attacked the base, freeing the girls, and hanging the commander from the barrel of a tank. They captured quantities of arms and ammunition. (...) A few months later, two commanders confronted each other in Kandahar, in a dispute over a young boy whom both men wanted to sodomize. In a fight that followed, civilians were killed. Omar's group freed the boy and public appeals started coming in for the Taliban to help out in other local disputes. Omar had emerged as a Robin Hood figure, helping the poor against the rapacious commanders. His prestige grew because he asked for no reward or credit from those he helped, only demanding that they follow him to set up a just Islamic system," wrote Ahmed Rashid in *Taliban*.

From the very beginning, the Taliban engaged the local population in a complex political (and implicitly religious) dialogue. Their past and present authority is based on the legitimacy of their discourse, since the Taliban deliver on their promises. They provide Afghans with local Islamic courts, proving that a primitive and brutal jurisprudence is preferable to the absence of justice. And, more importantly, they provide long-term security, without which no society, however rudimentary, can thrive. Perhaps the best-known characteristic of the Taliban has been their willingness to employ violence. Bloodshed always has a universally accepted political or theological justification.

It is now common knowledge that local nationals (LNs) are the center of gravity of any insurgency, since Taliban lines of communications depend on them. Creating a durable fracture between the insurgents and the LNs is synonymous to winning the war. A rupture, however, cannot be achieved as long as we will not engage the LNs in a credible dialogue. That is why we need intellectuals in uniform on the ground — people with innate or developed abilities for negotiation that can speak the language and understand the Afghan society, its culture and its religion. Hunting down insurgents does not work. Even though the violence to which we are exposing the LNs might be legitimate in the West, it is not always perceived as such in Afghanistan. Therefore, it is sometimes viewed as foreign aggression. In order to win the hearts and minds of the LNs, we have to realize that the gunslinger military culture of traditional combat leaders is leading us nowhere.

Conclusions

Contemporary Western armies are composed of thousands of interconnected and fine-tuned little cogs controlled by a supreme management team. General George Patton, arguably America's finest combat general in World War II, said that command is only 10 percent about giving orders and 90 percent about seeing that they were carried out. His philosophy of combat was that of

SSG Ryan C. Matson

Soldiers with the 1st Squadron, 61st Cavalry Regiment greet Gurem Village elders in Nangarhar Province, Afghanistan, on 6 November.

"restrictive control" and "umpiring" and represents the cornerstone of an industrial-age army's fighting spirit. Unfortunately, the outcome of the war in Afghanistan will not be decided by a few major strategic or operational victories but by numerous tactical successes, which means that the management team is no greater than the little cog on the ground in physical proximity and direct contact with the LNs. And that is why, now more than ever before, NATO forces need intellectuals in uniform on the ground — individuals able to engage in meaningful dialogue with the LNs and able to build enduring relationships with the local population. We need officers and NCOs capable of employing not violence but legitimate violence whenever the situation calls for it.

The "war as art" method set up by Moltke was truly revolutionary, as it created a military environment that cultivated creativity, improvisation, inventiveness, and open-mindedness. There is no doubt in my mind that this method would have moved beyond the gunslinger culture in asymmetrical conflicts. However, since in protracted high-intensity conflicts, the scientific method prevailed over it, the war as art method was consigned to the history books.

In Afghanistan, we should adopt a balanced way, avoiding two particularly ineffective approaches: the first one is the gunslinger culture, the other one being the negotiation à l'outrance penchant. Both are unproductive. In Afghanistan, legitimate violence is negotiation.

The scientific method has its own military culture — one that cultivates, in Norman Dixon's words: "an underestimation, sometimes bordering on the arrogant, of the enemy (...), an inability to profit from past experience (...), great physical bravery but little moral courage (...), a love of 'bull,' smartness, precision, and strict preservation of 'the military pecking order' (...), a high regard for tradition and other aspects of conservatism."

Before we can change the way we do business in Afghanistan, we need to change the very military culture that prevents decision makers in the field from being creative thinkers with a firm grasp of the intricacies of insurgencies acquired through incessant study. We often seem to forget that one of the most successful guerrilla fighters was an intellectual: T.E. Lawrence. His major work, *Seven Pillars of Wisdom*, should be mandatory reading for Infantry officers.

