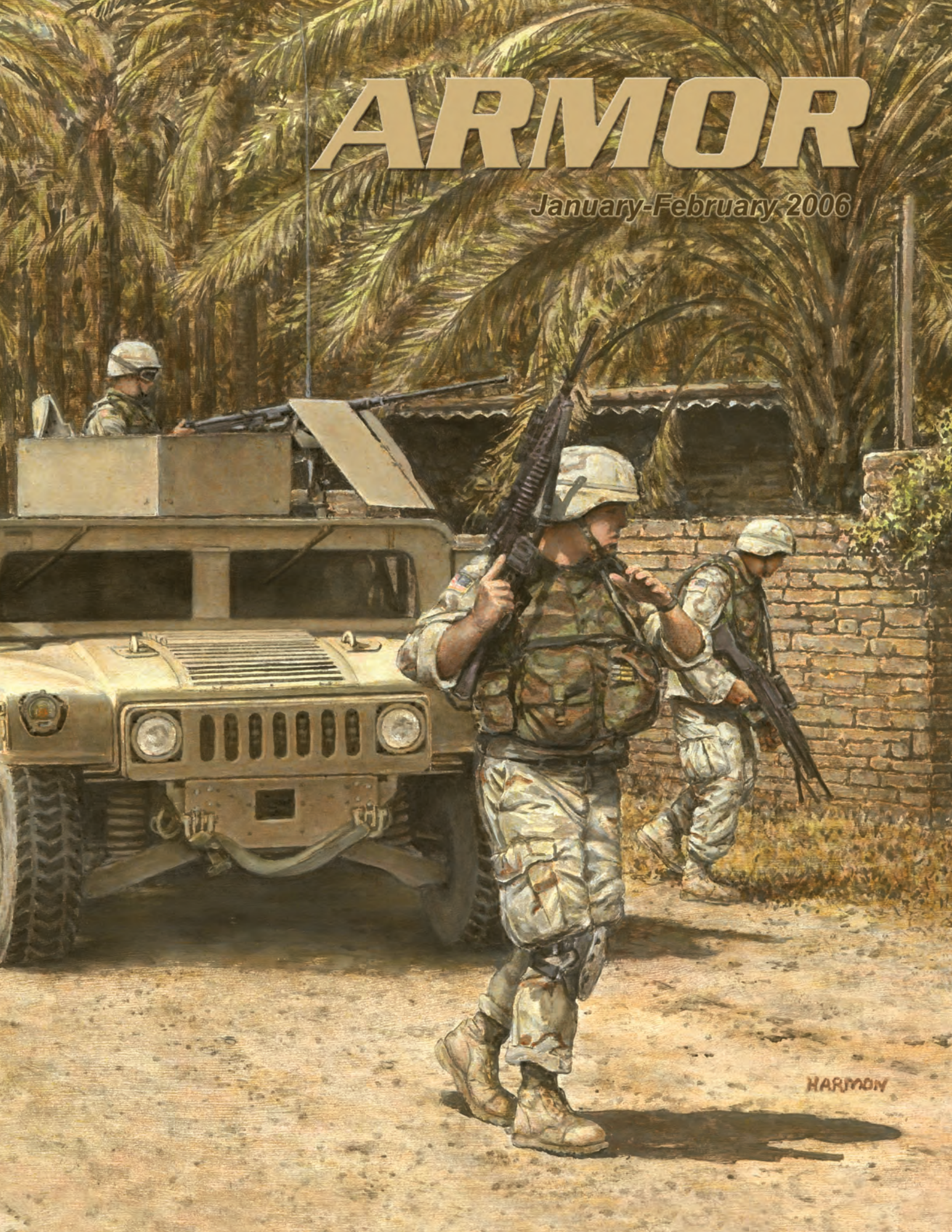# ARMOR

January-February 2006

HARMON

ARMOR

The Professional Development Bulletin of the Armor Branch PB 17-06-1

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Features

Departments

"From My Position..."

In the November-December issue, I made a special appeal to the force for articles. In support of that appeal, I would like to take this opportunity to make a few suggestions on possible topics. In general, *ARMOR* is seeking articles that fall into two broad categories: those that focus on current operations and those that help the force understand and discuss future combat developments. More specifically, I have included some suggestions that are by no means all inclusive and in no particular order:

Training. The average Roman Legionnaire spent four months in basic combat training. Surprisingly, most modern day U.S. Army tank crewmen and cavalry scouts, spend about the same amount of time learning the basic skills that will keep them alive in combat. Without taking anything away from our military ancestors, who were undoubtedly well trained for their duties, it would seem logical that today's soldiers have considerably more complex tasks to master during their initial training. During the past few months, I've heard several proposals to cut the amount of time soldiers spend in basic training to increase the amount of time they actually spend in their units. In light of the facts I've stated above, why is this proposal even considered to be remotely viable?

History. For many years, the pages of *ARMOR* have contained historical analyses of battles and campaigns. The proper use of history can provide us with guidance for the future, help us understand the development of current doctrine, and provide us with a basic set of lessons learned where we otherwise have no experience. Not all historical analyses, however, are created equal. As much as I enjoy reading about the campaigns of Napoleon, battles of the American Civil War, and the great armored battles of World War II, these articles are not particularly useful for soldiers fighting irregular opponents in Iraq or Afghanistan. On the other hand, articles describing historical irregular warfare campaigns, including those of the Spanish guerrillas fighting Napoleon's occupation of their country or Tito's fight against the German army during World War II, would be much more useful. Articles describing successful counterinsurgencies such as the U.S. Army's war against the Moros in the Philippines at the turn of the century; the British army's more recent experiences in Northern Ireland, Malaya, or Aden; or even the Union Army's experiences during reconstruction would be even more helpful.

Tactics, Techniques, and Procedures. We are prohibited from publishing tactics, techniques, and procedures as we knew them in the peacetime army. Please do not let that deter you from sending an article to *ARMOR*! Although we strictly comply with current operational security guidance, we can generally use the majority of any article that you may submit. If you submit an article that requires excessive security editing, you can always send it to the Center for Army Lessons Learned. They will undoubtedly have some use for it. Remember, there is more to counter-IED operations than describing the minutia of explosives detection, and understanding tactical intelligence gathering is more than describing the technical specifications of the latest sensor system.

The Future. What capabilities would allow a future combat system (FCS)-equipped force to better deal with a threat similar to that faced by armored soldiers in Iraq? How would that force operate in Afghanistan? Would a nontechnical solution applied to the current force be just as effective as an FCS-equipped force? If not, why not? Recently, we have talked a little about the future in the pages of *ARMOR*, but not nearly as much as we probably need to. *ARMOR* is more than willing to provide the forum for an informed, professional debate on this subject, but we need articles to facilitate this discussion.

Tactical Vignettes. Based on the results of our most recent reader survey, many of our subscribers would like to see the return of tactical vignettes. Given the amount of combat experience now resident in the force, there should be plenty of high-quality subjects for use in developing these kinds of articles. Developing tactical vignette articles may be a bit more complex than developing conventional articles, but doing the extra work required to set up a problem and produce an approved solution is well worth the effort. These articles will contribute significantly to the training and development of young soldiers, especially in today's complex environment.

Other Topics. Recently, we have published several articles on topics that are not specific to armor soldiers, but are nevertheless very useful. We have published articles on rules of engagement, post traumatic stress disorder, effects-based operations, as well as other issues facing soldiers on the battlefield. Articles that help better educate the force and its leaders on subjects they may not be familiar with are encouraged, as long as they have some relevant and current military application. We are even willing to delve into cutting-edge topics, such as rapid cognition or the adaptive unconscious, as long as these articles are written in layman's terms.

As stated previously, this is by no means an exhaustive list of potential topics. Use your imagination and creativity to write about those subjects most important to you. *ARMOR* plays a vital role in developing solutions to the challenges our force faces on a nontraditional battlefield. The agile and adaptable armor force of the future must be a force whose leaders appreciate the past, understand the present, and change the future. Share your views, expertise, and experiences at this critical time in the history of the armor force.

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LETTERS

Mistakes from the Past: Not Much Has Changed

Dear *ARMOR*,

I am writing to express my appreciation for the insightful article, "Effects-based Operations: Defined Through the Mistakes of the Past," by Captain H. Ripley Rawlings IV, in the November-December 2005 issue of *ARMOR*.

Two years ago, I had the opportunity to visit the sites of Fort Phil Kearney and the Fetterman massacre. This was a bad place to build a fort — and I mean really bad. As I walked across Massacre Hill, incompetence, unprofessional conduct, arrogance, and stupidity were just a few of the terms I initially reserved for Fetterman. But on second thought, perhaps he was just a product of an Army, flushed with victory, totally unprepared and equipped to fight the tough, well trained, asymmetrical enemy he faced.

There is nothing left of the fort, save for a few logs driven vertically in the ground marking what once was a corner of the old stockade, and a converted mobile home that serves as a "sort of" museum. It is located in a small flat valley, completely surrounded by high terrain. It gives one the impression of a small Dien Bien Phu. Ordinarily, this out-of-the-way corner of Wyoming would not be on anyone's top-ten list of places to visit, but I encourage professional soldiers to do so. Study the situation; study the terrain; but most of all, study the mistakes. This little known or appreciated piece of military history will be, as Captain Rawlings points out, a treasure trove of lessons learned for today's fight.

When one thinks of cavalry, our minds almost always wander back to the days of western expansion. Those were the days when a small mounted troop of professionals set out to tame a clever and (in his own way) professional enemy. When you think about it, not much has changed, and the hard lessons of that time are just as applicable today as when they were first learned. Why were Crook, Miles, and Grierson successful? Why were Carrington, Fetterman, and Custer abject failures? All were products of the same school — Civil War. The mounted arm is the arm of decision, but it also must be the arm of innovation and adaptation. We must out G the G and beat him at his own game.

The successful Indian fighters figured out how to do it; so must we.

CHARLES W. TREESE
LTC, U.S. Army, Retired

"Revolution or Evolution," Get the Facts Right

Dear *ARMOR*,

Major James Bushong's article, "Blitzkrieg: Revolution or Evolution," in the November-December 2005 issue of *ARMOR* is factually incorrect on too many points to be overlooked. While he is correct that German Blitzkrieg tactics are generally misunderstood, his focus on cavalry tactics misses the point. The paragraph concerning today's "modular force" seems as if it was hastily grafted in, contributing nothing to the article except continuing the erroneous analogy of cavalry lineage.

Regarding "ancient" tactics, the book *American Military History* (by Center of Military History) recognizes four basic forms of attack: envelopment, turning movement, double envelopment, and penetration. Blitzkrieg tactics are not "cavalry" per se, since the tactics are universal.

General Fuller's "Plan 1919" was nothing but a penetration intended to go deep at the enemy corps or even Army headquarters. The presumption was that by knocking out the "brain" of the defense, the "body" of subordinate units would collapse, leaderless. The theorist Captain Liddell Hart wrote much the same in his works after the war. "Plan 1919" was based on two unsound assumptions: first, that yet-to-be mass-produced next-generation tanks would roll on over and through to the objective; and second, that the German antitank defenses would remain ineffective for another year. The war ended in 1918 so neither assumption was tested.

The "Father of German Mechanized Warfare" is General Heinz Guderian. His 1937 book *Achtung! Panzer!* and his 1952 memoir *Panzer Leader* provide a very readable explanation of the prewar development of the doctrine, training, organization, and equipment of German mechanized forces. Guderian was an infantryman who spent World War I in signal units, especially with then-new radios. After the war, he was assigned to the motor transport service, where he worked on the technical and logistical challenges of operating and sustaining cargo truck fleets. When later working on tank development, Guderian focused not only on vehicle design (armor, firepower, and mobility), but also on the conceptual needs of command and control such as the commander's station, visibility and optics, and most importantly, signal communications. Probably his single greatest concern was for the concentration of the limited number of tanks and motorized vehicles into Panzer Divisions and Panzer Corps.

Major Bushong's claim that the German motorized forces and Luftwaffe (air force) paralleled the four types of cavalry is incorrect. The Panzer Division evolved from the motor transport service. The light division was a later competing cavalry-derived organization with more reconnaissance and motorized infantry, but only a single tank battalion. The motorized division was a regular infantry division that was fully motorized, but without tanks. (Guderian considered these latter two division types as a wasteful dispersal of Germany's limited motorized assets.) The Luftwaffe attacked ground targets in coordination with ground maneuver, but these were joint preplanned missions, not "close air support" since the communications links had not been worked out.

By comparison, both France and Britain fielded large armored and motorized forces at the outbreak of World War II. French tanks were more numerous, and in many cases, better armed and armored than their German opponents. The British Expeditionary Force (BEF) was small, yet fully motorized and well equipped with tanks in proportion to its size. Major Bushong's assertions that British leaders could not, or would not, imagine a battlefield without a horse is plainly not supported by the facts.

The BEF fought effectively and beat off all direct attacks, but was isolated by envelopment and turning movement and forced to evacuate by sea. Though losing all equipment, the troops escaped to fight another day.

In conclusion, I offer two comments. The Germans had better command and control, better situational understanding, and demonstrated greater initiative down to much lower levels than did their opponents. Debate all you want whether it was "revolution or evolution" but first, get the facts right.

Regarding the vaunted "modular army" being analyzed at the Pentagon today, I see no connection with the article. The supposed capabilities of tailored brigades, deploying world wide within 72 hours with perfect situational awareness on arrival represent neither an evolutionary nor revolutionary approach to warfighting. They are more akin to the unsound assumptions of "Plan 1919."

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

Dear *ARMOR*,

I disagree with Major Bushong's article, "Blitzkrieg: Revolution or Evolution?" in your November-December 2005 issue. I think Blitzkrieg was as revolutionary as paradigm shifts in warfare are likely to be.

He states that Blitzkrieg was a "happy marriage" of mechanized forces and time-tested cavalry tactics and relies on the British theorist J.F.C. Fuller to support his view. Without responding directly to Major Bushong's article point by point, please allow me to offer the following for your readers' consideration.

If by cavalry tactics, Major Bushong traces Blitzkrieg warfare to the 13th-century Mongols or the Byzantine army as commanded by Belisarius, his point is well taken. However, I submit that most cavalry operations bear little resemblance to Blitzkrieg, whether feudal knights, Scythian raiders, or the U.S. Cavalry in the Civil War. A Nathan Bedford Forrest or J.E.B. Stuart raid was hardly Blitzkrieg.

Heinz Guderian is surely one of the most intriguing figures in military history. He was a doctrine developer who actually practiced his own theories and proved them on the battlefield. Not even Napoleon did so at the tactical level, and he was not a doctrine writer until after 1815. Guderian was a general staff officer who was also a signal officer during World War I. In addition to improved engines and tracked suspension systems, workable radios made the Blitzkrieg technologically possible.

We all know the great killers in World War I were artillery and machine guns. The artillery

Major General Robert M. Williams
Commanding General
U.S. Army Armor Center

U.S. Army Armor School: Building New Leaders

In view of today's operational challenges and the U.S. Army's transformation, education is the number one resource available to field commanders that will undoubtedly increase the effectiveness of their leaders and teams. The U.S. Army Armor School has evolved with the current operational environment and offers unique courses to assist young leaders in today's challenging leadership roles. The four courses, the Scout Leaders Course, the Cavalry Leaders Course, and the two M1 Master Gunners Courses, are all functional courses specifically designed to qualify leaders and Soldiers for assignment to duty positions requiring specific skills or knowledge.

The Scout Leaders Course, although temporarily suspended, is up and running and has been for more than a year. The course has been primarily filled with recent Armor Officer Basic Course graduates. Training lieutenants is important, but not the only purpose of this course. In fact, we designed the course to teach reconnaissance fundamentals to platoon leaders, platoon sergeants, and scout section sergeants. Perhaps even more important, since reconnaissance is not just an armor or cavalry task, the Scout Leaders Course is open to all combat arms branch and military intelligence officers, as well as Basic Noncommissioned Officers Course graduates. We all know that battalion scouts in infantry brigade combat teams and heavy brigade combat teams are motorized; I can think of no better course to prepare an infantry soldier to serve in one of these scout platoons than the Scout Leaders Course.

In terms of content and resources for mounted reconnaissance training, there is no comparable course in the Army. The Scout Leaders Course maintains a very favorable 5 to 1 student to instructor ratio in both the classroom and field training exercises. Also, the course provides every student an evaluated opportunity to perform as a platoon leader or platoon sergeant in a field training environment.

The decision regarding whether a lieutenant will attend the Scout Leaders Course following graduation from the basic course rests with the gaining battalion commander. Recently, some commanders have placed higher priorities on attending Ranger School or the Reconnaissance and Surveillance Leader Course. These are both great schools, but they do not focus on employment of mounted reconnaissance elements the way the Scout Leaders Course does. I caution battalion commanders to give a hard look at what skills they want their new platoon leaders to bring to their first platoons. I highly encourage all commanders to send current and incoming officer and NCO leaders to the Scout Leaders Course. The skills they gain will more than make up for three weeks away from their unit.

Similar to the Scout Leaders Course, the Cavalry Leaders Course is also a terrific opportunity for those who are, or will be, assigned to a reconnaissance unit. Like the Scout Leaders Course, the Cavalry Leaders Course has great value to not only armor leaders, but to all leaders throughout the Army. The Cavalry Leaders Course provides instruction on the employment of reconnaissance troops and squadrons in all the various brigade combat team organizations. Additionally, the Cavalry Leaders Course provides its students several unique training opportunities: students conduct multiple repetitions of reconnaissance planning for a variety of battlefield environments and reconnaissance organizations; each student serves as both a reconnaissance squadron S3 and a reconnaissance troop commander in an evaluated event; and all students get the opportunity to conduct missions as reconnaissance troops and squadrons in the close combat tactical trainer. None of these opportunities are available in any other Army course.

With the advent of the new brigade combat team organizations, every maneuver brigade in the Army will have a reconnaissance squadron. The Cavalry Leaders Course is the ultimate tool for preparing captains to serve in reconnaissance squadrons and new armor first sergeants to serve in reconnaissance troops. Furthermore, every member of the brigade staff must have knowledge on the employment of that squadron. The Cavalry Leaders Course is a great way for a brigade S2 or S4 to learn how to employ and support a reconnaissance squadron. The Cavalry Leaders Course provides a one-of-a-kind training experience for reconnaissance leaders of all backgrounds.

The Armor School is also home to the M1A1 Master Gunner Course and the M1A2 Master Gunner Transition Course.

DRIVER'S SEAT

CSM Otis Smith
Command Sergeant Major
U.S. Army Armor Center
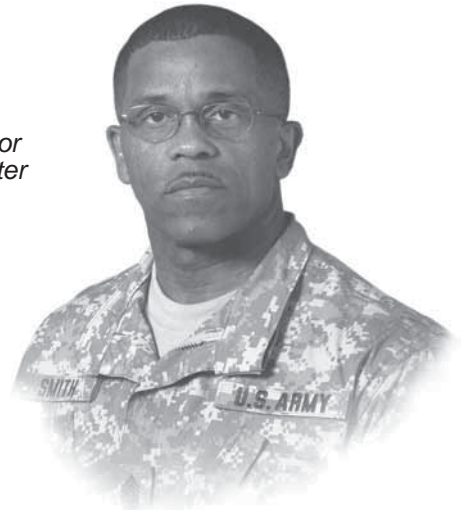
Embedded Training:
No Longer Just for the Future

On 16 August 2005, the U.S. Army received a software upgrade that includes fully embedded maintenance training capabilities for the Bradley A3 fighting vehicle. This did not happen overnight.

In 1987, the Undersecretary of the Army and the Vice Chief of Staff signed a memorandum, dated 3 March 1987, establishing embedded training (ET) as the preferred training strategy. In 1996, the Army's Chief of Staff reiterated the importance of ET, stating that new systems being developed should contain embedded simulation training. Despite these two proclamations by the Army leadership, there has been only limited success in fielding new weapons platforms and systems with ET capabilities. In the past, lack of technical ability has inhibited successful ET implementation beyond operator/maintenance training. Technology has now advanced to the point that a full range of embedded unit maintenance training capabilities are possible.

In 1999, during the initial stages of training development for the Bradley A3, it was determined that desktop virtual reality diagnostic trainers (DT), full three-dimensional hands-on trainers (HOT), and actual vehicles would be used to train the Army's maintainers for this system. The diagnostics trainers, which were established at the Armor School, Fort Knox, in March 2002, are used to train soldiers to maintain this vital combat system. During the development process for the HOT, it was determined that the trainers were going to be too expensive and that ET could be developed using the initial work that was conducted during the development of the DT.

The DT was built by Research Triangle Institute in conjunction with BAE Systems and training developers at Fort Knox's Bradley Training Division. The 1st Battalion, 81st Armor, 1st Armor Training Brigade, is doing a superb job of training students; however, the brigade cannot test or validate all of the training because there is no way to test the soldier's ability to correctly identify malfunctions and make repairs on actual vehicles. Since the fielding of the DT, the students have only been tested on 8 out of 14 critical tasks selected for training. Because of this shortfall in training, the decision was made to go forward with the ET development.

The process of training maintainers requires developing a method of inducing malfunctions in the vehicles so students have something to repair. When you take your car to the dealer and they cannot find anything wrong, it is impossible for them to repair it. It's pretty much the same with a combat vehicle; it must have a malfunction so the student can first learn to verify the malfunction, take necessary steps to isolate the malfunctioning component, replace or repair it, and finally, confirm the system is operating properly.

