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Mountain Operations
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Commandant’s Note

MAJOR GENERAL WALTER WOJDAKOWSKI

MOUNTAIN OPERATIONS: THE HIGH ALTITUDE CHALLENGE

The global war on terrorism is characterized to a large extent by the harshness of the climate and the terrain in which we operate. We are going after the enemy from the deserts and the maze of streets and alleys in the urban centers of Iraq to the mountains of Afghanistan. In this Commandant’s Note I want to highlight the demands placed on our Soldiers and planners by operations in mountainous terrain.

The mountain environment is unique in terms of its steep grades, rough terrain and limited trafficability, the thin air of high elevations, and extremes of weather. Cold, snow, rain, low-hanging clouds and fog often predominate, and constantly-changing winds can restrict the use and effectiveness of fixed and rotary wing aircraft. The climate itself can create non-battle injuries, something that demands constant alertness on the part of the chain of command. Units experienced in mountain operations understand these challenges and are operating effectively in spite of them. Mountain operations highlight the importance of infantry skills trained at Fort Benning and at home station. Among these are the employment of mortars and the long-range precision fire of snipers, designated marksmen, and other infantrymen. We must train and sustain these warriors as well.

Sustainability and mobility are other key components of mountain operations. Units maneuver and operate on foot, by road, or by air. Rotary-wing aircraft can re-supply deployed units and evacuate casualties. Road and foot movements offer better cover and concealment but are in turn vulnerable to ambushes with direct and indirect fire weapons and mines. Predictability means vulnerability; during the Soviets’ war in Afghanistan, Mujahideen operatives kept guerillas informed of planned Soviet and DRA operations and convoy movements, facilitating some catastrophic ambushes and complicating logistical operations. We now operate less predictably, but we must maintain tight operations security at all costs.

Cultural awareness is is just as important in the mountains of Afghanistan as it is in the desert of Iraq. Today’s insurgents move freely among the indigenous population and draw support — whether coerced or freely offered — from it. One challenge in dealing with the scattered mountain populations is their inaccessibility, both physical and social. Tribal, religious, and blood ties and the mistrust of strangers within host nation populations — particularly those among the mountain tribes — may go back generations, and old allegiances are not easily broken or new ones formed. The Soviet occupation of Afghanistan left deep scars and mistrust of foreign military forces. Gaining the wholehearted support of the indigenous tribes and factions is no overnight matter, but our efforts have already yielded success. Human intelligence has led us to stockpiles of weapons, ammunition and other supplies, and enables us to neutralize ambushes, interrupt the emplacement of mines and IEDs, and disrupt the insurgents’ logistical, psychological, and political operations.

Fire support in mountain operations is also important. We have an array of delivery means available. Mortars, artillery, attack aviation, close air support, and high altitude bombing are some of the options available. Global positioning systems and laser designators can facilitate placement of precision fires, but low clouds and fog can also make observed fires difficult. Map reading and terrain association skills remain important, and range estimation is especially crucial in the steep, compartmented mountain terrain where a few meters’ difference can place rounds hundreds of feet below or above the target. The logistics of moving artillery and ammunition is accomplished by ground or air within weather and altitude-imposed constraints. As always, we take into account the likelihood and effectiveness of enemy ground fire when conducting these missions. The physical demands that mountain operations place on our Soldiers cannot be overstated. Infantry moves across exposed ground, often on unstable talus slopes that can shift underfoot; over moss or lichen-covered rock; and up, down, or across steep slopes and trails at dizzying heights. Soldier’s load soon becomes critical when even the minimum combat load of weapon, ammunition, water, food, and personal gear takes on a whole new meaning in the thin air of mountain ridges, saddles, and peaks.

We will win the global war on terrorism by hunting down the terrorists wherever they choose to hide, and part of that is in the mountains and valleys. Our Soldiers have shown they can fight and defeat the enemy anywhere and at any time, and doing this in mountains remains a core competency of our Infantry.

Follow me!
INFANTRY, ARMOR NCOs TRAIN TOGETHER

ANNETTE FOURNIER

A s part of the Army’s ongoing transformation, senior armor and infantry NCOs began training together in September during the first combined Advanced NCO Course.

Two of the combined classes began simultaneously, with one class at Fort Benning and the other at the Armor School at Fort Knox, Ky.

ANCOC was redesigned as combined training so senior NCOs in combat arms would have a better understanding of each other’s tactics, capabilities and equipment, said Fort Benning’s ANCOC First Sergeant Sherman Roberts.

In the Army’s restructured brigade combat teams, Soldiers of many MOSs work side by side in combat, said Michael Quirion, the Fort Benning NCO Academy’s chief operations officer. The new training will help NCOs make better use of the equipment and Soldiers available, because they’ll understand their abilities, he said.

“The armor and the infantry deploy together and work together all the time, but they know very little about each other,” Roberts said. “Combining the courses will enable us to train as we fight.”

The courses are also being combined in preparation for the Armor School coming to Fort Benning to form the Maneuver Center.

The decision evolved from discussions between Major General Walter Wojdakowski, Fort Benning’s commanding general, and Major General Robert Williams, Fort Knox’s commanding general, Quirion said.

First word that the courses might be combined spread in late 2005, and by January the armor and infantry NCO academies were tasked with combining the old ANCOC and updating old content to create the joint course.

Much of the course content for the armor and infantry ANCOC were similar, but combining the two was easier said than done, Quirion said.

“It’s really a challenge because doctrine and manuals have to be rewritten. But, infantry and armor have the same goals, just different ways of accomplishing them,” Quirion said. “We’re focusing on the common ground, then adding some MOS-specific information.”

NCOs study together during the first five weeks of the seven-week course. In the class, doctrine is taught by an instructor but enhanced by student discussions. Because many of the students are combat veterans, their experiences are valuable teaching tools, Roberts said. Students also study the specialized skills, equipment and terminology of scouts, tankers, mortarmen, and infantrymen.

“I’m interested to see at the end what they learned from their brothers in arms,” Roberts said.

During the sixth week, students are divided to learn certain MOS-specific skills, and the final week the students rejoin for a situational training exercise (STX).

Because Fort Benning currently lacks the equipment to launch an STX complete with tanks, the practical exercise is conducted in the close combat tactical trainer.

Each week of the course, the instructors from the Fort Benning and Fort Knox classes meet via video teleconference to discuss the week’s progress.

“This is a coordinated effort all the way. Infantry doesn’t have the lead and armor doesn’t have the lead on the new course,” Roberts said. “And it’s not just putting the two old courses together.”

The new course adds content relevant to today’s battlefield and focuses on building skills that each MOS may not have had a lot of practice with.

New content includes combatives for armor and mounted land navigation for infantry. Other new content includes counterinsurgency operations, intelligence preparation of the battlefield, and information operations.

“Before, infantry didn’t know what armor was doing and armor didn’t know what infantry was doing,” Roberts said. “This course is breaking ground.”

(Annette Fournier writes for The Bayonet newspaper on Fort Benning, Ga.)

DOCTRINE AND COLLECTIVE TRAINING UPDATE: The Doctrine and Collective Training division is pleased to announce the creation of the U.S. Army Infantry School (USAIS) Lessons Learned and Integration Cell. The cell is made up of three Center for Army Lessons Learned (CALL) analysts who will work at Fort Benning. Their mission is collect, analyze, validate, disseminate, and respond to requests for Infantry lessons. You can contact the Lessons Learned Cell at doctrine@benning.army.mil.
USAMU Offers SDM Course for Drill Sergeants

The U.S. Army Marksmanship Unit will conduct a Squad Designated Marksmanship (SDM) Course Jan. 29 to Feb. 2, 2007, which is open to all Army drill sergeants.

Slots must be reserved in advance. Unit training and operations sections should request slots by e-mail to Sergeant 1st Class Edward H. Hocking at edward.hocking@usaac.army.mil; include the Soldier’s full name, rank, social security number, military occupational specialty, specific unit and unit point of contact name and telephone number. For more information, call (706) 545-7174/1410.

Each student’s unit is responsible for lodging, per diem, and personal transportation. The USAMU supplies the squad designated marksman rifle, ammunition, and advanced combat optical gunsight.

The U.S. Army Marksmanship Unit conducts Squad Designated Marksman Instructor Courses to help Soldiers improve their marksmanship skills. Soldiers are instructed in areas of marksmanship, range estimation and target detection; there are numerous practical exercises including instruction on known and unknown distance rifle ranges.

The course is normally available to NCOs in team leader through platoon sergeant positions, with priority going to Soldiers in combat arms; the course is leader training to develop Soldier long-range shooting skills.

The award-winning shooters of the Army Marksmanship Unit’s Service Rifle Team teach the SDM course. These shooters specialize in firing small arms that are organic to units within the military including the M-14, bolt-action rifles, and all variations of the M-16 and M-4 at distances up to 1,000 yards.

(Article provided by the U.S. Army Marksmanship Unit.)

New Course Trains Long-Range Shooters

ANNETTE FOURNIER

To meet the need for long-range marksmen, Fort Benning cadre are training Soldiers in a new long-range marksmanship (LRM) course.

The LRM course began in June to “fill a gap,” said Sergeant First Class Michael Hodge, an LRM team sergeant and instructor with the course, which is managed by 2nd Battalion, 29th Infantry Regiment.

“We’re changing with the Army,” Hodge said, “and the Army is changing because of the (global) war on terrorism. Units need long-range marksmen.”

In basic training, Soldiers learn to shoot targets up to 300 meters away. Sniper students learn to fire at 800 to 1,000 meters, but the intermediate range was left void, said Captain Mark Messerschmitt, commander of C Company, 2nd Bn., 29th Inf. Regt.

“Units deploy with sniper weapons and don’t have anyone who knows how to use them,” Messerschmitt said. “The long-range marksmen can be pulled down range to fire with the sniper weapon from a fixed position.”

The students learn to use an M-16 and M-4 with attached sniper scopes and sniper weapons, like the M-24 and the .50 caliber sniper rifle. They also learn to detect targets, estimate the distance to a target, collect ballistics information, and correct for factors like humidity, wind, and weather conditions when shooting. The course includes firing at moving targets during the day and night.

LRM is not a replacement for Sniper School, he said, but it’s a good way to meet the Army’s need for long-range marksmen. The students don’t learn the stalking and reconnaissance skills of snipers, but they are able to engage targets at an intermediate range using sniper weapons.

“We can train 256 snipers a year, but we’ve already trained 255 marksmen in five months. That’s more than anyone thought we would.”

They’ve taught one class at Fort Benning, but most are taught by mobile training teams of four to six instructors who train units at their installations. The MTTs have gone to Fort Drum, N.Y.; Fort Stewart, Ga.; Fort Hood, Texas; and Korea.

The MTTs cost less and allow for more students to train, Messerschmitt said. When a unit requests training, four to six MTT instructors travel to the unit’s installation. The unit pays the instructors’ per diem while they teach classes of about 36 students. It’s more cost effective than sending 36 Soldiers to Fort Benning for two weeks, Messerschmitt said.

While the main goal is training Soldiers to be long-range marksmen, it’s great preparation for Sniper School, Hodge said.

The majority of LRM instructors are snipers and all but one are combat veterans. The class is targeted for Soldiers from E-1 to E-4, Hodge said, because they will be the squad riflemen in deploying units. The class stands out because the subject matter experts train students directly, rather than a train-the-trainer approach.

“It would be a lot for an NCO to learn in just two weeks and bring back to teach others,” Hodge said. “Even though the Soldiers won’t be snipers, this doubles their range and lets them use their weapons to their maximum capability. This extends their range and makes them more lethal on the battlefield.”

It’s a menu-based course, Messerschmitt said. “We work (with) the unit to focus on what training their Soldiers need. Because it doesn’t have the requirements Sniper School (has), it gives us flexibility to adjust training.”

Each day ends with a mentoring session when the instructors meet with small groups and answer questions. The class is focused on teaching, not attrition, Hodge said.

“We want to teach them skills they can use when they deploy,” Hodge said. “This training might save a Soldier’s life. That’s what makes this assignment satisfying.”

(Annette Fournier writes for The Bayonet newspaper on Fort Benning, Ga.)
Soldiers Get Group Dining on the Go

U.S. ARMY SOLDIER SYSTEMS CENTER - NATICK

The Natick Soldier Center’s (NSC’s) Unitized Group Ration-Express (UGR-E) provides a group dining capability anytime, anywhere. With a quick pull of a tab, the meals are ready in 30 to 45 minutes and provide a change of pace from Meals, Ready-to-Eat (MREs). UGR-E modules serve hot meals for up to 18 warfighters without requiring kitchen equipment, cooks, fuel, or a power source. UGR-Es also reduce the costs and logistical burden associated with using a field kitchen.

“Warfighters would utilize the UGR-E in locations where they are unable to use a Mobile Kitchen Trailer (MKT), but want a group dining capability. This could be before MKTs make it to the field or if they are located too far away for the group to congregate there. UGR-Es also eliminate the need for trucks to bring them food in insulated containers,” said Shari Dangel, an NSC physical scientist.

“Warfighters would utilize the UGR-E in locations where they are unable to use a Mobile Kitchen Trailer (MKT), but want a group dining capability. This could be before MKTs make it to the field or if they are located too far away for the group to congregate there. UGR-Es also eliminate the need for trucks to bring them food in insulated containers,” said Shari Dangel, an NSC physical scientist.

“The UGR-E borrows technology from the MRE’s Flameless Ration Heater (FRH) to heat the food. These magnesium-based heaters produce a significant amount of heat with relatively small amounts of raw material. All that is required to start the reaction is mixing salt water with the magnesium. The UGR-E contains four heaters that are 10 times the size of each single FRH heater,” explained Dangel.

Dangel said that there are two types of UGR-Es. The Type I UGR-E requires warfighters to place the four heaters into the heater trays before pulling the tab. With Type II UGR-Es, the heaters are sealed into the heater trays. Warfighters need to pull one tab that will uncover the heaters and then pull a second tab that will release the activator solution.

According to Peter Lavigne, NSC chemical engineer, “To meet the immediate needs of the services, an accelerated development effort will field the UGR-E initially as Type I, and later the Type II will be transitioned as improvements in the heating system are completed. We’re also investigating other opportunities to improve the concept, to include the use of coated fiber heating trays that are low cost, lightweight and offer improved disposability and recyclability.”

According to Dangel, the first offering of the UGR-E will include three breakfast menus and six lunch/dinner menus. The meals can be easily transported with the unit. The four six-pound polymeric tray packs include an entrée, vegetable, starch, dessert, plus snacks as well as dining trays, beverages, eating utensils and serving utensils.

“While the food is heating, warfighters can enjoy the snack items included in the UGR-E. These can include M&Ms, Reese’s Pieces, Trail Mix, and powdered beverages,” said Dangel.

According to Dangel, warfighters who have evaluated the UGR-Es have liked that they do not have to rely on drivers to bring them food in insulated containers cooked in field kitchens hours beforehand. They can wait until they are almost ready to eat to start heating the food, then eat it while it’s still hot.

The technology most benefits small, remote units operating in austere environments. According to Dangel, prototype UGR-E’s have been sent to both Afghanistan and Iraq.

Future improvements are already in the works. “An Enhancement Box, or E-Box, is also being developed to provide a supplement for the UGR-E. It will include milk, cereal, bread, and other complementary items that will increase the variety and nutrition offered by the ration,” said Lavigne.
Scientists at the U.S. Army Research Institute of Environmental Medicine (USARIEM) are investigating ways to help Soldiers adjust to high-altitude environments.

Soldiers being sent to Afghanistan are often quickly deployed to high-altitude environments via helicopter, leaving little time for their bodies to adjust and putting them at risk for contracting high-altitude sickness. High-altitude conditions, which include adjusting to less oxygen and thinner atmosphere, can impact even the most physically fit Soldier.

According to USARIEM’s Dr. Stephen Muza, high-altitude conditions, at a minimum, affect stamina and cause Soldiers to fatigue much more quickly. Other problems can develop as well.

The most prevalent type of altitude sickness is acute mountain sickness (AMS), which can cause headaches, dizziness, nausea, and make it difficult to fall asleep. According to Muza, AMS typically occurs within 4-12 hours.

Although most people experience the aforementioned symptoms of AMS, 100 percent of the population experiences a decline in task performance.

“Soldiers can still make accurate decisions, but it takes them longer to do so. Altitudes above 5,000 feet can impair vision, especially the ability to see color,” said Muza.

AMS symptoms will often dissipate once a Soldier’s body adjusts to the high-altitude environment, but sometimes AMS can intensify into pulmonary edema, which is caused by a build up of fluid in the lungs and can lead to shortness of breath and heavy coughing.

AMS can also transform into cerebral edema, which is caused by an increased blood flow to the brain. Cerebral edema can cause swelling, disorientation, hallucinations and can impact physical coordination. It can be deadly if left untreated.

USARIEM scientists are investigating the use of pre-exposure to high-altitude conditions to prevent altitude sickness to help Soldiers who need to make sudden and prolonged ascents to altitudes of 5,000 to 14,000 feet.

Soldiers will perform a myriad of typical tasks in USARIEM’s Hypoxia Room and Hybobaric Chamber, which replicates a high-altitude environment. The Hypoxia Room is a low-cost, low-oxygen environment and can be replicated anywhere, even in small nuclear, biological, and chemical (NBC) shelters.

The study will document changes in Soldier performance under both high-altitude and low-altitude conditions. The study will also document changes in performance and well-being before and after Hypoxia Room treatments. USARIEM’s investigation will reveal exactly how much time Soldiers need to be exposed to high-altitude conditions to offset the effects of altitude sickness.

Based on observations so far, Muza said it appears Soldiers exposed to 10,000-14,500 feet for three or four hours a day are ready to undertake their mission with less sickness and higher performance.

According to Muza, if the Hypoxia Room treatments are done over six to seven days, it has been found that the treatments can increase physical stamina by 30 percent and can reduce or eliminate AMS. USARIEM scientists have found that two-thirds of improvement occurs during the first week of treatments.

One result of the study will be the creation of altitude preparation guidelines. Muza said that USARIEM’s research will develop predictive models to determine rates of decline in physical and cognitive abilities in correlation to how fast Soldiers need to ascend.

In addition to the Hypoxia Room treatments, recently completed studies by Muza’s team have determined that a high-carbohydrate diet in high-altitude conditions improves Soldier stamina and appears to reduce AMS. However, taking anti-oxidants or creatine did not lessen the effects of high-altitude exposure. Muza says that future studies will examine several other ways to lesson the effects of exposure to high-altitude conditions.

The study should be completed sometime prior to the end of 2006.

Private Jerrod Howard performs a task measuring marksmanship under both high-altitude and low-altitude conditions.

Sarah Underhill
Snipers in the SBCT

MAJOR MARK S. LESLIE

“Where precision fire is concerned, the sniper exists as the premiere and undisputed answer to the use of deadly force with the least chance of collateral damage and use of excessive force.”
— U.S. Army Sniper School

In an operating environment like Iraq, with an insurgency aimed at disrupting stability and reconstruction operations, the ability to place precision fires on the targeted enemy and only the targeted enemy is paramount to a successful counterinsurgency fight. The sniper and his abilities are essential and critical tools that every commander must address during the planning process. The Stryker Brigade Combat Team (SBCT) is an organization that has a larger and more flexible sniper task organization than its counterparts in light or mechanized infantry units.

Appendix C of FM 3-21.2, Stryker Brigade Combat Team Infantry Battalion, puts the role of snipers in the SBCT into perspective:

“Snipers play an important role in the SBCT infantry battalion. They give the commander accurate, discriminating, long-range small-arms fire. The best use of sniper fire is against key targets that other available weapon systems may be unable to destroy due to their range, size, or location; visibility; security and stealth requirements; avoidance of collateral damage; intensity of conflict; or rules of engagement. The techniques snipers use enable them to gather detailed, critical information about the enemy as a secondary role. The effectiveness of a sniper is not measured simply by the number of casualties or destroyed targets; sniper effectiveness also includes the effect the presence of snipers has on enemy activities, morale, and decisions. The presence of snipers hinders the enemy’s movement, creates confusion and personal fear, disrupts enemy operations and preparations, and compels the enemy to divert forces to deal with the snipers.”

Compared to the other infantry formations in our Army today, the SBCT snipers are uniquely suited for the mission we face in our current global war on terrorism due to the significant, substantial increase in sheer numbers, and task organization within the SBCT. This is not meant to imply that the individual snipers themselves are any better than their counterparts in other battalions, only to suggest that the task organization of the SBCT supports the role of the sniper element better than previous formations.

Task Organization

The doctrinal sniper task organization in the SBCT is a sniper squad at the battalion level and three snipers in every infantry company. That would bring the total to 48 snipers per SBCT. This is a substantial increase from other organizations. Snipers are capable of inflicting the right amount of force at the exact time and location the commander wants with minimal resources and with minimal collateral damage and negative impact upon the community we are there to protect. The battalion sniper
squad is at the disposal of the battalion commander to use with as METT-TC (mission, enemy, terrain, troops, time, civilians) requires. It can and often is considered a separate maneuver element. This sniper squad gives the battalion commander the capability to place precision fires on a target with minimal collateral and/or negative effects, at multiple locations throughout his battlespace. The battalion sniper squad is composed of two three-man sniper teams with a sniper squad leader. Each team is armed with an M107 sniper rifle, an M24 sniper rifle, and an M16/M203 per team. The company sniper team gives a company commander the same capability to place precision fires on a target with minimal collateral and/or negative effects as the battalion commander at a reduced scale. Company sniper teams are composed of three Soldiers: a team leader and two snipers. They are armed with an M24 sniper rifle, an M107, and M16/M203 per team. This allows the company commander the ability to task organize his sniper team appropriately based off the mission at hand without seeking additional assets from the battalion level for precision fires.

Compared with a light/airborne/air assault infantry battalion, the additional capabilities and tools at the hands of the SBCT battalion and company commanders are striking. A light/airborne/air assault infantry battalion has six two-man sniper teams organic to the scout platoon that are used by the battalion commander as METT-TC dictates. These six two-man teams are armed with three M24 sniper rifles and three M107 sniper rifles. This is a healthy asset that has and will continue to be used effectively in our operating environments. But, this task organization is restrictive compared to the SBCT. The companies have no organic precision-fire capability, other than designated marksmen, at their disposal. The quality of designated marksmen in all units is often tempered by the equipment available, training, and commander’s focus on precision-fire training. A mechanized infantry battalion’s precision capability is even more restricted. By task organization, the mechanized infantry battalion has two snipers per rifle company, each armed with an M107 sniper rifle and an M24 sniper rifle. The battalions also utilize squad designated marksmen. Recognizing the need for precision fires in our current operating environment in Iraq, some mechanized infantry battalions have consolidated their snipers at the battalion level, somewhat mirroring the SBCT doctrinal task organization. But this comes at the expense of the company commanders in terms of boots on the ground. It is an investment that is usually profitable, increasing the flexibility and capability of the battalion commanders. Compare this to the SBCT, which has the precision-fire capability organic to the battalion and company levels with the flexibility to “surge” precision-fire capabilities at the company or even platoon level when the need is identified for specific operations. Of course, the ability to surge assets to one company is not unique to the SBCT, and the need to do so may be less often exercised due to the multitude of precision-fire capabilities organic at the battalion and company levels in the SBCT. In turn, it also does not deny the other units within the battalion the precision-fire capability that is often the best answer in a counterinsurgency fight.