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TAMING THE DUKES OF AFGHANISTAN

CPT JONATHAN PAN

Colonel Abdul Razziq is currently the executive officer for the 3rd Zone Afghan Border Police. The mission of the border police is to protect the borders of Afghanistan against criminal offenders by providing a law enforcement capability at international borders. They control pedestrian and vehicular traffic at border crossing points, and international airports and are also responsible for aviation security. Razziq oversees the Wesh-Chaman border crossing point, the second busiest port of entry in Afghanistan. Instead of just focusing on his duties as an Afghan border police officer, Razziq has created a fiefdom in Spin Boldak district of Kandahar Province. He is part of a new class of warlords who are more politically and economically savvy than his mujahedeen predecessors. Instead of relying on his guns, he has become the conduit of foreign aid and dominates local governance.

Opponents of Razziq have portrayed him as a warlord who is allegedly into narco-trafficking and is involved in various other forms of corruption. Proponents of Razziq portray him as a fierce fighter of the Taliban (they killed his brother) and a source of stability. Military officers can't stomach parting with the stability that seems guaranteed with Razziq while foreign service officers feel that having a police official meddling in civil official activities undermines the central government. Combinations from both parties argue that Afghanistan has never been a strong centralized state, and that condition is impossible to change. Nevertheless, a recent essay published in *Foreign Affairs* offers a case study for centralizing state power through dealing with the Razziqs of Afghanistan.

Sheri Berman's essay, "From the Sun King to Karzai," which appeared in the magazine's March-April 2010 issue, proposes that the *ancien régime* serve as a case study for centralizing state power. Before the 17th century, Europe consisted of nothing more than a few kings who ruled capital cities. The dukes and the clergy had the real power outside the capitals. That sounds eerily similar to the Abdul Razziqs, the Matiullah Khans, and the mullahs in Afghanistan today. Consolidation of centralized power "involves destroying, undermining, or co-opting these actors so as to create a single national political authority," according to Berman.

In 17th-century France, local power brokers were destroyed, undermined, or bribed. Defeating committed opponents proved to be a Pyrrhic victory, so Louis XIV adopted the "co-opting" approach. The palace of Versailles was used as a venue for "political entrepreneurs" to procure and vie for power. The smarter ones eventually came to understand that Versailles was more akin to a white-collar detention facility than anything else. By then, Louis XIV had already broken them.

The first and most vital step to centralized government is to monopolize violence, and that has been achieved to a certain degree in Afghanistan through the Afghan National Security Forces (ANSF). However, many ANSF units are more loyal to their local power broker than to the country. This comes as no surprise in the volatile south where

TSgt. Francisco V. Govea, USAF

Afghan Border Police Colonel Abdul Razziq was featured in a December 2009 article in Harper's Magazine titled "The Master of Spin Boldak."

new police recruits earn $240 per month compared to the $600 their rival armed security groups make monthly. Therefore, one solution is to promote or move these local power brokers away from their political, economic, social, and military power base.

Karzai has demonstrated that he can do this when it is in his favor by moving Gul Agha Sherzai from the post of governor of Kandahar to the post of governor of Nangahar. Ironically, by 2009, Sherzai "had become the type of leader Karzai did not want to create: a politician with a base in Kandahar as well as considerable popularity and influence in the east," according to Carl Forsberg in his article "Politics and Power in Kandahar" (*The Institute for the Study of War*, April 2010). Nevertheless, by transitioning the former Afghan National Army lieutenant general into a civilian position, Karzai has forced Sherzai to expand beyond his military power and therefore to a certain degree tied Sherzai's success to the success of the government of Afghanistan. It is uncertain whether promoting Razziq to another province's chief of police or into a civilian position will either propel him into the success that Sherzai has seen or destroy his relevancy. Will Razziq be a better civilian or military leader?