During training, this method must be the same each time it is performed so the instructor knows the student did it correctly. Without a known outcome, it would be impossible for anyone to know if the process was done correctly and to standard. With the increased complexity and expense of our current high-tech vehicles/systems, inserting malfunctions has become too expensive to simply break a component to create a malfunction. Today's systems have single components that cost thousands of dollars, which makes it very expensive to break these systems for training, creating the need for ET capabilities.

Today's computerized systems are prime opportunities for developers to use advanced technology to simulate malfunctions by simply getting the systems to mimic malfunctions. The students have the experience of actually seeing a malfunctioning system, performing troubleshooting procedures, and bringing the system back to a combat-ready state. For students to become confident in what they have learned, they must see actual results of their training and its effects on the systems.

In the past, we could simply cut wires or put in defective low-cost components. Today's combat vehicle systems are digital and operate by sending signals to digital addresses along data busses that are designed to sustain combat damage. Therefore, the signals can go in any direction. This eliminates the option of simply cutting wires. Advances in computer technology have enabled us to build more reliable vehicles, and that same technology is allowing us to save valuable resources, while training our soldiers to the highest standards.

Today's maintenance training is the best it has ever been, given the high-tech equipment we are putting on the battlefield. This new embedded training capability, believed to be the first for ground combat vehicles, will enable our soldiers to fight America's war on terrorism and keep equipment operating when battle damage or normal wear and tear disables our systems.

Special thanks to Mr. Robert A. Fulkerson for his contributions to this article. Mr. Fulkerson is a Supervisory Training Specialist and Director of the Bradley Training Division, 1st Battalion, 81st Armor Battalion, 1st Armor Training Brigade, Fort Knox. Kentucky. We thank him for his dedication to training and supporting our troops.

From the Boresight Line:
The Master Gunner

by First Sergeant Robert Hay

Some of us know him as the old crusty sergeant in the tower with a cup of coffee in one hand, a cigarette in the other, seemingly able to determine the reason for a target miss simply by the sound of the projectile moving through the air at 1500 meters per second. Others may know him as the cocky, all-too-sure-of-himself NCO who always has an answer to any tank-related problem, saying things like, "The LRF used on the M1A1 tank utilizes a neodymium yttrium aluminum garnet laser transmitter with a range receiver using a silicon avalanche diode detector." To even others, he is the calm, unassuming guy on the tank line quietly, yet assuredly, encouraging others and assisting with armament accuracy checks and boresight or turret problems.

Regardless of who you think he is, one thing is certain — he is an expert. He is an expert in gunnery methodology, turret maintenance, and gunnery training management. He is a noncommissioned officer who has been through a thorough vetting process. He has met stringent prerequisites and an even tougher school graduation requirement to earn the honor of calling himself a "master gunner."

A graduate of the Master Gunner Course has been through a mental meat grinder. He has been required to meet standards in testing he has never before experienced — 100 percent on 11 hands-on tests and 90 percent on 15 written exams. There are no multiple-choice questions; all written tests require short response answers. The course culminates with the final of seven exams where the student is required to plan, develop, and present a gunnery training calendar to three instructors. This requires him to draw on everything he has learned in the past 11 weeks.

The standards are high and the training is tough, as they should be — the master gunner will be required to advise his commander in combat and during training exercises; he will be required to develop and execute a unit gunnery program; and he is the unit's master of gunnery. Anything less, the unit's combat readiness suffers.

A graduate of the Master Gunner Course has demonstrated a mastery of battle-focused training, gunnery training, integration of training devices, unit gunnery assessment, gunnery program development, and gunnery doctrinal and technical procedures. He has the ability to assess crew proficiency, identify crew procedural errors, train crews to operate the tank within its capabilities, and identify and troubleshoot complex fire control, turret electrical, hydraulic, and armament malfunctions.

The master gunner serves as the commander's gunnery advisor and tank commanders' mentor. Based on current changes in the Basic Noncommissioned Officers Course (BNCOC) and tank mechanic one station unit training, the master gunner's role becomes even more important. We no longer teach gunnery-related tasks in BNCOC, and our tank mechanics are now trained as system mechanics instead of specialized hull or turret mechanics. Master gunners can greatly assist the commander's maintenance program, and with a properly developed gunnery training program, can increase a unit's combat readiness and lethality.

Selecting the Right Candidate

As noted above, the Master Gunner Course is a very strenuous and stressful school and not everyone will be successful. The master gunner will often be required to work with little or no supervision, exercise initiative, and make decisions to support the commander's gunnery program. The right candidate should be an intelligent, professional, motivated self-starter. It is a decision that needs to be made deliberately and carefully. I highly recommend using current master gunners to screen potential candidates; they have been through the course and can assist in selecting the best-qualified candidates.

Preparing for the Course

It is very important for a potential candidate to prepare for the Master Gunner Course. Although we teach everything he will need to know to be a successful master gunner, the more familiar he is with the course material prior to attending the course, the greater his chances are of being successful. I recommend the unit implement a pre-course for master gunner candidates. Current master gunners are a great resource not only to screen potential candidates, but to provide guidance and training to those candidates. Candidates can also visit the "Master Gunner Knowledge" center on the AKO website. The website offers Master Gunner Course advance sheets that are available for download, as well as great interactive training materials. Finally, the unit should ensure each candidate meets the prerequisites below.

Master Gunner Course Prerequisites:

- SGT(P)-SFC
- One year experience as tank commander.
- Qualified as tank commander within 12 months/NG within past 24 months (waiver based on deployment).
- Passed TCGST within three months.
- GT 105 and CO 110 (waiver to 105 with TABE test results).
- Secret clearance.
- 10 months remaining in service from graduation date.
- Battalion commander/CSM interview

Finally, I want to continue to encourage units to identify and send eligible NCOs to the Master Gunner Course. I understand that no one wants to lose a good NCO for three months, but the unit will reap great benefits of what a master gunner brings to the table in terms of knowledge, abilities, and expertise. The master gunner has been a major contributor to the Armor force and its successes over the past 30 years in both training and combat. Commanders must continue to support and use everything the master gunner brings to the tank line.

Any questions can be directed to the Master Gunner Operations Sergeant at DSN: 464-8530 or the Master Gunner Branch Chief at DSN: 464-1055 or by email at *robert.hay@knox.army.mil*.

The Armored Reconnaissance Squadron and the Mechanized Cavalry Group

by Captain William S. Nance

Captain Forrest knew he had a problem. His troop of the 1st Squadron, 26th (1-26) Cavalry, the armored reconnaissance squadron (ARS) for 1st Brigade Combat Team (BCT), 23d Armored Division, had been deployed to the mountainous, forested border of Krasnovia in early January to prevent enemy forces from crossing into friendly territory. Severe winter weather was delaying the bulk of the division from arriving, so 1st BCT moved forward to guard the aerial port of debarkation (APOD) and seaport of debarkation (SPOD).

The BCT commander tasked 1-26 Cavalry to block a large mountain valley along the BCT's flank, while the two combined arms battalions (CABs) occupied battle positions to the east, where joint surveillance and target attack radar system (JSTARS) had picked up several large moving target indicators (MTIs). The BCT commander reasoned that the squadron with its sensors and mobility could easily block the valley, and allow him to concentrate his forces on the more likely enemy avenues of approach. Now, with heavy snow falling across the entire front, grounding Army aviation and unmanned aerial vehicles (UAVs), and the mountainous terrain creating huge holes in JSTARS coverage, it was left to CPT Forrest's soldiers in their observation posts (OPs) to detect any enemy forces coming through the Lostham Valley. As he stepped out of his command post (CP), CPT Forrest could feel a growing sense of disquiet, as the weather continued to worsen.

Lieutenant Saunders, the troop XO moved up quietly behind him, "Sir, X-Ray reports that OPs 4 and 5 are 10 minutes late for their radio checks. All attempts to raise them by wire and FM haven't worked." This was indeed bad news, as these two OPs covered the eastern portion of the entrance into the valley from Krasnovia. CPT Forrest stated flatly, "Have White send a mounted patrol up to the OPs to check things out. Better get everyone else to REDCON 1.5 until we know what's going on."

Several minutes passed, and CPT Forrest spent the time by his vehicle's radio trying to drink his now-cold coffee. Suddenly, the radio exploded, "X-Ray, White 1!! Contact!! Multiple armored vehicles moving south toward the troop; cannot get a good count, attempting to move back now…." As suddenly as he came on, White 1's voice broke off the net, replaced with static and X-Ray's increasingly desperate attempts to reach him.

CPT Forrest grabbed his hand mike, "Guidons, this is Aggressor 6; White has reported multiple armored vehicles moving toward our positions. Everyone go to REDCON 1 and prepare to defend." He grabbed the squadron net, "Sabre X-Ray, Aggressor 6, multiple armored vehicles moving south toward my position, request fires on AB 1001 and AB 1002." "Negative Aggressor 6, guns are busy, the entire squadron is under attack. Bandit Troop reported an entire armored regiment attacking in the west before going off the net; Crusader is in trouble as well. Brigade is try-

ing to move us some help from Eagle, but the weather is slowing their move." CPT Forrest dropped his hand mike, then looked at his gunner grimly, "looks like we're doing this the hard way." He knew that his troop of M3 Bradleys and HMMWV-mounted antitank (AT) systems could slow the enemy, but to stop them would cost him the better part of his troop. With this realization behind him, CPT Forrest again picked up his troop net and began to issue the orders that would start a long bloody night.

This narrative is a modernized version of the beginning of the battle at Losheim Gap, during the initial German offensive in the Battle of the Bulge. There, as in this story, a unit built entirely for reconnaissance was placed in a role outside of its capabilities and the result was the near destruction of the 14th Mechanized Cavalry Group, as well as a major German penetration into allied lines. This article demonstrates how units built exclusively for reconnaissance have performed when used both doctrinally and nondoctrinally.

The past year has seen the U.S. Army completely revamp its brigades into brigade combat teams (BCTs), with the heavy BCT consisting of two CABs and an ARS. With the introduction of the ARS, the Army is seeing the rebirth of a pure reconnaissance organization in an echelon higher than a troop (the old brigade reconnaissance troop). The armored cavalry regiments (ACRs) and divisional cavalry squadrons were built more for security operations than purely reconnaissance due to the fact that they were built for high-intensity conflict against the Soviets in Western Europe.

The ACRs and division cavalry squadrons could be used for reconnaissance, but were organized to fight and survive in mechanized sustained direct fire contact, as the Army expected them to fight for information on the German battlefields. Many times, commanders used these organizations as small combined arms battle groups, as seen by the frequent use of the 3d ACR as a mini division in III Corps exercises.[1] The ACRs and divisional cavalry squadrons succeeded in these roles more often than not, due to the fact that they had the firepower and survivability to do so. Although they may have been intended as reconnaissance organizations, these units are more closely akin to heavy cavalry with a combat maneuver mission due to their organization and how they have been used, rather than light cavalry with a purely reconnaissance mission.

This gap is where the ARS neatly fits; it is built around the core missions of zone, route, area reconnaissance, and area se-

curity, and is not intended for prolonged direct fire contact. It is interesting to note that the U.S. Army has been here before. During World War II, the Army reorganized its old cavalry regiments into mechanized cavalry groups, with an organization and doctrine very similar to that which is emerging for the ARS.

The mechanized cavalry groups were established in the late 1930s as part of the cavalry branch's reaction to the increased mechanization of the Army. However, the mechanized cavalry was not given much weight in the branch, due to the fact that it still saw horse cavalry as a significant combat player on the battlefield. Even as late as 1941, U.S. Army Field Manual (FM) 100-5 stated: "Cavalry is capable of offensive combat; exploitation and pursuit; seizing and holding important terrain…; ground reconnaissance; screening; security for the front, flanks, and rear of other forces on the march, at the halt, and in battle; delaying action; covering the retrograde action of other forces; combat liaison between large units; acting as a mobile reserve for other forces; harassing action; and surprise action against designated objectives deep in hostile rear areas."[2] Notice that reconnaissance is mentioned in this task list; however, it is not the dominant mission of the horse cavalry.

In 1942, with the dissolution of the branch chiefs, cavalry become subordinated to Army ground forces, under General Leslie McNair, who believed that the new armor force could perform most, if not all, of the cavalry missions listed above.[3] By 1943, reconnaissance remained the only mission for mechanized cavalry, while horse cavalry had almost completely disappeared. Training Circular 107, published in 1943, specified that mechanized cavalry units "are organized, equipped, and trained to perform reconnaissance missions employing infiltration tactics, fire, and maneuver. They engage in combat only to the extent necessary to accomplish the assigned missions."[4] Moreover, the mechanized cavalry units were trained to "employ infiltration tactics rather than combat to gain information."[5] Training Circular 107 became the primary basis for American mechanized cavalry doctrine for the remainder of the war, with its statements reappearing, almost verbatim in the 1944 edition of FM 100-5.[6]

The mechanized cavalry group belonged to a field army that could then choose to attach it to a specific corps or even a division. A group consisted of no more than two mechanized cavalry reconnaissance squadrons with a headquarters element. This organization basically set up a headquarters that could take care of the administration for the two attached squadrons.[7] Moreover, these squadrons were not organic to the group, allowing for rapid detachment to other units or missions, including independent assignments. Each squadron consisted of three reconnaissance troops, a light tank company, and an assault gun company.

The reconnaissance troops were made up of three platoons of three M8 greyhounds and six quarter-ton jeeps each. Each reconnaissance troop also had 27 riflemen for use as dismounts.[8] The reconnaissance troops were also heavily armed with machine guns and mortars, with each troop possessing nine 60mm mortars and multiple .30-caliber machine guns. In fact, the cavalry squadron possessed more machine guns than a regular American infantry battalion.[9] The light tank company consisted of seventeen M5s equipped with 37mm cannons.[10] The assault gun troop had six 75mm HMC M8 Scott self-propelled guns organized into two platoons. Each squadron consisted of approximately 31 officers, 2 warrant officers, and 721 enlisted men (although the numbers fluctuated constantly due to casualties and the ebb and flow of replacements).[11] It is interesting to note that this organization is proportionately stronger than the newer ARS.

The above organization indicates that the mechanized cavalry groups were not organized for prolonged heavy combat at all. With only 27 dismounts in a reconnaissance troop, as compared to more than 100 in a rifle company, the cavalry was not very suited to dismounted infantry-type combat where numbers are significant. Moreover, with the heaviest vehicles in the squadron being light tanks and the rest of the force equipped with quarter-ton jeeps and M8 armored cars, the cavalry was not suited for armored combat either. These deficiencies were acceptable to the Army ground forces though, as they saw the cavalry as not directly engaging in prolonged direct fire contact, either mounted or dismounted, as per the doctrine discussed earlier in which reconnaissance is defined as "[identifying] hostile units and [determining] their composition, dispositions, and flanks without becoming involved in combat."[12]

The mechanized cavalry groups were most successful when performing doctrinal missions in the European theater of operations. However, it is interesting to note that even when a cavalry group conducted reconnaissance, it often had to engage in some form of combat to achieve its purpose. This was evident by the results of the general board survey at the end of the war, which found that based on the number of days the mechanized cavalry spent in combat, only 3 percent of those days were spent conducting the doctrinal definition of reconnaissance.[13] This is not to say that they were not conducting reconnaissance, but they were fighting in order to complete their missions. In large part due to the inherent weaknesses of the cavalry, the groups were rarely sent on missions without reinforcements, with field artillery, medium tanks, and tank destroyers being the most common attachments.[14]

The first example of cavalry performing a successful doctrinal mission in the European theater of operations occurred on D-Day when 3d Platoon, B Troop, 4th Cavalry Reconnaissance Squadron landed at Utah Beach and was given the mission to move ashore, clear the roads to Saint Mer Eglise, and provide reconnaissance and liaison to the scattered airborne forces engaged in the area. The platoon partially completed its mission, but was kept from reaching the town by heavy German resistance, which included antitank gun and machine gun fire that prohibited them from bypassing the enemy.

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This resistance would have proven formidable for any platoon, but especially the lightly armored (quarter-ton jeeps and armored cars) and numerically inferior cavalrymen. However, the platoon continued to provide route reconnaissance and fire support to the paratroopers in the area, clearing crossroads and scouting suspected enemy positions.[15] This mission was very close to a pure doctrinal mission for the cavalry, as they conducted reconnaissance of enemy positions without becoming decisively engaged, leaving heavier fighting for the airborne and following infantry. Moreover, the squadron gave the infantry they were supporting a needed edge by delivering precise information on the whereabouts of the enemy, as well as which routes were open for use. They did encounter problems in clearing or scouting routes due to their lack of armor protection, which made them vulnerable to small arms fire, thereby prohibiting the cavalry from forcing its way through constricted terrain.[16]

Perhaps the best example of mechanized cavalry groups being used successfully in their doctrinal role is in the allied breakout across Northern France. The cavalry groups conducted zone reconnaissance in front of their respective corps and armies, as well as screening the main body from any German rear-guard actions. The nature of the battlefield allowed the cavalry to effectively use their mobility to find the enemy, then bypass or fix by fires as the situation warranted and as doctrine advised. For example, the 113th Cavalry Reconnaissance Squadron, 113th Mechanized Cavalry Group, conducted a zone reconnaissance in front of XIX Corps, 1st Army, in the attack across Northern France. The squadron discovered several German roadblocks and ambushes, and destroyed them with fires (indirect, direct, and close air support), thereby protecting the main body as it attacked to the east.[17]

A final example of the cavalry performing well in a doctrinal role involved the 6th Mechanized Cavalry Group during the Battle of the Bulge. The group raced north to help defend the southern shoulder of the Bulge. The group arrived in the battle area on 24 December and immediately began conducting reconnaissance patrols to establish the exact line of the German advance. The group remained in position for over a week, giving the Third Army a clear picture of German defenses along the southern edge of the Bulge, thereby setting the conditions for the successful counterattack to Bastogne.[18]

Despite their inherent weaknesses as direct combat organizations, the mechanized cavalry groups did succeed at times in sustained direct fire contact. In Northern France, the 113th Mechanized Cavalry Group became involved in a battle to reach crossing sites across the Seine River. At the end of the fight, the cavalry had not reached the crossing sites, but had captured 44 Germans, at the cost of 14 of their own, as well as three armored cars, one half track, and two quarter-ton jeeps.[19]

In another engagement, the 113th Squadron, reinforced with a platoon of tank destroyers, blocked a German battalion from breaking out of an encirclement. The group killed 50 Germans, captured 80, destroyed one armored car and one 75mm gun at the cost of one dead, ten wounded, two armored cars, two quarter-ton jeeps, and two M10 tank destroyers.[20]

As seen in these two examples, the mechanized cavalry groups could perform well in nondoctrinal roles, but at a much higher risk of losing equipment and personnel, as they had neither the armored protection of heavier units, nor the numbers of dismounts of infantry units. Additionally, both of these examples include an enemy short on heavy weapons and equipment. The cavalry may not have been as successful if the enemy had actually been in better fighting shape.

Some of the most tragic stories in the history of the mechanized cavalry groups come from occasions when commanders used them in roles well outside of their doctrinal boundaries. Perhaps the most notable example of this is the 14th Mechanized Cavalry Group's fight at the Losheim Gap. The group was screening the gap as the boundary between the VIII and V Corps of the American First Army (the group was habitually associated with VIII Corps).[21] The only major problem was that this gap was a natural avenue of attack from the German lines. Additionally, the 106th Infantry Division, which had temporary tactical control of the 14th Group, assigned the group a positional defense of 9,000 yards and the mission of helping to defend the left flank of the division.[22]

When the Battle of the Bulge commenced, the 14th found itself in the way of an entire Panzer army, including the 3d Parachute Division, the 18th Volksgrenadier Division, and the 1st SS Panzer Division.[23] Needless to say, the 14th Group suffered very heavy casualties and was forced to quickly withdraw from the gap. This withdrawal allowed the Germans to surround and capture the American 106th Infantry Division, as well as open up a huge hole in the American lines.[24]

The 14th Group failed in its mission of protecting the 106th Infantry Division's flank, but there was really very little that could have been done. Almost any American unit would have been hard pressed to

"With only 27 dismounts in a reconnaissance troop, as compared to more than 100 in a rifle company, the cavalry was not very suited to dismounted infantry-type combat where numbers are significant. Moreover, with the heaviest vehicles in the squadron being light tanks and the rest of the force equipped with quarter-ton jeeps and M8 armored cars, the cavalry was not suited for armored combat either."

hold the weight of an entire Panzer army attack, much less one that was as poorly outfitted in infantry, armor protection, and effective antitank weapons as the 14th Mechanized Cavalry Group. In fact, when viewed in this light, it is surprising that anything was left of the 14th Group after the initial attack. This battle demonstrates the consequences of using light cavalry incorrectly. In defense of the commander of the 106th Infantry Division, the division did have an extremely long front (18 miles) to cover.[25] Thus, the commander used the light cavalry to make up for his lack of troops as an economy of force measure. However, the question still remains as to why he put his weakest regimental formation along the most likely avenue of approach in his sector, as the rest of his division occupied the Schnee Eifel, a tremendous natural obstacle.[26]

Another example of the light cavalry being used outside of its doctrinal roles and suffering for it can be found in Normandy, where the 38th Cavalry Reconnaissance Squadron participated in a general corps attack in July 1944. The squadron attacked in the center of the corps' sector against dug-in German paratroopers and was defeated with the loss of over 100 casualties and 13 light tanks, virtually the entire tank company of the squadron.[27] While such a failure with casualties of such magnitude was nothing particularly special in the Normandy campaign, this attack demonstrates a spectacular waste of a corps asset.