Even though sniper teams avoid contact until they have identified their targets and involvement in sustained close combat is not the optimal employment of sniper teams, the enemy and circumstances in combat often change that equation, and the sniper teams themselves have little say so in the matter. One of the unique elements of the SBCT sniper capability is that in lieu of the traditional two-man teams, an additional Soldier has been added as a security man. This is an improvement over past sniper team organizations in that it gives the sniper team additional organic security without having to rely on additional assets from the parent organization. The additional security man is a part of the sniper team and is not only able to provide security but transition to the role of sniper if the need arises. Additionally, he can assist in the transportation of what is often a heavy amount of equipment that the modern sniper needs to stay alive on the modern battlefield. The battalion sniper squad is a battalion asset to be used at the battalion commander’s discretion. The emphasis placed on snipers at every level within the SBCT lends credence to the Army’s evolving picture on warfare in this century. In a counterinsurgency, the need for precision fires is often greater than in the traditional fight. The need to destroy only the designated target with minimal collateral damage in a counterinsurgency fight often makes our Army’s technological and heavy weapons a disadvantage.

Training
Currently, the U.S. Army Sniper School has no training specific to the SBCT or any other type of unit, and rightly so. The mission of the Sniper School focuses on developing and sharpening the skills of the individual sniper. According to Sniper
School officials, SBCTs are proportionally represented in sniper classes and have in the past performed above standard during pre-train ups prior to mobile training teams (MTTs) conducted on-site by Sniper School cadre, resulting in a large number of trained Snipers within the SBCTs.

While preparing this article, I conducted interviews with two Sniper School instructors from the 2nd Battalion, 29th Infantry Regiment at Fort Benning, Ga., who have served in an SBCT as snipers in Iraq. Staff Sergeants Shannon Kay and Joseph Brown both served in Stryker units during their tours of Iraq. They both had very positive experiences as snipers in a SBCT and have a plethora of knowledge on how snipers in the SBCT operate and train. Both had very positive things to say in regards to their training at Sniper School and said the training had prepared them for what was expected from snipers in combat. Neither Soldier recommended that any “unit-specific” (such as the SBCT) training be implemented in Sniper School as it would detract from the primary mission of training snipers on the individual skills required of them. Both agreed that this would be a task better left to the unit and felt that the unit was better suited to conduct this training before and after a sniper’s graduation from the school. This is based on the premise that the unit prepares the Soldier to attend Sniper School by focusing on the basics of being a sniper and what is required to complete the training. Sniper School then gives the sniper the foundation. After graduating from Sniper School, the unit then capitalizes on the basic groundwork ingrained and focuses its training depending on the type of organization. From their combat experience, both SSGs Kay and Brown agreed that other than marksmanship skills, target detection is probably the single most important skill learned in Sniper School. Often, a sniper’s job is 90-percent observation and reporting and at best, 10-percent actual engagement. Other instruction that the two NCOs found extremely useful included: pistol training, urban operations training, and unorthodox and/or offhand shooting exercises.

Home station training focused largely around marksmanship skills, demolition classes and breach exercises, infiltration and exfiltration exercises as well as developing rapport with the rest of the company at the company level and with the line companies for the battalion sniper squad. In hindsight, both agreed that room clearing was a skill that the sniper teams needed to hone and become proficient at prior to deployment. As experienced NCOs, both were proficient and comfortable with room clearing drills with a squad, but clearing a room with a sniper team, with reduced combat power and direct fire assets, was something new. No team was ever committed to any openly hostile building where they had received direct fire and were required to clear the enemy and establish a hide, but as all good Soldiers know, prior to establishment of a position, in this case a hide site, the area must be cleared. While overtly clearing a building with a four-man stack from a platoon is one thing, clearing a building covertly, with a three-man sniper team with pistols and bolt action rifles, is quite another.

One area of particular concern in the sphere of training and task organization is the snipers at the company level. While the command relationship and employment of the snipers at the battalion and company levels was a positive atmosphere, the levels of training varied. This is probably due to the fact that there are only three snipers at the company level, and although they are desperately needed and a valued asset, the commander’s focus and priority for training is to the bulk of his company. While having a sniper team organic at the company level in combat and training gives the company commander a degree of flexibility and options that are needed in the counterinsurgency fight, the method of training them at home station prior to deployment becomes difficult. It may be better to have all snipers in the battalion at the battalion level, effectively having two sniper squads. This would allow the battalion commander to ensure quality control and a common baseline for training for all sniper teams throughout the battalion. The sniper teams in the second squad could be habitually assigned to the same company on training exercises to develop the rapport necessary for proper support and employment. Once a deployment order is received, the operational control of the snipers could then be given to their respective companies. This would allow the company commander to inherit a trained sniper team that he and his subordinates have developed a relationship and rapport with, without losing any capabilities organic to the SBCT, and allow him to focus on the majority of his combat power. This would also allow the battalion commander to ensure that all of his sniper teams are trained to a common standard, have comparable skills, and would ease training as far as ranges, etc.

**Sniper Employment Officer**

The issue of “who is the Sniper Employment Officer or SEO” at both the battalion and company levels is often overlooked and sometimes not even addressed. This is a critical issue to ensure that the commander gets the most out of all his assets. During the military decision-making process (MDMP), both at the battalion and company levels, all units are represented with what they can bring to the fight. To ensure that the snipers at all levels are employed in accordance with the commander’s intent and properly within their capabilities, it is paramount that they are represented in the MDMP process. The sniper squad leader usually was present at the battalion level and served as the S-3’s “go to” guy for all sniper-related issues as far as employment, capabilities, etc. He was also the person that did not let the S-3 forget about the sniper assets available to the battalion when the S-3 was focusing on the bigger moving pieces and mechanics involved in a battalion fight.

At the company level, it usually fell upon the executive officer (XO) to act as the company SEO. This was not by design, but worked out extremely well when looking at the SBCT company task organization. No vehicle is specifically designated as the “mover” of the sniper team. A Stryker Mortar Carrier Vehicle

It may be better to have all snipers in the battalion at the battalion level, effectively having two sniper squads. This would allow the battalion commander to ensure quality control and a common baseline for training for all sniper teams throughout the battalion.
(MCV) or Fire Support Vehicle (FSV) were usually designated to carry the sniper team on administrative moves. Often attached to platoons for operations, the snipers would do as snipers in all organizations have done in the past and make themselves part of the platoon for the insertion in their vehicles. When conducting infiltrations separate or independent from a platoon or the rest of the company, the XOs used either the MCV or the FSV to insert the teams. This worked out well, gave the sniper team independent support without hindering or reducing the combat power of the platoons, and allowed the commander visibility of the sniper team at all times through the XO.

**Intelligence and Equipment Support**

The available intelligence assets organic to the SBCT battalion are fairly robust compared to that of their counterparts in the heavy and light battalions. This allows the intelligence officer the ability to develop very good target folders and “real time” imagery and video to assist the snipers in mission planning and hide site selection. Both SSGs Kay and Brown reported regularly receiving target folders and products from the S-2 that enhanced their capabilities to plan and determine the feasibility of a mission. Of course, extensive planning on a battlefield such as Iraq was not always a luxury snipers had, and they often had to operate off of verbal orders via FM radio. They were, however, still able to get “real-time” intelligence updates from the S-2 from the assets available, which were fed to them as situations developed.

While the snipers in an SBCT are not equipped with any more or less special equipment than snipers in any other unit, their observations on some of the equipment deserve noting.

1. The Stryker vehicle itself is an excellent insertion/extraction vehicle due to its high speed, low or subdued noise signature, and agility. Deception operations are a viable insertion technique, and the Stryker’s reduced noise signature can easily capitalize on the observation mission of the snipers. This allows a unit to investigate what the sniper observes when deadly force is not desired or when they do not want to compromise their position, without the observed target receiving early warning (due to noise) of their approach.

2. The PVS 10 scope is a good piece of equipment but rather fragile, and repairs in country were difficult.

3. The AN/PRC 148 radio is an excellent piece of equipment that needs to be standard equipment for all sniper teams.

4. Suppressors for sniper weapons are a must. They reduce a sniper’s signature and reduce the chances of compromise once an engagement is initiated, therefore increasing survivability and reducing the possibility of having to conduct a displacement once an engagement is initiated.

5. In an SBCT, the M107 rifle’s role is limited in its employment due to the phenomenal ability of the Remote Weapon System (RWS) in the Stryker. This lends validity to the “arms room” concept of the sniper in the SBCT. The trained sniper knows best the weapon of choice for the mission at hand.

The SBCT is a unique organization in our Army today. It has organic assets specially suited for the counterinsurgency fight. The number of precision-fire assets available to the maneuver commander is unprecedented. The flexibility of having numerous precision fire teams afford the SBCT commander the ability and flexibility to not only kill the enemy, but ensure that only the enemy is killed, preserving the precious, carefully cultivated relationships developed with our Iraqi partners.

“Untutored courage is useless in the face of educated bullets.”

— General George Patton

**Photo by Staff Sergeant Kevin L. Moses**

*A Soldier with the 2nd Battalion, 22nd Infantry Regiment provides security during a mission in Iraq.*
CAMP BLESSING, Afghanistan – In spring of 2006, Soldiers from 2nd Platoon, “Combat” Company, 1st Battalion, 32nd Infantry Regiment, Task Force Spartan, patrolled the Shuriak Valley during Operation Mountain Lion, moving into strategic position atop the peak of Abas Ghar as the highly successful mission wound toward its conclusion.

Like other infantrymen from the 10th Mountain Division’s “Chosin” Battalion, the 2nd Platoon, Combat Company Soldiers conducted operations in the Shuriak and Pech Valleys of northeastern Afghanistan in the immediate aftermath of Mountain Lion.

Were their experiences typical, the war story might have ended there — combat duty done, insurgent operations disrupted, bragging rights and a place in Spartan Brigade as well as Chosin Battalion history safely secured.

But for the men of the 2nd Platoon, the story was in its early chapters.

Selected to “stand up” the Korengal Outpost, the infantrymen shifted to the site of a dilapidated lumber yard rather than the relatively comfortable confines of a forward operating base.

In all, the Chosin Soldiers spent 115 days in remote outposts, camps and unmitigated mountain wilderness along the river valleys of northeastern Afghanistan. Only a brief pause at Asadabad to resupply interrupted their stay “in the field.”

Many American Soldiers, and many Spartans in particular, spend substantial chunks of time in the field. Yet the Chosin troopers’ experience differs not only in the quantity of their field time but in the types of missions they typically perform. For 2nd Platoon troopers, “Mountain Infantry” and “Light Infantry” described present realities, not historic legacies.

“When I got off the plane in Bagram, I noticed all the mountains around the base,” recalled Private First Class Jonathan Demler, a 22-year-old 2nd Platoon infantryman from Niagara Falls, N.Y. “Now we (are) up in those mountains, climbing them every day.”

Indeed, Demler and colleagues performed the vast bulk of their missions on foot. While fellow Soldiers in other parts of Afghanistan — not to mention Iraq and Kuwait — typically travel in vehicular
convoys, the 2nd Platoon infantrymen traveled by foot over, around, and through the most rugged terrain imaginable.

The length of the operation and size of the participating element varied according to mission and circumstance. Missions ranged from engagements and village assessments to combat operations against known anti-Coalition militants (ACM).

Operating in an isolated, rural, mountainous region located close to the Pakistani border and home to known ACMs, the Chosin troopers predictably made frequent contact with the enemy. The Soldiers said they averaged an indirect fire attack, typically a rocket or mortar assault, around every other day. They also met the enemy frequently during their daily foot patrols through the mountain passes and river beds of the Korengal and Pech Valleys.

"Sometimes, we’d get contact every day for a week, then go a few days with none at all. On patrols, it was around a ‘50-50’ chance of receiving contact,” McQuade said, adding that the enemy frequently “set up ambushes on cliffs and riverbeds. They always seemed to attack from the high ground.”

The native of York, Maine, who only recently celebrated his 26th birthday, recalled one memorable patrol during which a Chosin team “came around a bend of a trail and came face-to-face with three ACM. Our guys opened up first, killing two of the three. But we immediately received fire from another direction and withdrew.”

Many of the platoon’s young troopers took the gunfights in stride.

"By the time you could start thinking ‘I hope I don’t get shot,’ you’d already be firing back,” Demler said. “And then, before you knew it, it would be all over.”

The grueling physical challenges posed by the terrain and the mission impressed many in the platoon more than any perils presented by the enemy. Soldiers and leaders alike described the pace as relentless. In theory, Soldiers alternated duties, patrolling some days and providing security or serving on the quick reaction force on others. But given the velocity of the operation tempo, the frequency of enemy attacks and the precarious condition of the camp, the weary infantrymen enjoyed little rest.

“There would be days when we’d get back, drink some water and turn around and go out two hours later,” McQuade said. “If you were lucky, maybe you had a chance to wash your clothes or sew your uniform before you went back out.”

“‘It’s the toughest physical thing I’ve ever had to do in my life,’ added Sergeant Bradley Brinkman, a 23-year-old 2nd Platoon team leader from Sacramento, Calif. “It pushes you to your limit — and then you look up and you still have two more clicks to go.”

The endurance of the Chosin infantrymen reached proportions almost comical in their extremity.

“We had one guy who fell like 30 feet off the side of a mountain,” recounted Specialist Issac Jackson, a young infantryman from Plattsburg, Mo. “He’s a .240 gunner and he broke his butt stock. He landed in a riverbed. He got up and began pulling security by himself with a ‘9-mil.’ We asked him if he was OK. He said, ‘yeah,’ and we just continued the mission.”

The versatile infantrymen not only “humped,” climbed, fought and shot, but built. The establishment of the Korengal Outpost, envisioned by Colonel John Nicholson, the Task Force Spartan commander, as an institutional manifestation of the Coalition’s commitment to the security and welfare of the region, represents an accomplishment of strategic magnitude.

They started from scratch.

When the Chosin infantrymen arrived at the Korengal in the spring, Americans — mainly Marines who occupied the ground during Operation Mountain Lion — serving in the “outpost” enjoyed the use of a single hardstand building. A large, circular concertina-wire boundary encompassed ruins, fighting positions, decayed lumber stocks, human and animal waste, and a patch of reasonably level ground pressed into service as a landing zone. Aircraft landed and departed within a dozen or so yards of the single building, shaking loose makeshift doors and shutters and filling the hapless edifice with dust and debris.

Aided by combat engineers from the 27th Engineer Group from Fort Bragg, N.C., as well as engineer assets organic to the Spartan Brigade, the Chosin infantrymen slowly and painfully transformed the disaster site into a functional outpost. Soldiers serving at the “KOP” currently live in tents and enjoy access to functional if modest dining, wash and sanitary facilities as well as limited telephone and recreational services. Perversely, electrical service arrived as the 2nd Platoon Soldiers finally rotated out.

The men described living conditions at the KOP during their tenure as, well, Spartan.

An infantryman with C Company, 1st Battalion, 32nd Infantry Regiment, mans a check post in northeastern Afghanistan.

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“It was cool at night, (very) hot during the day,” said Staff Sergeant Chris Bryant, currently the senior enlisted 2nd Platoon Soldier. Perpetually donning “battle rattle” under the withering northeastern Afghan sun — daytime temperatures rarely fell below 100 degrees in the summer and occasionally reached as high as 130 — Soldiers struggled to keep hydrated. For three iceless weeks, the warriors consumed hot water. Some went entire days without urinating. Chosin troopers expertly assessed times and distances in terms of water requirements.

“You could give any of our guys a grid and he’d tell you exactly how much water you had to bring,” Private First Class Lucas Amyx, a 19-year-old 2nd Platoon infantryman from Cincinnati, said with a smile. “The packing list would be three-fourths water. Just three camel backs, some meals and your ammo — you didn’t even think about putting anything else in your assault pack.”

Soldiers serving on major theater operating bases typically find shelter from the sweltering Afghan summer heat in their living quarters, if not in comfortable work spaces, dining facilities, gyms or Morale, Welfare and Recreation establishments. Upon arrival at the KOP, 2nd Platoon Soldiers, by contrast, lived in a draw, forming makeshift shelters with timber beams, pieces of tarp, ponchos or clothing.

Food consisted principally of meals, ready-to-eat, supplemented occasionally by “pogy bait” garnered from care packages or regional bases and Afghan fare prepared by ANA colleagues or purchased from locals.

Not surprisingly under such circumstances, the 2nd Platoon Soldiers lost weight — sometimes significant amounts. Bryant, by no means fat to begin with, dropped 37 pounds. His “PL,” a lean, compact young man who could ill afford it, lost 23. Leaders estimated the men lost around 20 pounds on average during the “115 days.”

“Korengal,” Bryant observed one morning as he stretched his hand across his belly. “Asadabad,” the Columbia, S.C., resident added with a gesture toward the meitter midsection of a colleague enjoying the “plush” conditions of Asadabad – in truth only a small regional base featuring modest amenities.

When in charitable moods, 2nd Platoon Soldiers characterize sanitation at the KOP as “primitive.” The Chosin infantrymen typically relied on stream water or small amounts of bottled water for whatever washing they attempted. Uniforms, generally soiled and not infrequently torn into rags, went weeks without cleaning.

Service at the KOP did provide a few unique opportunities, mainly cultural in nature. The allies, for instance, shared living and working space at the outpost, officially an Afghan facility.

The platoon’s Soldiers forged tight bonds with the ANA troops they served alongside. Nearly every mission launched from the KOP, McQuade pointed out, involved Afghans as well as Americans. As they labored together against a ruthless, determined foe amid austere conditions, the Soldiers developed mutual respect and even affection.

“They were excellent,” McQuade said of his Afghan brothers in arms. “They’d pick up on things we wouldn’t. One time an ANA soldier reached down into the road and picked up an improvised explosive device. We didn’t even notice it.”

ANA soldiers, he added, picked up on “The cultural things, especially the language. Sometimes, they’d just know an attack was coming.”

The American warriors also grew to admire their ANA counterparts’ ferocity in battle.

“You shoot at them, and they’ll chase you down until they get you,” Amyx said. “They’ll scale walls to get at the enemy.”

The Americans noted the many essential similarities of the allies and their services. Similar in age to their American allies, ANA soldiers represent a national institution drawn from a broad cross-section of ethnic and cultural groups. Just as the U.S. military blends Soldiers of a variety of European, Asian, African and Latin American ancestry representing numerous strands of Christianity as well as other faiths, the ANA unites Sunni and Shiite Muslims of Tajik, Hazara and Uzbek as well as Pashtun extraction.

The Americans learned about enemies as well as friends.

Amyx said events that occurred during one patrol demonstrated the insurgents’ complete indifference to the lives of innocent Afghan civilians, including children.

“One time we were walking through a riverbed past a kid,” the infantryman recalled. “He was shaking hands with us and everything.” Anti-Coalition assailants, he continued, “just started firing into the area with no regard for the kid or any of the other locals in the area. The kid’s family was waiting for him on the other side. They kept screaming for (the insurgents) to stop, but they just kept shooting with no regard for human life.”

While the young men typically describe their accomplishments in earthy or ironic terms, they clearly appreciate the gravity of their mission and the stakes riding on its successful accomplishment.

“Being part of two monumental things in Afghanistan — Mountain Lion and standing up the KOP — is real exciting,” Amyx said.

“There’s a permanent base on the Korengal now, and we’re the ones who started it,” McQuade said. He added that his platoon’s insertion into an ACM stronghold also made a significant contribution to the allied effort.

If training rotations in the humid Louisiana woods and deserts of southern California, field problems in the frozen northern New York forests, deployment and shared grief hadn’t done so already, the “115 days” melded the platoon into a family.

“You’re going to scream and yell and get upset every once in a while, but I have a lot of confidence in these guys,” Demler said of his 2nd Platoon brothers. “I’m glad they’re on my side.”

“You just learn to trust people,” Brinkman added. “People you might not get along with in the rear might be your best friends when you’re out.”

“We were a pretty well-rounded, tight-knit platoon to begin with, but being in that kind of environment for that length of time just brings a platoon closer together,” McQuade observed. “They know the only people out there with them are the dudes on their right and left. It helps them perform better. They know they always have to give 110 percent.”

Sergeant First Class Michael Pintagro is currently serving as the Public Affairs NCOIC for Task Force Spartan in Afghanistan.
The U.S. Army has Soldiers deployed to approximately 120 different locations worldwide. We are a forward deployed force sent to promote and ensure U.S. political, economic, and security interests. As part of our continuing presence in these foreign lands, it has become one of our goals to “win the hearts and minds” of the people of the host nation. In today’s political environment, where Americans are no longer welcomed with open arms in many parts of the world, this goal is imperative. It is imperative not only to ensure the safety of our Soldiers, but to assist us in accomplishing our national goals as well as ensuring support for our continued presence, both domestically and abroad.

But, how do we go about “winning the hearts and minds?” What follows are ideas and observations based on experience while serving as the commander of the United Nations Command Security Battalion – Joint Security Area (UNCSB-JSA) located in Panmunjom, Republic of Korea (ROK). This unique battalion was comprised of 600 Soldiers, 60 percent of which were ROK officers and Soldiers. The UNCSB-JSA was the only U.S. tactical unit that executed operations inside the Korean Demilitarized Zone (DMZ). These included security operations inside the DMZ and administering the civil affairs for the Korean village of Tae Song Dong (TSD). This small farming village is the only South Korean village located inside the DMZ. The villagers lived, worked, and played within a “stone’s throw” of the Military Demarcation Line (MDL) and were constantly under the observation of armed North Korea combat outposts.