Dr. Mark Moyar puts the leadership issue above all other discourses concerning this war in his article, "Lessons Learned, Lessons Lost," published in the *Small Wars Journal*. This applies to both the military and the civilian leadership. Recent experiences in Iraq show that host nation armies will prove to be more competent and efficient than the police; this is a direct reflection on their officer corps. In some aspects, the police force is more important than the army. The Afghan National Police has more day-to-day interactions with the Afghan people than

any other organization. They are the face of the government. Moyar cites a statistic that in 2007, General David Petraeus and Ambassador Ryan Crocker "helped convince the Iraqi government to relieve seven of nine National Police brigade commanders and more than 2,000 Interior Ministry personnel." He compares this to the replacement of "20 provincial chiefs and 124 district chiefs" from 1968 to 1971 in South Vietnam. Is Razziq a competent colonel? Are the borders of his area of operations really secured? Is ISAF, with both its military and civilian components, capable of influencing his removal if he isn't doing his job?

Foreign intervention with host national military and civilian leadership is often met with accusations of challenging host national sovereignty. Therefore, it is necessary to leverage the silent financial power brokers behind the local power broker. The dukes of Afghanistan are known only because they are in the media spotlight, as evidenced by Razziq being the subject of a December 2009 *Harper's* Magazine article, "The Master of Spin Boldak," by Matthieu Aikens. As the saying goes in Hollywood, there is no such thing as bad publicity. Due to his recent stardom, he has been frequently courted by generals and ambassadors. All the attention on Razziq means less attention on the silent power brokers.

There needs to be a concerted effort to dig deeper than the face of corruption. The military knows the importance of networks: defeating the improvised explosive devices (IED) network is almost as important as defeating the IED itself. There should be a concerted effort to identify people who can be leveraged: silent financial power brokers. A separate task force or operational level intelligence asset should be dedicated to this endeavor.

The January 2010 Center for a New American Security article "Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan," which was written by MG Michael T. Flynn, CPT Matt Pottinger (USMC) and Paul D. Batchelor, is having an effect on intelligence analysts above the brigade combat level going down to the ground for information. Sadly, the primary source of population-focused information requested so far has been "tribal." A recent Human Terrain System report warns that "'tribal engagement' in Afghanistan … is based on an erroneous understanding of the human terrain," and "'Pashtuns' motivations for choosing how to identify and organize politically-including …'Tribe' is only one potential choice of identity among many, and not necessarily the one that guides people's decision-making" ("My Cousin's Enemy is My Friend: A Study of Pashtun 'Tribes' in Afghanistan," Afghanistan Research Reachback Center White Paper). Another issue is the insular tendencies of the intelligence community for classified information on classified systems. Luckily, most "white" activity (the Afghan population, economy, development, and government) is unclassified and therefore can be shared through unclassified systems.

It is time to tame the dukes of Afghanistan through economic violence by leveraging their silent financial power brokers or shifting them away from their economic and political base. To achieve this effect, there must be a concerted effort in identifying and leveraging the silent supporters through financial forensics.

CPT Jonathan Pan served as the economic development officer for the 5th Stryker Brigade Combat Team, 2nd Infantry Division in Afghanistan.

RANGERS GET RAW TO ENHANCE PERFORMANCE

VINCE LITTLE

The 75th Ranger Regiment is always looking for the Army's best Soldiers. Once they become Rangers, the unit wants to keep them sharp for their intense training and deployment tempo. The regiment has been continuously deployed since 11 September 2001, and Ranger fitness has been critical to its success, leaders said.

Through its Ranger Athlete Warrior (RAW) program, the regiment uses the latest concepts in functional fitness, resilience, sports medicine, and nutrition to optimize human performance within the ranks. RAW has been around since 2006, officials said, but leaders are emphasizing the rewards and sinking more resources into the system to maximize effectiveness.

"Rangers are always looking for an edge to get better, faster, and stronger — they already have that elite athlete mentality," said MAJ Robert Montz, the regimental occupational therapist and officer in charge of the RAW program. "There are a ton of resources out there. We thought, let's get some subject matter experts on board who know this stuff and make sure our Rangers are truly doing the right things to become more elite."

The program is built around four pillars: functional fitness, performance nutrition, mental toughness, and sports medicine. It incorporates multiple disciplines and takes a holistic approach to keeping Rangers in the fight, factoring in the extreme environments they routinely operate and train in.

Montz said the components address every need for optimal Ranger performance — and they're not just a matter of working out hard. Regimens must be appropriate to the physical requirements, fueled by sound nutritional practices and designed to prevent avoidable "overuse" injuries, he said. Any injuries that do surface should be addressed promptly and thoroughly.