As noted earlier, the light cavalry was not well suited for a frontal assault, even on a small front. Moreover, these units were the corps' special reconnaissance force. To use up such an important asset in a mere holding attack demonstrates a lack of understanding in how to properly use light cavalry. This situation did not even occur at a desperate time when the corps needed every unit on the line. One of its two divisions (5th Infantry Division) only had one regiment on line, with the others projected to come in as follow-on forces.[28] Thus, V Corps had units available that could have done the job, but instead chose to include the cavalry as part of the attack anyway.

The mechanized cavalry groups performed admirably when commanders assigned them missions for which they had been designed, or at least missions within their capabilities. When used nondoctrinally, and as a regular combat maneuver formation against a prepared enemy, these units suffered greatly and with little appreciable effect on the battle.

More than 60 years after the mechanized cavalry groups helped lead the Army to victory in Europe, we are reaching the same discussion as to the role and size of a reconnaissance force. The mechanized cavalry groups' children are not the ACRs of today, but rather the BRTs of the Army of Excellence and the ARS of today. The BRT is designed to conduct only zone and area reconnaissance in a nonpermissive environment, just like the mechanized cavalry. Field Manual (FM) 3-20.971, *Reconnaissance Troop*, states, "it is not organized for decisive operations, [and] must be heavily augmented with combat units to be successful, if tasked to conduct offensive or defensive operations," again, just like the mechanized cavalry.[29]

This light cavalry has always had a place in our Army as the eyes and ears of our combat formations, though they have never been found in any great numbers. With the introduction of the ARS, the Army has now devoted one-third the maneuver units of every BCT to reconnaissance. As General Patton said, "You can never have too much reconnaissance." We must keep in mind however that the ARS is a light cavalry formation akin to the mechanized cavalry of World War II and the BRT from our very recent past — it is not a heavy cavalry formation like that of the ACRs or even the old divisional cavalry squadrons. Even with the addition of a sensor troop and the incorporation of other sensors, such as JSTARS and River Joint, from across the military, the ARS (light cavalry) does not have the combat power to handle missions once assigned to the divisional cavalry and ACRs (heavy cavalry).

The case studies above speak directly to the importance of understanding the distinction between heavy and light cavalry. When used properly, the light cavalry is an awesome tool and combat multiplier. When tasked beyond their capabilities and role, the results are often tragic. The vignette at the beginning of this article illustrates how an ARS could be used improperly by commanders who do not make the distinction between heavy and light cavalry. Commanders in World War II often had the same failing — we should not let that happen again.

Notes

[1]Conversation with LTC(R) William T. Nance, former Deputy Commander for Operations, 3d Air Support Operations Group, and AF representative to III Corps plans team, 1996-2001 [primary source].

[2]U.S. Army Field Manual (FM) FM 100-5, *Field Service Regulations*, U.S. Government Printing Office (GPO), Washington, DC, 1941, paragraph 38.

[3]Kent Greenfield, Robert Palmer, and Bell Wiley, *United States Army in World War II: The Army Ground Forces: The Organization of Ground Combat Troops*, Historical Division of the Army, Washington DC, 1947, p. 268.

[4]War Department, Training Circular 107, *Employment of Mechanized Cavalry Units*, GPO, Washington, DC, 23 September, 1943, p. 1

[5]Ibid, p. 3.

[6]FM 100-5, *Field Service Regulations: Operations*, GPO, Washington, DC, 1944, paragraph 38.

[7]Robert R. Palmer, Bell I. Wiley, and William R. Keast, *The United States Army in World War II: The Procurement and Training of Ground Combat Troops*, Historical Division of the Army, Washington DC, 1948, p. 522.

[8]U.S. Army, V Corps Operations Memorandum, "Operation of Corps Cavalry on Terrain of Normandy," [primary source] 25 June 1944, p. 1.

[9]U.S. Army General Board, "Mechanized Cavalry Units, United States Forces, European Theater," Study Number 49, 1945, p. 6. (The Armor School Library at Fort Knox has a hard copy of the report used).

[10]V Corps Operations Memorandum, "Operation of Corps Cavalry on Terrain of Normandy," p. 1.

[11]113th Cavalry Reconnaissance Squadron After-Action Review Comments, "History of the 113th Cavalry Reconnaissance Squadron," Reference Group (RG) 407 CAVS-113-.01, National Archives, College Park, MD., 1 January 1944-31 December 1944, p. 1.

[12]War Department, Training Circular 107, p. 1.

[13]The General Board, p. 7.

[14]Ibid., Appendix 3.

[15]Major Robert R. Tincher, "Reconnaissance in Normandy," *The Cavalry Journal*, January-February 1945, p. 17.

[16]Ibid, pp. 12-14.

[17]113th Cavalry Reconnaissance Squadron After-Action Review Comments, p. 12.

[18]CPT Robert Willoughby Williams, "With the Unicorn West of Bastogne," *The Cavalry Journal*, March-April 1945, pp. 7-10.

[19]113th Cavalry Reconnaissance Squadron After-Action Review Comments, p. 11.

[20]Ibid., pp. 14 and 15.

[21]Hugh M. Cole, United States Army in World War II: European Theater of Operations: The Ardennes: Battle of the Bulge, Center of Military History, Washington, DC, 1994, p. 55.

[22]Ibid., pp. 138-139.

[23]Ibid., 81.

[24]Ibid., 151.

[25]Ibid., 137.

[26]Ibid.

[27]U.S. Army, *A Short History of the 38th Cavalry Reconnaissance Squadron*, Prestice, Czechoslovakia, 1945, p. 3.

[28]Martin Blumenson, *The United States Army in World War II: European Theater of Operations: Breakout and Pursuit*, Center of Military History, Washington DC, 1989, p. 284.

[29]FM 3-20.971, *Reconnaissance Troop*, GPO, Washington, DC, December 2002, paragraph 1-37.

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The Cavalry Model in Iraq: Right Time, Right Place

by Lieutenant Colonel Jeffrey Holmes

During the summer of 2004, as part of Operation Iraqi Freedom III, the 278th Armored Cavalry Regiment (ACR), an enhanced brigade of the Tennessee Army National Guard, was reorganized and deployed as a regimental combat team. The regiment served in Iraq during both the January 2005 elections and October 2005 referendum and conducted operations northeast of Baghdad along the Iranian border straddling the green line between the recognized Kurdistan regional government and Iraq's Diyala Province.

An Army in Transition

As we progress further and further from the former Cold War crises and the large armies and doctrine associated with that era, we are forced to adapt a new military structure to deal with present and future threats throughout the world. Change is characteristic of a forward-looking military, and each generation's ability to fight through the urge and comfort of the status quo has been a struggle from the very creation of the First Continental Army. Each major restructure brings with it hindsight in regards to systems and organizations that are swept up in the winds of change, but in reality, should have remained. As a byproduct of a forward-looking military, this is unavoidable. Smart people with the best of intentions strive to make perfect choices, which we all know is impossible for humans. So, in the aftermath of change, comes the realization of these areas where a good idea was followed by bad execution — not in total, but in some of the small, yet significant, pieces that make up the big picture.

Over the course of Operation Iraq Freedom, many units, armor, infantry, and artillery, the cornerstone arms of combat, were obliged to conduct similar missions throughout the theater. Although each one brought expert training in its respective branch, all of them were required to conduct similar combat and noncombat operations in a theater with no rear area and as much mentoring as shooting. The 101st Airborne Division's command sergeant major, after the division returned from its initial deployment, provided a piece of advice: "prepare your men to receive a handshake or a hand grenade, and many times within the same day and hour." This was sound advice as the 278th Regimental Combat Team, a Tennessee National Guard Enhanced Brigade, began its tour just prior to the January 2005 elections.

Reorganization: Does one size really fit all

First assigned to the 1st Infantry Division, then to the 42d Infantry Division, the regiment straddled the time gap between what is considered by some to be the two most important defining moments in the history of Iraq. While the regiment was originally organized as a heavy armored cavalry regiment, it went through a painful reorganization, as did many active and reserve units, prior to deployment. A unit, whose entire organization was tailored to providing information, reconnaissance, and security in close operations, was reorganized to conduct the very tasks it was historically designed to do.

Cavalry, by its organization, is a force capable of conducting a full spectrum of security and reconnaissance operations over very large areas along the front, flanks, and rear of a main body. It has "a lot of teeth and a little tail." Simply meaning, it has the firepower similar to a divi-

sion, packed into a smaller, more mobile force than a conventional armored or mechanized infantry division.

During the Army's hasty attempt to repackage all deploying brigades into a structure better suited to the current mission in Iraq and meet the intent of the brigade combat team (BCT) concept, the cavalry regiment, along with many units in the cavalry community, were swept up in this assembly line of force packaging. Little regard was given to the true understanding of the cavalry role and how well suited it is in its original form to conduct operations in Iraq.

While the reconnaissance, surveillance, and target acquisition (RSTA) squadrons replace the traditional organic cavalry troops in the new force structure, the larger regimental cavalry organizations, particularly the 3d ACR and 278th ACR, appear to be forced into the BCT mold as well in some variation. The logisticians, in their typical struggle with the maneuver side of the house, weighed in heavy with the BCT concept, the need to provide a standard logistics template, and the plug-and-play ability of the brigade-sized unit. However, while reaching in the standard brigade tool box to prepare the next brigade for transition, someone should have realized that a cavalry regiment was already halfway there — particularly when compared to a typical divisional brigade of infantry or armor. What could and should have been a slight modification to an already 90 percent solution, turned into a complete and complex overhaul of a cavalry regiment.

Once the dust had settled and the unit task organized for combat in Iraq, it looked like a hybrid of its original organization; having the capabilities of combined arms within each maneuver squadron, just as before, but this time with the painful attachment and detachment process. Squadron units, having recently given up their own organic Bradley and tank crews and indirect fire elements, now received them back once in theater. Only this time, these soldiers were attached from the newly created artillery battalion, and tank and Bradley companies. The squadron's soldiers, who had been tankers before, now worked beside tanks manned by soldiers from another squadron. They then gave up Bradley crews to other squadrons who had already initially trained Bradley crews prior to the mobilization reorganization. With a realization of the armored cavalry regiment's original organization, the mobilization process could have been less painful and much more efficient with a simple conversion of some of the squadron's tank

crews to infantry to fill the seats of an infantry platoon.

One could make a good case in arguing against restructuring a cavalry regiment at all based on the type of missions being conducted in theater. Again, hindsight is 20/20 and while there should be no attempt to cast blame, there should be an attempt to observe the success of all cavalry units deployed in Iraq and take note of the ability of the cavalry trooper to perform those missions. The fact is many of the missions now being performed in theater are the cavalry's bread-and-butter missions such as gathering intelligence, securing routes, and conducting area, route, and zone reconnaissance. Many at higher headquarters wondered aloud how a cavalry regiment could obtain such a high rate of success in discovering improvised explosive devices (IEDs) before detonation. The answer lies in the basic knowledge of a cavalry scout. Cavalry scouts conducting these missions are trained to be leery of the easy route, the out-of-place rock pile, and the signs of imminent danger.

Tailored Mobilization Training

While no one is naive enough to think a cavalry unit is any different in its need to conduct theater specific training prior to deployment, there are definite abilities that need to be considered to allow valuable pre-deployment time to be used to the fullest. You do not have to teach an old dog new tricks when some of the tricks are already second nature. You do not have to teach him how to smell, just what to smell for. Although using his nose to locate something different, his nose still works the same. While this may seem to be a sarcastic overture of the 278th ACR's mobilization reorganization and

training, the concept should apply to any type unit.

One-size-fits-all training does not take into account the experience and training the unit brings to the table. While resources prevent customized pre-deployment training programs for each unit, a selection of training blocks could be made available that would allow units to devote time to training specific tasks. This should apply not only to cavalry units, but other units as well. While an infantry unit should not spend an enormous amount of time retraining dismounted patrolling and room clearing, a cavalry unit should receive that full block of time. On the other hand, the infantry unit should receive extensive training on route security and reconnaissance, and in the same light, the cavalry unit should conduct only a quick refresher block.

Post Mobilization Training:
A 90-Percent Solution

Mobilization training for the 278th ACR was conducted at Camp Shelby, Mississippi, by 3d Brigade, 87th Division (TS) with elements of the 85th Division. A concept of theater immersion was integrated into the training as described in "Theater Immersion: First Army Post-Mobilization Training," by Lieutenant General Russel Honoré and Colonel Daniel L. Zajac, in the May-June 2005 issue of *ARMOR*. Adding theater immersion to the mobilization training was a success. Even though the 278th ACR was the first brigade-sized unit to mobilize at Camp Shelby and often outran its ever-increasing support structure, its mobilization training was developed under a solid concept. The ability to increase Camp Shelby's capacity, as well as arrange and stand up a new mobilization training program, was

"The area of operation assigned to the 278th Regimental Combat Team was well suited for cavalry operations — it was a diverse section of terrain with mountains along the border and to the north, intersected by rivers, streams, and large flat spaces of desert farther to the south."

"Once the dust had settled and the unit task organized for combat in Iraq, it looked like a hybrid of its original organization; having the capabilities of combined arms within each maneuver squadron, just as before, but this time with the painful attachment and detachment process."

a great success. As with all new ventures, the training will continue to be modified to best emulate the ever-changing Iraqi theater.

The training program did however have one challenge: orchestrating a full load of tasks in a short amount of time. While the time allowed was adequate, wisely selecting from available tasks (those in which the unit lacked experience versus those in which the unit had experience), would have made more time available to address weaker, more unfamiliar tasks that would be required in theater. Whether a training program can be modified to allow this flexibility is an answer that requires some study beyond the scope of this article. To lessen the success of the training would be unjust; however, modifications can and should be implemented to ensure continuous improvement.

Cavalry Country

The area of operation (AO) assigned to the 278th Regimental Combat Team was well suited for cavalry operations — it was a diverse section of terrain with mountains along the border and to the north, intersected by rivers, streams, and large flat spaces of desert farther to the south. Most of the population centers were medium to small in size, and the large geographical area forced the regiment's squadrons to operate with a high degree of independence, falling in line with the typical cavalry role.

While our infantry brothers are experts in urban areas, the missions typical of the 278th's AO allowed the unit to exercise its years of training in cavalry operations. Many of the missions, such as route clear-

ance and security operations, resulted in nearly 60 percent of all IEDs being discovered before detonation. This resulted in the highest discovery percentage in the division — a typical task every cavalryman is trained on before he is allowed to wear the spurs.

The widely dispersed smaller cities and villages forced the regiment to conduct both small-level urban operations, as well as zone and area reconnaissance operations throughout the largely agricultural area, which was intertwined with numerous irrigation canals and fields. Again, this terrain provided areas directly suitable for cavalry operations, operating in small-unit actions and covering large areas to apprehend suspects fleeing the cordons.

The Iranian border represents a largely undefined "line in the sand," separating villages and families with mountains and trails bisecting the area between Iran and Iraq. Along the Iraqi and Iranian border, permanent forts, which were constructed early in the 20th century, are often times located within audible voice range, while other portions of the border remain isolated and most often unobserved. Only by continuous patrols do the Iraqi border guards have any hope of maintaining the sometimes large areas separating the forts. Once again, a suitable mission for a cavalry unit trained to screen infiltration along a flank or in front of a larger unit. The screen mission was not only used along the border, but also throughout the AO as part of outer cordons, which were used to isolate villages or areas to prevent intervention or exit from any element inside or outside the targeted area.

As often debated, one of the most important principles of war is unity of command. While in its border context, unity of command simply means the control of multiple forces in a common mission under a single command. Equally important is the esprit de corps and relationship the multiple units have in working as a team. While this is a lesser discussed variant of the unity of command tenet, it is a vitally important aspect and should not be overlooked as a combat multiplier. While armor or infantry battalions and brigades are organized into task forces and teams during deployment, the cavalry is habitually task organized in its pure organization. This produces well-rounded leaders, knowledgeable and comfortable with various combat arms; but more importantly, it produces soldiers who consider their combat arms brothers an equal and vital part of their organic organization.

The reorganization of the 278th ACR, while a good idea in some respects, failed to recognize the strengths of the cavalry organization. Partly to blame is the cavalry community's small voice and the often unrecognized aspects of what a cavalry unit brings to the fight. The BCT concept is missing a well-balanced unit in the combined arms role, specifically trained to conduct traditional cavalry missions, and versatile enough to conduct a full spectrum of combat operations. To provide the corps commander a unit that is flexible and sizable enough to conduct large-scale urban, security, and reconnaissance missions during economy-of-force operations, the cavalry regiments should remain part of the force structure. Although modifications to the organization may apply, the traditional strengths of the cavalry should not be ignored or discarded.

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Securing the Combat Service Support Battalion

by Major Tim Kreuttner

The heavy division combat service support (CSS) battalions do not possess adequate security assets to protect themselves in the contemporary operational environment (COE). Defending the brigade support area (BSA) and securing logistics convoys both require force protection resources the forward support battalion (FSB), main support battalion (MSB), and brigade support battalion (BSB) do not have internally. Brigade staff planners must balance combat power in the decisive fight with logistics security, and the CSS battalion often suffers when such resources are scarce. The support battalion needs a change to the modified table of organization and equipment (MTOE) and a renewed emphasis by planners to provide necessary resources for force protection and security. This is relevant to maneuver leaders because we plan the operations our soldiers, both "killers" and "supporters," put their lives on the line to execute. We must allocate our resources wisely to accomplish the mission and bring them home.

The threat currently facing logistics trains is primarily asymmetric. Insurgents in Iraq and Afghanistan employ ambush techniques using improvised explosive devices (IED), vehicle-borne improvised explosive devices (VBIED), rocket-propelled grenades (RPG), small arms fire, and snipers. Insurgents employ indirect fire and surveillance against static logistics nodes or forward operating bases. In future conflicts, this type of threat is likely to continue. When fighting a conventional adversary, any potential enemy will attempt to attack our rear area using asymmetric techniques to disrupt, limit, and ultimately destroy lines of communication. If we fight another high-tempo maneuver campaign, similar to the March 2003 invasion of Iraq, lines of communication will be stretched and vulnerable. The logistics trains are vulnerable in any type of campaign and the time is long overdue to substantively address this vulnerability.

In 2003, U.S. forces rapidly advancing in Iraq, encountered significant rear area activity, most notoriously, the ambush and capture of soldiers from the 507th Maintenance Company.[1] This is an obvious example of the danger of accepting risk with the security of logistics elements. While there were certainly other factors involved in that one incident, such as navigational errors, broken communications, and fatigue, it is a reminder that we must carefully weigh the tactical risks that combat support (CS) and CSS units face. We have a duty to send every soldier into the fight as well prepared as possible. We do this both in our tactical planning and in how we equip and train soldiers.

From August 2004 until March 2005, I had the unique opportunity as an armor officer to be the S2/3 of 215th FSB, 3d Brigade, 1st Cavalry Division, while serving in Baghdad, Iraq, as part of Operation Iraqi Freedom (OIF) II. As the S2/3, I spent the majority of my time and energy coordinating convoy security and force protection. I quickly realized that the FSB lacked adequate security resources and most of its soldiers were not well-trained in required force protection and combat skills.

The 215th FSB and several other support battalions in the division solved this problem by building gun crews, gun trucks, and standard operating procedures (SOP) to provide their own security forces. They also constructed training programs to develop individual and crew combat skills. For example, 215th FSB created a gun crew skills training course modeled after the Tank and Bradley Crew Gunnery Skills Test. Fortunately, 215th FSB was able to acquire the material resources and spare the manpower to make their security plan work. Not all units had this luxury, and as a result, CSS in some areas suffered (1st Cavalry Division did allocate the 27th MSB an Avenger air defense unit in a ground convoy security role). When the 703d BSB, 3d Infantry Division, relieved 215th FSB in place during the spring of 2005, they deployed with a predesignated and trained convoy security platoon in anticipation that they, too, would self-secure.[2]

The need for the CSS battalions to create their own security elements from logistics manpower and borrowed resources, points

to a problem in organization that transcends the current operating environment. This security dilemma has existed for a long time and has yet to be properly addressed. Some of the reasons for the security shortfall in logistics units include an incomplete MTOE, gaps in doctrine, troop-to-task management challenges, and economic challenges.

MTOE

Army of Excellence, Force XXI, and the current BCT MTOEs do not provide significant security assets to support battalions. No dedicated security elements exist for CSS units. The MTOE allows only a small amount of organic personal and crew-served weapons manned by logistics soldiers. Even the newest MTOE, with respect to CSS security, reflects an organization designed to fight on a linear battlefield where the rear area is less at risk than the front lines. But even in a linear fight, the FSB or BSB does not have sufficient organic combat power to secure itself for a sustained period of time in a conventional BSA. U.S. Army Field Manual (FM) 4-93.50, *Tactics, Techniques, and Procedures for the Forward Support Battalion (Digitized)*, articulates the lack of adequate security: "Combat service support organizations are normally the units least capable of self-defense against a combat force. They are also often the targets of enemy action. Time and effort used to defend themselves degrade their ability to perform their primary support mission. …Assistance may come from an MP unit as a response force or a tactical combat force (TCF) located in the rear. No CSS unit can sustain a defense against a determined level II or III attack, but it should plan and train to protect itself until a TCF arrives to repel the enemy attack. The FSB must be able to synchronize self-defense with BSA assets, MPs, and the TCF when it arrives."[3]

This acknowledges that the BSA and combat trains do not have enough organic defensive resources. Army doctrine attempts to provide a solution by designating other assets, which may or may not be available to the brigade, to secure logistics nodes and convoys.