The leaders and Soldiers of the UNCSB-JSA monitored and controlled virtually every aspect of the villagers’ lives. This included maintaining order and discipline, holding mayoral elections, determining residency eligibility, controlling access to the village, serving as a conduit to the United Nations Command (UNC) for approval for construction or village improvements, and approval for expansion of farming areas within the DMZ. Most importantly, the battalion provided around the clock security for the villagers and guest workers, both inside the village as well as in the farming areas – many of which bordered right along the MDL. In order to accomplish these missions, it was imperative that the leaders and Soldiers of the UNCSB-JSA gain the willing cooperation of the villagers.

Additionally, since the battalion was a “combined” unit, consisting of both American and Korean officers and Soldiers, it was imperative that we created the environment that facilitated the formation of a cohesive and effective team. This was complicated since we were dealing with components of two completely different military cultures and national characters.

In order to do this, it was our belief that there were five key components to “winning the hearts and minds” of the Koreans that we worked with and were responsible for:
Understanding and respecting the culture;
Building a foundation of trust, confidence and mutual respect;
Developing personal relationships;
Attending social and cultural events; and
Working to improve their quality of life.

IMPORTANCE OF UNDERSTANDING AND RESPECTING THE CULTURE

In John Peddie’s book *The Roman War Machine*, he describes how Roman generals made it a matter of policy to establish good relations with the native people of the occupied territories that made up the Roman Empire. To the Romans, the exercise of good public relations aimed at gaining the friendship and support of local inhabitants was not only wise, but a military necessity. Roman armies, compared with the populations of their conquered territories, were small in size, and the number of legionnaires required maintaining security and numerical superiority would have been considerable and wasteful. The Romans desired to turn over responsibility for law and order to the people of the conquered territories as soon as possible. He writes how Augustus, during the war with the Germans, found a tree laden with fruit located inside his marching camp. The day after the withdrawal of the army, the local populace found the tree and fruit undisturbed. Although this example is simplistic, it may give an indication of how the Romans managed to maintain a vast empire for almost 2,000 years. To the Romans, it was all about respect. Respect for the culture, respect for the customs, respect for the traditions, respect for the religion, respect for the property, and respect for the people of the lands that the legions were garrisoned in.

Although the United States does not maintain an “empire” in the traditional sense, we do have units and Soldiers deployed all over the world, providing security, stability, and maintaining U.S. interests are maintained. Just as the Romans recognized, in order to effectively accomplish this we first must gain the respect of the people of the host nation. The first step in earning this respect is for our Soldiers to learn, understand, and then respect as much about the nation, its culture, customs, and traditions as possible.

The term “ugly American” is familiar to anyone who has traveled overseas. It is very easy for Americans, especially military personnel, to think of ourselves as superior intellectually, morally, culturally, professionally, physically, etc. Although we may feel superior in any or all of these areas, we should never convey or demonstrate this to our hosts. We must recognize that people from all nations take great pride in their country, its history, customs, and traditions. We must acknowledge and recognize this! Treat the people of the host country with dignity and respect and embrace the differences and nuances of their culture, customs, and traditions.

Some countries, Korea for example, have an incredibly diverse and rich history, unique culture, and traditions that are over a thousand years old. But from a practical sense, how do we go about understanding and respecting the culture of our host nation? It first starts with education. Our leaders and Soldiers must become knowledgeable about the host nation; its people, religion, customs, traditions, history, etc.

This education process was fully integrated into the training program at the UNCSB-JSA. Even though U.S. forces had been a fixture in the ROK since the Korean War, we were amazed how little ROK Soldiers knew about America and its people. The same, even more so, could be said for U.S. Soldiers who served in the UNCSB-JSA. For the most part, they were completely ignorant of the nuances of Korean society and even why the U.S. Army was in Korea. A technique that we used to mitigate this lack of knowledge and understanding was twice each year we gave a “U.S. – Korea” presentation to all Soldiers in the battalion, both Korean and American. The intent was to give the Soldiers and leaders a broad understanding of the basis of each side’s actions, beliefs, and why we acted in the manner that we did.

Additionally, six days a week, senior leaders of the battalion gathered each...
morning for an operational update. This update covered the day’s upcoming activities, patrols, visitors, training, and intelligence summary. Before we began, the battalion S2 (U.S. officer) and S3 Air (ROK officer) presented significant news highlights and items of interest from both the U.S. and the ROK. This always generated discussion and served to further educate both Americans and Koreans about our two nations and gain a better understanding of each other.

Learning and understanding the culture, customs and traditions of Korea was only a starting point. It was important for us to not only respect these, but we attempted to apply them in day-to-day activities as well. Some examples that were a part of our experience included taking our shoes or boots off prior to entering a person’s home, sitting on the floor and eating meals from a table approximately one foot high, eating with chop sticks, socializing prior to conducting business, greeting Koreans in their native language, and respecting the ROK soldiers as they sang their national anthem each morning during PT formation. These are just several examples; there were many more.

These examples may seem trivial to Americans and our serious, professional business-oriented culture, but they were very important to the Koreans and assisted us in earning their trust, confidence, and respect.

TRUST, CONFIDENCE AND RESPECT

The intent of honoring and respecting the Korean culture, traditions, and customs was to build a foundation of trust, confidence, and respect between the Soldiers and leaders of the UNCSB-JSA and the Korean people. The more trust, confidence and respect that we developed at all levels, the easier it became for us to gain the cooperation, assistance, and support of the Koreans, especially the villagers of Tae Song Dong, and the ROK Soldiers of the battalion.

This garnered many practical benefits to the battalion. These included increased and more productive dialogue, better intelligence (especially from ROK governmental organizations), willingness for cooperation for initiatives, support for quality of life improvements and security issues, better treatment of U.S. Soldiers, improved relations between ROK and U.S. Soldiers, and increased cooperation by members of the local populace concerning training activities and operations in and along the DMZ.

Most importantly, gaining the trust, confidence, and respect of our Korean hosts showed America, its Army, and its people in the best light possible. The Korean soldiers that were selected to serve in the UNCSB-JSA were some of the best and brightest young men in the ROK. Upon completion of their military service, they returned to Korean society attending universities, with many going on to become leaders in business, government, and the military. Their impression of Americans and the United States was shaped by their experience serving in the UNCSB-JSA. We did our best to ensure that this impression was a positive one — showing Americans as intelligent, respectful, open-minded, and compassionate individuals.

DEVELOPING PERSONAL RELATIONSHIPS

As mentioned earlier, Americans (especially military personnel) generally believe in and display a more business-oriented (i.e. less personal) approach to our affairs than do many other nationalities. Establishing a personal relationship with those that we work with or do business with is often considered unimportant or unnecessary. This was not our belief and experience in the UNCSB-JSA. Establishing close, personal and professional relationships between individuals was a key component to effective operations, especially when dealing with people from two different nationalities.

Every effort was made to create conditions that promoted and fostered the ability to build personal and professional relationships between the U.S. and ROK Soldiers, and our Soldiers and the TSD villagers. In the battalion, there was no such thing as a Korean-only or U.S.-only event. All functions and activities were “combined,” designed to bring Americans and Koreans together. ROK Soldiers were encouraged (and many did) to bring U.S. Soldiers home with them while on pass to show them their country and give them a taste of the “real Korea.” American Soldiers were likewise encouraged to take ROK Soldiers to the Yongsan U.S. Army Base in Seoul. Soldiers, leaders, and units were paired up with counterparts for all social and morale building activities. Teams were integrated for athletic competitions and all training and operations included a mix of Koreans and Americans. Every effort was made to form habitual relationships between individuals and units in anticipation that this would lead to enhanced personal and professional associations. Although maintaining national integrity in many of these activities would have been easier (especially given the language barrier), the creation of personal and professional bonds between individuals was an integral part of building trust, confidence, and respect for each other and successfully operating in a combined environment.

SOCIAL AND CULTURAL EVENTS

Social and cultural activities are a part of every society in the world. These were a big part of life in Korea, the village of Tae Song Dong, and with the ROK Soldiers in the UNCSB-JSA. These included national and local celebrations, dinners, weddings, funerals, parties, barbecues, school events, sporting events, and religious events. When invited, we made every effort to attend these events. On the rare occasion when we did not receive an invitation, we made it known that we were interested in attending and actively sought an invitation. Once again, this showed the Koreans that we were interested in their culture and wanted to learn more about them personally.

Attending social and cultural events were viewed as an opportunity. They were an opportunity to get to know the Koreans on a more personal level and, more importantly, for them to get to know us. Social events provided a venue for Americans and Koreans to interact in a relaxed atmosphere, facilitating relationship building and cultural understanding. Leaders and
Soldiers of the battalion were encouraged to participate in as many social or cultural events as they could make time for. When we attended these events, we ate what the Koreans ate and in the manner that was their custom, drank what they drank, participated in the games and sporting events, met and talked with members of the community — especially wives and children, and did our very best to respect the customs and traditions that were a part of these events.

This allowed the Koreans to see a personal side of American Soldiers and view us as respectful, considerate, and open-minded. These events became so important to our philosophy of gaining the trust and respect of the TSD villagers that all village cultural and social events were annotated on the battalion training calendar and became command-directed events for many of the leaders of the battalion. Although sometimes there was “mumbling and grumbling” prior to going to many of these events, I cannot think of a Soldier who did not feel that their time in Korea was enriched by these experiences.

Keeping this same intent, we always invited the Koreans to traditional American events and functions hosted by the battalion. These included 4th of July celebrations, Thanksgiving and Christmas meals in the dining facility, unit organizational days, athletic and sport competitions, unit barbecues, Oktoberfest parties, Cinco de Mayo celebrations, and coffees and social events hosted by the American wives. When possible, we assigned escorts or sponsors to the Koreans which facilitated getting to know our Soldiers. We found that the Koreans were fascinated by these events, our customs and traditions, and for the most part, thoroughly enjoyed them.

An example of how small gestures can go a long way toward building a positive image occurred during my second year in the battalion. The ROK leaders and families hosted a formal dinner for the senior American leaders and families as part of their annual Chusok celebration. This is probably the most important Korean celebration, on par with our Thanksgiving, where Koreans come together with their entire extended family to honor their ancestors. The Koreans went to great lengths and expense to make this dinner special for the Americans. They prepared wonderful traditional Korean dishes and treated the entire evening as if they were with “family.” The battalion S3 and I, along with our wives, wore traditional Korean dress (Hanbok) to the dinner. The Koreans were amazed and delighted that we were willing to wear the traditional dress. This gesture enhanced our relationship with the Koreans as word and pictures spread throughout the battalion of the respect we had shown this important cultural event.

ENHANCING QUALITY OF LIFE

One of the most effective tools for building trust between the Koreans (ROK Soldiers and TSD villagers) and the battalion was demonstrating our commitment to improving their quality of life.

Given the isolated location of the battalion (400 meters south of the DMZ), complete absence of local, off-camp recreational activities, and extended operational requirements (Soldiers received only one four-day pass per month), quality of life for the Soldiers was of prime importance to the battalion leadership. Considering that most of the ROK Soldiers were operating and living in an unfamiliar environment (on a U.S. Army installation), special attention was given to improving their quality of life. These included providing Korean food in the dining facility, purchasing Korean movies and showing them on our battalion movie channel, improving living conditions at our operational sites in the DMZ, providing each platoon their own barbecue, purchasing Korean newspapers for distribution, etc. All of these were fairly simple initiatives, but they had an enormous impact on building respect and trust in the leadership of the battalion.

Although security of Tae Song Dong and the villagers was our number one priority and dominated our decision making, any issue concerning the village was always considered in the context of how it would impact on the villagers’ quality of life. Our goal was not just to sustain the village, but do everything in our power to improve the village and enhance the villagers’ quality of life. This included all facets of village life such as modernization, beautification, streamlining of many administrative requirements, enhancing business opportunities, implementing school improvements, enhancing available religious services, increasing recreational opportunities, promoting village exposure, and tempering disruptive security requirements.

As the relationship between the villagers and the leaders of the UNCSB-JSA matured and a sense of mutual trust permeated both, the villagers became comfortable enough to raise issues that they had previously withheld. We discovered that the villagers had a number of ideas to improve life in the village. They apparently had made some of these ideas and requests known for years but had never seen any visible action on the part of the UNC leadership to address them. This resulted in a corresponding loss of trust in the UNC leadership.

An example of this and how we turned it around to our advantage occurred during one of our quarterly town council meetings. The villagers had been seeking approval to establish cell-phone coverage inside the village and adjacent DMZ farming area. This required construction of a cell-phone antenna station within the village,
something that required UNC approval. To the villagers, this was a significant quality of life as well as a prestige issue, since the village touted itself as a model of modern South Korean life and was designed to be a showcase village in the eyes of North Korean leaders and tourists. From the villager’s perspective, each time they raised this issue, it appeared that nothing was ever done to move the issue forward and gain approval, and their request was consistently denied.

When they made the request known, we discovered that there was no valid reason to deny the request. It made too much sense. It enhanced the villagers’ quality of life and had the added benefit of assisting the battalion in providing security to the villagers. We now had an alternate form of effective communication, in lieu of land-line and secure radio, within the DMZ. Within two months of making the request, we gained UNC approval, the tower was constructed, and the villagers had cell phone coverage. Immediately, there was enhanced respect and trust in the leadership of the battalion. We demonstrated, in a tangible way, that we were willing to take action to back up our stated goal of enhancing the quality of life of the villagers.

I can not overstate how effective being truly concerned for the TSD villagers and ROK soldiers’ welfare and quality of life was in building a foundation of trust between the Americans and Koreans. Once again, this dynamic provided some very tangible benefits to the battalion. Whenever we asked for support or concessions from the villagers on certain issues, they were more inclined to agree and support our requests. This was extremely important during the high OPTEMPO planting and harvest seasons when we had to ask their cooperation to schedule and coordinate farming efforts, ensuring that we could provide sufficient armed security escorts whenever a villager or worker went into the fields. This was initially met with resistance, but once we gained the trust and confidence of the villagers, they came to support the effort wholeheartedly.

WINNING THE HEARTS AND MINDS IS HERE TO STAY

No one can accurately predict what the future holds for the U.S. Army, but it seems clear that the Army will be involved in stability, support, and security operations throughout the world for the foreseeable future. As long as the United States has political, economic or security interests in a particular country or region, and other governmental organizations continue to display an inability to respond or influence as they were intended to (i.e. State Department), the U.S. Army will remain at the forefront of promoting American interests overseas. As long as this dynamic remains, our long-term success will undoubtedly be predicated not so much on our military prowess, but on our ability to gain and retain the willing support of the people of our host nations. To accomplish this, it seems clear that commanders, leaders and Soldiers must actively seek ways in which to “win the hearts and minds” of the populace. This will require deliberate planning, conscious execution, and must be made an integral part of any deployment operation. Isolating ourselves in our base camps and limiting our contact with the local populace will only breed mistrust and fail to capitalize on our greatest strength — the American character and ideal as demonstrated by our Soldiers. The people of other nations must see and be exposed to this. Leaders must look for opportunities to make contact with and build personal relationships with members of the host nation. It is only through the creation of interpersonal relationships that we can establish a foundation of mutual trust, respect, and confidence. Once established, there is no limit to what can be accomplished by people from two nationalities working together toward a common goal.

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The author (at right) poses for a photo with the mayor of Tae Song Dong village. Although security of Tae Song Dong and the villagers was the UNCSB-JSA’s number one priority and dominated decision making, any issue concerning the village was always considered in the context of how it would impact on the villagers’ quality of life.
A Holistic Approach to Combat Identification

MAJOR EDWARD J. OSPITAL AND CAPTAIN ADAM N. WOJACK

Combat Identification (CID) is the process of attaining an accurate characterization of detected objects (friendly, enemy or neutral) throughout the Joint battlespace to the extent that with high confidence, timely application of military options and weapons resources can occur. Combat Identification is achieved through proficient application of a family of situational awareness and target identification capabilities, and adherence to doctrine, unit tactics, techniques and procedures (TTPs), and approved rules of engagement (ROE) that directly support a combatant’s shoot/don’t shoot decision for detected objects in their battlespace.

The purpose of CID is to improve unit combat effectiveness while at the same time preventing fratricide and minimizing collateral damage. CID is the process that human shooters or sensors go through to identify entities on the battlefield prior to making shoot/don’t shoot decisions. To perform CID, the warfighter uses all available means of his disposal to sort the entities on the battlefield prior to applying combat power or fires effects. The whole point is to enable the warfighter to maximize the effects of lethal fires against the enemy, while at the same time reducing or eliminating the effects of fires on friendly or neutral personnel, equipment or facilities.

While CID is a complex series of linked systems, procedures and doctrine — when it is effective, it is simple and transparent. When it is ineffective, its results can be tragic and disastrous. A recent example of the “links” in the CID chain (Family of Systems [“See” the entity] + Training [“Identify” the entity] + Doctrine/TTP/ROE [“Engage” the entity]) being broken in the global war on terrorism is a highly publicized incident involving the 2nd Battalion, 75th Ranger Regiment.

Fratricide in Afghanistan

While on patrol in a Taliban-infested sector of Afghanistan’s Paktia Province in April 2004, an element of the 2nd Battalion, 75th Ranger Regiment became bogged down because of a broken HMMWV. A segment of the platoon, Serial 1, passed through a canyon and was near its north rim. The other segment, Serial 2, changed route plans because of poor road conditions that hindered the recovery of a broken HMMWV being towed by a locally acquired vehicle. Serial 2 entered the same canyon from the south. Serial 2 did not have the ability to communicate their situation and change of route to Serial 1 due to the rugged terrain. Upon entering the canyon, Serial 2 came under mortar and small arms fire from Afghan Taliban fighters. Rangers in Serial 1 heard the initial explosion that preceded the attack. Three Rangers were ordered to head toward the attackers. The canyon’s walls prevented them from radioing their positions to their colleagues, just as Serial 2 had not radioed its change in plans. One group moved toward the north-south ridge to face the canyon.

The light was dimming. The presumed Taliban guerrillas were about half a mile away.

Two Rangers and an Afghan ally moved down the slope into a position where they could engage the enemy. As Serial 2 pulled alongside the ridge, the gunners fired into the area where members of Serial 1 had taken position. The first to die was the Afghan, whom the Rangers in Serial 2 mistook for a Taliban fighter. Under fire, Rangers on the ridge shouted and waved their arms. They then used a smoke grenade to mark their position and firing ceased for a few moments. The Rangers in Serial 1 thought the engagement was over and got up from their position. The HMMWV then moved to a position of advantage and resumed firing killing one of the Rangers in the second engagement.

To use this tragic example to better explain CID, you must first understand its basic formula: Situational Awareness (SA) + Target Identification (TI) = Combat Identification (CID).

Situational Awareness (SA)

SA consists of reported friendly (blue), enemy (red), neutral and unknown entities normally displayed on a computer screen or manually posted on a map. For the purposes of CID, we will only describe SA as it relates to automated and reported information using available command and control (C2)/SA systems. There are three key attributes of SA — accuracy/timeliness of reporting; density of blue position, location, information (PLI) generating systems; and interoperability of friendly force C2/SA systems in the affected battlespace. SA is sent to and displayed in...
The proper mix of target identification systems would have enabled vehicle commanders to properly guide their element’s crew-served weapon gunners onto enemy targets — as well as to prevent them from engaging friendly forces.

Target Identification (TI)

TI is the process of determining the affiliation (blue, red, neutral) of detected objects at the point of engagement in one’s immediate battlespace. This is normally conducted within line of sight visual range and is for the purpose of applying combat power or fires effects against enemy entities or targets, while preventing fratricide and minimizing collateral damage. There are two categories of TI — cooperative target identification (CTI) and non-cooperative target identification (NCTI).

CTI includes any method or materiel solution that allows a human shooter/sensor to “interrogate or question” a potential target, and allows the same potential target to “respond or answer” the interrogator in a timely manner. Air-to-air and ground-to-air systems use of IFF (identification friend or foe) Mode 4, and ground-to-ground systems, in the near future, may use Battlefield Target Identification Device (BTID) and Radio-Based Combat Identification (RBCI) CTI systems. IFF is a misnomer as none of the CTI technologies identify foe, they only identify friend or unknown (IFU) entities.

NCTI involves methods or systems that exploit the physical characteristics of entities in the battlespace to help identify and determine affiliation, and does not require a cooperative response or answer from the target. NCTI systems include optics (forward-looking infrared [FLIR], night vision goggles [NVGs] and binoculars), vehicle and personnel markings (Joint Combat Identification Marking Systems [JCIMS]), which include Combat ID Panels [CIPs], Thermal ID Panels [TIPs], Phoenix Beacons [infrared lights lights] and Dismounted Combat Identification Marking System [DCIMS] - a TIP panel that is form fitted to a Kevlar helmet, giving a reverse polarity image through a FLIR device), and Automated Target Recognition (ATR) devices. JCIMS marking systems are used in conjunction with FLIR optics and night vision goggles and assist in friendly identification at the point of engagement.

In this example, Serial 2 (or the platoon for that matter) did not have adequate optics. Thermal sights for HMMWV-mounted crew-served weapons (AN/PAS-13s or Enhanced Night Vision Goggles [ENVG], for example) combined with reverse-polarity markings and/or thermal ballistic helmet covers on all Soldiers would have enabled turret gunners to identify the dismounted Rangers in Serial 1 as friendly entities. Technology combined with a rehearsed TTP to avoid fratricide and adherence to ROE could have prevented this occurrence. Each “link” of the CID chain was broken.

The unit fired on would have benefited from other NCTI devices such as infrared (IR) beacons for limited visibility operations (seen through AN/PVS-7B/D or PVS-14 night vision goggles that Soldiers are currently issued) or a day-visible strobe light.

A CTI technology that services Ground-to-Ground domains (“service to platform,” “platform to soldier,” “soldier
Regardless of what CTI technology is used, the combatant must still make the final determination whether to engage the unknown entity based on blue, red or neutral status. Once determined, the combatant must incorporate the ROE criteria and restrictions into his “shoot/don’t shoot” decision.

A Holistic CID Solution

Progress has been made since the incident in Paktia. Per the recommendation of the AMC B G-G CID Study, the Training, Doctrine and Combat Development Division at Fort Knox, Ky., assisted by the TRADOC Capability Manager Platform Battle Command/Combat Identification (TCM PBC/CID) and the TRADOC Centers, selected a vendor in March 2006 to address issues associated with the incorporation of CID into Army doctrine. Comprehensive CID doctrine will be developed for inclusion into FM 3.90, Tactics (publication date: 4 July 2001), that explains how to increase combat effectiveness in relation to combat identification requirements, including but not limited to SA, TI, TTP and ROE. The CID input will address the Ground-to-Ground (“platform to platform,” “platform to soldier,” “soldier to platform”), Air-to-Ground (rotary-wing aircraft-platform to soldier and UAV-platform to soldier), and Ground-to-Air mission areas.