"That's the whole continuum … everything a Ranger needs to be operational. This program brings all those dynamics into one," he said. "There isn't a recipe or formula online for becoming a better Ranger. For NFL and college players, there's a nice science out there already for how a linebacker can become a better linebacker. (RAW) is specific for the mission sets Rangers need to do in combat operations.

"We knew we needed something a little more robust than traditional (physical fitness test) tasks."

Among recent moves, the regiment brought in Dr. Travis Harvey to serve as director of human performance. The RAW staff also includes CPT Nick Barringer, the regiment's first Ranger dietician, and LTC (Retired) David Meyer, a physical therapist and the unit's sports medicine director. In addition, each battalion now has a strength and conditioning coach, along with a physical therapist, physician assistants, and surgeons.

"There's a vast amount of information available. We help them filter it for their own program integration," Harvey said. "Since a Ranger's schedule is already so jam-packed, we want to optimize their time and get them to train smarter and more efficiently. This is specifically tailored for Rangers.

"There are a lot of good training programs and components

RAW intent

The Ranger Athlete Warrior program addresses four objectives through the components of functional fitness, performance nutrition, mental toughness and sports medicine:
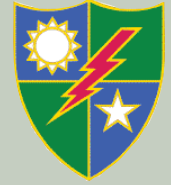
* Achieve a level of physical fitness that is commensurate with the physical requirements of Ranger missions.

* Understand and choose sound nutritional practices.

* Employ mental toughness skills to enhance personal and professional development. The regiment's occupational therapist and psychologist coach Rangers on the mind-body connection in order to optimize performance.

* Receive screening, education, and skills for injury prevention and "prehabilitation" that prompt effective and thorough treatment through "rehabilitation" of injuries if and when they do occur.

For more information about the Ranger Athlete Warrior program, go to https://www.benning.army.mil/75thranger/content/physical.htm.

online, but putting it all together for Rangers is just not out there. We want (RAW) to be the pre-eminent program so they don't need to go anywhere else."

The team of therapists and health-care providers spread the program's principles by conducting five-day training sessions with squad and team leaders throughout the regiment. Soldiers in the Ranger Assessment and Selection Program also get an overview.

In a joint venture with Fort Benning's Directorate of Family and Morale, Welfare and Recreation, the 75th Ranger Regiment provided equipment to Audie Murphy Athletic Center for tactical fitness training. The facility features pulling sleds, ladders, ropes, and other apparatus designed around power, speed, and agility drills. The gym is undergoing renovations and not scheduled to reopen until March, but it's normally available to all post personnel.

In 2008, the regiment began doing a 10-event RAW assessment to measure the program's impact and functional fitness level of its Rangers before and after combat deployments. It's a physical fitness test loaded with Ranger tasks in uniform to evaluate performance levels. Facilitators said it's a better gauge than the APFT and a great tool that's been shared with other units.

Montz said commanders use the data to make adjustments and help map out physical development for missions.

"The RAW program is constantly evolving to reflect the current mindset, operations, and conditions," he said. "It's an ongoing process to make sure we're delivering the most optimal, up-to-date program for our Rangers and leaders."

Vince Little writes for Fort Benning's post newspaper, *The Bayonet.*

Book Reviews

The Search for al-Qaeda: Its Leadership, Ideology and Future. **By Bruce Riedel. Washington, D.C.: Brookings Institution Press, 180 pages, 2008, $26.95.**

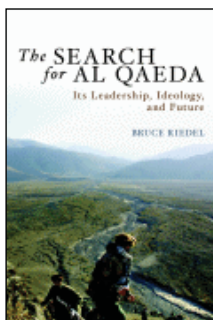Reviewed by CDR Youssef Aboul-Enein, U.S. Navy.

Bruce Riedel is a former CIA officer who served as Deputy Assistant Secretary of Defense for Near East and South Asia as well as on the National Security Council during the Clinton Administration. His most recent book is a short primer on al-Qaeda with specific chapters devoted to Usama bin Laden, Ayman al-Zawahiri, Mullah Omar and the late al-Qaeda in Iraq (AQI) leader Abu Musab al-Zarqawi. What makes this book a useful read is the focus on ideology.