Doctrine

The doctrinal solution for CSS security is not practical or reliable. Doctrine attempts to solve the shortfall in CSS security by designating non-organic elements to secure the support battalion when needed. Assets range from maneuver units within the brigade, to the military police (MP) platoon that would normally be in general support (GS) of the maneuver brigade. In practice, these assets are rarely available to the logistics units because of troop-to-task and combat power requirements in the "close" or decisive fight.

Convoy security is a daily mission-essential task in Iraq and Afghanistan. Like any other combat mission, ideally, no logistics convoy leaves without an appropriate number of crew-served weapons, thorough pre-combat checks and inspections (PCC/PCIs), briefings, and various pieces of critical equipment. FM 4-93.50 recognizes the importance of convoy security but lacks a feasible answer: "Logistics release point security and C2 are critical. Routes into and out of each LRP must be secure. Security arrangements must be preplanned, synchronized, and executed. Convoys must include self-protection measures, such as a combination of gun trucks, military police escort vehicles, armed helicopters, and combat vehicle escorts. Field artillery, engineer, and air defense unit support may also be required."[4]

Since the MTOE for the FSB does not equip such units with either security vehicles or soldiers to properly secure convoys without outside support, the MP platoon and the tactical combat force (TCF) are the two elements identified to fill this gap: "The only specific asset the FSB commander may have that is trained for and has the primary mission of rear area operations is the military police platoon. …With their ability to shoot, move, and communicate, MPs on the battlefield provide the commander both technical and tactical advantages. Commanders can rely on MPs to help keep enemy activities in the rear area from delaying his reinforcing units and disrupting C2."[5] FM 4-93.50 further explains that, "The area security mission of the MPs is vital to rear operations. …The MPs may also be used for convoy security and to protect static positions as required. However, when used in this manner, missions, which capitalize on MP mobility, are degraded."[6]

While this reads well in doctrine, battlefield reality presents a tougher challenge. The planning assumption for the FSB is that the brigade's MP platoon will be available and that the brigade commander will constitute a TCF or at least a quick reaction force (QRF). The MP and maneuver elements, however, are overtasked. The brigade has competing priorities, which require the services of both the MP platoon and other combat forces.

Troop to Task

During the Armor Captains Career Course, our small groups learned to build

"In 2003, U.S. forces rapidly advancing in Iraq, encountered significant rear area activity, most notoriously, the ambush and capture of soldiers from the 507th Maintenance Company. This is an obvious example of the danger of accepting risk with the security of logistics elements. While there were certainly other factors involved in that one incident, such as navigational errors, broken communications, and fatigue, it is a reminder that we must carefully weigh the tactical risks that combat support (CS) and CSS units face."

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brigade and battalion tactical plans. In course of action (COA) development and analysis, we constantly stumbled on the same dilemma: troop-to-task and combat-power ratios in the decisive fight conflicted with the ability to provide security in the rear. An acceptable solution, commonly used was to "accept risk" in the rear area. Perhaps this was the easiest, or even best, solution to ensure sufficient combat power in the close fight. But this reflected a loose concern for securing the logistics "tail." After all, the important fight was up front, where the tanks and infantrymen were. And perhaps accepting risk, or assigning a small QRF or TCF for the rear area was indeed sufficient for a linear high-intensity conflict scenario against a conventional force with limited, irregular, or special operations capability.

Maneuver planners have to balance multiple competing demands on combat power. Our tendency when planning a linear fight is to "accept risk" in the rear or sustaining area to ensure we meet the required combat power ratios forward. Unfortunately, this tendency persists to varying degrees on today's non-linear battlefield. We need every available combat and combat support element to accomplish the primary mission. Maneuver platoons are conducting reconnaissance patrols, raids, and checkpoint operations. MP platoons are engaged heavily in training the indigenous police, escorting dignitaries, guarding prisoners of war, and securing high-value assets. Everyone recognizes that convoy escort is critical to the mission, but there still seems to be a struggle to make ends meet when it comes to providing appropriate resources where needed.

During Operation Iraqi Freedom II, there were abundant military police units and other security-oriented units in 3d Brigade, 1st Cavalry Division's battlespace, but they were needed to train Iraqi police, secure high-value assets, or dignitaries. The next

logical force available to secure convoys was the brigade reconnaissance troop (BRT), which also served in many other roles. Every combat element was committed to patrols, checkpoints, and other combat missions. So the FSB was left with two choices: either reduce the flow of supplies to fit the reduced availability of escorts or produce an organic capability.

Prior to my arrival in 215th FSB, the battalion leadership made the decision to equip and train an organic security element whose exclusive mission would be convoy security. Initially, the organic crews were only intended to augment security assets from the BRT and other escort elements, but as those units were committed elsewhere and the FSB soldiers became more proficient, they began to self-support exclusively. Several other FSBs in the division, faced with the same dilemma, did similar things to varying degrees. While 215th FSB gained the ability to fully self-secure, the other FSBs were unable to provide a full measure of self-generated security and simply limited the volume of what they could push, placing the burden on supported units to pull what they needed.

While the arrangement of CSS units self-securing worked during OIF II, the FSB sacrifices capability to self-secure — drivers, gunners, and commanders of security vehicles were mechanics, cooks, and clerks. Although the supporters excelled once properly trained, these soldiers were removed from vital duties of turning wrenches and processing supplies. In the long term, the trend of allocating logistics manpower to perform security tasks degrades overall CSS efficiency.

Economics and Resources

Providing additional resources, such as the necessary weapons, armor, combat vehicles, personnel, and additional training,

"We should allocate training time and combat arms subject-matter experts to help train logistics soldiers to standard; some units have already accomplished this during predeployment training. The quartermaster, transportation, and ordnance schools have implemented warrior tasks, COE, and discussion of current operations into their curriculums. Quartermaster students conduct capstone field exercises that integrate warrior skills and convoy live fire into their training."

is expensive. The U.S. Government, the U.S. Army, and major commands make tough budgeting choices — we balance dollar values against capabilities, and consequently, the lives of soldiers. To date, support battalion security has not been a high enough priority to garner the needed share of these scarce resources.

Improvised explosive devices, small arms fire, rocket propelled grenades, car bombs, and indirect fire, have compelled us to put armor and crew-served weapons on everything. No soldier deploys into Iraq without body armor and no HMMWV departs a forward operating base or camp without an appropriate level of armor and armament. This makes sense, but why has there been so much controversy about a shortage of armor? For years, we assessed that noncombat vehicles in rear areas did not require armor — and to outfit every vehicle with armor and crew-served weapons was undoubtedly not economically feasible. Thus, shortcomings in equipment and manpower are at least in part attributable to economic choices. And although MTOE should be driven by doctrine, doctrine has had to accommodate a budget-constrained organization. Budget remains the primary obstacle to obtaining the desired resources to properly man, equip, and train dedicated security elements for CSS units.

Proposed Solutions

The two solutions to the support battalion's security shortfall include a change to organization and an emphasis by maneuver planners, particularly at the brigade level, to provide necessary resources for logistics units to accomplish their mission in the COE. The former is a Department of the Defense (DOD), Department of the Army (DA), and higher command issue that needs attention from leaders at the highest levels. The latter is a readily achievable planning issue that every maneuver and CSS planner can help solve.

Organization and Equipment

Captain Christopher L'Heureux, "Tactical Logistics: Adapting for the Future," *ARMOR*, January-February 2005, asserts that CSS units, the battalion support platoon in particular, need some basic equipment to operate in a combat zone: "To survive in the COE, CSS elements must be properly armed. All CSS leader vehicles should be equipped with crew-served weapons on ring mounts. …Supply trucks, maintenance vehicles, and at least one-half of the support platoon's HEMTT's should have ring mounts and crew-served weapons."[7]

I agree with Captain L'Heureux, but I think he stops short of the real need — *every* vehicle in the support platoon needs a ring mount and a crew-served weapon. Not only in the FSB, but in every deployable Army unit, all vehicles, with the exception of combat ambulances, need ring mounts and crew-served weapons. All vehicles in deployable units need some degree of ballistic armor protection as well. I can think of no contingency, past, present, or future, where units would not have this need. Likewise, CSS battalions need an assigned and dedicated security element.

We should modify the FSB, BSB, and MSB MTOE to include a security platoon. The security platoon should have the capability to defend a BSA, contribute to life support area force protection, and secure two convoys simultaneously. If money and manpower were not obstacles, the platoon would consist of two M2 infantry fighting vehicles, one infantry squad, and eight M1114 armored HMMWVs (a four-truck section can secure up to a 12-vehicle convoy), each with truck commander, driver, and gunner, as shown in Figure 1. Each M1114 would also be equipped with a gun-shield, one M249 squad automatic weapon (SAW), one M500 shotgun, electronic countermeasure devices, a mix of

M2HB machine guns, M240B machine guns, and Mk19 automatic grenade launchers.

Given that money and manpower are obstacles, M113 armored personnel carriers or Strykers could replace the M2 Bradleys, or the platoon could be all HMMWV-based. With the exception of the M2 Bradley fighting vehicle or Stryker crews, military occupational specialties are immaterial as long as we develop an appropriate training plan. The platoon would be capable of conducting convoy escort, BSA security, and personal security detachment operations. A mix of a mechanized section with a motorized section gives flexibility and firepower to the FSB for security in various environments and conditions.

The Department of Defense, Department of the Army, major unit commanders, and logisticians at every echelon should ensure that logistics units are appropriately equipped to protect themselves, not once they arrive in theater, but prior to training for future deployments, and ideally, permanently. Our Army must be willing to pay the economic price to equip and man our units for success. The short-term economic cost of the right equipment will deliver a long-term dividend in more combat ready units and provide soldiers the ability to survive first contact and prevail in battle under any conditions.

Planners' Emphasis

Given that we do not currently, and may never, have a security platoon in support battalions, maneuver planners must dedicate appropriate combat power to logistics security, whether in a supposedly linear fight or in a COE scenario. Trainers should ensure we appropriately train logistics soldiers to defend themselves.

We should allocate training time and combat arms subject-matter experts to help train logistics soldiers to standard; some units have already accomplished this during predeployment training. The quartermaster, transportation, and ordnance schools have implemented warrior tasks, COE, and discussion of current operations into their curriculums. Quartermaster students conduct capstone field exercises that integrate warrior skills and convoy live fire into their training. CSS soldiers are trying to do their part to meet the very real challenges of the COE. We maneuver planners need to support those who support us by more carefully weighing the risks that we once so readily accepted based on an erroneous assumption that the logistics soldier faced a lesser threat.

Notes

[1]The 507th Maintenance Company gained national attention when, on 23 March 2003, a convoy that strayed off course was ambushed by Iraqi irregular forces in the city of An Nasiriyah. Eleven of 33 soldiers in the 18-vehicle march unit were killed and seven captured. The march unit had only one crew-served weapon and no armored vehicles. A detailed report on the action, "Attack on the 507th Maintenance Company, 23 March 2003, An Nasiriyah, Iraq, Executive Summary," can be found at the following website: *http://www.army.mil/features/507thMaintCmpy*.

[2]The 703d BSB was formerly 703d MSB. The 3d Infantry Division deployed to OIF III under unit of action organization; the 1st Cavalry Division was organized under Force XXI during OIF II.

[3]The U.S. Army Field Manual (FM) 4-93.50, *Tactics, Techniques, and Procedures for the Forward Support Battalion (Digitized)*, U.S. Government Printing Office, Washington, D.C., May 2002, p. 9-1, section 9-1.
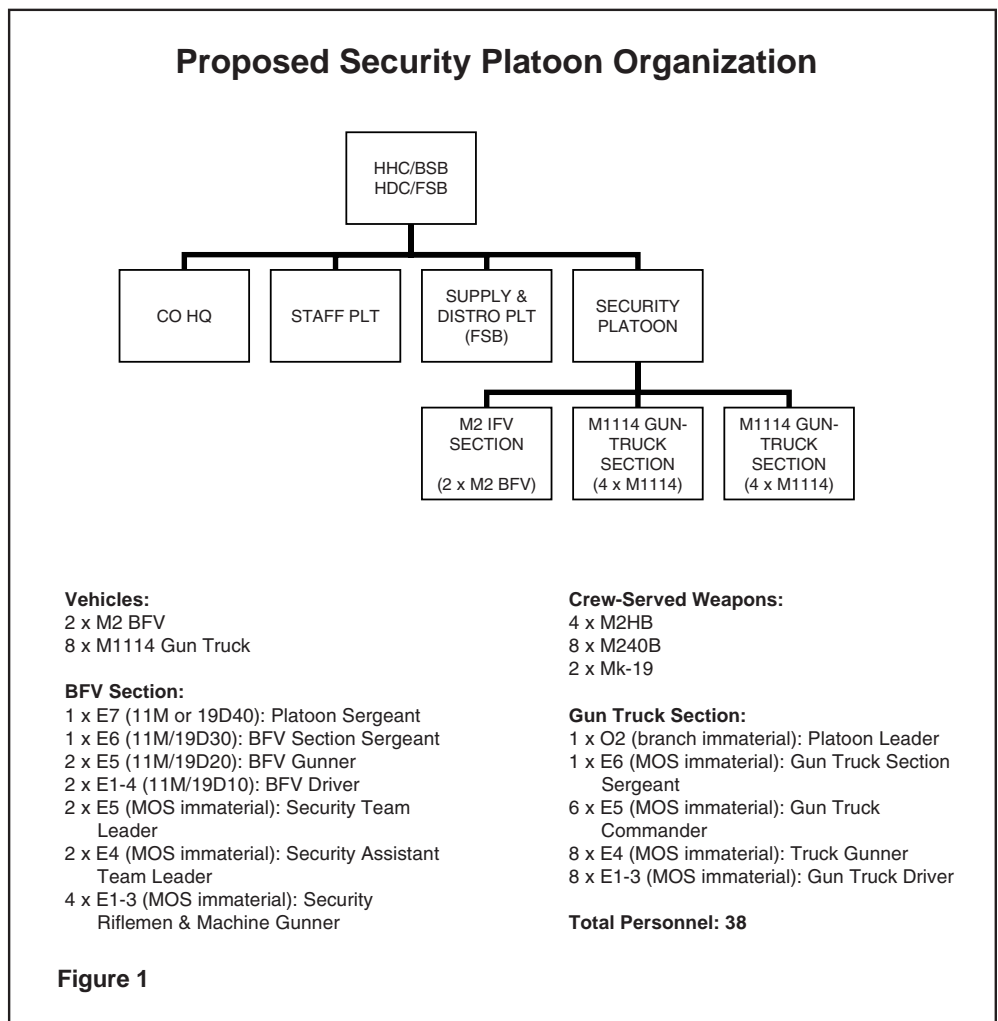
[4]Ibid, p. 7-13, section 7-45.

[5]Ibid, p. 9-7, section 9-26.

[6]Ibid, p. 9-45, section 9-138.

[7]Captain Christopher D. L'Heureux, "Tactical Logistics: Adapting for the Future," *ARMOR*, January–February 2005, p. 43.

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Proposed Security Platoon Organization

HHC/BSB
HDC/FSB

CO HQ | STAFF PLT | SUPPLY & DISTRO PLT (FSB) | SECURITY PLATOON

M2 IFV SECTION (2 x M2 BFV) | M1114 GUN-TRUCK SECTION (4 x M1114) | M1114 GUN-TRUCK SECTION (4 x M1114)

Vehicles:
2 x M2 BFV
8 x M1114 Gun Truck

BFV Section:
1 x E7 (11M or 19D40): Platoon Sergeant
1 x E6 (11M/19D30): BFV Section Sergeant
2 x E5 (11M/19D20): BFV Gunner
2 x E1-4 (11M/19D10): BFV Driver
2 x E5 (MOS immaterial): Security Team Leader
2 x E4 (MOS immaterial): Security Assistant Team Leader
4 x E1-3 (MOS immaterial): Security Riflemen & Machine Gunner

Crew-Served Weapons:
4 x M2HB
8 x M240B
2 x Mk-19

Gun Truck Section:
1 x O2 (branch immaterial): Platoon Leader
1 x E6 (MOS immaterial): Gun Truck Section Sergeant
6 x E5 (MOS immaterial): Gun Truck Commander
8 x E4 (MOS immaterial): Truck Gunner
8 x E1-3 (MOS immaterial): Gun Truck Driver

Total Personnel: 38

Figure 1

A Light Infantry Officer Training at the Home of Mounted Warfare

by Captain Ed Kennedy

Fort Knox, Kentucky, the "Home of Mounted Warfare," which has been home to the Armor Center since 1940, is in jeopardy of leaving the Bluegrass state. The May 2005 Base Realignment and Closure (BRAC) Report recommends relocating the Armor Center to Fort Benning, Georgia, "Home of the Infantry."[1] It is conceivable that this base switch is not merely a consolidation of resources, but rather part of a larger conceptual transition to a new maneuver branch that attempts to keep pace with Army Transformation. While the Army has been making continual improvements to the vehicle platforms and unit compositions within the armor and mechanized infantry communities, my career has been focused solely on light infantry units and tactics.

The BRAC recommendation suggests that educating armor soldiers at Fort Benning in conjunction with the infantry schoolhouse would be a better utilization of training resources and proposes significant cost savings.[2] However, this change could also serve as a catalyst for the concept of merging the infantry and armor communities into a maneuver force. Amidst the relocation of the Armor Center, officers such as Colonel Robert Valdivia, Director of the Armor School, examined a transition from separate mechanized infantry and armor branches into a single maneuver branch.[3] This idea may stem from the continuously transforming operational environment that finds armor and infantry officers in similar roles. In current operational theaters, you will likely find an armor platoon leader maneuvering his light-skinned high-mobility multipurpose wheeled vehicle (HMMWV) platoon to raid a compound, or an infantry platoon leader maneuvering his armored Bradley platoon to establish an attack-by-fire position. With overlapping roles, it can be difficult to decipher the differences in their professional educa-

tions at both the basic and career levels. It is possible that the collocation of the Armor Center and the Infantry Center to Fort Benning is the first step to unite the branch that controls the soldiers maneuvering in HMMWVs, Bradley fighting vehicles, and Abrams tanks.

My assignments so far have been light infantry. The Infantry Officer Basic Course (IOBC) has a strong focus on light infantry tactics and a solid preparation for Ranger School-style patrolling. Ranger School provides valuable leadership and tactical skills applicable to light, mechanized, combat arms, or combat service support units. However, the application of these lessons and tactics are focused mainly on light infantry units.

On my arrival at the 25th Infantry Division, I trained for traditional light infantry tasks — from clearing a trench to platoon attack. Aside from the rare light medium tactical vehicle (LMTV) ride to

the range or random interactions with the battalion's antitank section or the support platoon's light-skinned M998 HMMWVs, I had no experience with mounted warfare. It was not until a rotation to the Joint Readiness Training Center (JRTC) in 2003 that I first worked with a mounted maneuver force.

As the Headquarters and Headquarters Company executive officer during our JRTC rotation, I was overwhelmed when we had a tank company attached to the task force. As a logistics planner in the field trains, I was quickly challenged as to how to support this new attachment — I had no idea just how much class III (bulk and packaged) each tank would require or what type of class IX was needed to be prepared to push forward. Without the tremendous assistance of the tank company commander, I would have failed to adequately supply the attachment. From a tactical perspective, the infantry lieutenants were also relatively untrained on how to operate with a tank section. Suddenly, I was keenly aware of how little I knew about the combined arms fight. Seeing how successful the task force had trained with the combination of infantry and armor units, sealed the importance of understanding how to effectively employ the pair. Following JRTC, my duty assignments included two other major deployments, but provided only a little more insight into mounted maneuver warfare.

During Operation Enduring Freedom (OEF), patrols were conducted either on foot, by air assault, or mounted on HMMWVs. The types of operations conducted on HMMWVs were different from those of my platoon leader days. While the general concepts taught during IOBC and Ranger School could be applied, I did not have any experiences on which to base my actions. As an aerial reaction force team leader, I participated in a different type of mounted maneuver warfare. During such operations, I flew in UH-60s and inserted with a quick reaction force in response to enemy contact, or to action on signal intelligence or human intelligence. The decisionmaking cycle for such missions had to be extremely rapid to be effective. Any delay in the time it took to process reports and make a decision to insert could result in a missed opportunity. While these operations gave me some understanding of managing several radio nets with one set of headphones, processing information, and making rapid decisions, they did not

"During the execution of the mission, I was challenged with maneuvering Abrams tank platoons from my Bradley fighting vehicle, while analyzing and adjusting to the intelligence reports from my HMMWV-mounted scout platoon. This exercise combined classroom conferences with very realistic hands-on training, which far exceeded my expectations of AC3."

test my ability to maneuver other mounted forces. After four years in the infantry, I had a solid understanding of light infantry tactics, but very little experience with mounted maneuver.