Gunnery doctrine will be updated to incorporate combat identification requirements, to include but not limited to, insertion of friendly, allied/coalition and neutral targets, and refinement of direct fire target engagement processes. Existing gunnery manuals for Armor/Cavalry, Infantry, Artillery, Air Defense, and Aviation will be reviewed to identify deficiencies in addressing CID-related tasks. This doctrine shall be for the entire Heavy Brigade Combat Team (HBCT), including Armor, Infantry, mortar gunnery, Engineers, and Combined Arms Support Command (CASCOM) and should be used as a template for the Infantry Brigade Combat Team (IBCT) and Stryker Brigade Combat Team (SBCT) manuals. The doctrinal effort will take approximately 12 months to complete following initiation in March 2006. This effort will strengthen the Doctrine/TTP/ROE (“Engage or Do Not Engage”) “link” of the SA + TI chain.

Improvements in the current family of systems (FBCB2/IBCP, Optics, 2/3 GENFLIR, JCIMS) enabling the “sensor-to-shooter kill-chain” to better see the targeted entity can be enhanced through
the acquisition of a CTI that services all of the Ground to Ground domains and one that addresses the Air to Ground Mission Area, such as RBCI. Future CTI systems that enter into an acquisition strategy should service as many domains as possible to fully address our CID gaps.

Fratricide incidents are still occurring during stability operations in Iraq and are being committed by platforms other than armored. A system like BTID would have no positive impact on these incidents. Acquisition of a CTI technology that services all domains will strengthen the family of systems (“See the entity”) link in the CID equation. Until that occurs and the doctrinal/facility gap mitigation measures are in place (identified and funded by the AMCB G-G study), fratricides in full spectrum operations will likely continue to occur.

The fog of war and the human factor makes total elimination of fratricide difficult. Marksmanship and “muscle memory” (the ability to conduct crew drills/battle drills under stressful conditions, i.e. fire commands, fire control systems switch manipulation) training remains a “must” in order to maintain lethal crews and soldiers, and is necessary to simultaneously protect the force from fratricide. The contemporary operating environment drives the need for target discrimination skill-set for all soldiers. This standard of training grounded in solid doctrinal principles will hone the warfighter’s judgment at the point of engagement. Family of system and doctrinal improvements coupled with improved training devices (Recognition of Combat Vehicles (ROC-V), simulations, and realistic ranges with blue, red and neutral targetry incorporating shoot/don’t shoot decision making) will enable the soldier to make better decisions on whether or not to engage an unknown entity. The combatant must be able to ask themselves the question if unsure whether to shoot or not:

(1) Am I or my friends in mortal danger?
(2) What is the worse thing that can happen if I pull the trigger?
(3) Am I positive that my target is hostile?

There is no “silver bullet” solution to end all fratricide incidents. The emphasis should be placed upon improving density of SA and TI systems in the Army inventory, preparing the combatant for full spectrum operations and acquiring a CTI technology to service all domains in the Ground-to-Ground mission area. This can only be accomplished by looking at CID through a holistic lens and by strengthening every link of the CID (SA+TI [Family of Systems + Training + Doctrine/TTP/ROE]) chain. It is imperative that we do everything possible to prevent unfortunate incidents of fratricide from occurring in the future.

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Photo by Specialist Christa Martin
Usama Bin Laden and his Al-Qaeda movement represent major challenges to American military planners, and as such, any material written about him and his organization should be analyzed and studied with great care. The May-June 2006 edition of *Infantry* featured an analysis of street literature highlighting the strategic evolution of Bin Laden and his organization (See “Street Literature on Usama Bin Laden: A Review of Cheaper Arab Biographies found in Arab Alleyways,” pages 22-24). The response from readers desiring more analysis of pro-Bin Laden street literature has been overwhelming. Requests have come in from the Pentagon to war colleges and even colleagues from Naval Station Rota in Spain. As a result, part two will focus on a 1991 booklet that mythologizes his Soviet-Afghan war years (1980-1989).

In major Middle East capital cities, one can find a host of street literature about Bin Laden, but between the wild claims of his abilities to fight Soviet forces and other Afghan jihadist groups are kernels of knowledge that offer a realistic assessment of the Al-Qaeda leader, his health, his psychology, his world view, and the evolution of his military tactical prowess. Such street literature is one of the least known means by which Islamist militants influence public opinion, by offering those wanting to go beyond satellite television a means of reading in detail the mythology, the manipulation of Islamic history and texts as well as what a young impoverished man on the street can do to join the jihadist cause. U.S. war colleges should assign translated excerpts of these street biographies of Bin Laden. These books can range from less than 100 pages to more than 400 pages and have permeated Arab streets since the early ‘90s; war colleges and Special Forces schools can extract excerpts of this material as a basis for a robust discussion and assessment of one of America’s major adversaries.

These books can be obtained from street vendors in prices ranging from 50 cents to $3. This review will look at an earlier piece of Bin Laden street literature that details his Soviet-Afghan War years. *Usama Bin Laden Yarwi Maarek Massadah Al-Ansar Al-Arab bee Afghanistan (Usama Bin Laden Narrates the Battles of the Arabs of Massadah Al-Ansar in Afghanistan)* was published in 1991, by Manar Al-Jadid Press in Cairo. The author, Essam Daraaz, was among those Arab jihadists who left Egypt to report on Usama Bin Laden’s jihad against the Soviets in Afghanistan. His talent lay not in combat but in propaganda, journalism, and chronicling the Arab-Afghan movement in Afghanistan. He is perhaps one of the earliest individuals to convince Usama Bin Laden of the need to publicize his movement to globalize his network and reach among the Arab street. The 93-pages detail the early phases of Usama Bin Laden’s vision to bring Arabs to the fight against the Soviets, and the network he developed that would evolve into Al-Qaeda today. This was a time when it was acceptable for Arab jihadists to be associated with Bin Laden and when Arab regimes all too gladly got rid of violent radicals by exporting them to the Soviet-Afghan war. It was hoped they would never come back alive. Like many street publications, the dates are unclear and the tactics discussed are not crisp; there are also no maps that would aid the reader in following the engagements of Bin Laden’s group. The dates covered are Bin Laden’s phase where he jetted between Saudi Arabia, Pakistan, and Afghanistan from 1980 to 1984, and the years he settled in Afghanistan more permanently during the Soviet-Afghan War from 1985 to 1989.

**Bin Laden’s Gradual Involvement in the Soviet-Afghan War**

According to the book, Bin Laden arrived in the region 17 days (January 1980) into the Soviet invasion of Afghanistan but never made it to Afghanistan. His first foray into the jihadist movement was to arrive in Lahore, Pakistan, connect with Jamiat Al-Islamiyah and through them provide money to the most radical of the Mujahideen factions led by Gulbudin Hekmetyar and Burhannudin Rabbani. Between 1980 and 1984, he returned to Pakistan from Saudi Arabia numerous times and solicited information on whereabouts of Afghan Mujahideen factions to contribute directly to them. He also formulated his vision between 1980 and 1984 of creating his own Arab organization that would enable Arabs to directly contribute their services, funds, and themselves to the Afghan cause. Usama Bin Laden would latch onto a mentor and professor from King Abdul-Aziz University in Jeddah, who had established the beginnings of an organization that greeted Arabs arriving in Pakistan and enabled them to
experience the jihad in Afghanistan against the Soviets. It would offer a counter-culture experience for those Arabs wanting to participate full-time or part-time in the jihad against the Soviets. Azzam’s guesthouse was also an effective fundraising tool as it enabled donors to spend vacations at the front. The cleric and professor was the Palestinian Abdullah Azzam, who first saw a need to organize Arabs arriving in Pakistan and began by establishing guesthouses for them in Peshawar that would be called the Maktab Al-Khidmat lil Mujahideen (The Services Office for Arab Jihadists). This is the precursor to Al-Qaeda, the core organization from which Bin Laden would improve upon and globalize. Bin Laden was brought into this organization by his professor, and his skills proved invaluable in financing and organizing the group.

Bin Laden Reorganizes Azzam’s Organization

Bin Laden heard many complaints of inefficiency in Azzam’s organization, and he began to organize what was essentially Azzam’s guesthouse into a structured organization, which included a:

- military committee;
- administrative committee;
- travel committee; and
- training committee.

The travel committee specialized in cross-border infiltration of Arab jihadists through the Pakistan-Afghan border. The book highlights how Bin Laden spent $25,000 alone on jihadist literature, propaganda, books, and papers. Why the book highlights only this particular expense is unclear, but it demonstrates the importance the organization places on propaganda. By 1985, Usama Bin Laden had become a permanent resident of Maktab Al-Khidmat in Peshawar, and from 1985 to 1986 he began importing earthmoving equipment and engineers from the family construction firm into Afghanistan. He selected the mountain stronghold of Jaji to be an area from where he would lead Arabs in a separate brigade to attack the Soviets and Afghan communist forces or to supplement the two of the Mujahideen factions under Rabbani or Hekmetyar. The book discusses that Bin Laden not only constructed trenches, tunnels and defensive fortifications, but more importantly he taught his followers how to operate and construct these fortifications.

Interview Between the Author and Bin Laden on Forming Massadah Al-Ansar

The author interviewed Bin Laden in Jeddah, and he articulates how when he was in his final years of studies he felt remiss as an Arab and Muslim about his duty towards the Afghans, noting how the Russians helped the Afghan communists and Muslims around the world were doing nothing. He tells the author that when he visited Afghanistan, he noted that the Mujahideen felt bolstered and empowered by the presence of Arabs in their midst. In the early months of the Soviet invasion, they treated Arabs as guests and prevented Arabs from fighting alongside them. In 1984, he asked permission from Ittihad Islami Mujahideen to bring more Arabs into Afghanistan and create additional safe houses for them, as well as training camps.

According to the book, the formation of Bin Laden’s Massadah Al-Ansar (The Lion Den of the Companions) was a gradual process and represents a historic moment in the Arab jihadist movement. It unified a global network of like-minded violent Islamist radicals who shared the same world views; these views included that Arab regimes:

- Were to be violently opposed;
- Oppressed their people;
- Wrecked and stifled Islamic scholarship; and
- Imported alien ideologies.

The arrival of Arab jihadists in Afghanistan was the first step and migration from these Arab nations who rode the wave of Marxism, Baathism, Arab Nationalism and capitalism and have failed. It would be a physical declaration of independence, and the majority of Massadah Al-Ansar members were initially Saudis, according to the book and the author who interviewed Bin Laden.

One hundred Arab jihadists joined in the summer of 1984, but by the winter the number dropped to a dozen. Bin Laden tells the author that these young Arabs did not appreciate the importance of this front and the necessity of killing infidels so that God’s word reigned supreme. The dozen who remained were mostly from the Saudi city of Medina. Bin Laden seeks legitimacy through symbols and Medina is the city where the Prophet Muhammad is buried and home to the first Islamic society established in the early seventh century AD. According to the book, Bin Laden spent 1985 to 1987 tunneling, building, training and recruiting those committed to fighting the Soviets. He built Massadah Al-Ansar in the mountains of Jaji and acquired the name from a poem written by Prophet Muhammad’s companion. An interesting tactical note is that an Afghan commander (named Abdul-Sameelah) ignored Bin Laden’s advice to winter over at Jaji, considering it folly and a waste of manpower. The Afghan tribes would typically winter over in villages and not in the mountains. It seems Bin Laden and his dozen insisted they winter over in Jaji, and this may explain why only a dozen Arabs remained with him at that location.

Tactical Trial and Error, According to Bin Laden and His Associates

Abdul-Rassul Sayyaf ordered a first trial of the Massadah Al-Ansar-trained Arab unit in Ramadan 1986, granting the unit permission to fight in the Battle of Khost. It is important to pause and understand that Khost, which is located on the Afghan-Pakistan border in Afghanistan’s southeastern end, would be assaulted by Mujahideen forces numerous times. It was an easy target as supply lines from Pakistan were virtually guaranteed. The book discusses an assault conducted in 1986 when the Arabs probed around a static communist troop defense. One hundred and twenty Arab fighters were divided into two groups:

1. Advanced fighters and
2. Support or reserve forces.

At 1800 the Arabs assaulted objective Umm Khanadaq (mother of ditches); 40 meters from entrenched communist defenses around the city of Khost. Their assault would be a complete failure according to the book, as the Arabs began with an ineffective mortar and artillery barrage that only heightened Soviet military awareness. Then the barrage ceased and the
Arabs assaulted, providing a pre-warning of when and from which direction the attack would come. The Afghan communist forces on watch let loose with the World War II Gorunyov 7.62mm machine guns and suppressed the Arab assault. Bin Laden ordered withdrawal, and Afghan commanders felt their performance only reaffirmed their belief that Arabs could not fight. From the Battle of Khost, Bin Laden learned many lessons on training and preparation, exploitation of artillery by assault forces, reconnaissance, that assaulting a larger force directly was folly, and the value of larger firepower to suppress an assault.

One year after the Battle of Khost, a system was set up where young Arab volunteers would arrive in Peshawar and be taken to Jalalabad for two months training. Bin Laden hoped his Massadah Al-Ansar would offer additional training opportunities, but he had no experience in setting up training schedules. Coupled with the pressure of young Arabs wanting to immediately face Soviet forces, Bin Laden stressed that training and patience to maximize damage to the adversary was what they most needed. The book talks about the difficulty in reigning in young, inexperienced Arabs who wanted their first taste of battle. Seven months in 1987 were spent fortifying Jaji. Shelters were constructed, tunneling occurred, and to appease the eager young Arabs, he authorized small raiding operations that only garnered the attention of the Soviets. By then, Massadah Al-Ansar has been composed of a command and control room they called the Badr Center (after Islam’s first Battle in the plains of Badr), a room for anti-air weapons was constructed, storage room for food, an armory, a guestroom and a kitchen. Bin Laden made another tactical blunder by ordering an assault on Soviet forces operating in Jaji without completing the tunnels and defenses at Massadah. Aside from incomplete construction, he also did not have enough weapons and ammunition for every Arab fighter in Jaji, as everything had to be brought up the mountain by pack mule.

The first real trial occurred during Ramadan 1987, when the Soviets and Arab jihadists in Jaji each planned different campaigns on one another. The Soviets and Afghan government forces planned a three-week campaign to annihilate the Jaji camp with a scorched earth policy of villages surrounding the camp and closure of the Jaji passes to Mujahideen forces. Ten thousand Soviet and Afghan communist troops were amassed with three Soviet brigades and one Soviet Spetnaz (Special Forces) brigade. The Soviets struck first with aerial bombardments of Massadah Al-Ansar lasting nine days. Like during the Battle of Khost, Bin Laden’s leaders divided his force into advanced fighters and support forces. The advanced fighters were then divided into two groups: one protected Massadah Al-Ansar and fired surface-to-surface missiles, and the second was an assault force under the command of Abu Khalid Al-Masri. Bin Laden ordered the support force (those with the least training) to guard the rear of the tunnels, and he sent an experienced jihadist fighter with them.

After the Soviet aerial bombardment, the Soviet offensive began with communist tanks on the lower side of the mountain approaching on an incline. Bin Laden and the jihadists used communications to concentrate fire on individual tanks, the signal of three bursts of fire (from which weapon is unclear) meant the Arab unit was surrounded and needed aid. The book highlights Arab jihadist and Mujahideen use of wireless phones to let Bin Laden’s group know of the approach of Spetnaz forces. According to the book, Bin Laden used a concentrated fire of 35 rocket-propelled grenades (RPGs) to repel the Soviet special forces assault.

The Arab jihadists, who now numbered under 100, began acquiring real tactical field experience such as distinguishing between the Kalakov assault rifles carried by Soviet special forces and the Kalashnikovs given to Afghan communist regulars. The Battle of Jaji also provided a lesson in Soviet field tactics; they did not advance while calling in artillery on Arab positions and were typically no more than 200 meters entrenched from where the artillery landed. Once the Soviet artillery stopped, they would then advance. Bin Laden also noted that transmitting a Spetnaz body count seemed to stiffen Arab resistance and boost morale. The book criticizes Soviet tactical performance saying they:
- Did not practice good field discipline and stealth maneuver;
- Constantly broke radio silence; and
- Rustled through scrub and brush giving away their positions and allowing Arabs to regroup for an ambush.

The Arabs who trained at Massadah noted that in a defensive war the Soviets were at a severe disadvantage because their ground forces were not as aware of the contours of the terrain. This was an era before extensive use of GPS mapping, and it seems the Soviets did not conduct much aerial reconnaissance before a major assault. One thing is clear about the Battle of Jaji (which was also called the Battle for Massadah Al-Ansar by the jihadists) is that the Arabs began taking note of the tactical capabilities of their adversary.

The Battle for Jalalabad

In many ways this battle would be prophetic in the way 21st century conflicts would evolve. This was the first urban war involving the Arab-Afghans. By then the book boasts that Bin Laden has established 18 Massadah Al-Ansar training centers. (This could be an exaggeration, as pre-9/11 showed no more than five training camps.) What is clear is that Bin Laden’s group developed and acquired:
- Increased training centers,
- More rifles, rockets and RPGs,
- Medical evacuation system from Afghanistan to hospitals in Saudi Arabia,
- More trained artillerymen and mortarmen,
- Skill in using maps to land artillery and mortars on target and develop kill zones,
- A potent infusion of comms and trucks...
to maneuver irregular troops around the battle zone, and

- Captured weapons up to tanks were used to train jihadists on new systems.

The Soviets conducted a July 1987 assault on Jalalabad focusing on the neutralization of not only a Mujahideen stronghold, but a home for Arab jihadists like Bin Laden. Weapons caches peppered the city itself and outlying villages, and the Soviets encountered stiff resistance. The first indication of trouble for the Soviets was that the Arab and Afghan Mujahideen forces maintained a 72-hour constant barrage of mortar and artillery exchanges. Soviet tactical aircraft encountered air-air guns and there was a saturation of rockets from multiple rocket launchers. The only tank under Arab control was a single T-62 tank used to guard one of the main roads to Jalalabad leading to the airport. By the admission of this mythologized version of Bin Laden’s battles in Afghanistan, the tank deployment was useless in stemming the approach of the Soviets and Afghan communist regulars. Bin Laden and his forces withdrew into structures and ambushed Soviet armor with 75mm and 82mm anti-tank guns, RPGs at a range of 300 meters, and Milan anti-tank missiles. They destroyed two communist tanks, and 42 tanks were captured. The Arabs were provided six of those tanks, and former Egyptian army soldiers (Egypt has a mandatory draft of all male citizens who had trained in armor were able to operate and then train others in the operation and repair of the T-62 tank. In the end, the Mujahideen forces were pushed out of the center of Jalalabad but at a tremendous cost. Yet in Al-Qaeda lore, this is a major psychological victory.

**What Bin Laden Considers Lessons of the Massadah Al-Ansar Campaigns?**

(I) The concept of Arab fighters in Afghanistan evolved from guesthouses to military training camps to military formations. One can expect this to be the model of how Islamist militant groups who take control of a neighborhood or state operate. Convert military training camps into military formations to exert dominance over society and bring a constant state of conflict with adversaries.

(II) Arab jihadist youths must be spiritually, mentally, and physically trained and oriented for jihadist operations. This clearly indicates Bin Laden as a patient and calculating tactician, who believes in acquiring a qualitative edge in operatives and fighters to achieve his objectives.

(III) Training and lessons learned should be derived from each contact with the enemy. From the Soviet-Afghan War, Al-Qaeda learned lessons on ever-changing tactics and the need to learn from failed operations. U.S. forces and law enforcement must remain vigilant for new techniques and attempts to improve upon failed operations.

(IV) There should be adequate time allocated for a qualitative training program. Keeping Bin Laden from establishing a base of control as well as Al-Qaeda-like organizations from establishing a geographical permanence means a drop in the quality of fighters and suicide operatives. An objective for the United States is to deprive these Islamist militant organizations any opportunity to establish a presence from where to develop quality training regimens.

(V) Soviet airborne and special forces must be dealt with using the tactic of harassment, withdrawal, and ambush.

(VI) The Battle of Jalalabad (urban defensive battle) taught the need for active reconnaissance of approaching Soviet forces, marking known resupply and escape routes in and out of the city, and to utilize the fluid and flexible tactics learned in mountain fighting in the urban setting.

(VII) The profile of the jihadist Ali Al-Hazlan shows a Saudi who went from discos and the luxuries of the Persian Gulf lifestyle to guilt over sin and then to jihad to expunge those sins. Operatives can go from discos to jihad and back again if tactically necessary.

**Conclusion**

There is much mythology surrounding Bin Laden both in Arabic and English. This adversary and the legacy he leaves behind once he is neutralized are much too important to ignore. While preparing this review essay, questions surrounding Bin Laden’s death or illness once again permeated the national media. The booklet contained a collection of photos, one of which shows Bin Laden receiving what the book calls glucose treatments. The book goes on to describe only two physical ailments he suffers from: one is low blood pressure, and the second is severe lower back pain that necessitates that he lie down for extended periods to relieve back pressure. There is no indication of any other physical ailments.

Studying this street biography and others of Bin Laden’s early days in the Soviet-Afghan War provide a baseline by which one can begin to detect advances in strategy, tactics, and war fighting techniques of the Arab-Afghan movement. It is vital that such Arabic works written by Bin Laden sympathizers be translated, analyzed, and rationalized for future American military leaders who will be combating the Al-Qaeda movement for decades to come.

Lieutenant Commander Youssef Aboul-Enein is a Navy Medical Service Corps officer who has been on special detail in the Washington, D.C., area. From 2002 to 2006 he was Middle East Policy Advisor at the Office of the Secretary of Defense for International Security Affairs. He currently serves as a Counter-Terrorism Analyst. He has highlighted many Arabic books of military interest in the pages of U.S. Army professional journals. Aboul-Enein delivers a popular three-hour lecture on the evolution of Islamist Militant Ideology from the 7th century to the present to military audiences around the country. He wishes to thank the John T. Hughes and Georgetown University librarians for making this street literature available for study and the readers of Infantry Magazine who contacted him asking for more assessments of Bin Laden biographies written in Arabic.
Not long after the U.S. Army’s entry into Afghanistan, reports from the field began to surface that in close quarters engagements, some Soldiers were experiencing multiple “through-and-through” hits on an enemy combatant where the target continued to fight. Similar reports arose following the invasion of Iraq in 2003. Those reports were not always consistent – some units would report a “through-and-through” problem, while others expressed nothing but confidence in the performance of their M4 carbines or M16 rifles. The M249 Squad Automatic Weapon, which fires identical bullets as the M4 and M16, did not receive the same criticism. Often, mixed reports of performance would come from the same unit. While many of the reports could be dismissed due to inexperience or hazy recollections under the stress of combat, there were enough of them from experienced warfighters that the U.S. Army Infantry Center asked the Army’s engineering community to examine the issue. Specifically, the Infantry Center asked it to examine the reports of “through-and-through” wounds, determine if there was an explanation, and assess commercially available ammunition to determine if there was a “drop in” replacement for the standard issue 5.56mm M855 Ball rounds that might provide improved performance in close quarters battle (CQB).