In the chapter entitled "The Thinker: Zawahiri," Riedel synthesizes Zawahiri's writings, which are numerous, to reveal unique clues that differ from others within the militant Islamist movement. An example is Zawahiri's obsession with the Ottoman Caliphate that fell in 1924, versus those militants focused on the caliphate that came after the death of Prophet Muhammad in 632 AD. He rightly assesses Zawahiri's penchant for spinning narratives of history and ideology that are fragments and sound bites designed to incite and not educate. The chapter ends by highlighting Zawahiri's consistent disappointments and failures, particularly in his native Egypt. He has been reduced to being in the margins of Arab Muslim society.

The book also points out how Usama bin Laden also had a series of disappointments such as never completing his university studies and failing to assume a leadership role in the bin Laden construction company. The book correctly highlights the significance of Sheikh Abdullah Azzam, the Palestinian known as the "Fighting Cleric," in the development of bin Laden. Among Azzam's concepts is al-Qaeda al-Sulba (Firm Foundation), a lucid term that can mean base or foundation to inject arms, fighters and money in need, or a firm foundational society based on their image of Islam. Riedel, however, says the term al-Qaeda originated from the term al-Qaeda al-Askariyah (the military base). There are those, including myself who believe it came from Azzam's reference. The book continues with the origins and history of Taliban leader Mullah Omar and his symbiotic relationship with bin Laden.

A final short biography is on Zarqawi, whom Riedel gives the label "The Strange" based on a name given him for his passion for violence that was strange even by Iraqi militant standards. The book does an excellent job of highlighting Zarqawi's independence and his relationship to his spiritual advisor al-Maqdisi. His killing of Shiites was designed to sow such sectarian violence, the Iraqis would not be able to effectively govern and the United States project in Iraq would fail.

The best chapter is Riedel's recommendations on how to defeat al-Qaeda, and he rightly assesses that the group has developed a complex narrative to justify its war on the United States. He advocates countering this narrative through action and not words. This is where I personally disagree; although action is important, words matter too. Nothing elicited a reaction from Zawahiri more than Islamic argumentation crafted by former mentors and clerics that undermines his narrative and justifications. Image and words matter to al-Qaeda. He does make the observation that al-Qaeda, in the long run, will have to answer to a sizable Muslim majority who never wanted Islam to be exploited to justify global carnage, and cites Muslim leaders who have rallied against al-Qaeda's narrative and ideology. In my view these counter-narratives need to be amplified to expose al-Qaeda as a bankrupt, pseudo-intellectual, and narrow ideology that is different from Islam.

The book did have some slight mistakes, but overall it is a good, short read as we immerse our minds in the new threats posed by al-Qaeda.

Takedown, The 3rd Infantry Division's Twenty-One Day Assault on Baghdad. By Jim Lacey. Annapolis, MD: Naval Institute Press, 267 pages, 2007, $29.95.

Reviewed by LTC Keith Everett, USAR.

This story of the 3rd Infantry Division's ferocious fighting begins with the 1st Brigade Combat Team (BCT) breaching the Iraqi-Kuwaiti border berm in several places. This allowed the 2nd BCT to rush to Samarrah, and the 3rd BCT to punch through and capture Tallil Air Base. The narrative continues with a maneuver by maneuver description of the fight all the way to and through Baghdad. Key questions are answered in this story including:

* How does a modern Infantry division fight?

* How did American forces win so decisively against Iraqi forces in such a short time?

* How did the 3rd Infantry Division destroy five Iraqi divisions in 21 days of fighting?

Jim Lacy, a retired U.S. Army officer who served as an embedded reporter with the 101st Airborne Division during the 2003 invasion of Iraq, answers these questions. He splices firsthand Soldier interviews into the narrative, and these are bolstered by their personal papers and war memoirs. He also splices in transcripts of senior Iraqi Army officer interviews to bring the enemy's view somewhat into focus. A few of the highlights include:

* COL David Perkins, the 2nd BCT commander, made the innovative decision to use mobile tactical operation centers (TOCs) to follow the maneuver elements closely, which was a great solution to the massive problem of maintaining contact and
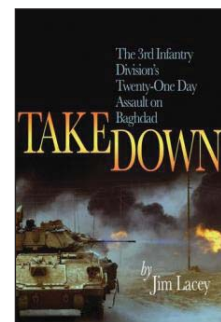
close communication with all subordinate units. COL Perkins also replaced his .50 gunner with an intelligence officer and had a fire support coordinator and a communications specialist work his radios. These modifications gave him more command and control over his forces.