Following my first duty assignment, I decided it would be best for me to broaden my breadth of knowledge and transition to a mechanized infantry or a Stryker unit. Understanding that my future would be mounted, I knew that I needed a far better understanding of operating with vehicles, their limitations and capabilities, and how best to employ them. The transition to mounted warfare would not be easy, and it was not long before I decided that the Armor Captains Career Course (AC3) would provide a better understanding of not only tank companies, but also increase my overall understanding of mounted warfare.

I expected to graduate AC3 with a basic understanding of my doctrinal role as a battalion staff officer and company commander with a variety of different tactics, techniques, and procedures (TTP); the knowledge to maneuver tank platoons instead of squads of infantrymen; and the opportunity to reset my family after a relatively high optempo first duty station.

AC3 presents students with the opportunity to develop operations orders at all levels, from company to brigade, with a strong emphasis placed on the delivery of the order. The instructors put a significant emphasis on being able to deliver an

order in such a manner that platoon leaders will understand and execute the commander's intent.

AC3 met my expectations to maneuver tanks instead of infantrymen during tactical scenarios and the orders process, but not exclusively. While simulation network (SIMNET) training focuses solely on maneuvering tanks, it is one of the few situations where students are only responsible for a company of tanks. During the orders processes, and routinely during tactical scenarios in the classroom, students are required to plan for maneuvering not only tank platoons, but also mechanized and light infantry platoons.

During the "Gauntlet," the tactical training event with the Armor Officer Basic (AOB) Course lieutenants, AC3 captains operate as company commanders, executive officers, and observers/controllers from HMMWVs, Bradleys, and M113s. During this capstone training event, I conducted troop leading procedures as a company commander, from start to finish, in a field environment. This was a great chance to test my ability to deliver an order to lieutenants using the mapboard format and apply doctrinal and tactical knowledge learned during AC3. During the execution of the mission, I was challenged with maneuvering Abrams tank platoons from my Bradley fighting vehicle, while analyzing and adjusting to intelligence reports from my HMMWV-mounted scout platoon. This exercise com-

bined classroom conferences with very realistic hands-on training, which far exceeded my expectations of AC3.

AC3 packs a remarkable amount of information into a short 100 days of class. They should not cut any topics from the course, but it would be in the best interest of the students, as well as the Army, to lengthen the course. The course has only enough time to scratch the surface when discussing effects based operations (EBO) and urban operations (UO). While most of the class has some operational experience with both EBO and UO, very few in the class have a solid base of doctrinal knowledge. In light of recent operations in both Afghanistan and Iraq, both of these topics deserve more attention in the classroom and training environment. A longer course would provide a more thorough understanding of the material without sacrificing personal time.

Two blocks of instruction that I did not expect to receive during AC3 were the lieutenant mentorship program and Ranger School preparations. The Armor Officer Basic (AOB) course mentorship program is an opportunity to challenge individuals outside of the classroom blocks of instruction. During IOBC, a branch-qualified captain was in charge of my student platoon, which is vastly different than the current noncommissioned (NCO)-led AOB classes.

While an NCO is capable of teaching the subject material, and in many cases more knowledgeable, it is important that lieutenants start to formulate relationships with captains. It is also important that lieutenants not minimize the officer's role in training and not associate training as an NCO-only responsibility. The AOB mentorship program is an excellent chance to make up for what some AOB students are missing, and for captains to start cementing their captain-to-lieutenant mentoring role.

The mentorship program is an excellent opportunity for professional interaction outside of the classroom. In an attempt to expand this interaction, it would be beneficial for captains, instead of just classmates, to brief lieutenants on operations orders. This idea would be the classroom version of the AOB "Gauntlet," and similar to task force operations where one small group of AC3, acting as the task force staff, briefs another small group of

"It is also important that lieutenants not minimize the officer's role in training and not associate training as an NCO-only responsibility. The AOB mentorship program is an excellent chance to make up for what some AOB students are missing, and for captains to start cementing their captain-to-lieutenant mentoring role."

captains acting as company commanders. This would create a more realistic scenario, provide feedback, and serve as an indicator of the student's ability to deliver an order.

With the transition to units of action, where armor officers will fill infantry-related roles, there is an added incentive to push armor officers to attend and graduate Ranger School. There is a renewed focus in the areas of physical fitness and small unit tactics in an effort to prepare students, physically and mentally, to attend Ranger School. Officers, who already have their tabs, should help prepare classmates to attend and graduate their follow-on courses.

While I could have taken the typical path of attending the Infantry Captains Career Course (ICCC), graduating and successfully commanding some day, I would not have had the same experiences as I did by attending AC3. ICCC is an outstanding course for preparing captains for command and staff and I would have benefited from attending the course. However, the AC3 curriculum does not focus solely on tank platoons or companies; therefore, it provided me a great balance in my quest to understand the employment of all maneuver forces, not just mechanized infantry. As long as the armor and infantry communities remain as separate branches, my recommendation to other combat arms captains is to consider cross training at these different career courses. Based on my experiences and from talking with other officers, the basic career course classroom instructions are comparable; however, the lessons that can be gained from a different perspective outside of the set curriculum are immeasurable.

As I complete AC3, there are a few lessons I will take with me as I prepare for

a future in mounted warfare. These lessons have increased significance, as my follow-on assignment is to 4th Infantry Division where I will be a staff officer and company commander in the mechanized infantry. It is here that I will test my ability to provide the purpose and direction to accomplish any mission, facilitated through my delivery of company-level operations orders; test my understanding of mounted warfare, to include the capabilities and limitations of a tank company; and prove my ability to perform as any member of a staff during the military decisionmaking process. Although not as exciting as being a company commander, and not as fun as planning your company's mission in a movement to contact in an urban environment, staff time is inevitable and you must be prepared to excel in that role as well.

As I move back into the transforming Army, amidst an ever-changing operational environment, understanding these three topics will greatly impact my ability to contribute to my next unit. I am eager to link up with my infantry brethren; however, I feel very fortunate to have had the opportunity to attend one of the last armor classes held at the birthplace and current home of mounted warfare, Fort Knox, Kentucky.

Notes

[1]Base Realignment and Closure Report Committee, Department of Defense Base Closure and Realignment Report, Volume I, Part 2 of 2: Detailed Recommendations, May 2005, available online at *http://www.defenselink.mil/brac/*.

[2]Ibid.

[3]Colonel Robert Valdivia, "Maneuver Branch: A Vision for the Future," Stormingmedia.us, 2005, available online at *http://www.stormingmedia.us/44/4422/A442234.html*.

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21st-Century Rules of Engagement

by Captain Louis V. Netherland

At a dusty checkpoint on a February afternoon, a squad of young cavalry scouts was in a challenging situation. As an unidentified civilian male approached their checkpoint on foot, the squad leader gave the order to halt when the man closed to within 100 meters of the barrier. The man, who shifted his hands to his front jacket pockets, continued to walk for approximately 15 meters, where he stopped in the middle of the road, glancing nervously from side to side. The squad leader called for the man to remove his hands from his pockets — there was a noticeable bulge beneath his jacket at chest level. The man kept his hands concealed, now shifting forward and backward a few steps and mumbling under his breath. From covered positions, the scouts trained their weapons on the man as the squad leader called back to the tactical operations center (TOC) with the report. For the next 10 minutes, a standoff ensued — the scouts assumed the man was a suicide bomber who had intended to get closer to the checkpoint before detonating, only to now find himself unable to go any farther, forward or backward, with-

out being shot. Maybe he had lost his nerve; maybe the device had malfunctioned; maybe he wasn't a threat at all. The man began to call out loudly, falling to his knees and then rising again in a quick walk toward the checkpoint. The scouts called again and again for him to halt. The squad leader froze in a moment of uncertainty. When the man closed to within 20 meters of the barrier, a young private squeezed off three rounds at center mass. The shots seemed to jar loose the air of gridlock, and another two privates first class engaged their M16s as well. The unidentified man fell dead — 15 meters short of the checkpoint.

That's when end of exercise (ENDEX) was called.

The checkpoint had not been on the outskirts of the green zone or the mountain passes of eastern Afghanistan, but was instead located in Training Area 3, Fort Knox, Kentucky. The scouts were not from the 2d Armored Cavalry Regiment, 1st Cavalry Division, or 3d Infantry Division, but were 19D10 one-station unit training (OSUT) soldiers from the 5th

Squadron, 15th U.S. Cavalry, most with less than 120 days in the Army. In the after-action review (AAR) that followed the incident, the scouts-to-be were concerned: "Was it OK that we shot him?" "I thought I saw something under his jacket, but I can't be sure." "Did we let him get too close to us?" "Should we have shot him if he turned to run away?" And the question on every mind: "Would we get in trouble if this had been real?"

In light of these questions, one can't help but see both the good news and bad news of the situation. The good news is the privates genuinely cared about doing the right thing, and demonstrated that they are smart, motivated, responsible young men. The bad news is they were concerned with "getting in trouble," which caused hesitancy; that hesitancy would have likely gotten them killed or seriously wounded.

Situations, such as the one illustrated above, as well as others, were among topics discussed by a panel of U.S. Army and Air Force Staff Judge Advocates and Federal Law Enforcement Officers dur-

"There is a clearly defined need for review and revision of how rules of engagement (ROE) are conceptualized, developed, and published, as well as how we as leaders train soldiers to make the right decisions in defending themselves and protecting others."

ing a recent visit to Fort Knox as part of the Rules of Engagement/Rules of the Use of Force Tactical Training Seminar. The seminar, similar to those presented at Special Operations Central Command (SOCCENT), Fort Stewart, Georgia, the United States Military Academy, and the FBI Academy, serves to familiarize attendees with legal and tactical lessons learned by the U.S. Department of Justice (DOJ) and the civilian law enforcement community concerning the application of use of force — particularly deadly force.

Such dialogue is useful given the fact that operations within the contemporary operating environment (COE) are increasingly encompassing tasks that bear resemblance to what law enforcement officers face each day. Additionally, the historical record of the U.S. Armed Forces in understanding and applying threat recognition, rules of self-defense, and use of appropriate defensive postures in nontraditional tactical environments, arguably leaves much room for improvement. There is a clearly defined need for review and revision of how rules of engagement (ROE) are conceptualized, developed, and published, as well as how we as leaders train soldiers to make the right decisions in defending themselves and protecting others.

Guest speakers at the seminar discussed the foundational knowledge regarding the full spectrum of use of force issues and debates. The development of use of force policies in a given theater of operations is a detailed process that must con-

sider national policy, the laws of land warfare, and the characteristics of the operational environment to achieve an end product for implementation. The challenge exists in identifying legally supportable rules concerning the use of deadly force that remain tactically sound enough to avoid placing a soldier's life in unnecessary danger. Compounding this challenge is the verbiage used as the start point of most ROE, "You may use force, including deadly force, when you reasonably believe yourself or others to be in imminent danger of death or serious bodily harm (AFI 31-207 1.4.1)."[1] Such language leaves the man on the ground with the overarching question: "What constitutes imminent danger?"

The difficulties of developing and managing ROE/rules of the use of force (RUF) issues led some commanders to impose certain control measures to mitigate virtually any threat of perceived impropriety. Many of these measures contributed to, rather than alleviated, confusion amongst the rank and file of deployed personnel, and resulted in ROE/RUF policies that put soldiers at risk and security in question. The seminar highlighted some of these policies in citing various real-world examples from across the front. These examples extended along the spectrum of response: prohibiting troops on guard duty from inserting magazines into their wells; use of "minimum force necessary;" guarded authorization of "use of deadly force as a *last resort*;" and provisions against shooting a fleeing hostile actor from the scene of an attack.

Such examples represent a larger trend toward imbalance between the risk-averse and the risk-inclined. This imbalance is weighted by a latent fear of using force, paranoia of the "accidental" discharge, and a dual misunderstanding of both the dynamics of a deadly force encounter and the laws justifying such force. In discussing these issues, the seminar focused on providing an understanding of both the applicable law and the dynamics of such encounters as they relate to one another. A greater appreciation of this relationship is generally accepted as the fundamental building block on which tactically-minded, legally supportable ROE may be drafted for use in theaters of conflict.

Not surprisingly, much of the legal precedence regarding the use of deadly force is grounded in civilian, not military, law. The seminar focused on historic decisions that helped to establish one of the key legal considerations in drafting any ROE; a rigorous balance must exist between the perception of a reasonable response to a threat, and how unique conditions of the event are weighed in passing final judgment. For example, in *Graham v. Connor*, the judicial opinion addressed the fact that determining the reasonableness of a shoot/no-shoot encounter is not reliably accomplished through the sterile eyes of a detached observer, but rather to be balanced within the physical and mental circumstances of the incident, *"…such reasonableness must be judged from the perspective of a reasonable officer on the scene, rather than with the 20/20 vision of hindsight…the calculus of reasonable-*

ness must embody allowance for the fact that police officers are often forced to make split-second judgments about the amount of force that is necessary in a particular situation in circumstances that are tense, uncertain, and rapidly evolving." [Graham v. Connor, 490 U.S. 386 (1989)]

In another case, the published opinion cautioned against the idea that law enforcement officers must fully exercise the capability to pause and analyze the intent of an attacker before using deadly force, "*Detached Reflection cannot be demanded in the presence of an uplifted knife.*" [Brown v. United States, 41 S.Ct. 501, 502 (1921)] The seminar then posed the subsequent dilemma as to how, then, certain ROE still demand such detached reflection in the presence of an uplifted AK-47?

With legal precedence supporting the notion that reasonableness of action is weighed against the circumstances of the encounter, it is helpful to devote some thought as to just how varied those circumstances may be. The dynamics of a deadly force encounter are part of a psychologically and physiologically complex process, and it is indeed a process; a systematic series of events that unfold both consciously and subconsciously in the mind's eye of the soldier. That process requires the soldier to first recognize the threat, then choose the appropriate level of response for the threat, and finally implement that response, all in a matter of seconds. Even under the best conditions, it is a challenging and highly charged event. Add to this the variables of: limited visibility; innocent civilians intermixed within the battlespace; rapid and unpredictable movement by shooter and target(s); the life and death stress of sudden, close, personal violence; and any myriad of sudden, unexpected circumstances, and such encounters become even more demanding. What remains is the fundamental importance of ROE/RUF policymakers understanding the intricacies of the tactical situation on the ground before drafting regulations that decrease overall security and threaten the safety of both soldiers and civilians.

It is important to note that this article is not an argument for more liberal ROE that ignore the equally complex and sensitive political-military environment of a combat zone. There is no mistaking that the job of those who draft and approve ROE for use in theater involves an extraordinary balance of issues of monumental importance. Critics voiced pronounced concern that the seminar advocated and encouraged a trigger-happy mentality amongst attendees; that it created a dangerous opportunity for an individual to cover himself in a protective blanket of the circumstantial. But to the contrary, the real message encouraged everyone to think more broadly and more tactically about security and security-related policies and procedures. The true value of the information presented encouraged a positive change in the cultural mindset of officers and noncommissioned officers, leaders who might otherwise be reluctant to break apart the 20th-century formula for drafting ROE and rethink to reconfigure all of the factors that embody such policy. The 21st-century battlefield demands nothing less.

Notes

[1]Air Force Instruction (AFI) 31-207, *Arming and Use of Force by Air Force Personnel*, U.S. Government Printing Office, Washington, DC., 1 September 1999, paragraph 1.4.1.

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"*The dynamics of a deadly force encounter are part of a psychologically and physiologically complex process, and it is indeed a process; a systematic series of events that unfold both consciously and subconsciously in the mind's eye of the soldier. That process requires the soldier to first recognize the threat, then choose the appropriate level of response for the threat, and finally implement that response, all in a matter of seconds.*"

The Platoon Raid:
High-Intensity Urban Operations Cha

by Captain Gregory G. Lee

Current publications on conducting raids in a combat zone assume the environment to be a high-intensity conflict against a determined enemy in prepared positions. U.S. Army Field Manual (FM) 3-06.11, *Combined Arms Operations in Urban Terrain,* defines precision conditions in urban operations (UO) as, "either the threat is thoroughly mixed with noncombatants or political considerations require the use of combat power to be significantly more restrictive than UO under high-intensity conditions."[1] As the major combat phase of Operation Iraqi Freedom ended and the 1st Armor Division relieved the 3d Infantry Division in Baghdad, the attitude toward high-intensity raids had to change.

High-intensity raids would only serve to undermine support for coalition forces by harming innocent bystanders and causing collateral damage. The terms "soft raid" or "knock and search" imply that there is a culture of non-violence in a combat zone, but due to the unpredictable nature of the enemy and his ability to disguise himself as a civilian, the mission shifts from high-intensity urban operations to precision UO for raid operations. If necessary, precision UO can transition immediately to high-intensity UO on contact with hostile combatants. Additionally, U.S. Army UO doctrine is often tailored to combat in western-style urban areas; Iraqi dwellings are often significantly different from their western counterparts and present different tacti-

nging to Precision Urban Operations

cal problems to the soldier. This article discusses some of the tactics, techniques, and procedures (TTPs) that our unit developed to fill the gap between doctrine and its application, while transitioning from high-intensity raids to precision raids, trying to best account for and protect the indigenous customs of the local population.

Urban Iraqi Dwellings

There are two main types of dwellings in the Baghdad area, family houses and apartment buildings. The first type of dwelling can be either a single home with its own boundaries or a row house that shares adjoining walls with its neighbors. Apartment buildings tend to be between four and eight stories with varying interior floor plans.

Single homes in urban areas are usually multistory buildings. The most significant difference from western-style homes is that rooms are rarely constructed off a hallway. Instead, there is usually one main room that contains doorways leading to several adjoining rooms, which have doors to other rooms or connect back to the main room, creating a complicated security problem for soldiers conducting room-by-room clearing. This is mostly attributed to the need to conserve space in the home for living use (hallways are not space available for living) and

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and sleep on the floor. Large pieces of furniture are rare, with the exception being wardrobes since most Iraqi homes do not have built-in closets. Bathrooms are very small and sparsely furnished with squat-toilets and a large water basin or container. Stairways usually do not have a wall to the inside, but have a landing at the top overlooking the stairs below, and have at least one turn.

Iraqi homes tend to have flat roofs with access from the inside and are often used for storage and sleeping in hot weather. Since most Iraqi homes are built very close together, adjoining roofs make excellent escape routes. Both single homes and row houses are usually surrounded by a concrete, stone, or brick wall between six and eight feet tall with a gate for foot traffic and autos. With their maze-like construction and the need to secure routes surrounding stairs, single-family dwellings most often are cleared from the ground floor up. (The exception is when assaulting personnel can gain access to the roof from the outside.)

the prominent Islamic culture, which protects the sanctity of the home by usually having a receiving room directly inside the main entrance to the house. This allows the women to cover themselves appropriately out of sight, while the men receive visitors. Often and not unusually, visitors will be graciously received by their hosts without seeing a woman.

Homes often contain more than one family or an extended family; consequently, they tend to be both crowded and cluttered. Several individuals may occupy a small 10x12 foot room

Apartment buildings in Iraq, like their western counterparts, are often constructed around a central stairwell, which leads to the roof. It is therefore possible to speed the assault and enemy prisoner of war (EPW)/breach teams to the roof, where they can begin top-down clearing. As in single homes, the roofs of apartment buildings are frequently used for sleeping and storage; the roof must be cleared before proceeding to lower levels. Individual apartments are constructed like houses, with one room leading to several others and with more occupants than is typical in the west. Apartment buildings should be treated as a series of single-family dwellings.

"The outer cordon secures the target area by blocking streets and alleys or other natural choke points around the target building to prevent interference from external forces and escape of targeted personnel from the area. The soldiers scan adjoining buildings for snipers, provide suppressive fire with crew-served weapons if resistance is encountered and the building must be assaulted, and use optics and spotlights to detect personnel attempting to escape via adjoining rooftops."

Platoon Precision Raid Operations

Platoons, regardless of organization, are capable of successfully conducting raids; however, commanders must accept some risk when assigning raid missions to smaller platoons, such as tank platoons. FM 3-06.11 dictates that platoon offensive operations should be task organized into an assault element, support element, and a breaching element. "The purpose of the assault element is to kill, capture, or force the withdrawal of the enemy from an urban objective and to seize key terrain."[2] FM 3-06.11 continues to define the duties of the support element as "isolating the objective building with direct and indirect fires" and "suppressing enemy weapons systems" and "containing a reserve for the assault element."[3] The breach element provides mobility for the assault element throughout the operation and may be a separate element or be assigned from either the assault or support elements. Although doctrine recommends a generic task organization, it fails to task the separate elements that are necessary for command and control.

The Raid Team

Raids on dwellings can be conducted by a platoon with specialized support provided by the company or task force. The following task organization is recommended:

Outer cordon. *Support element: 3 to 5 vehicles*. The outer cordon secures the target area by blocking streets and alleys or other natural choke points around the target building to prevent interference from external forces and escape of targeted personnel from the area. The soldiers scan adjoining buildings for snipers, provide suppressive fire with crew-served weapons if resistance is encountered and the building must be assaulted, and use optics and spotlights to detect personnel attempting to escape via adjoining rooftops.

Inner cordon/yard team. *Support element: 4 to 6 personnel*. This team scales the outer wall (if present) and secures yard or area outside of target building. They identify and assist in breaching the gate and secure prisoners as they exit the target building. The yard team must also provide suppressive fires with individual weapons if resistance is encountered by the clearing team. After the building is secure, they gather and inventory intelligence items seized during search.