What resulted grew into a lengthy, highly technical, and highly detailed study of rifle and ammunition performance at close quarters ranges that involved technical agencies from within the Army, Navy, and Department of Homeland Security; medical doctors, wound ballisticians, physicists, engineers from both the government and private sector; and user representatives from the Army, U.S. Marines Corps, and U.S. Special Operations Command.

After having made some significant contributions to the science of wounds ballistics effects and ammunition performance assessment, this Joint Services Wound Ballistics (JSWB) Integrated Product Team (IPT) was eventually able to conclude that: (1) there were no commercially available 5.56mm solutions that provided a measurable increase in CQB performance over fielded military ammunition, (2) the reports from the field could be explained and supported with sound scientific evidence, and (3) there are steps that can be taken to immediately impact performance of small arms at close quarters ranges.

Background
Development of small caliber ammunition is an area which in recent years has largely been left to the manufacturers of the civilian firearms industry. Although there have been efforts by the military...
services to assess the performance of its small arms, the levels of effort and resources involved have been extremely low compared to those spent on other weapons systems: bursting artillery rounds, anti-tank munitions, etc. The general assumption within the services, despite evidence to the contrary from the larger wound ballistics community, has been that small arms performance was a relatively simple, well-defined subject. What has developed in the interim in the ammunition industry is a number of assessment techniques and measurements that are at best unreliable and in the end are able to provide only rough correlation to actual battlefield performance.

The major problem occurs at the very beginning: What is effectiveness? As it turns out, that simple question requires a very complex answer. For the Soldier in combat, effectiveness equals death: the desire to have every round fired result in the death of the opposing combatant, the so-called "one-shot drop." However, death — or lethality — is not always necessary to achieve a military objective; an enemy combatant who is no longer willing or able to perform a meaningful military task may be as good as dead under most circumstances. Some equate effectiveness with "stopping power," a nebulous term that can mean anything from physically knocking the target down to causing the target to immediately stop any threatening action. Others may measure effectiveness as foot-pounds of energy delivered to the target — by calculating the mass and impact velocity of the round — without considering what amount of energy is expended in the target or what specific damage occurs to the target. In the end, "foot-pounds of energy" is misleading, "stopping power" is a myth, and the "one-shot drop" is a rare possibility dependent more on the statistics of hit placement than weapon and ammunition selection. Effectiveness ultimately equates to the potential of the weapons system to eliminate its target as a militarily relevant threat.
The human body is a very complex target, one that has a number of built-in mechanisms that allow it to absorb damage and continue to function. Compared to a tank, it is far more difficult to predict a human target’s composition and what bullet design will be most advantageous. The combinations of muscle, bone, organs, skin, fat, and clothing create a staggering number of target types which often require different lethal mechanisms. Physical conditioning, psychological state, size, weight, and body form all play a factor in the body’s ability to resist damage, and all add to the complexity of the problem. The same bullet fired against a large, thick, well-conditioned person has a very different reaction than that fired against a thin, malnourished opponent.

The physical mechanisms for incapacitation — causing the body to no longer be able to perform a task — ultimately boil down to only two: destruction of central nervous system tissue so that the body can no longer control function, or reduction in ability to function over time through blood loss. The closest things the human body has to an “off switch” are the brain, brain stem, and upper spinal cord, which are small and well-protected targets. Even a heart shot allows a person to function for a period of time before finally succumbing to blood loss. What the wound ballistics community at large has long known is that the effectiveness of a round of ammunition is directly related to the location, volume, and severity of tissue damage. In other words, a well-placed .22 caliber round can be far more lethal than a poorly placed .50 caliber machine gun round. Setting shot placement aside for the moment, though, the challenge becomes assessing the potential of a given round of ammunition to cause the needed volume and severity of tissue damage, and then relating this back to performance against a human target.

**Terminal Ballistic Testing**

A common way of measuring this “damage potential,” or “terminal ballistic effectiveness,” is through what are known as “static” testing methods. Typically, these involve firing a weapon at a tissue simulant which is dissected after the shot to allow assessment of the damage caused by the bullet. Tissue simulants can be anything from beef roasts to blocks of clay to wet phone books, but the typical stimulant is ballistic gelatin. Gelatin has the advantage of being uniform in property, relatively cheap to make, and simple to process, which means that this form of static testing can be done almost anywhere without the need for special facilities. Unlike other simulants, gelatin is transparent. Therefore, assessment can take the form of video footage of a given shot,
measurement of the cavity formed in the gelatin (“gel”) block, and recovery of the bullet or its fragments for analysis. Static methods measure real damage in gel, but have difficulty translating that damage to results in human tissue.

When the Infantry Center initially asked its questions about 5.56mm performance, two agencies moved quickly to provide an answer through static testing, firing a small number of shots against gel blocks to compare several bullet types. Unfortunately, tests at the Naval Surface Warfare Center at Crane, Ind., (NSWC-Crane) and the Army’s Armaments Research, Development, and Engineering Center (ARDEC) at Picatinny Arsenal, N.J., produced significantly different results. Further analysis revealed that the two agencies had different test protocols that made the results virtually impossible to compare — and as it turns out, these test methods were not standardized across the entire ballistics community. The JSWB IPT began work to standardize test protocols among the participating agencies to allow results to be compared. Unfortunately, that work had been completed and static firings of a wide range of calibers and configurations of ammunition were under way (see Figure 1), the IPT discovered that results were still not consistent. Despite using the same gel formulation, procedures, the same lots of ammunition, and in some cases the same weapons, the static testing results still had differences that could not initially be explained.

The IPT was ultimately able to determine a reason for the differences. The Army Research Laboratory (ARL) at Aberdeen Proving Ground, Md., has long used a type of testing know as “dynamic” methods to evaluate ammunition performance, which estimate probable levels of incapacitation in human targets. Dynamic methods are resource intensive — the ARL measures the performance of the projectile in flight prior to impacting the target as well as performance of the projectile in the target. ARL was able to identify inconsistencies in bullet flight that explained the differences in the static testing results. Ultimately, the best features of both static and dynamic testing methods were combined into a new “Static/Dynamic” method that is able to much better assess weapon and ammunition performance. This method takes into account a range of parameters from the time the bullet leaves the muzzle, to its impact on the gel block target, its actions once in the target, and then uses a dynamic analysis tool to correlate the gel block damage to damage in a virtual human target. It provides a complete “shooter-to-target” solution that combines both live fire and simulated testing, but is very time and resource-intensive to perform. As a result, the study effort narrowed, focusing on providing complete analysis of the most promising 5.56mm systems, and one reference 7.62mm system, needed to answer the original question (see Figure 2).

**Terminal Mechanics**

Before providing an explanation of the JSWB IPT’s results, a brief discussion of small caliber, high velocity terminal ballistics is in order. The small caliber, high velocity bullets fired by military assault rifles and machine guns have distinct lethality mechanisms; conclusions provided here do not necessarily apply to low velocity pistol rounds, for example, which have different damage mechanisms. The performance of the bullet once it strikes the target is also very much dependent upon the bullet’s material and construction as well as the target: a bullet passing through thick clothing or body armor will perform differently than a bullet striking exposed flesh. This study focused on frontal exposed targets.

<table>
<thead>
<tr>
<th>Ammunition Given Full Static/Dynamic CQB Analysis</th>
<th>Weapons Tested to Answer the Problem Statement</th>
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</thead>
<tbody>
<tr>
<td>M855 “Green Tip” (62-gr.)</td>
<td>M16A1</td>
</tr>
<tr>
<td>M995 AP (52-gr.)</td>
<td>M4</td>
</tr>
<tr>
<td>M193 (55-gr.)</td>
<td>M16A2/A4</td>
</tr>
<tr>
<td>Mk 262 (77-gr.)</td>
<td>Mk 18 CQBR (10”)</td>
</tr>
<tr>
<td>COTS (62-gr.)</td>
<td>M4</td>
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<tr>
<td>COTS (69-gr.)</td>
<td>M14</td>
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<tr>
<td>COTS (86-gr.)</td>
<td></td>
</tr>
<tr>
<td>COTS (100-gr.)</td>
<td></td>
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<tr>
<td>M80 7.62 (150-gr.)</td>
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</tbody>
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Take an average M855 round, the standard round of “green-tip” rifle ammunition used by U.S. forces in both the M4 and M16 series weapons and in the M249 SAW. The 62-grain projectile has an exterior copper jacket, a lead core, and a center steel penetrator designed to punch through steel or body armor. An M16 launches the M855 at roughly 3,050 feet per second, and the M855 follows a ballistic trajectory to its target, rotating about its axis the entire way, and gradually slowing down. Eventually, the bullet slows enough that it becomes unstable and wanders from its flight path, though this does not typically happen within the primary ranges of rifle engagements (0-600m). (For more detailed ballistic discussion, see FM 3-22.9).

Upon impacting the target, the bullet penetrates tissue and begins to slow. Some distance into the target, the tissue acting on the bullet also causes the bullet to rotate erratically or yaw; the location and amount of yaw depend upon speed of the bullet at impact, angle of impact, and density of the tissue. If the bullet is moving fast enough, it may also begin to break up, with pieces spreading away from the main path of the bullet to damage other tissue. If the target is thick enough, all of these fragments may come to rest in the target, or they may exit the target. Meanwhile, the impacted tissue rebounds away from the path of the bullet, creating what is known as a “temporary cavity.” Some of the tissue is smashed or torn by the bullet itself, or its fragments; some expands too far and tears. The temporary cavity eventually rebounds, leaving behind the torn tissue in the wound track — the “permanent cavity.” It is this permanent cavity that is most significant, as it represents the damaged tissue that can impair and eventually kill the target, provided, of course, that the damaged tissue is actually some place on the body that is critical.

This is where the balance of factors in bullet design becomes important. Volume of tissue damage is important — which might suggest high velocities to enable the bullet to tumble and fragment sooner, materials that cause the bullet to break up sooner, etc. — but it must also occur in critical tissue. If the bullet immediately
breaks up, it may not penetrate through outer garments to reach tissue, or it may break up in muscle without reaching vital organs underneath. The projectile must have enough penetration to be able to reach vital organs to cause them damage. At the same time, it must not have so much penetrating capability that it passes completely through the target without significant damage — resulting in a so-called “through-and-through.” Energy expended outside the target is useless (incidentally, this is why “impact energy” is a poor measure of bullet comparison, as it does not separate energy expended in damaging the target from energy lost beyond the target). The ideal bullet would have enough energy to penetrate through any intervening barrier to reach vital organs without significantly slowing, then dump all of its energy into damaging vital organs without exiting the body. Unfortunately, design of such a bullet is nearly impossible in a military round, even if all human bodies were uniform enough to allow for such a thing. A round that reaches the vital organs of a 5-foot 6-inch 140-pound target without over-penetration is likely to react differently against a 6-foot 2-inch 220-pounder, even without considering target posture. To complicate matters, when hitting a prone firing target the bullet might have to pass through a forearm, exit, enter the shoulder, then proceed down the trunk before striking heart or spinal cord. A flanking hit would engage the same target through or between the ribs to strike the same vital regions. All these possibilities are encountered with the same ammunition. Ultimately, bullet design is a series of tradeoffs complicated by the need to survive launch, arrive at the target accurately, possibly penetrate armor, glass, or other barriers, and be producible in large quantities (1+ billion per year) at costs the military can afford.

**Findings**

The significant findings of the JSWB IPT’s efforts include:

1. No commercially available alternatives perform measurably better than existing ammunition at close quarters battle ranges for exposed frontal targets. Based on current analysis through the static/dynamic framework, all of the rounds assessed performed similarly at the ranges of 0-50 meters. Though there might be differences for a single given shot, the tradeoffs of delivery accuracy, penetration, fragmentation and wound damage behavior, and speed and efficiency of energy deposit all serve to render differences between rounds minimal. The following chart (Figure 3) shows the rounds of interest plotted together. The specific values of the chart are not meaningful; what is meaningful is the fact that all of the rounds act in the same band of performance. Interestingly, the one 7.62mm round that received the full evaluation, the M80 fired from the M14 rifle, performed in the same band of performance, which would indicate that for M80 ammunition at least there appears to be no benefit to the larger caliber at close quarters range.

2. Shot placement trumps all other variables; expectation management is key. Though this should produce a “well, duh!” response from the experienced warfighter, it cannot be emphasized enough. We try hard to inculcate a “one-shot, one-kill” mentality into Soldiers.

When they go to the qualification range, if they hit the target anywhere on the E-type silhouette, the target drops. The reality is that all hits are not created equal — there is a very narrow area where the human body is vulnerable to a single shot if immediate incapacitation is expected. Hits to the center mass of the torso may eventually cause incapacitation as the target bleeds out, but this process takes time, during which a motivated target will continue to fight. While projectile design can make a good hit more effective, a hit to a critical area is still required; this fact is borne out by the Medal of Honor citations of numerous American soldiers.
Soldiers who continued to fight despite being hit by German 7.92mm, Japanese 6.5mm and 7.7mm, or Chinese or Vietnamese 7.62mm rounds. A more realistic mantra might be “One well-placed shot, one-kill.”

3. Field reports are accurate and can be explained by the phenomenon of bullet yaw. Shot placement aside, why is it that some Soldiers report “through-and-through” hits while others report no such problems, despite using the same weapons and ammunition? The phenomenon of bullet yaw can explain such differences in performance.

Yaw is the angle the centerline of the bullet makes to its flight path as the projectile travels down range (Figure 4). Although the bullet spins on its axis as a result of the barrel’s rifling, that axis is also wobbling slightly about the bullet’s flight path.

Yaw is not instability; it occurs naturally in all spin-stabilized projectiles. However, bullet yaw is not constant and rifle bullets display three regions of significantly different yaw (see Figure 5). Close to the muzzle, the bullet’s yaw cycles rapidly, with large changes of angle in very short distances (several degrees within 1-2 meters range). Eventually, the yaw dampens out and the bullet travels at a more-or-less constant yaw angle for the majority of its effective range. Then, as the bullet slows, it begins to yaw at greater and greater angles, until it ultimately destabilizes. A spinning top which wobbles slightly when started, then stabilizes for a time, then ultimately wobbles wide and falls over demonstrates the same phenomenon.

Unfortunately, projectiles impacting at different yaw angles can have significantly different performance, particularly as the projectile slows down. Consider the two photos on page ?? In the first (Figure 6), the bullet impacted at almost zero yaw. It penetrated deeply into the gel block before becoming unstable. In a human target, it is very likely that this round would go straight through without disruption — just as our troops have witnessed in the field. In the second photo (Figure 7), the bullet impacted the gel block at a relatively high yaw angle. It almost immediately destabilized and began to break, resulting in large temporary and permanent wound cavities. Our troops have witnessed this in action too; they are more likely to report that their weapons were effective.

So all we have to do is fire high-yaw ammunition, right? Unfortunately, it’s not that easy. High yaw may be good against soft tissue but low yaw is needed for penetration — through clothing, body armor, car doors, etc. — and we need ammunition that works against it all.

Figure 5 — Overview of Bullet Yaw (Source: ARL)

Figure 6 — Low yaw impact (Source: ARDEC)

Figure 7 — High yaw impact (Source: ARDEC)
Further, we currently cannot control yaw within a single type of ammunition, and all ammunition displays this tendency to some degree. Both of the shots were two back-to-back rounds fired from the same rifle, the same lot of ammunition, at the same range, under the same conditions. Yaw requires more study, but the Army solved a similar problem years ago in tank ammunition.

4. There are doctrinal and training techniques that can increase Soldier effectiveness. The analysis tools used in this study were used to evaluate some alternative engagement techniques. The technique of engaging CQB targets with controlled pairs — two aimed, rapid shots as described in Chapter 7 of FM 3-22.9 — was shown to be significantly better than single aimed shots (see Figure 8). While that should certainly not be surprising to those who have been using this technique for some time, we now know why. Not only are two hits better than one, but controlled pairs help to average out striking yaw; on average, the Soldier is more likely to see a hit where the bullet’s yaw behavior works in his favor.

Caveats
This study was an extremely detailed, in-depth analysis of a specific engagement (5.56mm at CQB range); we must be careful not to apply the lessons learned out of context. The study did not look at the effectiveness of ammunition at longer ranges, where differences in projectile mass, velocity, and composition may have greater effect. The target set for this analysis was an unarmored, frontal standing target; against targets in body armor, or crouching/prone targets, the results may be different. Of course, most targets on the modern battlefield can be expected to be engaged in some form of complex posture (moving, crouching, or behind cover) and future analysis will have to look at such targets, too. The study evaluated readily available commercial ammunition; this does not rule out the possibility that ammunition could be designed to perform significantly better in a CQB environment. Human damage models need further refinement to move beyond gelatin and more closely replicate the complex human anatomy. While these caveats should not detract from the importance of the study’s findings, they should be considered as a starting point for continued analysis.

Conclusion
Soldiers and leaders everywhere should take heart from the fact that despite all the myth and superstition surrounding their rifles and ammunition, they are still being provided the best performing weapons and ammunition available while the armaments community works to develop something even better.

More work remains to be done in this area, and the work is continuing with the participation of the major organizations from the original study. That effort is planned to look at longer ranges, intermediate barriers, and different target postures, and will further refine the tools and methods developed in the original study. The lessons learned are being put to immediate use as part of an ongoing program to develop a lead-free replacement for the M855 cartridge; the information obtained from this study will be used to develop a round that is expected to be more precise and consistent in its performance while still being affordable.

Major Glenn Dean served as the chief of the Small Arms Division in the Directorate of Combat Developments at the U.S. Army Infantry Center at Fort Benning, Georgia. He was the Infantry Center’s representative to the Joint Services Wound Ballistics Integrated Product Team.

Major David LaFontaine is the Assistant Product Manager for Small Caliber Ammunition and served as the PM-Maneuver Ammunition Systems lead for the Joint Services Wound Ballistics IPT.
Editor’s Note: Given the unique nature of mountain operations and the Mujahideen actions against Soviet and Democratic Republic of Afghanistan (DRA) ground forces, we have selected three operations from The Other Side of the Mountain, by Ali Ahmad Jalali and Lester W. Grau, that illustrate an ambush, a shelling attack and its consequences, and a mining attack using improvised explosive devices. These three actions are noteworthy because they discuss tactics commonly used by the insurgents, and because they all include mistakes that either caused the operation to fail or resulted in higher casualties on either side.

AMBUSH AT QAFUS TANGAY
By Major Sher Aqa Kochay

On August 13, 1985, my 40-man Mujahideen force moved from its base at Sewak (20 kilometers southeast of Kabul) to establish an ambush at the Qafus Tangay (some 25 kilometers east of Kabul). The area was protected by a Sarandoy (Internal Ministry Forces) regiment. This area was previously protected by tribal militia, but exactly one year prior, the local tribal militia of Hasan Khan Karokhel defected to the Mujahideen. Hence, the regiment deployed east of Kabul between Gazak and Sarobi to protect the power lines supplying electricity from Naghlu and Sarobi hydroelectric dams to Kabul. The regiment’s headquarters was at Sur Kandow and its forces were deployed along the Butkhak-Sarobi road (the southern east-west road on the map) in security posts. (Map 16a — Qafus 1).

Each day, the regiment sent truck convoys with supplies from headquarters to the battalions. In turn, battalions sent trucks to make deliveries to all their highway outposts. About two kilometers from the DRA Mulla Omar base, the road cuts across the mouth of a narrow valley called Qafus Tangay. Qafus Tangay begins at the Khak-e Jabar pass in the south and stretches north to the Gazak-Sarobi road. The valley offered a concealed approach from the Mujahideen bases in Khord Kabul in the south. The road at the mouth of the valley passes through difficult terrain forcing the traffic to move very slowly. This was a favorable point for an ambush.

I moved my detachment at night reaching the ambush site early in the morning of August 13. My group was armed with four RPG-7 anti-tank grenade launchers, several light machine guns and Kalishnikov automatic rifles. I grouped my men into three teams. I positioned a 10-man party with the four RPG-7s at the bottom of the valley near the road. I positioned two 15-man teams on each of the ridges on the two sides of the valley that dominated the road to the north. Both of the flank groups had PK machine guns. (Map 16b — Qafus 2)

The plan was to wait until the enemy’s supply vehicles arrived at the difficult stretch of road directly facing the Qafus Tangay Valley. I planned to assign targets to the RPGs as the trucks moved into the kill zone (for example number one, fire at the lead truck). I hoped to engage four trucks simultaneously, maximizing surprise and fire power. The teams on the ridges were to cover the valley with interlocking fields of fire and to support the withdrawal of the RPG teams while repelling any enemy infantry. They would also seize prisoners and carry off captured weapons and supplies once they had destroyed the enemy convoy.

Finally, the group heard a vehicle approaching from the east. Soon an enemy jeep appeared around a bend in the road. As the jeep slowly moved over the rocky road to the ambush site, a machine gunner on the ridge suddenly opened fire at the vehicle.

I was extremely upset because the ambush had been compromised and ordered one RPG-7 gunner to kill the jeep before it escaped. A few seconds later, the vehicle was in flames and the wounded driver was out of the jeep. He was the sole occupant of the vehicle. He was returning from the battalion headquarters at Lataband where he had driven the regimental political officer. We gave him first aid and released him. He was a conscript soldier from the Panjshir Valley who had recently been press-ganged into the military.

The Sarandoy sent out patrols from the nearby Spina Tana and Nu’manak outposts. Because it was too risky to remain at the
ambush site we withdrew through the Qafus Tangay Valley to our base.

COMMENTARY: The Mujahideen ambush failed for lack of fire discipline. The unauthorized initiation of fire compromised a carefully planned and deftly prepared ambush. It was always a challenge for Mujahideen commanders to train and control a volunteer force fighting an organized military power. Further, some Mujahideen commanders ignored certain basic control measures. It is not clear what arrangements Major Aqa made to control the fire of the Mujahideen deployed on the ridges. Had the commander assigned sub-group leaders on each ridge with clear instructions to control the fire of the teams the outcome of the ambush could have been different.

The ambush also lacked sufficient early warning which could communicate the size, composition and activity of approaching convoys. If the commander had early warning and a chain of command, he could have anticipated the arrival of vehicles using something other than sound, determined whether or not to attack the vehicles and gotten his new orders to his men in a timely manner.