  * COL William Grimsley, commander of the 1st BCT, reported the outstanding close air support along the hundred miles of the 100-foot tall Najaf escarpment to illustrate the key role of air support in restrictive terrain.

  * The 3rd BCT commander, COL Daniel Allyn, decided to attack with only part of his forces assembled on the assault position even though it was against doctrine taught at the National Training Center not long before. Allyn commented he would not have tried this attack method if he thought the Iraqi Army units were able to maneuver competently. COL Allyn knew his enemy and knew what critical risks he could take with success. Even with poor weather interfering with the refueling of the Apache helicopters, preventing their use, the 3rd BCT destroyed the 11th Division HQ with 35-50 T-55 tanks. The next day the BCT would block the remaining enemy escape with an infantry battalion and killed more enemy and destroyed much of their equipment with concentrated artillery fire.
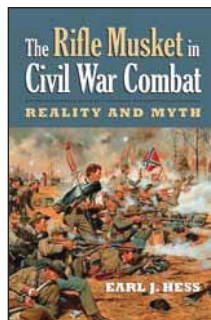
Audacity was a huge part of the 3rd Infantry Division's plan in seizing bridges over the Euphrates River at Samarrah. Units attacked east of the Euphrates and finished the fight with thrusts through the heart of Baghdad, ending the major combat phase of the Iraq war. The Iraqis evidently had visions of a Mogadishu-type scenario dancing in their heads, but the firepower of the 3rd Infantry Division's M1A1 tanks and Bradley fighting vehicles changed the dance to a mad scramble to surrender or escape.

Takedown should be required reading for all combat maneuver commanders, officers, and NCOs. The division fighting guide answers many questions with clear examples of innovative training and fighting methods. Additional stories include a brigade commander making the decision to blow a bridge to block the enemy, a company commander calling in artillery on his final protective fire line, and battalions running dangerously low on ammunition and the push to resupply.

The Rifle Musket in Civil War Combat: Reality and Myth. **By Earl J. Hess. Lawrence, KS: University Press of Kansas, 2008, 288 pages, $29.95.**
Reviewed by Christopher Timmers.

Here is a new text to challenge our assumptions about weaponry in wars leading up to those in which our own Infantrymen have taken a role. To begin with, you may discard all your previous beliefs about the rifled barrel of early muskets: they were not responsible for increased deaths on the battlefields of Gettysburg, Vicksburg, or other American Civil War venues. They were not responsible for increased marksmanship training on the part of both Union and Confederate Soldiers, and they were not responsible for a diminishment of the importance of artillery fire (long-range muskets taking out advancing infantry). No, No! This whole business about long-range Infantry weapons being more lethal and causing the American Civil War to be prolonged are all wrong. In other words, forget everything you have been taught (or read) about rifled weapons' increased lethality affecting the outcome of war. They (the rifled weapons) didn't have that effect.

How can Professor Hess, who holds the Stewart W. McClelland Chair in History at Lincoln Memorial University, make such claims? Quite logically, as it turns out, even though some of his reasoning is a bit off base or irrelevant. Let us examine his most compelling points:

 * Whether rifled musket or not, both weapons were muzzle loaded and fired the same volume of fire.

 * The parabolic arc of rifled rounds versus the flat trajectory of smooth-bore musket rounds left an open zone in the battlefield from which advancing Infantry were not exposed to fire;

 * Marksmen on both sides had little formal training at engaging distant targets;

 * Because of the smoke from muskets and artillery fire, the battlefields of the Civil War were frequently obscured, rendering long-range rifles useless;

 * Despite claims by arms manufacturers that a skilled marksman could "pick off" an enemy soldier at 500 yards, such claims were silly given battlefield conditions (above) and the simple fact that a human figure at such a distance is extremely difficult to detect.

Hess further cites information from wars ranging from the War of Austrian Succession (1740 – 1748) up through WWI, WWII, Korea, Vietnam, and our recent engagements in Afghanistan and Iraq that Infantrymen most frequently engage the enemy at ranges under 100 yards. What counted — and still counts — in these engagements, was not long-distance accuracy but volume of fire.