Clearing team. *Assault element: 4 personnel*. This team consists of the basic four-man stack. Their duties include entering and clearing the building while neutralizing threats. The clearing team initially secures/neutralizes building occupants for handover to the follow-on EPW team and assists in the search for items of intelligence value.

Breach/EPW team. *Support element with breach tasking: 4 to 8 personnel*. The aptly named team breaches all obstacles, to include the outer gate and the building's entrance. They assist the clearing team by securing and advancing the foothold inside the house as it is cleared, while securing, searching, and evacuating EPWs to the EPW holding area. This is the alternate clearing team if the primary clearing team receives casualties. The breach/EPW team can also evacuate friendly casualties to the casualty collection point (CCP) (normally where initial entry or foothold was made), if the primary clearing team cannot evacuate itself. Lastly, they search for and secure items of intelligence value.

Command and control (C2) team. *Support element: platoon leader and crew, platoon sergeant and crew, interpreter, and medic*. The platoon leader directs and coordinates the efforts of all teams, initiates evacuation of the building through the use of an interpreter, initiates the assault on the building by the clearing team, conducts initial on-site interrogations of the EPWs,

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and identifies targeted personnel. Throughout the operation, he receives and passes reports to and from higher headquarters and controls the interpreter to prevent exposing this valuable asset. During the search phase, the platoon leader may identify items of intelligence value.

The platoon sergeant also receives and passes reports to and from higher headquarters, supervises and controls the CCP, medic, and evacuation vehicle, and conducts casualty evacuation and combat service support (CSS) resupply of supplies, equipment, and ammunition.

The platoon leader and platoon sergeant crews provide mounted security with crew-served weapons at the front of buildings for suppression of enemy weapons systems, and if necessary, assist in the conduct of casualty evacuation or CSS resupply of the soldiers inside the building.

Task Force Support

The task force must provide assets not organic to the platoon: an on-site medic (usually through standard operating procedure),

"If the platoon leader elects to set at an attack position, he may also choose to dismount his clearing and breach/EPW teams to reconnoiter and secure the target building via dismounted avenues of approach. The reconnaissance should focus on the following: the presence and activity of civilians on the battlefield (COBs) and enemy guards or lookouts surrounding the target building; whether or not the target building has lights/electricity; the location of entry points through the outer wall and into the building, and the assets required to breach them; the presence of dogs in the yard; and signs of human activity in the target building."

an interpreter to accompany the raiding team, transportation for EPWs and seized items, and a task force quick reaction force. Depending on the distance or size of the operation, the task force may wish to establish a forward aid station (FAS) or consolidated ambulance exchange point (AXP).

Sample Sequence of Events

FM 3-06.11 states when conducting an attack, the platoon must "isolate the objective, enter the building (secure a foothold), and clear the building (room by room, floor by floor)." The following sequence of events demonstrates how a typical precision raid would unfold in the Baghdad area of operations. The planning and preparation phases are omitted in the interest of brevity, but would follow doctrinal troop leading procedures. Also, certain steps may be omitted from the raid at the platoon leader's discretion or as necessary due to mission, enemy, terrain, troops, time, and civilians (METT-TC).

Platoon sets at attack position. The platoon leader may elect to have the platoon set at an attack position several bocks from the target building. While this affords the platoon leader greater flexibility to deploy his force in stages and synchronize his raid with other units, it also increases the risk that the raiding party will be detected and the target personnel will have the opportunity to escape or resist. If tracked vehicles are included in the raiding party, the attack position must be sufficiently distant from the target building to avoid detection by sound signature.

Clearing and breach/EPW teams conduct dismounted infiltration. If the platoon leader elects to set at an attack position, he may also choose to dismount his clearing and breach/EPW teams to reconnoiter and secure the target building via dismounted avenues of approach. The reconnaissance should focus on the following: the presence and activity of civilians on the battlefield (COBs) and enemy guards or lookouts surrounding the target building; whether or not the target building has lights/electricity; the location of entry points through the outer wall and into the building, and the assets required to breach them; the presence of dogs in the yard; and signs of human activity in the target building. All of these factors can influence the raiding

party before reaching the target building, causing a gambit of problems, possibly allowing the target to escape.

Mounted element moves to target building. The mounted element moves rapidly to surround the target building. Cordon vehicles occupy positions that block or observe key avenues of approach and escape routes from the target house. The order of march should account for vehicle positioning around the cordon, not section integrity, to achieve surprise and gain a foothold in the target building before the enemy can react. Dismounted security is immediately established by both the assault and the support elements.

Yard team secures yard and inner cordon. Once the outer cordon is established, the yard team sets the inner cordon. If the gate cannot be opened from the outside, the yard team should scale the outer wall (a vehicle pulled close to the wall will expedite this). The yard team immediately secures the yard, and then moves to open at least one gate. If the gate cannot easily be opened from the inside, the breach/EPW team selects and breaches an opening. Having an open gate is necessary for easy evacuation of casualties and allows for the winch of a HMMWV or tow chain to assist in breaching a point of entry in the target building. While the yard team secures the yard, the clearing team and breach/EPW team stack separately along the outside of the wall near the designated entry point.

Building evacuation is initiated. Using the interpreter, the platoon leader initiates the evacuation of the target building. A siren is sounded to wake the buildings occupants, while an announcement is made through a loudspeaker, demanding all occupants of the target building drop their weapons and come out with their hands in the air within five minutes. Similar announcements are made every minute and a countdown is initiated at 15 seconds. As target personnel exit the building, they are secured by members of the yard team and escorted to the gate for handover to the EPW team. The EPW team secures and searches all male personnel, while females and children are moved to a separate holding area.

Females and children must be searched, but with proper regard to local cultural customs. A female soldier for a pat-down is most desirable, but electronic wands work well if the unit is all male. With the aid of an interpreter, the platoon leader immediately begins on-site interrogations with the aim of determining the identity of all males, location of weapons in the target building, location of personal identification and documents, location of keys to all vehicles parked at the target property, and other information as specified by the higher unit. Two members of the breach/EPW team remain as guards for the male detainees (females and children should be watched by members of the C2 team). The interpreter must also reassure the family that no harm will come to anyone outside the building.

Clearing and breach/EPW team enter building. Before the occupants are awakened by the siren and countdown, the clearing and EPW teams move to the building's entry point and the clearing team immediately "stacks" the door. After the countdown, and if the building has been evacuated, the teams use the

doorway through which the occupants exited, and the breach/EPW team "stacks" behind the clearing team. If the building has not been evacuated, the teams select a point of entry and the breach team forces entry.

The clearing team enters the building and establishes a foothold using proper room-clearing procedures. When the foothold is secure, two members of the breach/EPW team are called in. If enemy personnel have been encountered, they are immediately secured, searched, and evacuated by the breach/EPW team. The handover must be performed rapidly to maintain the clearing team's momentum. The clearing team moves quickly, clearing from room to room. Members of the breach/EPW team advance the foothold by trailing the clearing team and securing EPWs, breaching heavy doors and obstacles, and securing the exit route to the CCP. If a stairwell is located, members of the breach/EPW team assist in securing it, while the clearing team clears the remainder of the floor.

Once the ground floor is secure, the clearing team ascends the stairs using proper building clearing procedures and begins clearing the second floor. They continue this process until all floors are clear, including the roof. The clearing team leader reports as each floor is completed and when the entire building is secure. Team leaders must keep the platoon leader informed of the location of team members inside the house to prevent fratricide from the cordon elements.

Target building is searched. Once the target building is secure, the clearing and breach/EPW teams split into two-man search teams under the control of the breach/EPW team leader. Searchers look for items of intelligence value as determined by higher headquarters, and as items are seized, members of the yard team remove them from the building for inventory. Two copies of the inventory list are made, one of which serves as a receipt to the property's owner, the other as a record for the S2. Once a ground-floor room has been searched, the females and children may be moved indoors and guarded. Members of the yard team assist in searching vehicles parked at the target property.

Evacuating detainees. The platoon leader calls for the vehicle to transport detainees, which may be integrated into the outer cordon or set at the attack position. The detainees are silenced, blindfolded, segregated (if necessary), and loaded onto the transport vehicle (members of breach/EPW team may accompany detainees as guards or, if the task force provides guards, may rejoin their team). It is important that the transport vehicle not depart the objective until the search of the target house is complete. The platoon leader continues to interrogate the detainees until he determines that there is no more information to gain about the contents of the house. Once the search is complete and all items of intelligence value are loaded, the transport may depart for the task force jail.

Reconsolidation and exfiltration. Once all detainees and items of intelligence value have been removed from the target site and the search completed, all personnel exit the building, except for

one soldier who remains to guard the females and children. After all personnel and equipment are accounted for, the guard moves to his vehicle, all personnel mount their vehicles, and the platoon exfiltrates the target area.

Equipment Requirements

To successfully complete the tasks of isolating, clearing, securing, and searching the target building and its occupants, certain items of team and individual equipment are required, while other items are desirable (but not critical). Much of the equipment is organic to the platoon, while others must be provided by the task force or specifically ordered for conduct of UO and stability and reconstruction operations.

Team equipment. Communications between the team and its leadership is crucial to the smooth, rapid execution of the raid. Squad dismount radios are preferred, but other types of personal radios are acceptable. Each team leader, the platoon leader, and the platoon sergeant should be so equipped. The team must have breaching tools, such as sledgehammers, battering ram, and heavy bolt cutters, carried on the platoon sergeant's vehicle (or another vehicle in the inner cordon) and accessible as needed. Flex-cuffs, blindfolds, and 2-foot strips of engineer tape (for gags) should also be carried by the breach/EPW team. Additionally, sandbags and boxes are useful for transporting items seized during the search, and clipboards with carbon paper will speed the inventory and receipt process. Spotlights or other portable battery-powered lights are useful in searching buildings that do not have electricity, and they can be used to illuminate the surrounding area. Thermal sights, when available, should be used by the outer cordon to observe the rooftops for fleeing personnel, while other personnel in the outer cordon, yard team, and C2 team should use night-vision goggles (NVGs) to observe their sectors.

"The clearing team enters the building and establishes a foothold using proper room-clearing procedures. When the foothold is secure, two members of the breach/EPW team are called in. If enemy personnel have been encountered, they are immediately secured, searched, and evacuated by the breach/EPW team. The handover must be performed rapidly to maintain the clearing team's momentum. The clearing team moves quickly, clearing from room to room."

Individual equipment — clearing team. Buildings are inherently cramped spaces for soldiers and narrow doorways, furniture, and other obstacles often inhibit movement. The clearing team, in particular, must remove all unnecessary equipment to ensure that they do not become caught or snagged while moving through the narrow confines of a dwelling. Such items as "butt" packs, NVG mounts, bayonets, and canteens should be removed. Ideally, the soldier should wear only his Kevlar helmet and body armor with magazine/grenade and first aid pouches attached. Needed supplies, such as water and additional ammunition, should be carried by follow-on teams. Rifle slings should be removed and replaced with snap-rings or commercially available "hands-free" slings. NVGs must not be used when clearing buildings due to the loss of depth perception; narrow field of view caused by the NVGs will make smooth, rapid movement through buildings difficult. Instead, high-intensity flashlights should be mounted on weapons, gaining the added benefit of blinding a target that is already adapted to the dark (since most raids occur at night) and on familiar ground. Because of the potential for falls while moving rapidly through dark, cluttered rooms, clearing teams should wear kneepads, elbow pads, and gloves. Ballistic goggles prevent eye injuries caused by spalling when weapons are fired indoors.

Individual equipment — breach/EPW team. Like the clearing team, the breach/EPW team should remove all unnecessary equipment. In addition to the items mentioned above, the breach/EPW team should carry one or two breach tools, such as a hooligan bar and sledgehammer, and a small supply of flex-cuffs and blindfolds. The breach/EPW team should not attempt to carry heavy breaching equipment; the platoon sergeant or yard team will bring these forward as needed.

Using a checklist, such as the one in Figure 1, will greatly assist leaders in preparing soldiers for various situations they may encounter during raids.

Room and Building Clearing Procedures

The following paragraphs outline procedures that have been successfully employed in previous raids. For a full discussion of room clearing, refer to FM 3-06.11.[4]

The complex layout of Iraqi homes makes it necessary that the clearing team be led from the front. While it is not always necessary that the first man in the stack be the team leader, it is essential that an experienced decisionmaker lead the assault. The leader, as he moves through and clears the room, must not only identify noncombatants and engage targets, but also identify additional entrances to the room and immediately determine what resources are needed to secure all entrances/exits. Civilian casualties will only breed resentment and fuel hostilities toward coalition forces, therefore, the first man into a room must be an experienced decisionmaker, preferably a SGT or SSG. This allows the lead man to decide instantly who is or is not a threat without resorting to communications for guidance.

In our experience, the rooms that lead from the main room are what most UO operators consider "short" rooms. They are small in area and only require two soldiers to clear. Initially, two personnel will enter the room. The first man will follow the path of least resistance (usually straight across the door) and move to the nearest corner. The second man will proceed in the opposite direction. Their entry should be as simultaneous and as rapid as possible. Both soldiers clear as they move; swinging their muzzles from the corner they are approaching, across the room, to the opposite (diagonal) corner. Noncombatants are ordered to lie facedown on the floor and enemy personnel are engaged

PRECOMBAT INSPECTION CHECKLIST

INDIVIDUAL EQUIPMENT

___ Mission knowledge
___ Non-essential equipment removed
___ IBA with SAPI plates
___ Magazine/grenade pouches
___ First aid pouch w/casualty feeder card
___ Rifle sling removed/hands-free sling present
___ Flashlight mounted w/fresh batteries
___ Kneepads worn
___ Elbow pads worn
___ Gloves worn
___ Goggles worn/clean and serviceable
___ Close combat optic (M68) w/fresh batteries
___ Squad dismount radios present/radio check complete
(team leaders, platoon leader, platoon sergeant)

BREACH/EPW TEAM EQUIPMENT

___ Hooligan bar
___ Sledgehammer (x 2)
___ Battering ram (large and small if possible)
___ Bolt cutters, heavy
___ Wire cutters
___ Flex cuffs/large zip strips
___ Sandbags
___ Engineer tape (2-foot strips, for gags)
___ Blindfolds

SEARCH EQUIPMENT

___ Boxes
___ Sandbags
___ Shoe tags
___ Clipboard w/paper and carbon paper; pens
___ Latex gloves
___ Large flashlights w/charged batteries (Maglite D-cell preferred)
___ Pry-bar
___ Small stepladder
___ Electronic metal detector wand (for searching females and children)

CORDON, YARD and C2 TEAM EQUIPMENT

___ Thermal sights operational w/batteries or vehicle power
___ Crew served weapons w/night sights mounted and operational
___ NVGs operational w/fresh batteries
___ Spotlights with fresh/charged batteries

CSS ASSETS

___ Medic w/aid bag present
___ Interpreter present and briefed w/script for evacuation announcement
___ Loudspeaker w/siren
___ All soldiers know location of CCP
___ Bulk class III and water present for resupply
___ Link-up points for CASEVAC and detainee evacuation established/briefed

Figure 1

with accurate shots (controlled pairs). If the room is irregularly shaped or contains additional entrances, the leader gives the order, "Next man in, right (or left)." The third man replies, "Coming in, right (or left)," and enters the room in the ordered direction. The leader verbally identifies the threat to be secured and directs the third man to a position from which he can best cover

his assigned sector. If the leader determines that a security threat still exists, he orders additional personnel into the room until the room is secure. Personnel outside the room (unemployed clearing team members or breach/EPW team personnel) cover unsecured areas in the direction of travel and secure exit routes.

If noncombatants or enemy personnel are encountered, two personnel from the breach/EPW team are called in as soon as the room is secure. They immediately assume responsibility for captured, wounded, or dead enemy forces; all living enemy and noncombatants are secured and evacuated. The clearing team immediately moves to the next unsecured room and prepares to enter.

If any member of the clearing team becomes a casualty, the breach/EPW team immediately takes the lead and becomes the clearing team. This maintains the momentum of the operation and permits the rapid evacuation of the casualty. Casualty evacuation and the handover of team responsibilities *will not* occur until the room is secure. Once the room is secure, the casualty's team members render aid and evacuate the casualty to the CCP, where the platoon sergeant and the medic are prepared to receive him.

Considering the labyrinth of rooms on the first floor, an unguarded or bypassed stairwell could allow enemy to infiltrate behind the clearing team and split the raiding forces inside the house. Therefore, when a stairwell is located, it must be treated as an unsecured area. Two soldiers from the breach/EPW team are detailed to secure the stairway and the stairway is bypassed until the ground floor is secure.

Training and Rehearsals

Speed, surprise, and violence of action are the three most important factors governing success, as they minimize the enemy's ability to offer resistance and quickly overwhelm those who choose to resist. To achieve speed, the raiding party must constantly and methodically train and rehearse, resulting in smooth, seamless execution. Surprise need not be complete, as entering at a time and location unsuspected by the enemy and then attacking rapidly through the building more than compensates for any surprise lost when the five-minute warning at the outset is given. Violence of action sows confusion among enemy personnel and discourages resistance.

Importance of training and rehearsals. Because the procedures outlined in this article deviate from established U.S. Army doctrine, they are likely to conflict somewhat with how soldiers have been previously trained. Also, the execution of raids requires precision and teamwork surpassing that required for normal UO. Frequent, repetitive training will build precision and teamwork, while reinforcing the differences between high-intensity, precision, and surgical conditions in UO.

Maintaining team integrity. It is desirable for teams to be cross-trained on the responsibilities of other teams, and that teams are rotated through various duties of clearing team, cordon teams, breach/EPW teams, and C2 teams on successive operations. However, team integrity must be maintained. Soldiers must train and operate as part of a team to maintain consistency, so movement of personnel between teams should be avoided as much as possible. This develops flexibility in the platoon and yields more options for the platoon leader's planning.

Training techniques. Precision building clearing should be trained using the crawl-walk-run method. Teams begin by learning the basics of close quarters battle, then progress to clearing rooms. Training should be repetitive, like a football team practicing plays, with the emphasis placed on precision and smoothness. As training progresses, a variety of room sizes and shapes should be included, and a series of rooms representing a house should be cleared. Training may culminate with the inclusion of opposing forces personnel and noncombatant role players.

Training sites. Traditional Army UO training sites are not well suited to training for operations in Iraq, as they usually represent European-style architecture. A suitable training site must be constructed or improvised. The example at Figure 2 below represents the layout of a typical Iraqi home. Note the mazelike pattern of rooms, with one room containing doorways into several others, and the corner stairway with turn.
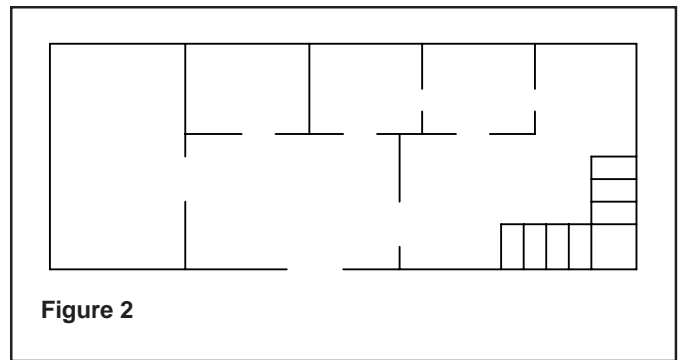

Figure 2

To respond to the noncontiguous combat environment in Iraq, while seeking to embrace the local customs, units must be able to transition seamlessly from surgical conditions to precision conditions to high-intensity conditions during operations. Leaders must continually revise operational and tactical procedures and train their soldiers to adapt to the ambiguous enemy threat. Leaders establish the restrictions through rules of engagement that determine whether operations occur under surgical, precision, or high-intensity conditions. Through planning and rehearsing, leaders can train soldiers to rapidly transition from one condition to another and still maintain the warrior edge when in contact with hostile forces. Battling complacency is the toughest fight for a leader on a battlefield. It is a leader's responsibility to prepare his soldiers for every situation they may encounter on the battlefield; wherever the battlefield, whatever the mission.

Notes

[1]U.S. Army Field Manual (FM) 3-06.11, *Combined Arms Operations in Urban Terrain*, U.S. Government Printing Office, Washington, DC., 28 February 2002.

[2]Ibid.

[3]Ibid.

[4]Ibid.

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An Integrated Approach:

British Political-Military Strategy in the Malayan Emergency

by Lieutenant Brian Drohan

Since the end of the Vietnam War, the study of conventional, high-technology warfare has provided the main emphasis for American military professionals and scholars. With the current insurgency in Iraq, the study of counterinsurgency warfare has recently emerged as a top priority for the U.S. military. However, counterinsurgency is not a recent phenomenon, and despite certain opinions of the war in Iraq, insurgencies can be defeated.

The British army fought a communist insurgency in Malaya from 1948 to 1960. The British succeeded largely because they integrated political and military strategies to form a cohesive overall strategy that reinforced the Malay government's political legitimacy. This example offers several lessons for U.S. political and military decisionmakers in Iraq. However, before analyzing British counterinsurgency in Malaya, we must understand the nature of insurgency.

Insurgency is "an attempt to overthrow or oppose a state or regime by force of arms" and is often termed "guerrilla war."[1] It is "the weapon of the weak" for those who cannot oppose their enemies with traditional conventional warfare.[2] Counterinsurgency can be defined as the government's attempt to preserve its place as the legitimate political authority within the state.[3]

Throughout the 19th and 20th centuries, western armies fought several counterinsurgency campaigns, such as the United States in the Philippines and Vietnam, French colonial wars in Indo-China and Algeria, and Britain in South Africa, Kenya, Malaya, and other former colonies.