Major Sher Aqa Kochay is a graduate of Afghan Military Academy, Kabul, and received training in commando tactics in the Soviet Union. He served in the 37th Commando Brigade and participated in DRA actions against the Mujahideen in Panjsher Valley. He defected, with a large amount of weapons, to the Mujahideen in 1982 and became a NIF A commander in Kabul. He organized a new Mujahideen base in the Khord Kabul area some 20 kilometers southeast of the Afghan capital.

A SHELLING ATTACK TURNS BAD
By Mawlawi Shukur Yasini

In the spring of 1981, the Soviets and DRA were very active in our area. As a result, we dismantled our permanent bases and changed them to mobile bases scattered throughout the area. I intended to launch a major show of force against the Soviets using my mobile bases. I had two mortars — a 60mm and an 82mm. The problem with the 60mm mortar is that it only has a range of 1,400 meters, so the gunner has to get close to the target to use it. I also had two DShK machine guns, and five RPG-7s. I kept these heavy weapons at my base at Gerdab. My men had small arms which they kept with them.

On 17 April 1981, I launched a shelling attack against the Soviet 66th Separate Motorized Rifle Brigade in Samarkhel. I only took 42 men with me since we were not very well equipped and we were not ready for a major encounter with superior forces. Further, Kama District is right across the river from the 66th Brigade garrison and they kept the area under constant surveillance. I did not want to move a large group of men through the area and alert them. To avoid observation, we went north from Gerdab into the mountains and then west across the mountains and into Mamakhel Village in the Kama area (Map 3-1 — Dargo). We stayed for three nights in Mamakhel and spent the days in the mountains at Dargo China spring — some three kilometers away. From Mamakhel, we went to Kama Village where some people were still living — although many people had already emigrated to Pakistan.

At Kama, I put my nephew Shahpur in charge and told him to my two mortars and 38 men and to go shell the 66th’s camp. I kept four men with me. The shelling group left Kama at dusk. They positioned the 82mm mortar on the north side of the river at the house of Khan-e Mulla at Jamali Village — since it had the range. Then they crossed the river at Bela and approached the camp through the village of Samarkhel. They occupied positions close to the entrance of the enemy camp. They had the guerrilla mortar (60mm) and the RPGs with them. They opened fire with the RPGs and
the 60mm mortar from close range at 2200 hours. The 82mm mortar joined in long-range fires onto the sleeping camp. The shelling attack created chaos. The shelling group fired at intervals over a two-hour period and then broke contact and withdrew. I was in Kama throughout the attack. My men had orders to join me in the mountains at the Dargo China spring the next day. I went to the rendezvous point. I arrived at dawn and they were already there. Two of my men were missing, since they had forgotten the 60mm mortar and a video camera and had gone back to retrieve them.

While I was in Kama, informers told me that the enemy would launch a search and destroy mission in Kama District in five days. I decided that they would now come sooner since we had shelled them.

I decided that we had to leave the area. At sunrise, I instructed my men to go deeper into the mountains. I was tired and had a cold, so I decided to go back home to Gerdab. However, as I set out, I saw helicopters lifting off from the airport and flying low over Kama District. I hit the ground and hid. I was alone except for Hail Shahbaz. Other helicopters followed the first two. At first I thought that the helicopters were enroute to Kunar Province, but then they started landing troops from two helicopters at Mirji Gholi point on Derghi Ghar mountain — about a kilometer away. They also landed troops north of Mamakhel on the plain and on Gedaro Ghunday hill. My men saw the helicopters landing and realized that they would be seen if they continued to climb into the mountains. So they turned around in the wide canyon and started back toward me. I was in a ditch between Mirji Gholi and Dargo China and was hidden by the early morning shadow from the mountain. As I raised my head, I could make out some 25 Soviet soldiers along with several people wearing tasaraw moving to the southeast from the high ground of Mirji Gholi toward Gedaro Ghunday. I could also see Soviets setting up mortars on top of Gedaro Ghunday. I crawled about 50 meters in the ditch. The Soviets were facing the sun and I was in the shadow, so they couldn't see me. As I crawled, I got rid of heavy things that I had in my pockets — such as pliers and wads of money. I headed north toward the mountain ridge. At that point, Zafar and Noor, carrying the missing 60mm mortar and video camera, walked into the Soviet group setting up at Gedaro Ghunday. They were immediately captured. Noor was my cousin. I climbed Derghi Ghar Mountain to try and see what was happening. I saw that my men had split. Thirteen were now back in Dargo China. These 13 men were commanded by Tajahul and the rest, commanded by Shahepur, were going back into the mountains. I saw that part of the Soviets were heading toward my 13 men. The Soviets began firing flares at the group of 13 to mark their position. Helicopter gunships then attacked my men with machine-gun fire. Other Soviets headed down from Derghi Ghar toward them.

After the air attack, the Soviets began attacking my 13-man group. I was midway between the attacking Soviets and my men — about 500 meters away. I looked in my binoculars and saw that another group of Soviets were down in the valley picking up the pliers, first aid packets and money I had discarded. The group examining my things looked different than the others and I thought that they were officers. I decided that when the helicopters made their next strafing run, I would use the noise of their gunfire to hide my fire. When the helicopters made their next gun run, I fired on the group in the valley and hit one. I then took cover, raised my head, fired and got another one. This drew the Soviets attention and they opened up on me. Artillery started to fall all around. I ran from this position to another position about 100 meters away. I had a “20-shooter” [Czechoslovak M26 light machine gun] and some of my men had “20-shooters.” As I ran to change positions, I heard firing from “20-shooters” in my group. They were involved in a heavy fire fight.

I then heard noise from the north and I thought that the Soviets were coming from that direction as well. But then I saw Shahepur and one of men. They were coming for me. Shahepur reported that tanks were moving through Kama and had sealed the exits. The enemy were arresting people throughout Kama. We decided to leave to the north. Earlier, Shahepur had sent a messenger to my group of 13 telling them to move north. However, they were pinned down by heavy artillery fire and direct fire. They could not break contact and fought to the last man. As we left the area, one of my Mujahideen fired an RPG at a helicopter. The helicopter caught fire and flew off and fell to the ground near Kama where it exploded. I don’t know whether the RPG hit the helicopter or whether another ground fire got it.

We moved to the village of Ghara Mamakhel, some four hours into the mountains, where I met two more of my men. By morning, 12 of my people arrived there. I learned the fate of my group of 13. The Soviets remained in Kama for two days. Then we returned to retrieve the bodies of my men. I found the bodies of my 13 men in a group, plus those of Zafar and Noor and five more of my men. The Soviets had booby-trapped some of the bodies and had sprinkled chemicals on other bodies which caused them to disintegrate. We couldn’t evacuate these bodies. So we built graves over them. Their bodies are still there under stones. I do not know what the Soviet casualties were, but I do know I shot two, we downed a helicopter and the Soviets lost three vehicles to our mines during this action.

Throughout the war, I faced the Soviets like this during seven sweeps. I moved the families of the martyrs to refugee camps in Peshwar, Pakistan, since we couldn’t support them in the Kama area. I later learned that the Soviets were looking for me personally. They arrested someone who looked like me (the narrator has a prominent nose) while he was harvesting clover. At that time, my beard was shorter. They took him to Jalalabad and paraded him around — “We’ve caught the son of a b—” they said. Someone finally recognized him, and said that he wasn’t me and so he was released. Around that same time, the DRA governor of Kama District was in the Merzakhel Village. The Soviets arrested him and put him into forced labor since they didn’t recognize him. They had him carrying water to their soldiers on the high ground. The Soviets were very careless of Afghan lives. They killed several villagers indiscriminately. They also killed one of my men who was unarmed.

I am glad we drove the Soviets out, but the subsequent actions of the Mujahideen tarnish their record of victory. I have written many poems of protest against their current activities.

COMMENTARY: The Mujahideen were able to fire on the garrison over a two-hour period since they periodically shifted firing positions to avoid return fire. The Soviets did not push out any night patrols to find the firing positions but only replied with artillery fire. The artillery fire did no good. Apparently, the garrison commander had not surveyed potential and actual Mujahideen firing positions to counter them.

The Mujahideen rendezvous point was located in one of three
Several Soviets gathered around the bomb, checking the route. When they came to the mine detectors. They were carefully walking in front of the column with their portable, short-range radios which would have allowed them to coordinate their actions.

Maulawi Shukur Yasini is a prominent religious leader in Nangrahar Province. He is from the village of Gerdab in Kama District northeast of Jalalabad. During the war, he was a major commander of the Khalis group (HIK). Later, he joined NIFA. During the war, he took television journalist Dan Rather to his base in Afghanistan.

MINING ATTACKS NEAR MEHTAR LAM

By Commander Sher Padshah and Sheragha

After the battle for Alishang District Center, Commander Padshah gathered 30 Mujahideen and moved further south to the village of Mendrawur. Mendrawur is about 11 kilometers south of the provincial capital of Mehtar Lam and about five kilometers north of the Kabul Jalalabad highway. We received information that an armored column would be moving from Jalalabad to Mehtar Lam toward the end of August 1981 (Map 5-1 — Mehtar). We decided to attack the column with bombs and an ambush. We liked powerful mines, so we usually took the explosives from two Egyptian plastic mines and put these into a single large cooking oil tin container. We also used the explosives from unexploded Soviet ordnance to make our own bombs. We put one bomb under a small bridge and hooked a remote-control device onto it. We strung the detonating wire about 100 meters further south where we established our ambush in an orchard on the east side of the highway. We had two RPG-7s, one PK machine gun and one Bernau light machine gun. There were three Mujahideen in the bomb-firing party.

We saw the Soviet column approach slowly. Dismounted Soviet engineers were walking in front of the column with their mine detectors. They were carefully checking the route. When they came to the small bridge, they discovered the bomb. Several Soviets gathered around the bomb, but instead of disconnecting the wires, they stood around talking about the bomb. The three-man firing party, Sheragha, Matin and another Sheragha, were watching them through binoculars. We saw several Soviets checking the bomb and knew that the ambush was spoiled, so we detonated the bomb killing several Soviets. The Soviet column began firing in every direction. We left the orchard and withdrew through the Bazaar of Mendrawur going north. Some of the villagers were wounded by the Soviet fire.

Three or four days later, we had 40 Mujahideen in our group and were ready to try another ambush. We went to the village of Mashakhel. We buried two of our bombs in the road. We did not have any more remote-control firing devices, so we rigged these bombs with pressure fuses. We put cow manure on the mines to hide them. God bless Matin’s soul, he used to always put the manure on the mines. We set up our ambush covering the mines.

We saw the column approach slowly. Soldiers with mine detecting dogs were walking in front of the column. The dogs were running loose and they promptly found and pointed out our bombs. Sheragha and Shawali moved forward when they saw the dogs. They watched as the dogs stood by the mine. Two soldiers got out of an APC with a long probe. The soldiers started probing the manure piles and they found the mine in the third pile. Four Soviets, including an officer, crowded together looking at the mine. So, Sheragha and Shawali opened fire killing the four Soviets. The remaining Soviets pulled back out of the ambush kill zone.

The Soviets began to return fire. Commander Padshah ordered four Mujahideen to move north onto Tarakhel hill to provide covering fire for the group’s withdrawal. To confuse the enemy, he grabbed his megaphone and yelled “Keep your positions. The reinforcements just arrived.” A DRA column came from Mehtar Lam and took up defensive positions and started firing at us. Tanks also maneuvered against us on the Mehtar Lam plain west of the road. We withdrew under the cover of night. We know we killed four Soviets and may have killed or wounded up to 18 DRA and Soviets. We destroyed one of their tanks and two trucks.

COMMENTARY: The Mujahideen preference for homemade mines in metal cans made it easier for Soviet mine detectors to find them. The tendency for curious troops to cluster around a newly-discovered mine is not uniquely Soviet, and the Soviets eventually trained their engineers to quit clustering around mines.

The Mujahideen usually combined demolitions and mining with other forms of offensive and defensive action. They usually covered their mines with direct fire weapons. The Mujahideen seldom left their mines unattended if they were located a distance from the border and a ready supply of mines. After an ambush or fight, they would often dig up their unexploded mines and take them with them to the next mission.

Commander Sher Padshah and Sheragha are from Laghman Province.
THE
COMBAT
SHOTGUN IN
THE BCT

FIRST SERGEANT (RETIRED)
D. ROBERT CLEMENTS

The shotgun is the most misunderstood weapon in the Brigade Combat Team. The combat shotgun has found new life in the Infantry during the war on terror and through “Modularity” with the BCT being equipped with 178 M-500 shotguns. However, at issue is that no single doctrinal resource exists supporting the current combination of roles the shotgun is being employed in. Units are forced to either search through multiple field manuals, depend on unit subject matter experts, or simply make it up. The result is often that shotguns are being used in improper roles such as a primary weapon without a stock or supporting pistol, or as a secondary weapon with the full stock slung across the Soldier’s back. In this article, I will attempt to impart the lessons learned over the last five years of employing shotguns in the 10th Mountain Division.

Methods of Employment

The shotgun should be employed in one of two methods. In the first method, the shotgun is employed as a primary weapon with a full stock. Considerations for the commander when employed in this manner are the limited range and reduced ammo capacity of the shotgun. A Soldier conducting house-to-house fighting at close ranges may be well served by the standard shotgun. However, skills that must be ingrained are: reloading constantly or the “load what you shoot” rule and transitioning to a handgun. With only six rounds at their disposal, a shotgunning may find himself out of ammo quickly in a fire fight. Reloads must occur at every lull in the fight. Transitioning to a handgun is one method of staying in the fight if you run out of ammo. Simply put, the shotgun is lowered and the M-9 is drawn, and a controlled pair fired when the shotgun is out of ammo. The shotgunning maintains the M-9 until the situation allows him to reload the shotgun. The same process is used for a stoppage that cannot be cleared by immediate action.

In the second method, the shotgun is employed as a secondary weapon. In this case the primary weapon for the Soldier is the M-4 or M-16. The shotgun is then typically employed with a pistol grip and some sort of retention system. The 10th Mountain’s Infantry Mountain Leaders Advanced Marksmanship Course (IMLARM) teaches the shotgun being slung on the firer’s side and to transition from the M-4 to the shotgun, then back again.

In the role of a secondary weapon to the M-4, the shotgun is carried uncocked on an empty chamber or with an expended cartridge in the chamber. When employed, the gunner pulls the M-4 across his body away from the shotgun, then brings up the shotgun, racks the slide and fires. Once the engagement is complete, the gunner leaves the shotgun action closed on the expended round and transitions back to the M-4. This process is repeated as required. The gunner will then reload the shotgun when the tactical situation permits.

Units should look at using NSN: 8465-01-491-4509 in combination with a sling for retaining their shotguns used as a secondary weapon.

The fundamental operation of the shotgun in either role is the same. Vigorous racking of the slide back then forward assures positive extraction, ejection, and chambering of the rounds. Weak manipulation of the slide will result in the shotgun suffering a malfunction. Immediate action for any malfunction is to cycle the action again. If you are still unable to fire, transition to the M-9 or M-4 and continue the fight. Once the tactical situation allows, go into remedial actions to clear the malfunction or reload as required.

Operational Roles of the Shotgun

The greatest strength of the shotgun and its greatest weakness is
the versatility of its ammo. Everything from bird hunting loads, slugs, and flares to 12-gauge high explosive rounds are available today. Currently, the Army only authorizes a few loads: #9 shot, 00 buckshot, M-1030 breaching rounds, M-1012 and 1013 less-lethal rounds. Other rounds such as the Action FRAG-12 (USMC), Joint Non-Lethal Warning Munition (JNLWM), XM-104 Non-Lethal Bursting Hand Grenade and the Extended Range Point Less-Lethal Munitions are in various stages of development and should be expected to lead to new training requirements. This leaves a bewildering array of possible roles (anti-personnel, breaching, less-lethal, etc.) depending on the type of rounds at the commander’s disposal. Further, many rounds can be used in multiple roles. For example, 00 buckshot can be used to conduct breaches but presents an increased risk of collateral damage to civilians or fellow Soldiers. Also, lack of a STRAC (Standards in Training Commission) that sufficiently supports training with the shotgun has extremely hampered commanders understanding the shotgun.

Currently, the shotguns roles can be divided into three general roles:

1. Offensive Weapon,
2. Breacher,
3. Less-Lethal Munitions delivery system.

As an offensive weapon, the shotgun should be employed as a full-stocked weapon employing 00 buckshot rounds, supported by a M-9 pistol. In this role commanders must account for the limited effective range of the shotgun. Employing the current 00 buckshot loads, the shotgun’s realistic effective range would be 25-35 meters. If the shotgun is employed without a stock, this range is reduced to 10 meters.

Future munitions such as the Action FRAG-12 or a type-classified slug round combined with an improved sighting system should be expected to increase this range to 100 meters.

In the breaching role, the shotgun provides the commander with increased momentum when conducting urban operations. The breaching shotgun is extremely effective in quickly defeating locked doors with reduced risk to the Soldier compared to manual breaching methods. The M-1030 round is the primary breaching round; however, it has only been procured in small numbers. The M-1030 round presents the most effective breaching round and presents the lowest risk for collateral damage. Typically units should expect to employ #9 shot loads for training and can also effectively employ them in combat with only slightly increased risk of collateral damage and slightly reduced effectiveness. Commanders should also be aware that both M-1030 rounds and #9 shot loads are not effective anti-personal rounds much farther than arm’s reach.

In the role of a less-lethal munitions delivery system, the 12-gauge shotgun offers exceptional versatility. Utilizing the shotgun instead of systems such as the FN-303 Individual Serviceman Non-Lethal System (ISNLS) reduces the training and sustainment burden on the commander also, since he already has shotguns organic to the unit. Here, more then any area though, the lack of training ammo or qualification standards has defeated the commander. The current M-1012 round provides the commander with a low to medium point pain compliance munition effective to about 30 meters. The M-1012 round is most effective in a low threat environment against an individual target. The M-1013 is a medium pain compliance round designed for use against multiple targets; however, it is also effective against a point target. Munitions such as the USMC Stingball grenade or Army XM-104 Non-lethal Bursting Hand Grenade, which are employed from the shotgun’s grenade launching cup, can extend the less-lethal range out to 100 meters and give commanders an extremely effective method of dispersing rioting mobs. Developmental rounds such as the Flarebang also provide the commander with the ability to deliver more effective warning shots by providing

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**Figure 2 — 12-Gauge Munitions**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>DODIC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Army:</strong></td>
<td></td>
</tr>
<tr>
<td>12-Gauge 00 Buckshot</td>
<td>AO11</td>
</tr>
<tr>
<td>12-Gauge Breaching Round M-1030</td>
<td>AA54</td>
</tr>
<tr>
<td>12-Gauge #9 Shot Shell</td>
<td></td>
</tr>
<tr>
<td>12-Gauge Non-Lethal Point Control (M1012)</td>
<td>AA51</td>
</tr>
<tr>
<td>12-Gauge Non-Lethal Crowd Dispersal (M1013)</td>
<td>AA52</td>
</tr>
<tr>
<td><strong>New Army / Soldier Enhancement Programs:</strong></td>
<td></td>
</tr>
<tr>
<td>Extended 12-Gauge Non-Lethal Round, XM1068</td>
<td>TBD</td>
</tr>
<tr>
<td>FY 07 SEP XM-104 Non-Lethal Bursting Hand Grenade</td>
<td>TBD</td>
</tr>
<tr>
<td>Grenade, Practice Body Non-Lethal</td>
<td></td>
</tr>
<tr>
<td>FY 07 SEP XM-104 Non-Lethal Bursting Hand Grenade</td>
<td>TBD</td>
</tr>
<tr>
<td>12-Gauge Launching Cup</td>
<td></td>
</tr>
<tr>
<td>FY 07 SEP XM-104 Non-Lethal Bursting Hand Grenade</td>
<td>TBD</td>
</tr>
<tr>
<td>FY 07 SEP 12-Gauge Stand Off Breaching Round</td>
<td>TBD</td>
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<tr>
<td><strong>The Joint Non-Lethal Weapons Program:</strong></td>
<td></td>
</tr>
<tr>
<td>12-Gauge Joint Non-Lethal Warning Munitions</td>
<td>TBD</td>
</tr>
<tr>
<td><strong>USMC:</strong></td>
<td></td>
</tr>
<tr>
<td>Grenade, Rubber Ball Non-Lethal 9590</td>
<td>GG04</td>
</tr>
<tr>
<td>Grenade, Practice Body Non-Lethal</td>
<td>GG05</td>
</tr>
<tr>
<td>12-Gauge Launching Cup</td>
<td>AA30</td>
</tr>
<tr>
<td>12-Gauge Bean Bag</td>
<td>AA29</td>
</tr>
<tr>
<td>12-Gauge Fin Stabilized</td>
<td>AA31</td>
</tr>
</tbody>
</table>
a visual and audio cue. This round should prove to be exceptionally effective at check points.

**SOPs**

Units must consider how they configure their combat loads of shotgun ammo if they are using multiple types of ammo on an operation. Units must determine the method of employment, then the role the shotguns will be used in. For example, the commander determines that they will employ the shotgun as a secondary weapon. He further sees the role as being primarily to conduct breaching with a secondary mission of delivering less-lethal munitions. The commander elects in this case to designate shotguns as primary breachers and determines they will be loaded with breaching rounds in the mag tube, breaching rounds in the shotgun ammo pouch (fighting load) and less-lethal ammo carried in the right canteen pouch (sustainment load). In each case, the chamber is empty or after initial contact is closed with the pump unlocked.

Commanders may also segregate the types of munitions into special teams. The commander thus reduces the requirement to clear weapons in order to switch munitions. Instead, the squad leaders are able to call forward a special team to meet the need as required. He has further reduced the likelihood of firing a lethal breaching round into a situation requiring less-lethal rounds. Further segregating the load carried by the Soldier reduces the likelihood of introducing the “wrong” round while reloading.

The same principles apply when the shotgun is employed as a primary weapon. The primary difference is based on METT-T (mission, enemy, terrain troops, time), but one of the two loads carried should be 00 buckshot. This provides the shot gunners lethal force and specialty munitions as required. Mixing more then two types (lethal, less lethal and breaching) of ammo per Soldier should be carefully considered and have sufficient measures in place to prevent employing the wrong munitions for the target.