But let us look at what Hess is really saying and how he supports it — that the rifle musket was a great deal less effective than previously thought and influenced the outcome of battles to a much lesser degree. Based on Hess's research, that conclusion is supportable. But the only flaw in this book is the sometimes mathematically sloppy analysis when it comes to battle losses used to justify the author's conclusions that the rifled musket was not so powerful a casualty maker as conventionally thought. While not disagreeing with his premise, I must say that averaging total battle losses (without cause) for each battle while ignoring terrain, time of year, and other intangibles (did the troops engaged recently return from battle; were they green recruits, etc) is statistically ignorant.

Hess takes battles with entirely dissimilar stats and tries to equalize them, i.e., Antietam with 132,000 combatants is compared with 36,000 combatants for first and second Bull Runs. One cannot simply "average" combat losses for the two battles and come up with a meaningful number of losses. Further, Hess never defines what he means by a battle loss. Comparing battle losses with rifled muskets versus without rifled muskets is virtually impossible. A dead Soldier is a dead Soldier. I do not know of any study in which teams recovering the slain bodies of Soldiers in the Civil War attributed death to a specific caliber of weapon, explosive device, or rifled weapon.

And, lastly, what about other causes of death, such as artillery? Where are the statistics? Unfortunately, not in this book.

Hess has helped continue the debate as to the effectiveness of the rifled musket. But his statistics don't help the reader reach a solid conclusion.

***Managing Ignatius: The Lunacy of Lucky Dogs and Life in New Orleans.* By Jerry E. Strahan. NY: Broadway, 256 pages, 1998, $19.**
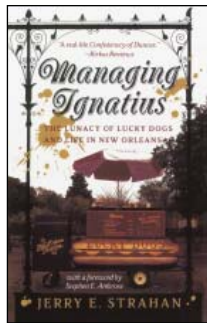
Reviewed by Jonai Senior, *Infantry Magazine* editorial intern.

If a reader would like a glimpse into the heart of the French Quarter in New Orleans, Jerry Strahan has provided it. *Managing Ignatius* is a humorous and intriguing tale of Strahan's unanticipated career working at Lucky Dogs in the French Quarter. His book gives a genuine insider's portrayal of the city that tourists would never see nor experience. Mardi Gras is not mentioned with the connotation of a party, but rather hard work and chaos instead. Strahan has captured the essence of what makes New Orleans the city it is by capturing its most important element — the people. "They didn't simply sell hot dogs; they sold themselves, and the city as well," he wrote.

The author's story begins with his atypical employment in the quarter as a teenager. From there the reader follow's Strahan's adventure with Lucky Dogs as his life continuously intersects with the hotdog chain throughout the years. Each encounter he has with the company proves to be a humorous and at times dangerous story. Strahan's descriptions of events are factual as well as entertaining. The reader gets vivid imagery of New Orleans including its buildings, bars, streets, and most importantly the people.

The characters that haphazardly come into employment at Lucky Dogs give the reader a true taste of the underworld of New Orleans. Prostitutes, seaman, boxers, veterans, hippies, winos, and bums all come together under the management of Strahan as he builds the Lucky Dog empire from bottom to top. His encounters with the residents of the French Quarter exemplify his clever and uniquely attuned skills when dealing with the quirky employees of the hotdog stands as well as his entrepreneurial workmanship. His line of work does not get the top choice of applicants but rather the only choices available. As a manager he must handle the strange and sporadic personalities of those who seek employment with Lucky Dogs. In doing so, Strahan implemented a number of different strategies to counter and work with the eccentric personalities of the employees at Lucky Dogs. If an employee was a thief, which often occurred, he'd have to use the police as an alternative method for reprimands. Or if an employee failed to show for work, he'd have to replace him on short notice. At times, he even searched for the missing employee himself, to ensure that the company's money was returned and the business could operate smoothly. Regardless of the situation at hand, his main strategy was to keep the business afloat. In doing so he respected each employee, no matter how wild or raunchy, while still handling the business professionally. What Strahan managed to accomplish an incredible feat, which was to keep a stable company in an unstable environment.