Although some view insurgency and counterinsurgency as a recent development, this is not the case.[4] The British army developed tactics, techniques, and procedures for dealing with insurgencies

during the late 19th century. Colonel C.E. Callwell wrote some of the earliest professional literature on the subject with his book, *Small Wars*, first published in 1896. The British discovered that at the heart of every insurgency lies a political problem — "guerrilla insurgency is quintessentially a *political* phenomenon" — and must be solved primarily through political solutions.[5]

Although an insurgency springs from political grievances, it manifests itself through violence. Insurgents attack where the government is weakest — isolated outposts or supply convoys. Because insurgencies are violent, governments must use force to preserve law and order. Also, since political dissatisfaction feeds an insurgency, a government must address these political grievances through policy changes. Because of this dual political-military nature, one of the most important principles in defeating an insurgency is the

integration of a coherent political strategy with a coherent military strategy.

During the Malayan Emergency of 1948-60, the British army developed and integrated coherent military and political strategies that ultimately resulted in decisive victory. British strategy in Malaya transitioned between three phases: the initial phase (1948-1950), characterized by a predominantly military approach to counterinsurgency through the use of force; the second phase (1950-1951), in which the British recognized the need for a political strategy, as well as necessary changes to the military approach, and implemented these changes; and the third, integrative phase (1952-1960), which combined the political and military strategies. Before analyzing these phases, one must first understand the history of the Malayan Emergency.

Geography and the Beginning of British Influence in Malaya

Geographically, the modern-day Federation of Malaysia shares only one land border — with Thailand — and occupies approximately 50,000 square miles. In the late 1940s, the population was comprised of 49 percent ethnic Malays, 38 percent Chinese, 11 percent Indian, 1 percent aboriginal tribes, and about 12,000 Europeans.[6] The majority of the Federation's 5.3 million people lived around the major cities of Kuala Lumpur, Ipoh, and Taiping. Jungle highlands dominate the interior of the peninsula, reaching 7,000 feet.[7]

British influence in Malaya reaches back to the late 18th century, with the signing of several commercial treaties between Britain and local rulers. In 1909, modern Malaya, then called Kedah, came under direct British control with the Anglo-Kedah Treaty. Malaya experienced strong economic growth and became important to British policy in Southeast Asia.[8]

Based largely on rubber, latex, and tin exports, the Malayan economy provided many natural resources that Imperial Japan lacked during its expansion prior to World War II. Recognizing this, the Japanese invaded Malaya in 1941 and occupied the country for the duration of the war. The Malays fought a small-scale guerrilla campaign until the Japanese surrender in 1945.[9] The Malayan Communist Party (MCP) provided many contributions to the anti-Japanese effort during the war, but later initiated the insurgency campaign that sparked the British high

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commissioner for Malaya to declare a state of emergency in June 1948.

The MCP and Outbreak of Insurgency

The MCP, primarily comprised of ethnic Chinese, gained power among the Chinese elements of society through its opposition to the Japanese occupation. World War II had "exacerbated the ethnic tensions that had already existed in Malaya, as the Malays had largely cooperated with the Japanese occupiers. The British forces that arrived to reoccupy the country in September 1945 had lost their aura of invincibility after their defeat four years earlier."[10] Ethnic tensions between Malays and Chinese led to the collapse of law and order across the country. The MCP, although only nominally communist, formed the Malayan People's Anti-British Army (MPABA) and declared "under the increased exploitation and oppression and even the use of violent attacks of the British imperialists, the working classes launched a violent strike struggle, followed by an outbreak of peasant struggle in certain places."[11]

The communists launched a series of terrorist attacks, destroying property and murdering several Europeans. On 17 June 1948, the high commissioner, Sir Edward Gent, declared: "On unanimous advice of the G.O.C. [General Officer Commanding] and all other officials and unofficial members of my Executive Council, I have decided that it is essential to extend Emergency Regulations mentioned in my telegram number 630 so as to make them applicable to the whole of the Federation."[12]

Phase I: Initial Approach to Counterinsurgency

When Sir Edward Gent declared a state of emergency, the Federal government had at its disposal only 10 infantry battalions and 9,000 police officers.[13] The Chief of the Imperial General Staff, Field Marshal Montgomery, approved a request for another infantry brigade to be dispatched to Malaya. However, Montgomery cautioned that "there must be no delusion… that by sending one brigade to the Far East, the situation there would be solved."[14]

Initially, British administrators approved and enacted the emergency regulations, which authorized the heavy-handed use of detention, deportation, and the collective punishment of entire towns and villages. The high commissioner was authorized to "use the banishment ordinance without prior reference to me [Creech Jones, Secretary of State for Colonies]" and to detain all those "implicated in acts of violence, or in organizing or inciting persons to take part in strikes, disturbances, or demonstrations in which violence of the threat of violence is used."[15] Although the emergency regulations were an act of policy, and therefore a political element of British strategy, the regulations relied almost exclusively on a heavy-handed approach. The authorities could essentially take whatever actions they wished, without many legal restrictions such as due process. The government's harsh application of the emergency regulations and the police and military forces' behavior, fostered the belief among many Chinese that the government did not care about their welfare.[16]

Militarily, the British reorganized the Malay police force, increasing its numbers and providing better training for its officers. With more police officers available, the British began using Malay police to patrol villages and perform local guard duties, which allowed more British and Malay soldiers to patrol the jungle in search-and-destroy missions. British commanders employed a "conventional" mindset, sending large patrols on vast jungle sweeps for short periods of time in search of enemy troops or bases.[17] Often, soldiers would find recently abandoned enemy camps — the large-scale, multiple-battalion sweeps were simply too slow to catch most communist terrorists (CTs) before they could disperse.

To their credit, the British quickly realized that they needed to adapt their approach. In a letter dated 23 August 1948, the Permanent Undersecretary of State in the Colonial Office, Sir Thomas Lloyd, wrote that "the daily reports about the struggle to get the upper hand of the terrorist campaign continue to present a fluctuating record of success and disappointment, and there is still no definite indication of that lessening."[18]

In addition to recognizing the need for military changes, the British also realized that they had to approach the insurgency as a political phenomenon: "Reports, which we have seen from Malaya, have spoken of the Chinese community as sitting on the fence. We realize that the main reasons for this attitude — if it exists — are doubt about our ability to protect the law-abiding Chinese and eventually to liquidate the terrorists… there may be room for more active efforts to enlist the enthusiasm of these people."[19]

Throughout 1948 and 1949, British officials quickly realized the necessity to adapt their strategy both by changing their military approach and by adopting a political strategy for winning the support of the Malayan population, including its ethnic Chinese elements. By 1950, the British had reached the second phase in the development of an integrated political and military strategy.

Phase II: Implementing Political and Military Changes

Realizing the need to improve jungle warfare training, the British army established a Jungle Warfare School in Singapore to train officers and NCOs. The British also recognized the value of special operations forces. As early as 1948, the British formed "Ferret Force," which was "designed for traveling light and living off the land," during long-range jungle operations.[20] Ferret Force, though small in numbers, became proficient in jungle tracking and long-range patrolling. Grasping the value of special operations units, such as Ferret Force, the British formed the Malayan Scouts in 1950 — the precursor to the Special Air Service (SAS) Regiment.[21] The SAS conducted long-range patrols deep in the jungle over several months in duration, tracking CTs and laying ambushes, destroying CT supplies, and performing reconnaissance and surveillance.

In addition to these innovations, the British began improving their intelligence capabilities. In 1950, Lieutenant General Sir Harold Briggs was named director of operations in Malaya. Briggs created the Federal Joint Intelligence Advisory Committee to coordinate the collection and management of intelligence throughout the peninsula. He also initiated the Federal War Council, which included civil, military, and police officials. This innovation eased coordination between the different civil and military authorities.[22]

Briggs' tenure as director of operations also marked the beginning of a coherent

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political strategy for dealing with the insurgency. In a document, which has since become known as the "Briggs Plan," Briggs outlined his strategy to gain the support of the population, which would isolate the MCP from its supplies and intelligence sources. In this plan, the police concentrated "on fulfilling normal police functions, including the obtaining of intelligence," while the army would "maintain in States a framework of troops, deployed in close conjunction with the Police, to cover those populated areas which the Police cannot themselves adequately cover." The civil administration would "strengthen…their effective control of the populated areas… to ensure that all populated areas are effectively administered."[23] Within each Malay state, the army established strike forces "to dominate the jungle up to about five hours journey from potential bandit supply areas."[24] The Briggs plan placed a priority "on winning the support of the population rather than defeating the insurgents by force of arms."[25] This marked the beginning of a strategic focus on the enemy's political vulnerabilities. Rather than applying methods of detention, deportation, and collective punishment, the British realized that they must build up the population's confidence in government.[26]

These measures improved security in the major cities and larger villages, but support for the insurgency continued in the squatter areas.[27] To increase government control of these communities, Briggs adopted a policy of forced relocation, establishing "new villages," protected by barbed-wire fences, and a new Chinese auxiliary police force. The government would also provide services such as schools and medical facilities. Although the new villages increased security in the squatter communities, and eventually resettled over 400,000 people, "the support of the population for the MCP continued."[28] Sir Henry Gurney, the high commissioner for Malaya, who replaced Gent in October 1948, wrote of the new village concept: "Into these settlements and into trade unions and into schools, the MCP are trying hard to penetrate and are succeeding. If they are allowed to continue thus unopposed by any Chinese effort whatever, the whole of the Chinese rural population will soon come under Communist domination."[29] Clearly, the new

villages alone would not provide the solution to the insurgency.

Despite the mixed successes of the new village concept, this second phase of British strategic development marked a distinct change in the military approach to fighting the insurgency, resulting in a much more effective military strategy, and represented the beginning of the realization that the insurgency must be defeated through the application of a political strategy as well. The British Secretary of State for War, John Strachey, wrote in a memorandum in June 1950: "The political essence of the problem is, in my view, the extent and the limits of popular support for the Communists… if there was no popular support for them, there would be no problem for us."[30] By the end of 1951, Gurney had been assassinated in an ambush, Briggs had retired due to poor health, and the head of police, Colonel Nicol Grey, had been relieved. Though the British had recognized the need for adapting their military strategy and the need for establishing a political strategy, the Malayan situation at the end of 1951 seemed sinister. Two developments during the last months of 1951 and the first months of 1952 ushered in the third phase of British strategy.

Phase III: Adapting and Integrating

The first development that initiated phase three was the 1951 election of a conservative government headed by second-time Prime Minister Sir Winston Churchill. Churchill's new Secretary of State for Colonies, Oliver Lyttelton, visited Malaya and offered his conclusions in a cabinet memorandum. He believed that, "although the Briggs Plan is fundamentally sound and has achieved a certain measure of success, the communist hold on Malaya is as strong, if not stronger, today than it ever has been. This fact must be faced." In his view, "the crux of the problem is the winning of the confidence and loyalty of the bulk of the Chinese population."[31] Lyttelton's report outlined political success as the primary means of achieving peace and stability in Malaya.

With this in mind, Lyttelton chose General Sir Gerald Templer to replace the re-

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"The more stable and secure sections of Malaya were declared white areas where travel restrictions, curfews, and food restrictions were lifted. This provided incentives for the population to support the government's efforts in combating the CTs. After the first white areas were declared, other Malays learned the benefits to be gained from living in a "safe" part of the country (these benefits were publicized through British propaganda)."

tiring General Briggs. Templer's selection provided the leadership and vision necessary to adapt British political strategy, making it much more effective, and integrating the political and military strategies into a single, coherent, and successful strategy. Lyttelton's directive to Templer on his assumption of command stated that "not only will you fulfill the normal functions of High Commissioner, but you will assume complete operational command over all armed forces assigned to operations in the Federation."[32] Lyttelton essentially granted Templer complete political and military control of the situation in Malaya. With civil and military authority now centralized, Templer could enact whatever policies he deemed necessary.

Templer immediately energized the British effort in Malaya through his strong personal leadership. First, he continued the successful military innovations from phase two, using small-unit patrols and special operations forces proficient in jungle combat and improved on this through institutional learning. As individual soldiers and units gained more experience from fighting in the jungle, their lessons were incorporated into the curriculum of the Jungle Warfare School and turned into doctrine with the publication of a jungle warfare handbook, *The Conduct of Anti-Terrorist Operations in Malaya*.[33] These innovations allowed inexperienced soldiers to learn more in training, which made them more proficient in tactics and procedures once they reached the battlefield.

He also adapted the political aspects of British strategy by creating a rewards system and improving propaganda. Policies of collective punishment proved counterproductive, so Templer repealed many of the unpopular emergency regulations

while establishing the concept of "white areas."[34] The more stable and secure sections of Malaya were declared white areas where travel restrictions, curfews, and food restrictions were lifted. This provided incentives for the population to support the government's efforts in combating the CTs. After the first white areas were declared, other Malays learned the benefits to be gained from living in a "safe" part of the country (these benefits were publicized through British propaganda).[35]

Propaganda improved as the British recruited more Chinese speakers as interpreters for police or civil administrators and initiated programs, such as Radio Malaya, and mobile propaganda units, which would travel from village to village, playing pro-British films.[36] Also, the increased use of Malay police and soldiers — made up of both ethnic Malays and Chinese — provided better interface with local populations. After initiating more effective political and military measures, Templer began integrating the political and military aspects of British strategy.

In a memorandum addressed to Lyttelton, he announced his intention to consolidate the Federal War Council (primarily military experts) with the Federal Executive Council (civil experts). Integrating the military and civil/political efforts at the highest level ultimately led to further integration at lower levels of authority. He established state and district war executive committees, which controlled each state or district. These committees were comprised of a soldier, police officer, and civil servant, which essentially forced the three branches of government to work together to solve the problems in their regions of the Federation.[37] Templer integrated Britain's political and military strategies by reorganizing the com-

mand and control structure of government in Malaya. This allowed for closer coordination between military, police, and civil administrators.

Under Templer's command, British strategy was also integrated through the subordination of military force to the rule of law. British soldiers had to follow the established rules of engagement, resting on the principle of minimum force. Prior to the Templer era, British troops could act indiscriminately, largely because of the wide range of powers granted to the authorities under the emergency regulations. The harsh policies and behavior of military and police forces, prior to Templer's assumption of command, created the sense among the Chinese population that government "was no friend of the Chinese."[38] With the repeal of the emergency regulations, the law imposed greater limits on military and police forces and the circumstances in which they could use force. By legally restricting the security forces' power, the Malay population began viewing the rule of law as the source of legitimate government.[39]

By centralizing military and political authority in one figure, Sir Gerald Templer, Britain created the necessary conditions to integrate the political and military aspects of British strategy. Templer reorganized the high-level decisionmaking bodies of the government, which allowed better, more efficient coordination between the different branches of government. Also, by emphasizing the use of limited force, Templer presented the law as the supreme authority, which lent more credibility and legitimacy to the federal government. This approach created a legitimate security role for the military and police forces within civil society, further integrating the military and political approaches to achieving British objectives in Malaya.

The Integrated Strategy: Results

Implementing a cohesive, integrated political and military strategy provided a means for the British to address the fundamental political issues that fueled the insurgency and preserved law and order by subduing communist terror attacks. By 1954, many Malays, whether ethnically Malay or Chinese, supported the British policies. In late 1954, the Federation of Malaysia conducted its first national election. Templer "left Malaya on 31 May 1954, driving to the airport in an open car."[40] Although the Emergency was not declared over until Malaya's independence in 1957, and the insurgency actually dragged on until 1960, the integrated British political-military strategy, formulated in three phases from 1948 to 1954, provided the necessary conditions for Britain's ultimate victory.

Lessons

Integrating political and military strategies directly addressed the dual political-military nature of the insurgency. Within this integrated framework, three major lessons emerge. First, military force was restricted — military and police forces operated within the constraints of the law. Although it restricted British forces' firepower, this measure lent political legitimacy to the government since no one was above the rule of law. The use of force was restricted to only the minimum amount necessary. Second, civil programs, such as the white areas, Radio Malaya, and the state and district war executive committees, provided for the civic needs of the Malay population, which directly attacked political issues that had led to the insurgency. Third, strong centralized leadership and a willingness to adapt contributed greatly to Britain's success. Sir Gerald Templer's pragmatic personal leadership provided strategic direction. British and Malay forces also adapted to changing circumstances — the Jungle Warfare School and *The Conduct of Anti-Terrorist Operations in Malaya* handbook institutionalized lessons learned in the field.

The most important lesson of the Malayan campaign is that an integrated political-military campaign provides the most effective means of addressing the disease (political disaffection) and the symptoms (terrorism and guerrilla war) of insurgency. However, other factors, such as strong leadership and professional competence, also proved essential. The integrated political-military campaign relied on the Malayan government, police force, and army for ultimate success. Creating a stable and independent Malaysia was Britain's strategic objective — the political process that created a legitimate Malay government began with British-inspired civil programs, progressed to democratic national elections in 1954, and finally resulted in Malay independence in 1957.

Establishing a legitimate national Malay government provided the British with a ticket home. In Iraq, a legitimate national Iraqi government will provide U.S. forces with tickets home, and hopefully revitalize the shattered Middle East.

Notes

[1]Anthony James Joes, Jr., *Resisting Rebellion: The History and Politics of Counterinsurgency*, University Press of Kentucky, Lexington, KY, 2004, p. 1.

[2]Ibid.

[3]This is my definition based on Joes' definition of insurgency.

[4]For instance, U.S. Marine Corps Colonel Thomas Hammes' book, *The Sling and the Stone*, identifies insurgents who use low-technology, asymmetric guerrilla tactics against high-technology, modern militaries, such as the U.S. military as practitioners of "fourth generation warfare." Portraying insurgency as some sort of new "fourth generation" of warfare is simply a false distinction — insurgents have always sought to engage the enemy's weaknesses, whether through high-tech or low-tech means. The principles of insurgency, such as its fundamental political nature and emphasis on fighting the enemy's vulnerabilities, have remained unchanged despite technological advances.

[5]Joes, p. 7.

[6]John A. Nagl, *Learning to Eat Soup with a Knife*: *Counterinsurgency Lessons from Malaya and Vietnam,* Praeger Publishers, Westport, CT, 2002, p. 60.

[7]Robert Jackson, *The Malayan Emergency*, Routledge, London, 1991, p. 1.

[8]Ibid, pp.2-6.

[9]Ibid, pp.7-10.

[10]Nagl, p. 62.

[11]Transcript from the Fifth Plenary Session of the MCP Central Committee, as quoted in Nagl, p. 63.

[12]Declaration of Emergency: Telegram from Sir E Gent, 17 June 1948, from the British Documents on the End of Empire collection, A.J. Stockwell, ed., *Malaya: Part II The Communist Insurrection 1948-1953*, HMSO, London, 1995, p. 19.

[13]Nagl, p.65.

[14]Cabinet Defence Committee Minutes, 13 August 1948, *Stockwell Documents Vol. 2*, p.52.

[15]Telegram from the Secretary of State for Colonies, Creech Jones, 12 June 1948, *Stockwell Documents Vol. 2*, pp. 17-18.

[16]Kumar Ramakrishna, *Emergency Propaganda: The Winning of Malayan Hearts and Minds 1948-1958*, Curzon Press, Richmond, 2002, p. 100.

[17]The official term for enemy combatants was "communist terrorist" or "CT." On the conventional mindset of British officers during the early phase of the emergency, see Nagl pp. 66-68.

[18]*Stockwell Documents Vol. 2*, p. 65.

[19]Lloyd's 23 August 1948 letter, *Stockwell Documents Vol. 2*, p. 66.

[20]Nagl, p. 69.

[21]Jackson, pp. 36-37.

[22]Nagl, p. 71.

[23]The Briggs Plan, *Stockwell Documents Vol. 2*, p. 218.

[24]Ibid.

[25]Nagl, p. 72.

[26]Ramakrishna, p. 102.

[27]The squatter communities were made up of mostly unemployed Chinese who fled to the jungle during the 1930s and 1940s, occupying land and cultivating their own food. These areas were mostly located in remote areas on the outskirts of the jungle. See Jackson, p. 20.

[28]Nagl, p. 75.

[29]Memorandum from Sir Henry Gurney, dated 4 October 1951. As quoted in Nagl, p. 75.

[30]*Stockwell Documents Vol. 2*, pp. 236-237.

[31]*Stockwell Documents Vol. 2*, pp. 310-311.

[32]*The Times*, 8 February 1952, as quoted in John Coates, *Suppressing Insurgency: An Analysis of the Malayan Emergency, 1948-1954*, Westview Press, Boulder, 1992, p. 205.

[33]Nagl, p. 97. Institutional learning provides the central theme of Nagl's book, in which he analyzes the institutional structure of the British army to understand why and how it managed to adapt to changing situations.

[34]Ramakrishna, p. 120.

[35]Ibid, pp. 138-139.

[36]Ibid, p. 111.

[37]Memorandum to Lyttelton, 28 February 1952, *Stockwell Documents Vol. 2*, pp. 373-376.

[38]Ramakrishna, p. 97.