### Table 2 — STRAC Table 5-79

<table>
<thead>
<tr>
<th>Event</th>
<th>DODIC</th>
<th>Rounds</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMI</td>
<td>N/A</td>
<td>EST</td>
<td>2</td>
</tr>
<tr>
<td>Instructional Fire</td>
<td>A011</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Qualification Fire</td>
<td>A011</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Total Per Soldier</td>
<td>A011</td>
<td>26</td>
<td></td>
</tr>
</tbody>
</table>

**M1200 Shotgun Door Breaching Training Strategy**

<table>
<thead>
<tr>
<th>Event</th>
<th>DODIC</th>
<th>Rounds</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballistic Breaching</td>
<td>AA54</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Total Per Soldier</td>
<td>AA54</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>
in support of all phases of training. Both doors support M-1030 rounds and the more common #9 shot. Prior to procuring any breaching doors, the command must do a risk assessment and is advised to coordinate their actions with the Installation Safety Office and their Range Division.

Commanders must also be aware that units and individuals are also modifying the issue shotguns to better meet their requirements with untested commercial parts. Such modifications are violating the technical manual and Army Regulation 750-10, Army Modification Program. While there are improvements that could be made to the issue shotgun, they are outside the scope of this article. Currently the only approved method for requesting modifications is through an Operational Needs Statement for “Special Missions Modifications.”

Once properly understood and resourced, the shotgun presents the commander with many additional capabilities that he is able to tailor to his mission. From lethal force to less-lethal or breaching, the combat shotgun is on hand and ready to support the Infantry.

First Sergeant (Retired) D. Robert Clements is currently employed by Quantum Research as a DA G-8 Force Development and Transformation Coordinator for Fort Drum, N.Y. He previously performed duties with 10th Mountain Division Modularity Coordination Center responsible for fielding and New Equipment Training of Soldier Systems, RFI, and Small Arms.

**Shotgun Qualification Standards**

**Task:** Engage targets with a 12-gauge shotgun (Qualification). Modified from STP 19-95c1 SM.

**Conditions:** You are given a requirement to engage targets using a 12-gauge shotgun. You are given a shotgun, 10 rounds of #00 buckshot, Type E silhouette targets, a 25-meter range and a firing barricade. The barricade should measure about 72 inches x 26 inches with an opening (window) cut 36 inches to 42 inches from the bottom of the barricade. The opening should be 18 inches wide and approximately 36 inches high.

**Standards:** Engaged targets with the 12-gauge shotgun, scoring a minimum of two pellets per round in the targets.

<table>
<thead>
<tr>
<th>POSITION</th>
<th>ROUNDS FIRED</th>
<th>DISTANCE</th>
<th>METHOD</th>
<th>TIME STANDARD</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standing</td>
<td>2</td>
<td>25</td>
<td>Off Hand</td>
<td>4 Seconds</td>
<td>Load 4 Rounds</td>
</tr>
<tr>
<td>Kneeling</td>
<td>2</td>
<td>25</td>
<td>Off Hand</td>
<td>4 Seconds</td>
<td></td>
</tr>
<tr>
<td>Crouched</td>
<td>2</td>
<td>25</td>
<td>Underarm Assault</td>
<td>4 Seconds</td>
<td>Load 4 Rounds</td>
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<tr>
<td>Standing</td>
<td>2</td>
<td>25</td>
<td>Strong Side Barricade Supported</td>
<td>4 Seconds</td>
<td></td>
</tr>
<tr>
<td>Standing</td>
<td>2</td>
<td>25</td>
<td>Barricade Supported</td>
<td>4 Seconds</td>
<td>Load 2 Rounds</td>
</tr>
</tbody>
</table>

**SHOTGUN FIRING, SHORT-RANGE MARKSMANSHIP QUALIFICATION** (Modified from FM 3-22.9, *Rifle Marksmanship*, Chapter 7, 7.27 Phase III)

Soldiers should conduct SRM qualification semiannually, using the shotgun in the full stock configuration. In addition to qualification, commanders should conduct familiarization using the same qualification standards while altering the conditions. Firing the qualification tables with out stock, in protective masks and during periods of limited visibility with night vision devices should be included.

**Task:** Conduct short range marksmanship with a 12-gauge shotgun. Modified from FM 3-22.3

**Conditions:** You are given a requirement to engage targets using a 12-gauge shotgun. You are given a shotgun, 16 rounds of #00 buckshot, Type E silhouette targets, and a 25-meter range.

**Standards:** Engaged targets with the 12-gauge shotgun, scores 16 hits day and night. A hit is a minimum of two pellets per round in the targets.

**Turn In M1200 Shotguns**

The M1200 shotgun is obsolete and has been replaced by the M500 Mossberg shotgun, NSN 1005-01-295-1832. Units authorized shotguns that still have M1200s should get them replaced with M500s since the M1200 is no longer supported by the Army.

Units that need assistance can contact TACOM-Rock Island’s Flora Taylor at DSN 793-1943, (309) 782-1943 or e-mail flora.taylor@us.army.mil

TM 9-1005-338-13&P covers the M500. (Information provided by PS Magazine.)
Shotgun qualification standards con’t ...

### SHORT RANGE MARKSMANSHIP (SRM) RECORD AND PRACTICE FIRE

<table>
<thead>
<tr>
<th>POSITION</th>
<th>ROUNDS FIRED</th>
<th>DISTANCE</th>
<th>METHOD</th>
<th>TIME STANDARD</th>
<th>NOTES</th>
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<tbody>
<tr>
<td>Straight Ahead</td>
<td>2</td>
<td>25m</td>
<td>Controlled pair</td>
<td>4 Seconds</td>
<td>Load 4 Rounds</td>
</tr>
<tr>
<td>Left Turn</td>
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<td>25m</td>
<td>Controlled pair</td>
<td>4 Seconds</td>
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<td>Right Turn</td>
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<td>Load 4 Rounds</td>
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<tr>
<td>Straight Ahead Walking</td>
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<td>5m begin at 15m</td>
<td>Controlled pair</td>
<td>4 Seconds</td>
<td></td>
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<tr>
<td>Straight Ahead Walking</td>
<td>4</td>
<td>10m begin at 20m</td>
<td>Controlled pair</td>
<td>8 Seconds</td>
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<tr>
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<td>25m</td>
<td>Controlled pair</td>
<td>4 Seconds</td>
<td>Load 4 Rounds</td>
</tr>
<tr>
<td>Walk laterally to the left</td>
<td>2</td>
<td>10m</td>
<td>Controlled pair</td>
<td>4 Seconds</td>
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</tr>
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</table>

**LESS-LETHAL QUALIFICATION MODIFIED FROM FM 3-19, CHAPTER 5, 8-9**

Soldiers should conduct less-lethal qualification annually, using the shotgun in the full stock configuration. In most cases, kinetic energy will only carry these NL munitions projectiles 75 meters or less. This gives trainers flexibility as to the locations where a live-fire exercise can be conducted, especially in a field-expedient situation.

**Task:** Conduct less-lethal marksmanship with a 12-gauge shotgun. Modified from FM 3-19.

**Conditions:** You are given a requirement to engage targets using a 12-gauge shotgun. You are given a shotgun, a grenade launching cup, 2 rubber ball grenade (Sting ball), 2 launching rounds, 7 M-1012 rounds, 6 M-1013 rounds, Type E silhouette targets, and a 25-meter range.

**Standards:** Engaged targets with the 12-gauge shotgun, scores 15 hits USMC, 13 hits Army.

**Note:** The Sting ball grenade and grenade launching cup is a USMC only program. Stingball grenades should not be fired directly at individuals. The XM-104 Non-Lethal Bursting Hand Grenade SEP program should be expected to provide this capability to the Army in the future.

### LESS-LETHAL RECORD AND PRACTICE FIRE

<table>
<thead>
<tr>
<th>POSITION</th>
<th>ROUNDS FIRED</th>
<th>DISTANCE</th>
<th>TARGET TYPE</th>
<th>ROUND TYPE</th>
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<tr>
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<td>Area</td>
<td>Sting Ball/Launching Round</td>
<td>Load 1 Round USMC only</td>
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<tr>
<td>Standing</td>
<td>1</td>
<td>50m</td>
<td>Area</td>
<td>Sting Ball/Launching Round</td>
<td>Load 1 round USMC only</td>
</tr>
<tr>
<td>Standing</td>
<td>4</td>
<td>25m</td>
<td>3 Area, 2 Point</td>
<td>3 M-1013/2 M1012</td>
<td>Load 4 rounds</td>
</tr>
<tr>
<td>Standing</td>
<td>3</td>
<td>20m</td>
<td>3 Area</td>
<td>3 M-1013</td>
<td>Load 3 rounds</td>
</tr>
<tr>
<td>Standing</td>
<td>2</td>
<td>20m</td>
<td>2 Point</td>
<td>2 M-1012</td>
<td>Load 2 rounds</td>
</tr>
<tr>
<td>Standing</td>
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<td>15m</td>
<td>2 Point</td>
<td>2 M-1012</td>
<td>Load 2 rounds</td>
</tr>
<tr>
<td>Standing</td>
<td>2</td>
<td>10m</td>
<td>2 Point</td>
<td>2 M-1012</td>
<td>Load 2 rounds</td>
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</tbody>
</table>

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The Army Challenge

“After one year, 68 deaths, and 498 Purple Hearts awarded with “several hundred more” pending, the 3,900 soldiers of the 2nd Brigade, 2nd Infantry Division have left Iraq. They were an experiment of sorts for the Army, deploying from bases along the Demilitarized Zone in South Korea, the first time units there meant to preserve a Cold War peace were sent directly to a shooting war. They will head to an entirely new home in Fort Carson, Colo., taking over the barracks of yet another unit deploying to Iraq.”

— Stars and Stripes, Pacific edition, July 31, 2005

The Army is simultaneously fighting a prolonged war while conducting a substantial transformation process which increasingly limits the pool of available units to deploy, and decreases the dwell time between deployments. The 2nd Brigade Combat Team, 2nd Infantry Division, is a model example of our incredible flexibility. Our young Americans are “Our Greatest Generation.” We owe them the best in equipment and training. This article will outline a way to meet the demands of freedom by supporting the readiness of her most important resource, our Soldiers.

Coupled with Transformation, the Army approved the Army Force Generation (ARFORGEN) model as a synergistic approach to building combat power during compressed re-fit periods for all deploying units. This structured progression of increased unit readiness over time, results in recurring periods of availability of trained and cohesive units prepared for operational deployment.

Installations must transform themselves to provide a flexible base operations surge capability in order to support all units both assigned and mobilized with a live/virtual/constructive collective training framework. These base operations become the hallmark of a flagship installation capable of supporting all units throughout their transformation and “go-to-war” readiness cycle.

The Integrated Training Strategy

Units preparing to deploy to Afghanistan or Iraq will rely more and more on home station training exercises. Recently, the Fort Carson, Colo., developed a major, installation-wide training exercise designed around the 2nd BCT, 2nd ID that incorporated and tested this integrated training strategy.

Developing an installation-wide exercise around a deploying brigade combat team makes sense from the point of leveraging all
possible enablers to create the appropriate player task-organization to replicate the relevant theater environment.

This particular exercise, called Bayonet Strike, included units validating for deployment, preparing for a Combat Training Center (CTC) rotation, and sustaining training readiness. (See Figure 1.)

Every unit on the installation as well as Reserve component units from several states participated in the training. For example, the New Mexico National Guard flew 39 close air support sorties in support of live fires and force-on-force engagements throughout the Pinon Canyon and Fort Carson areas. Civil Affairs teams from the Arkansas National Guard supported the BCT in civil-military operations. Veteran units recently returning from combat operations in theater supported the opposing force (OPFOR) and observer/controller (O/C) tasks. After leveraging all available trainers and enablers, more than 5,200 Soldiers were involved in creating a realistic training venue for 18 separate units ranging from a military police working dog detachment to Special Operations teams.

The next challenge was identifying and completing the training environment by rounding out all the left and right coalition and U.S. forces in the constructive and virtual simulations environment. These “simulated digital player units” were role-played by the external control staff and spiraled into one common operational picture that replicated the current contemporary operating environment.

Building around a deploying BCT is an excellent way of “teaming” all available assets and cutting costs. The Mountain Post used the 2nd BCT, 2nd ID as the catalyst to bring an installation’s worth of units together and to meet deployment and sustainment training objectives.

The 2nd BCT, 2nd ID “Strike Force” provides an excellent example of the challenges installations have today in supporting a modular brigade combat team in its mission as a global expeditionary force. This brigade deployed to OIF from Korea in September 2004 and received a Department of the Army order while in theater directing in stride re-stationing to Fort Carson at the conclusion of a yearlong combat tour.

As the brigade wrapped up its yearlong tour in Ramadi, Colonel Gary Patton, the brigade’s commander, said “We’ve got a lot of blood, sweat and tears invested here. We will be following the progress of Ramadi. We want to see this thing finished.”

The Strike Force BCT uncased their colors at Fort Carson in September 2005, reorganizing into a modular combat formation. The unit is now combat ready following its recent home station training event and mission readiness exercise at the National Training Center. In only 10 short months, the Strike Force has transformed into a new modular force ready to deploy and fight. (See Figure 2.)

The Relevant Training Framework

Fort Carson, with its superb satellite training facility, the Pinon Canyon Maneuver Site (PCMS), offered some insights on how a flagship installation tackles the challenges of supporting the Army Force Generation model.

Transformation is all about changing the way the installation does business and supports modularity. Since the Army is
reconfiguring from a division-based structure to a more flexible and agile brigade combat team-based structure, the installation is changing its business model as well.

Fort Carson replicates a docking station that can accept and accommodate the training, sustainment, and life support needs of both active and reserve component BCTs that are not necessarily geographically assigned to the Mountain Post. Combine this with the remote full-spectrum, high-altitude Afghanistan-like training area of Pinon Canyon and the answer is realistic training in real time over real distances.

“Bayonet Strike” — Developing the Exercise

Preparing the Strike Force BCT for success at the National Training Center (NTC) and Operation Iraqi Freedom (OIF) serves as an example for home station training now and in the future. A critical part of that success was the contribution made by 3rd Armor Cavalry Regiment in organizing, preparing, and executing O/C support, but most importantly by sharing lessons learned from a very recent deployment to Iraq. The planning and investment of veterans who have recently returned from war into the next unit’s preparation for combat provides a source of continuity in home station training that cannot be replicated at the CTCs. Coupled with training and organization, this will ensure our units are as prepared as they can be for combat. Every unit follows the same fundamental gate training strategy as outlined in Figure 3.

One hundred and fifty road miles away at Fort Carson, members of the EXCON (exercise control) are carefully choreographing Bayonet Strike, a mission rehearsal exercise for the 2nd BCT, 2nd ID just one of Fort Carson’s BCTs preparing for deployment to Iraq. Months before Bayonet Strike began, thobs, affectionately referred to by those ordering the traditional Middle-Eastern apparel as “man dresses,” had been ordered. Street signs in Arabic were printed. Mock villages to include mosques and schools were erected, and many task orders were sent out to support this mammoth undertaking, which was designed to replicate the command and control and geographic conditions Soldiers face in theater.

Because the 2nd BCT, 2nd ID would operate under the command of the 1st Cavalry Division in Iraq, Fort Carson built the training scenario to replicate a 1st Cavalry Division higher headquarters. Completing the scenario, the planners included Special Operations forces, U.S. Air Force elements, coalition units and Iraqi Army and police units. The 2nd BCT, 2nd ID occupied a forward operating base downrange while units rotated through demanding live-fire exercises.

The battalions then rotated to PCMS, traveling the 150 miles between the two facilities in a tactical configuration replicating the kinds of distances and lines of communication found in Iraq. At PCMS, they were immersed in a MILS and O/C-supported training environment closely modeled on current operational missions in Iraq. Fort Carson provided the location for the sustainment operating base and a

Figure 3

Mountain Post Training Strategy

Supporting ARFORGEN, the key tasks associated with the ARFORGEN Training Cycle

1. HS Training CORE
   - Stay Relevant (Reach Back)
   - Leader Training
   - Individual through Squad
   - Battle staff training
   - Platoon to Battalion
   - situational training
   - Modularity
   - Build the Team

2. HS Training MISSION
   - Cultural Training
   - Recon theater/ IED Defeat
   - Combined Arms/ Joint
   - Theater focused STX
   - Gunnery
   - Maneuver/ Urban Ops
   - B/ BCT/ CPX
   - Deployment Training

3. Deploy: FULL SPECTRUM
   - Rear Detachment
   - TOA (RSLS Ride)
   - MIH/ COIN Academy
   - Theatre Lane Training
   - Pass Back Lessons Leamed
   - Resource the fight

Figure 2 — 2nd Brigade, 2nd Infantry Division

ARFORGEN Glide-Path to Combat Readiness

AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT

Individual & Crew Small Arms Training
Fielding: Long Range Surveillance System
Fielding: Armored HMMWV
Digital Systems Training
New Soldier & Leader Integration
Fielding: Fielded Howlitzer
Company Training
Fielding Mortars
Fielding Digital Systems
Fielding: Towed Howlitzer
Fielding: Advanced SIGs

Figure 3
host of live-fire training while the Pinon Canyon Maneuver Site provided the force-on-force venue at a realistic distance from the BCT. This separation replicated the time and distance factors in theater as well as added the fog and friction of war through the extensive use of a broad range of role players.

Partnerships at PCMS with the local media, academia, resident subject matter experts, joint and special forces units provided a demanding and highly realistic operational, cultural, linguistic, digital and political environment set within a climatic and geographic training area that mimics theater very well. Constructive simulation was artfully integrated to support live training at both Fort Carson and PCMS. Interfaced with the newly received digital command and control systems of the 2nd BCT, 2nd ID constructive simulations and higher command headquarters replicate not only coalition forces (including 1st Cavalry Division as the controlling headquarters) but various Iraqi security elements as well.

The unique synergy obtained by using both Fort Carson and PCMS, the live and constructive integration, the sophisticated use of OPFOR, role players, subject matter experts, joint enablers and the injection of real world events (such as the elimination of the terrorist leader al-Zarquawi) all combined to provide a tremendous mission rehearsal for the Soldiers and leaders of the brigade.

This capability is a particularly useful tool that permits commanders to tackle the home station training/CTC proficiency “delta” that has always existed but now has become more of a challenge due to the variances in readiness, equipment, and manning generated by the different force pools in the ARFORGEN model.

The Fort Carson and Pinon Canyon complex offers a mitigation tool in support of the CTC throughput shortfalls that exist in CONUS. Pinon Canyon’s demonstrated ability to support a major mission readiness exercise (MRE) at very reasonable costs, combined with the emergent concept of an exportable training capability offer some exciting options to the Army for training more BCTs than can currently be supported between our combined arms training centers.

Home station training in support of the ARFORGEN model requires a far broader and sophisticated approach than has been the case in the past. ARFORGEN provides a trained and ready brigade combat team prepared for continuous operations in support of the Global War on Terrorism. Rather than trying to have all the units ready for the “Big One” all the time, the Army can repetitively generate BCTs focused on actual or contingency missions in a more predictable process, while still maintaining the ability to surge for major combat operations. Based on this methodology, Fort Carson realized the new mission of receiving, equipping, training, deploying, supporting and recovering brigade combat teams required a steady-state training and logistical process far more sophisticated than any previous systems. This combination of training and logistical support for ARFORGEN has generated a surge requirement in base operations that is unprecedented.

Military Police Security Patrol

The four-vehicle convoy of up-armored high-mobility multipurpose wheeled vehicles (HMMWVs) labored up the slope ahead and began negotiating the unpaved road’s bends and curves. The young military police lieutenant in the lead vehicle was grateful the dust coating her face wasn’t as thick today as it had been. While contemplating the dust, she also thought about how fortunate her small patrol had been making it through the last village without incident and was now on the way through open country.

Out of the corner of her eye she saw muzzle flashes in the scrub brush about 40 meters off the road. “Contact right,” she shouted into the radio. “Everyone put suppressive fire down now.” Without releasing the mike button, she called her platoon sergeant, “One-Four watch our left. I’m going after the threat on our right.” Without waiting for a response, she ordered her driver to turn off the road and stop.

She instructed Johnson to, “Keep fire on this area” and quickly fired her rifle at the spot she’d seen the muzzle flashes originate. Using the vehicle for cover, she jumped out and ran around to the following HMMWV, gesturing for the MPs inside to dismount and form a skirmish line. The rest of the patrol was now staggered along the road, some firing at the ambush site to the right, some nervously scanning to the left, looking for more insurgents.

Taking stock of the situation, the young MP lieutenant wiped the perspiration from her eyes, took a deep breath, and told the driver of the second HMMWV to call in a contact report just beyond checkpoint four. “Tell em I’m developing the situation,” she said. While looking at the corporal and two MPs next to her, she pointed toward the scrub, “Let’s go in and get those guys.”
Together they began moving forward at a low crouch. Standing behind a pinion pine about 25 meters away, the 3rd ACR O/C approvingly made some quick notes on his map. This was the second ambush today along this mock main supply route and, although surprised, the patrol had reacted pretty well. Looking over his shoulder, he could see another team of MPs from the rear vehicle quickly moving to flank the insurgent position.

The cavalryman nodded to himself thinking, “If they move fast and don’t walk into their own crossfire, they just might get the insurgents before they can break contact.” In a few minutes another Bayonet Strike after action report led by veteran mounted riflemen of the 3rd ACR would take place, and the MPs would have a chance to learn some valuable lessons.

Integrating our Combat Veterans

The 3rd ACR returned in February-March 2006 from successful counterinsurgency operations in both Tal Afar and southern Baghdad. The regiment, still inside of its 90-day redeployment window, was preparing both personnel and property to re-station to Fort Hood as part of the Army’s Base Realignment and Closure Program (BRAC) and transformation campaign. The regiment had already initiated movement to Fort Hood and most of the regimental staff had begun to clear post. Therefore, the regimental commander, Colonel McMaster, directed his 3rd Squadron (Thunder) to organize, equip, and deploy a regimental O/C package from units across the regiment and provide the regiment’s hard earned lessons learned to the Strike Brigade. The regimental headquarters in turn focused on training the 2nd BCT, 2nd ID staff during a simulation exercise at Fort Carson while 3/3 ACR deployed O/Cs to PCMS to train and assist 2BCT, 2ID battalions rotating through MILES based force-on-force company lanes.

The 3rd ACR O/C team also provided daily feedback to unit commanders at the battalion, company, and platoon levels. At battalion level, sustain and improves from every company were consolidated daily to provide overall battalion sustains and improves to the battalion commanders. These observations were used to provide daily status to the senior trainer and post commander, Major General Robert W. Mixon, Jr. After providing daily observations to the battalion commanders, the O/Cs requested the battalion commander’s O/C priorities for the next day’s training. The O/Cs acted as “directed telescopes” to provide feedback the commander needed to better understand where his unit was in preparation. Upon completion of each battalion’s four-day training exercise, the 3rd ACR O/Cs consolidated the unit’s battalion and company training observations and provided it to the unit as part of the take home package.