Many entrepreneurs, CEOs, and executives would have left Lucky Dogs and let the business fold. Jerry Strahan showed the world a higher level of dedication and determination for work. He didn't fire his ragged employees; instead he molded them, himself, and the company around them, using all of his resources to full capacity. He understood the personalities of his workers and used them to his advantage. Refusing the limitations that were at hand, he worked until he elevated the company to new heights. His motivation to keep going is unmatched in consideration to the obstacles he encountered on his journey.

Managing Ignatius is a must read for those who appreciate New Orleans, adventure, humor, the ups, downs, and curves that life can throw. Strahan has opened the door for the world to view the Ignatius' of the French Quarter. His journey with Lucky Dogs is a true success story that all will enjoy to read. He took the lemons that the world gave him, and made hotdogs.

***The Gods of Diyala: Transfer of Command in Iraq.* By Caleb S. Cage and Gregory M. Tomlin. College Station, TX: Texas A&M University Press, 307 pages, 2008, $29.95**

Reviewed by BG (Retired) Curtis H. O'Sullivan.

I'm not sure if the title and subtitle are going to attract many readers — which is unfortunate as it is a cut above the flood of potboilers flowing from Operation Iraqi Freedom. It is well written by two professional officers who not only know their trade but know how to describe it. As a platoon leader in combat myself, early in my career, I can relate to these experiences. Some things have changed in 65 years, but human nature is the same and there is still the pride in being given the privilege of command and the concern for having the responsibility for the lives and welfare of the men entrusted to you.

Diyala is one of the 18 provinces of Iraq, just north of Baghdad. Most of the action covered here was in the provincial seat of government, the medium-sized city of Baquba, through which the Diyala River flows. In the book's title, the word "gods" came from a mistranslation of an Arabic word for civic official — a role the authors played. "Transfer of Command" applies to the role of preparing the local officials for assumption of authority.

The mission assigned to the authors' task force is both frightening and reassuring. It had been a Field Artillery battalion and was being told to switch the unit from "redlegs" to straight leg rifle platoons. It's a matter of concern that our resources were so thin that this had to be done, but a feeling a comfort we were able to do so. They were deployed to Iraq in March 2004 during the second stage of the ongoing war. Though they had a counterinsurgency mission, it was closely connected to the broader goals of stabilization and the development of the Iraqi security forces to whom they could pass the torch. This was both gratifying and frustrating. The authors call it the way they saw it. They are not reluctant to criticize as one speaks of his commander's "ill-conceived whims." The pictures give a good feel of the background but another map of the larger area would have been helpful.

This work would be especially useful to junior officers going into combat but also for family and friends who should have an appreciation of what such duty is like. It may also appeal to some, like myself, for whom it brings back memories. However, the day-by-day, hour-by-hour description of activities may not be for everyone.
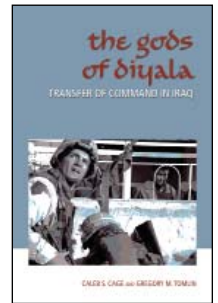
Soldiers with the 2nd Battalion, 327th Infantry Regiment, 101st Airborne Division, secure the area after finding an improvised explosive device on a road in the Shalay Valley in eastern Kunar province, Afghanistan, on 4 November 2010.

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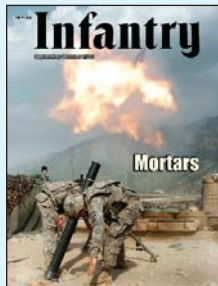
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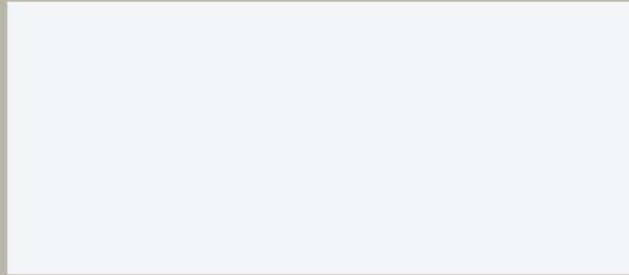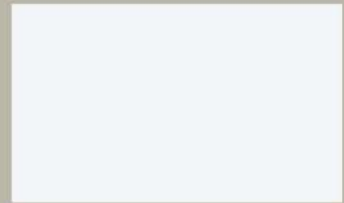
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