In Conclusion

To fully realize the potential of the ARFORGEN model requires that a new array of installation functions be provided to BCTs that may not be assigned in the traditional fashion to either the senior mission commander or the supporting installation. In reality, the installation must act as a docking station that allows all modular units of different type to literally plug into the infrastructure and have immediate access to collaborative command and control systems both in CONUS and the operational theater. The methods of training must be far more adaptive to the rapidly changing demands of combat than our traditional mission training plans and mission essential training list methodology. They must quickly incorporate the latest tactics, techniques and procedures fresh from the battlefield in a well-knit live, virtual, and constructive package.

Understanding the implications of the ARFORGEN process, planners at Fort Carson built a new home station training model and validated it during Bayonet Strike. This model had to simultaneously train multiple units and staffs at differing proficiency levels within a single integrated scenario. Ultimately, the installation must enable all units to bring together all their Soldiers, equipment, and tactics, techniques, and procedures through theater-like immersion site training culminating in a mission readiness exercise comparable to a CTC-hosted exercise. We must not just focus on brigade formations, but give every Soldier no matter how small the unit every advantage of being trained and ready. While this daunting task is being accomplished, the installation must also continue to support and sustain resident families and deployed Soldiers while continuing to project and recover combat power.

Lieutenant Colonel Karl D. Reed is currently serving as the III Corps G3 (FWD) at Fort Carson, Colo. He commanded the 5th Battalion, 20th Infantry, 3rd Brigade (SBCT), 2nd Infantry Division, in support of OIF 2003-2004. Reed also previously served as G3 for the 7th Infantry Division in 2005-2006.
Summer Training at USMA

Academy Updates Cadet Field Training

CAPTAIN RYAN MORGAN

The mission of the Department of Military Instruction at the United States Military Academy states that it will “...train, educate, and inspire cadets in the essence of Warfighting and the Profession of Arms ... in order to develop competent future Army officers.” For as far back as most can remember, that mission has been fulfilled by using a Cold War model for training. That has now changed.

Cadets, in their first two years, go from being civilians to small unit leaders. Cadet Field Training (CFT), the training conducted at West Point for the second-year cadets, follows the crawl, walk, run method spread over two four-week details. The first detail, crawl and walk, focused on individual training. Land navigation, basic and advanced rifle marksmanship, patrolling, combatives, and first aid are just a sample of the training conducted during the first detail. Up until the summer of 2006, the second detail training was focused on offense, defense, raid, recon and ambush operations. These were separate events that took on a focus of operating in the woods and away from built-up areas. The training was good and useful but in light of the global war on terrorism, not as relevant as it needed to be. The academy realized this and made a radical change.

The change came not as a slow, multiple-year process, but in the course of about two months the new plan was instituted, and the planning and resourcing started. The new training for CFT still followed the crawl, walk, run model; however, now the run phase looks more like a sprint. All of the training during the first detail now directly supports Operation Highland Warrior (OHW), which is the second detail. Camp Buckner was transformed into a forward operating base (FOB) complete with access control points. Cadets also implemented a complete weapons immersion program, and training turned into a continuous operation where all of the committees interacted with each other. The new committees for OHW are Cordon and Search, Search and Attack, Access Control Point, Quick Reaction Force, Squad Live-Fire Ambush, and Convoy Reaction. The academy also hired Arabic linguists to provide Cadets with experience in dealing with a language barrier and to also learn more about the Muslim religion and culture.

When asked to put into context the changes for the 2006 training, Major Bill Conde, the regimental executive officer, explained that “the training at CFT has evolved since my first experience back in 1992 ... This past CFT we took the training to a new level by using current scenarios we are experiencing in the GWOT. The deliberate defense, for example, has changed to defend a forward operating base and establish access control points. Other missions the cadets experienced this summer were search and attack, convoy operations and cordon and search. All of which our force is executing daily while forward deployed.”

The access control point mission was an opportunity for cadets to not only be exposed to the difficulties in defending a fixed site but the necessity of all Soldiers having to deal with difficult tactical, ethical, and cultural decisions at a high visibility location — the front gate of an American compound. Cadets were trained and evaluated in the actual setup and execution of an ACP by conducting vehicle and personnel searches. However, they were further challenged when the enemy tried to infiltrate the ACP using a variety of methods which included vehicle-borne and personnel-borne improvised explosive devices (VBIEDs, PBIEDs), peaceful and aggressive protests, and full-out attacks. Each of the situations required cadets in all positions to make tough decisions on the spot.

Search and attack operations focused on traditional patrolling techniques. The necessity for all cadets, and future lieutenants, to understand the principals of a combat patrol is critical to current
operations in many theaters of operations. This mission centered on the security of the FOB by conducting combat patrols in the surrounding hills looking for enemy mortars and caches.

Convoy operations occur on a daily basis in OIF/OEF, and this led to the development of a convoy reaction mission. This mission not only focused on the ability of executing a convoy and conducting react-to-contact drills, it also trained the cadets on route clearance missions, resupply missions, and reacting to IEDs. Cadets were able to focus on eight of the 9 Warrior Drills while conducting this mission.

“The cadets are pushed a little harder, hold more responsibility as cadet leaders and actually learn techniques and procedures they can take directly to the Army as platoon leaders,” MAJ Conde said.

Cordon and search is the only company-sized mission of OHW. This mission consisted of an extensive planning period, an air assault, establishment of a patrol base, then the actual cordon and search that has the propensity to escalate into an urban attack. This mission allows cadets the opportunity to conduct deliberate troop leading procedures and mission rehearsals. When the cadets are entering the village, they must establish contact with the village leader (who was played by an Arabic linguist from Iraq).

The cadet company commander, through an interpreter, discusses the operation with the sheik, tries to gain his trust and cooperation, and execute a safe, controlled search of the village. The enemy has also infiltrated the village, and the cadets must then search and clear the buildings with the enemy in them. After the battle, the cadet commander must return to the sheik and repair the relationship damaged by the enemy attack. This is an eye-opening experience for most cadets, from having to talk through an interpreter and deal with the obvious, and not so obvious, cultural differences, to conducting building and room clearance in a company operation.

The quick reaction force (QRF) interacted with all of the other missions in addition to conducting its own separate missions. The QRF had priorities of planning given to it by the regimental commander, and it conducted TLPs in support of this guidance. In addition to supporting each of the other missions, the OPR conducted searches for mortar teams, downed aircrew rescue, and medical evacuations (MEDEVACs). This mission gave cadets the opportunity to conduct planning along multiple timelines, and to coordinate with multiple units to support their mission.

One huge difference that stands out with the summer training of 2006 from previous summers was that the operations, across the entire summer, were continuous. The regimental commander and staff had the challenge of managing all aspects of the cadet’s summer. They organized training, events, and activities for down time (what little of it there was). The staff conducted mission planning for all missions and training events, and coordinated with the eight company commanders in daily battle update briefs. The result was a summer training program that was run by cadets for cadets from the first day to the last.

“Compared to past years, CFT was a truer reflection of training in the real Army,” said Cadet Command Sergeant Major Amelia Wiershem.

The field training conducted by cadets during the summer of 2006, more so than in recent years and especially during Operation Highland Warrior, exposed cadets to what they can expect to see when they graduate. The objective is not to make all cadets experts in all of the missions, but to place cadets in situations that take them out of their comfort zone and force them to make difficult decisions. The overall purpose of Cadet Summer Training is to train, instruct, test, and validate cadets and new cadets on specific Basic Officer Leader Course I (BOLC I) tasks, Military Program Required Tasks (MPRT), and the Chief of Staff of the Army’s Warrior Tasks and Drills focused by the global war on terrorism within the contemporary operational environment, and this last summer was a resounding success.

Captain Ryan Morgan is the Cadet Summer Training S3 at the United States Military Academy. His previous assignments include serving as commander of C Company and Headquarters and Headquarters Company, 2nd Battalion, 502nd Infantry, 101st Airborne Division (Air Assault) during Operation Iraqi Freedom I. He has also served as an Infantry Requirements Analyst at the Futures Center, Headquarters, U.S. Army Training and Doctrine Command.
Not all of the handguns carried by today's combatants are of recent manufacture or are any longer standard issue. The pistols and revolvers found in Afghanistan and Iraq, for example, include the venerable British .455 Webley that was in service from 1915-1947. The big Webley (Figure 1) was the standard British service pistol during most of World War I, and was later superseded by a .38/200 (.38 caliber, 200 grain bullet) revolver in 1936 because it was felt the .455 was too powerful for general military use. The .455 revolvers were resurrected from storage during the massive buildup for World War II and reissued, either in their original .455 caliber or in a version converted to fire the powerful .45 Automatic Colt Pistol (ACP) round, and which could be loaded by means of 3-round moon clips (Figure 9).

The United States adopted the Colt automatic pistol as its sidearm in 1911. Based upon WWI experience, changes were later made to the trigger, tang, sights, grip and other features, and in 1926 the improved weapon was designated the Pistol U.S. Caliber .45 Model 1911A1 (Figure 2). More than 2,400,000 M1911A1's were issued to U.S. forces, and the pistol served us through the Cold War. The number of these pistols made under separate contract for foreign governments and commercial markets is in the hundreds of thousands and, due to their reliability and the impressive knockdown power of the .45 ACP round, they are still to be found wherever shooters need a reliable, powerful pistol.

When the United States entered World War I, fewer than 56,000 of the M1911 service pistol were available for the Army and Marine Corps, so both Colt and Smith & Wesson received contracts to produce the United States Revolver, Caliber .45, M1917, based on earlier Colt and Smith & Wesson designs. The M1917 (Figure 3) used the same ammunition as the .45 service pistol, with ammunition held in 3-round half-moon clips for ease of loading and of ejecting the fired cases. Today, the M1917 — just as the .455 Webley — can also be loaded using full-moon clips.

The M1933 Tokarev (Figure 4) is a modified Colt and Browning design, and was the standard issue Soviet sidearm from 1933 until the 1950's. The 7.62x25mm is a high-velocity round and generates more muzzle energy than the .455 Webley, but less than the 9mm Parabellum and the .45 ACP. The Tokarev is to be found in service in many of the former Soviet surrogate and client states around the world. A cautionary note when handling this pistol: it has no manual safety, but only a half cock feature that locks the slide.

The Browning Hi-Power (Figure 5) is the sidearm of British and Australian coalition forces in Iraq. Prior to the defeat of Iraq, it was also the favored sidearm of high-ranking Iraqi officers, including Saddam Hussein himself. Chambered for the NATO standard 9x19mm round, the Browning is widely distributed due to its accuracy, reliability, and the ready availability of 9mm Parabellum ammunition. The pistol's basic design was the work of American John M. Browning, who patented it in 1922. The pistol was first manufactured in Belgium, where it was refined and manufactured as the M1935. When Belgium was overrun by German forces in World War II, the M1935 continued to be manufactured and used by the Axis, while other factories in Canada made the pistol for Allied use.

The Beretta Model 92 (Figure 6) pistol first appeared in 1975 and the United States Army adopted it as a
### Training Notes

**Cartridge - Bullet Weight (grains) - Bullet Type - Muzzle Velocity (ft/sec) - Muzzle Energy (ft. lbs.)**

<table>
<thead>
<tr>
<th>Cartridge</th>
<th>Bullet Weight</th>
<th>Bullet Type</th>
<th>Muzzle Velocity</th>
<th>Muzzle Energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>.45 ACP</td>
<td>230 gr.</td>
<td>FMJ</td>
<td>880</td>
<td>401</td>
</tr>
<tr>
<td>.455 Webley</td>
<td>262 gr.</td>
<td>Lead</td>
<td>700</td>
<td>285</td>
</tr>
<tr>
<td>9mm Parabellum</td>
<td>112 gr.</td>
<td>FMJ</td>
<td>1262</td>
<td>423</td>
</tr>
<tr>
<td>(9x19mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9mm Makarov</td>
<td>95 gr.</td>
<td>FMJ</td>
<td>1000</td>
<td>211</td>
</tr>
<tr>
<td>(9x18mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.380 Browning</td>
<td>90 gr.</td>
<td>FMJ</td>
<td>910</td>
<td>165</td>
</tr>
<tr>
<td>(9x17mm Short)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.62 Browning</td>
<td>71 gr.</td>
<td>FMJ</td>
<td>905</td>
<td>129</td>
</tr>
<tr>
<td>(.32 ACP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.62x25mm</td>
<td>71 gr.</td>
<td>FMJ</td>
<td>425</td>
<td>305</td>
</tr>
<tr>
<td>Tokarev</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Ballistic figures are approximate and may vary according to bullet weight, powder charge, barrel length, and other factors. However, the data shown represent the characteristics of most handguns carried by coalition, host nation, and enemy forces in the COE.

replacement for our M1911A1 in 1985. Chambered for the NATO 9x19mm round, it facilitates resupply of ammunition between NATO partners. While made in a number of variations such as the compact version, the Model 92’s carried by the U.S. and Italy are essentially the same pistol, and could be interchanged without creating interoperability issues. The 9mm Parabellum is generally adequate for most applications, and that is the overriding consideration.

In 1951 the Soviet Union replaced the M1933 Tokarev with the 9x18mm Makarov (Figure 7) as its service sidearm, which meant that the pistol would soon be adopted throughout the Soviet Union’s subsidiary states. While the Makarov is more powerful that its closest relative, the .380 Browning (9x17mm or 9mm Short), it generates significantly less muzzle energy than either the 9mm Parabellum or the .45 ACP (Figure 10). While the lion’s share of Makarvos were made in Russia, they were also produced in China, Bulgaria, and East Germany. According to Wikipedia — an excellent source of firearms data, by the way — handguns chambered for the 9x18mm cartridge were also made in Poland and Hungary, but are not true Makarovs.

During Saddam Hussein’s reign, the Iraqis manufactured a 7.65mm pistol under Beretta license. Named the Tarik (Figure 8), it is chambered for the .32 ACP cartridge and was initially intended for issue to members of the Republican Guard. Externally, it closely resembles the Beretta M1935, another small and easily concealed pocket pistol.

This is but a glimpse of the variety of handguns that can turn up wherever our Soldiers are deployed. Some of the more esoteric calibers such as 7.62 Nagant, 9mm Ultra, 7.63 Mauser, 9mm Bergmann-Bayard, and others appear in the markets and bazaars and in private hands, but such ammunition is no longer readily available. If you come across a weapon or cartridge you cannot identify, send us a digital image and we’ll try to help.

*(Weapons photographed courtesy of the National Infantry Museum, Fort Benning, Ga.)*

The events of Fighting the Breakout: The German Army in Normandy From “Cobra” to the Falaise Gap are familiar to most students of World War II. As part of its series on World War II German military debriefs, Greenhill Books here publishes a collection of personal accounts from five German generals, all of whom were instrumental in the activities of the Seventh Army during the campaign. These firsthand accounts are presented in one consolidated collection for students of the era to study.

For the most part, the selections are from the after action reviews and post-war debriefs of Generalmajor Freiherr von Gersdorff (chief of staff, German Seventh Army) although chapters from German Generals Hausser, Fahrmacher, Eberbach and von Luettwitz are included. These men all figured prominently in the German defense against the expanding allied armies, and their accounts represent operational perspectives on the fighting during the critical period between Operation Cobra and the closing of the Falaise pocket — three weeks that sealed the fate of German hopes for a positive decision in Normandy. Most readers will be acquainted with these men, their units, and their stories from the hundreds of secondary sources covering this period of the war; all of these contributions have been cited regularly by scholars in the past half-century. Here, the accounts stand on their own and can be read without looking through the prism of another writer.

As with many primary source collections, however, there are drawbacks for the casual reader. These accounts all contain a great deal of detail and specificity which can prove difficult, presented in the respective authors’ formal verbiage. The audience for such accounts is admittedly limited, but those who are studying any aspect of the examined operations will reap great rewards working through these important and substantial accounts. Besides commentary on the positioning and movement of forces, these officers’ stories address other aspects of the Normandy fighting, such as the impact of Allied air superiority and French partisan actions. These discussions are particularly interesting in light of six decades of hindsight, research, and historical knowledge.

Fighting the Breakout is a useful and informative collection, despite the sometimes thick reading. These reminiscences of German general officers serves as a valuable parallel to the trials and tribulations of the common soldiers of the war, and the perspectives here should not be forgotten.


The recent ascendency of the military as an institution in the minds of the public has given rise to a spate of books designed to teach the rest of the world, especially the business world, the leadership lessons of our most revered leaders and organizations. A search of a popular bookselling website using the words ‘leadership lessons of…’ brings up thousands such books, most based on military examples. Virtual bookstore shelves are full of titles about the leadership lessons of Navy Seals, Army Rangers, Lord Nelson, Alexander the Great, Lewis & Clark, Patton and a host of others; and, of course, several on Grant and Lee. Add this book to the growing list.

Lee & Grant is published by the American Management Association and targets the business world. This, and all books of this type, is based on the widely held belief that the military is the premier leadership laboratory in existence today. Such an idea ebbs and flows in the public mind, but currently the military is riding a long wave of admiration with no end in sight. Among the countless icons of stellar leadership, Ulysses S. Grant and Robert E. Lee are some of the most popular. The author, an active duty aviator, former history professor at West Point, and veteran of Operation Iraqi Freedom, focuses on the Overland Campaign of 1864, in which Grant fought Lee to the gates of Richmond, to illustrate his leadership examples.

He juxtaposes his points against current Army leadership doctrine as articulated in Field Manual 22-100, skillfully explaining the different categories of direct, organizational, and strategic leadership. Bowery points out that in the Overland Campaign Lee and Grant applied the interpersonal, conceptual, technical, and tactical leadership skills that are the basis of the organizational level of leadership.

While businessmen with little or no knowledge of military leadership may find Lee & Grant useful, it will also provide some service to Soldiers as the author uses examples to illustrate his points. In one such case, the author does a good job of using Grant’s assumption of overall command of the Union armies as a demonstration of how one can take over business responsibilities, especially in a challenging situation. In another circumstance, he explains how leadership by example can redeem a bad decision such as in the well-known ‘Lee to the rear’ incident in the May 1864 Wilderness battle. The book is full of such well-illustrated examples that correspond with the tenets of FM 22-100. Bowery harvests these and translates them into business lessons that can be used with equal success by civilian managers and Soldier leaders alike. He also closes the book with a useful template for off-site visits to battlefields suitable for business leaders.

Students of the Civil War, however, may find some reason to take issue with the author’s interpretation of events depending...
on their view vis-à-vis the “Lost Cause Theory.” This is the theory that attributes the Southern defeat to several causes but places no blame on the Southerners themselves. The foundation of this theory is idolatry of Lee. Bowery does bow somewhat at Lee’s altar himself. His characterization of Lee’s betrayal of the Union as a show of Lee’s “inner strength of character that made him the great leader he was” (p. 20) made this student of the Civil War cringe. Additionally, the author makes a few other curious assertions about the war such as when he mentions that Union General George McClellan was a “very competent” leader whose petulance prevented him from “earning the credibility and freedom of action that he [McClellan] thought he deserved” (p. 27-28).

Other than those minor concerns, Lee & Grant: Profiles in Leadership from the Battlefields in Virginia is strongly recommended.


We have all heard the old adage, “Don’t fix it if it ain’t broke!” However, in today’s society it seems these words are rarely heeded as people continually try to reinvent the wheel. Fortunately, author Robert Citino is from the old school of thought. His most recent effort, The German Way of War; follows the same formula of the other superb books I have read by him. It is highly researched, superbly written, truly informative, and a book that is simply outstanding!

For years, we in the military circles have thrown out constant references to a “German way of war.” In developing courses of action or drawing parallels to tactics or doctrine, it was always vogue to throw out German historical references. Regrettably, for many, there was no clear understanding of what was truly this “German way of war.” Citino clears up these misconceptions and greatly broadens a reader’s understanding of the concepts they used so freely in the past.

Citino answers three key questions for readers. First, “What characterizes the German way of war?” Second, “Why did they develop this style of warfare?” Finally, “What events and people shaped and influenced this style of war?” In answering these questions, he provides exhaustive research to his readers and a rare ability to put his keen insight into words that readers can comprehend.

Based on his research, Citino focuses his study from the Prussian First Northern War of 1655 to the collapse of the Third Reich attack into Russia during World War II. Readers will find detailed discussion on the wars, campaigns, and battles fought by the Prussian, Bismarckian, Weimer, and Nazi regimes during this nearly 300-year period. Additionally, Citino keys on the men who fought and led these conflicts and those who shaped doctrine and thought. These include Frederick the Great, Moltke (the Elder), Clausewitz, Schlieffen, von Seeckt, and Manstein. Of the men highlighted above, the author is especially effective in his treatment of Frederick, Clausewitz, and Schlieffen.

After reading previous volumes by Citino, I find there is always anticipation as to what intriguing insight or fresh comment may come up on the next paragraph or page. Certainly, within the pages of The German Way of War there is no shortage of excellent material that will make you think or question yourself as to why you never thought of that. One such example follows next. When surmising the overall career of Frederick the Great, Citino states, “He was perhaps, Frederick the Great, but he was certainly Frederick the Lucky. To which one is tempted to add: anyone who is lucky eventually receives an invitation to leave the casino.”

As in his past works, it is the added extras that truly set a Citino book from most volumes. In The German Way of War, he inserts dozens of pen and ink drawings of the men he analyzes and adds over a dozen maps to depict key battles and campaigns. Even more impressive, is the author’s note section at the end of the book. Citino provides more than 60 pages of notes discussing his sources and providing readers additional information if they seek further material on a specific subject. I believe there is no better writer today in providing this valuable service to his readers.

I found Citino’s last effort, Blitzkrieg to Desert Storm: The Evolution of Operational Warfare to be, perhaps, the best book I read in 2004. Certainly, others agreed as it was awarded several prestigious awards and was highly acclaimed in numerous publications. However, I believe The German Way of War may be even better because of its specific focus and his utter command of the subject area. It is one of those rare books that allows Citino to not only teach his readers, but also facilitates future learning. It is truly highly recommended reading and I again look forward to his next project. What was that adage again? “If it ain’t broke…”

**RECENT AND RECOMMENDED**


Above, Soldiers with the 3rd Brigade, 2nd Infantry Division, come across a mortar tube during a mission in Mosul, Iraq. At right, a 10th Mountain Division Soldier patrols near Aranas, Afghanistan.

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