[39]Thomas Mockaitis, *British Counterinsurgency 1919-1960*, St. Martin's Press, New York, 1990, pp. 17-57. Mockaitis devotes an entire chapter to the concept of the limited use of force in British counterinsurgency operations.

[40]Nagl, p. 102.

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Leader Behavior: How to Identify Good Leaders

by Retired Lieutenant General Walter F. Ulmer Jr.

Leaders can be studied from various perspectives. We sometimes examine values, traits, aptitudes, personality, ambition, intellect, energy, and personal goals to find out what makes them tick. However, in practical terms, the process of leading is best measured not by attributes or characteristics, but by the specifics of what leaders do. This was a major premise of a recent U.S. Army War College study that looked at the leadership of four division commanders who had just completed tours in Operation Iraqi Freedom (OIF).

The study, "Leadership Lessons at Division Command Level-2004," attempted to "…identify behaviors that are crucial for contemporary leader effectiveness." The ultimate measure of effectiveness of course is mission success — both short and long term. To achieve that success, leaders must create and sustain robust, focused, resilient organizations. The team that created this study also recognized that operations in Iraq present an environment that epitomizes two fundamen-

tal challenges for leaders of all organizations: the need to attain immediate tactical success while maintaining the long-term health of the force; and establish the necessary centralized control to ensure integration of operating systems while encouraging and supporting the required initiative at subordinate levels.

The first conceptual issue in the study was to design a method of isolating specific critical leader behaviors. Which behaviors really make a difference between the "good" and the "poor" leader? To answer this question, the team reviewed U.S. Army leadership doctrine, which included U.S. Army Field Manual (FM) 22-100, *Army Leadership*, and Army Regulation (AR) 600-20, *Army Command Policy*, as well as publications from the U.S. Army Command and General Staff College, the U.S. Army War College, and significant past studies of Army officer leadership. Studies included the U.S. Army War College's "Study on Military Professionalism" in 1970 and "Leadership for the 1970s" in 1971; the Center for

Strategic and International Studies report, "2000 American Military Culture in the Twenty-First Century;" and the 2001 Army Training and Leadership Panel Officer Study.[1] Also reviewed were contemporary articles, such as the 2004 paper by Leonard Wong, "Developing Adaptive Leaders: The Crucible Experience of Operation Iraqi Freedom."[2]

An interesting but not surprising finding from that exploration of previous studies was that certain behaviors kept surfacing as crucial to "good" leadership. There is no doubt that Army officers over the years have had a solid feel for what "good" looks like. While there are some differences of opinion on the relative importance among behaviors, there is remarkable agreement across grades and branches on which set of behaviors really make a difference. It is also important to note that in distinguishing "good" leaders from others, the distinction did not fall between leaders on one side, who focused on mission, and leaders on the other, who focused on people. Rather, it was

Leader Behavior Preferences (LBP) Worksheet

(Behaviors that create a command climate that supports operational excellence and motivates competent people to continue military service.)

Specific leader behavior (for a division commander)				
1. Adapts quickly to new situations and requirements.				
2. Understands and employs current Army and Joint doctrine.				
3. Keeps cool under pressure.				
4. Knows how and when to involve others in decisionmaking.				
5. Clearly explains missions, standards, and priorities.				
6. Sees the big picture; provides context and perspective.				
7. Sets high standards without a "zero defects" mentality.				
8. Encourages initiative and welcomes new ideas.				
9. Backs up subordinates; confronts the boss if necessary.				
10. Is trustworthy; keeps promises or explains why he can't.				
11. Employs units in accordance with their capabilities.				
12. Can handle "bad news."				
13. Gets out of the headquarters and visits the troops.				
14. Coaches and gives useful feedback to subordinates.				
15. Sets a high ethical tone; demands honest reporting.				
16. Will share the risks and hardships of his soldiers.				
17. Knows how to delegate and not "micromanage."				
18. Is consistent and predictable in his behavior.				
19. Shows respect and consideration for others of any rank.				
20. Puts mission and people ahead of his own career.				
21. Is approachable; listens to questions and suggestions.				
22. Can make tough, sound decisions on time.				
23. Shares the limelight; gives due credit to others.				
24. Senses unproductive policies and makes prompt adjustments.				
25. Builds and supports teamwork within staff and among units.				
26. Holds people accountable for their actions and results.				
27. Is more interested in doing good than looking good.				
28. Is fair; doesn't play favorites with units or people.				
29. Is positive, encouraging, and realistically optimistic.				
30. Write in:				

Figure 1.

Note: This list may be reproduced with credit to AWC Study "Leadership Lessons at Division Command Level–2004."

how leaders approached mission and people that accounted for the perceived differences in the quality of their leadership.

One major preliminary task, then, was to assemble a list of behaviors that seemed to be critical. That list would be used in surveys and discussions with the study participants. While this study focused on division commanders, the requisite behaviors were typically relevant to any level of the organization, and discussions with participants, who ranged in grade from captain to lieutenant general, went beyond the exclusive behavior of division commanders. (As one indicator of the relative universal applicability of basic leader behaviors, an Army Research Institute study a few years ago on leader effectiveness in light infantry platoons showed many critical behaviors at that level were similar to those seen important for division commanders.)

The study team eventually isolated 29 behaviors, derived from current leadership doctrine and the synthesis of prior studies. That preliminary list was further reviewed by a number of active duty and retired officers who had extensive leadership experience. An Army War College class and some scientists familiar with Army leadership principles and methods also helped to refine the list. The final list became one of the survey instruments used in the study, see Figure 1. These 29 behaviors were seen as relevant and comprehensive by the 77 officers from the four divisions, who eventually participated in the study at their home stations within a few weeks of returning from OIF.

To gain an external view of division mission accomplishment, two corps commanders and a deputy corps commander were queried about the combat performance of the divisions and the styles of the division commanders (individual or unit data was not specified in the report; subordinate participants provided survey input anonymously). In each division, the division commander, the assistant division commanders (when available), the chief of staff, eight members of the division staff, and from six to ten subordinate commanders completed survey instruments and participated in lengthy and wide-ranged discussions with study team members. These participants had observed the division commander during most or all of the division's deployment to OIF.

The study report provided a number of conclusions and recommendations. The study concluded that we have a lot of impressive people in today's very busy Army! The study further concluded that we still have some development and selection work to do. In particular, we must have the interpersonal skills to gain trust and build the essential horizontal and vertical teams needed to take full advantage of the high level of tactical and technical competence that typically exists in our Army.[3]

Twelve behaviors, validated by officers returning from a combat theater, were selected as the most important factors in creating a command climate that supports operational excellence and motivating competent people to continue their military service. These behaviors, referred to in the study as the "Big 12," also best differentiate between "good" and "poor" leaders. Note that the criterion included both short- and long-term mission requirements: tactical success today; a strong Army tomorrow.

The "Big 12" list, shown in Figure 2, is not proclaimed to be the silver bullet that answers all leader development questions. Different situations, different resource levels, different states of organizational training, and coherence, all dictate particular leader behaviors best suited to the moment. This list can provide a useful starter for officer professional development discussions among other things.

Notes

[1]U.S. Army Field Manual (FM) 22-100, *Army Leadership*, U.S. Government Printing Office (GPO), Washington, D.C., 31 August 1999; Army Regulation (AR) 600-20, *Army Command Policy*, GPO, Washington, D.C., 13 May 2002; U.S. Army War College, "Study on Military Professionalism," Carlisle Barracks, PA, 1970, U.S. Army War College, "Leadership for the 1970s," Carlisle Barracks, PA, 1971; the Center for Strategic and International Studies report, "2000 American Military Culture in the Twenty-First Century," U.S. Army War College, 2000; and Report to the U.S. Army, "2001 Army Training and Leadership Panel Officer Study," Department of the Army, Washington, D.C., 2001.

[2]Leonard Wong, "Developing Adaptive Leaders: The Crucible Experience of Operation Iraqi Freedom," U.S. Army War College, Strategic Studies Institute, Carlisle Barracks, PA, July 2004.

[3]The complete 103-page study, dated 5 November 2004, can be accessed online by searching on "Leadership Lessons at Division Command Level-2004" at *http://stinet.dtic.mil.*

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Lieutenant General (Retired) Walter Ulmer served as a team member for the study, "Leadership Lessons at Division Command Level-2004." He received a B.S. from the U.S. Military Academy and an MRP from Penn State. He is a graduate of the U.S. Army War College. During his career, he served in various command and staff positions, to include commanding general, III Corps, Fort Hood, TX; commanding general, 3d Armored Division, Germany; assistant division commander, 2d Armored Division; deputy commanding general, U.S. Army Armor Center, Fort Knox, KY; and commandant of cadets, U.S. Military Academy, West Point, NY. In 2002, he held the General of the Army Omar Bradley Chair of Strategic Leadership, which is shared by Dickinson College and the Army War College.

"BIG 12"

At the top of the list: (In order of question number)

\# 3. Keeps cool under pressure.
\# 5. Clearly explains missions, standards, and priorities.
\# 6. Sees the big picture; provides context and perspective.
\# 22. Can make tough, sound decisions on time.

Also particularly significant: (In order of question number)

\# 1. Adapts quickly to new situations and requirements.
\# 7. Sets high standards without a "zero defects" mentality.
\# 12. Can handle "bad news."
\# 14. Coaches and gives useful feedback to subordinates.
\# 15. Sets a high ethical tone; demands honest reporting.
\# 17. Knows how to delegate and not "micromanage."
\# 25. Builds and supports teamwork within staff and among units.
\# 29. Is positive, encouraging, and realistically optimistic.

Figure 2

LETTERS from Page 3

was great for taking out the machine guns and worked marvelously until the attacking forces achieved a penetration. Their inability to get accurate and timely calls for fire was a major contributor to the stalemate on the Western Front and the futile nature of western front warfare. With the advent of workable wireless, penetration forces can now call for accurate fire support of all kinds.

Uniquely, the Germans tailored armored units to exploit the qualities of the tank and to compensate for its disadvantages. I think this approach was revolutionary. Marlborough certainly got the most out of his cavalry (Blenheim); however, even he did not tailor his army force structure to make cavalry the decisive arm. Except for the Soviets after 1943, no other army took this approach. Guderian's writings are clear. The tank was the primary weapon and all other arms (infantry, artillery, close air support) were tailored to support the tanks. This was only in the armored/mechanized/motorized divisions. The vast majority of the German army was traditional and horse drawn. But, even they could get accurate and timely fires using radios.

The British continued to use tank-pure formations through most of the war. Even their World War I experience tended to be tank formations charging ahead with the infantry following. Montgomery refers to Lumsden "swanning around the desert in a white tank" with no radio contact with artillery or the Desert Air Force. The Germans in Africa were puzzled by and thankful for the tremendous success of the 88mm AA guns. These guns, with their high profile, were extraordinarily vulnerable to artillery, but the British almost never supported tank charges with artillery — tank units had no way to call for artillery.

The U.S. Army mostly used tanks as infantry support weapons. An exception was the armored division, especially the 2d and 4th. The corps tank battalions gave great service to "their" infantry divisions. Our theory of combined arms as practiced by Patton and others was close to Blitzkrieg, but not the same, and our artillery was undoubtedly the most lethal and responsive in the war.

Maybe it is merely a matter of degree, but when one contrasts the campaign in France in 1914 with the campaign in France in May 1940, I think the conclusion that Blitzkrieg was revolutionary is a safe one.

PHILIP ALLUM
LTC, U.S. Army, Retired

**Announcing the Inaugural
Combined Arms Center Commanding General's 2006
Special Topics Writing Competition: "Countering Insurgency"**

"The 'expert' thing just kills me. I thought I understood something about counterinsurgency, until I started doing it."

— LTC John A. Nagl, *Learning to Eat Soup with a Knife:
Counterinsurgency Lessons from Malaya and Vietnam*

The Army absolutely needs to understand more about counterinsurgency (COIN) — nothing less than the future of the civilized world may depend on it. If you have something to contribute, submit it to the Combined Arms Center Commanding General's 2006 Special Topics Writing Competition: "Countering Insurgency." The possible topics are nearly limitless: relevant historical studies, cultural considerations, gaining and sustaining public support, ethical challenges, enhancing COIN coalition operations, transitioning from combat to nation-building, tactical and strategic issues, **armor in COIN**, winning hearts and minds, the battles for Fallujah, "lawfare," and so on. For more ideas, see the contest rules, enclosure 3, at *militaryreview.army.mil.*

Winning papers will be well-written, carefully researched, analytically oriented critiques, proposals, or relevant case histories that show evidence of imaginative, even unconventional, thinking. Submissions should be approximately 3,500 to 5,000 words long.

First prize is $1,000, featured publication in the Combined Arms Center's *Military Review,* and a certificate of recognition signed by the commanding general. Second prize is $500, publication, and a signed certificate. Third prize is $250, publication, and a certificate. Fourth prize is $250, special consideration for publication, and a certificate.

Essays should be submitted with an enrollment form not later than 1 April 2006 to *Military Review*, ATTN: COIN, 294 Grant Avenue, Fort Leavenworth, KS 66027-1254, or via email to *milrevweb@leavenworth.army.mil* (Subject: COIN). For a copy of the enrollment form and additional information, visit the *Military Review* website or call (913) 684-9330 (DSN 552).

Fort Carson's COE Gunnery Validation

by Major Christopher H. Engen and Sergeant First Class William C. O'Connor

In their article, "The Future of Tank Gunnery," in the September-October 2004 issue of *ARMOR*, Major Herb Skinner and Sergeant First Class Michael Dunfee introduce the armor and cavalry communities to the latest developments in tank gunnery.[1] As readers of that article considered the merits of the described changes, tank crews at Fort Carson, Colorado, were putting these new concepts to the test.

From September to early November 2004, crews from 1st Battalion, 68th (1-68) Armor and 3d Armored Cavalry Regiment (ACR) conducted validation gunnery, observed by members of Fort Knox's Crew Gunnery Branch. A total of 108 crews fired the revised tables, providing subjective feedback in the form of crew survey results, as well as engagement times and scores. Sixty-nine crews from 3d ACR fired the M1A2, and 39 crews from 1-68 Armor fired the M1A1 heavy. Although final approval of the contemporary operational environment (COE)-compliant strategy is still pending, this article provides both resource and training lessons learned to help prepare trainers for soon-to-be published changes.

Range Improvements

As described in "The Future of Tank Gunnery," the COE-compliant gunnery incorporates urban engagements that re-quire the addition of urban facades on existing tank ranges. Skilled members of Fort Carson's range control staff, working closely with the division master gunners, designed, built, and installed facades to support the new tables. The facades were constructed using plywood that was supported by a galvanized metal outer frame and a wooden inner frame composed of 4x4 diameter beams. Approximately 16-feet tall, each facade represents a two-story structure with four opened windows. Single troop target lifters can be installed in any of the four windows (see Figure 1). The facades are not permanently set into one position, which provides flexibility when developing engagement scenarios. Instead they are held in place by artillery powder canisters, which are dug into the ground, that serve as boots or receptacles for the frame (see Figure 2). Wire cables to the front and rear help secure the facade. Moving a facade from one set of pre-dug boots to another takes approximately 30 minutes using an M88 recovery vehicle. The cost of materials for each facade is approximately $1,700, and takes a crew of workers approximately eight hours to build. Urban facade materials include:

- Fourteen 4"x 4" x 10' wood beams.
- Seventy-five feet of 4"x 4" diameter galvanized beams.
- Ten sheets of 4' x 8' plywood (3/8").

- Twenty saddle bolts.
- Two 16' sections of PSP metal beams.
- AR500-grade steel plates (protection for target lifters).

Although the facades described above proved both effective and challenging during the course of the validation gunnery, it became apparent that both construction and placement could be improved. For instance, multisided facades provide a better, more realistic three-dimensional battlefield than single-sided structures when the turret-to-target angle becomes increasingly oblique. As tanks progressed down the course roads toward the facades, the turret-to-target angle become too flat to maintain realistic presentation. More importantly, this reduced angle also created the need to position the front or engagement side of the facade slightly toward the course road. A single troop target in a window opening offers much less of a target cross section than a full set of exposed troops, and becomes much harder to acquire and engage when closing the distance on an offensive engagement. This lesson did not become fully apparent until several crews had tested our urban target array.

The COE gunnery also presents crews with nonstandard or "technical" truck-type targets. Our technical trucks are con-

"Our lead units found that the common practice of combining Tank Tables V and VI into one modified table hindered their ability to train key skill sets later tested on Table VIII."

Figure 1. Front and side views of urban facade with single troop target

structed like any other moving vehicle target, using plywood cut to the dimensions of a Toyota pick-up truck with a silhouette of a machine gun mount in the rear. Painted white, these targets have thermal pads placed to represent the heat signature of the wheels and the engine block. These targets worked well and looked exactly like a small pick-up truck scooting across the range.

Although our urban facades and technical trucks performed well and set the required training conditions, we quickly identified the need to improve our friendly target presentations. COE gunnery requires presentation of friendly and civilian vehicles, as well as friendly and civilian personnel during both day and night conditions. We did not develop a sufficiently realistic means of marking these targets prior to gunnery execution, using only VS-17 panels to distinguish friendly from threat. However, a number of suggestions emerged, such as affixing civilian clothes to standard troop targets, painting friendly troop targets tan or sand colored, installing blinking infrared "bud lights," used by our troops in theater, and placing combat identification panels (CIP) on friendly vehicle targets.

Having only one tower-operated daylight/thermal sight connected to a video recording system stands out as perhaps the most significant range capability shortfall we identified during COE validation gunnery. The new gunnery tables include simultaneous presentations for the tank commander and gunner, as well as the loader in both Tables VII and VIII. While tank crew evaluators (TCEs) succeeded in scoring these engagements, aided by observers using binoculars and computer sensing relayed by the target operator, they were unable to capture the events on video for after-action review (AAR) purposes and potential alibi adjudication. As a minimum, a second, independently-controlled, long-range sight with thermal and video recording capability should be installed on every range used to support COE gunnery.

Training Aids and Simulations

According to the crew gunnery doctrine team, upgrades to unit conduct of fire trainer (UCOFT) and advanced gunnery training systems (AGTS) that support the COE strategy will commence following formal approval. However, there exists a need to develop or modify training aids or simulations to support the addition of the loader's M240 targets during the lower tables and Table VIII A1 and A4 engagements. Without sufficient training aids, loaders have no means of developing or sustaining their skills prior to live fire. Our units at Fort Carson compensated for this by using our convoy skills trainer, which includes four M1025/26 high-mobility, multipurpose wheeled vehicle (HMMWV) mockups with turret weapons linked to two engagement skills trainer (EST) 2000 simulators. While a HMMWV-mounted M240B does not provide a perfect match to the loaders M240C, it did give loaders a chance to become familiar with their weapons at a "crawl" pace before firing live rounds. To better train our loaders, we are exploring options such as a loader station mockup linked to the EST 2000.

Unit Training Strategies

The added machine gun engagements also required changes to gunnery training plans and fostered some equipment modification. Our units placed greater emphasis on machine gun skills, as well as machine gun maintenance because the loader's M240 can no longer be considered a spare. Also, as our units executed the lower tables, they soon found that the current loader's machine gun mount and "butterfly" trigger adapter did not foster quick, accurate target acquisition and en-

gagement. Some companies and troops modified the loader's M240 by adding a butt stock, pistol grip, and barrel with sights, essentially transforming it into an M240B. This modification significantly improved loader ability to engage and destroy troop targets. However, the brass catcher of the current loader's M240 mount does not accommodate the addition of the pistol grip. Units choosing to add the pistol grip found two quick fix solutions: some cut a U-shaped groove into the back of the brass catcher, which allowed the weapon to be properly seated into the mount; and others raised the mount and connected the loader's M240 using the front pin only, but at the expense of flying spent cartridges that did not fall into the brass catcher. Regardless of the method used, crews reported better control and quicker engagement times using these modifications.

Due in part to the recognized need for additional machine-gun training, units learned they must maximize use of the lower training tables to properly train

Figure 2. Green bag artillery powder canister dug into ground to serve as target base

crews for success on Tables VII and VIII. Our lead units found that the common practice of combining Tank Tables V and VI into one modified table hindered their ability to train key skill sets later tested on Table VIII. Subsequently, follow-on squadrons lengthened their respective gunnery calendar to allow for the separate firing of Tables V and VI. The new versions of Tables V and VI represent a significant departure from previous versions, and if executed as designed, will foster success during Table VIII qualification.

The ability of tank drivers to conduct quick, stable short halts while on the offense stands out as another important skill now required but not trained during previous versions of M1 gunnery. During Tank Table VIII, crews must perform short halts while executing the A1, A3, and B5 engagements. Veterans of the M60 series tanks will certainly recall the need to conduct short halts, but the M1 has long been touted for its ability to "shoot on the move." This capability does not exist, however, when required to fire the top-mounted machine guns or when using the gunner's auxiliary site (GAS). Use of the turret machine guns and the GAS while on the offense are both tested during COE gunnery. While most drivers quickly develop the "soft touch" necessary to quickly bring the tank to a stop without a rocking motion that delays target engagement, this ability does not just happen without training. Our units recognized this as the gunnery progressed, and plan to include more short-halt exercises in both their driver and gunnery training programs.

Tank Table VIII

The task of validating COE gunnery Table VIII engagements rests with the crew gunnery branch team, and the results of Fort Carson's tank crews should not be considered an authoritative source when developing unit training strategies. However, the following paragraphs describe the trends that emerged during our conduct of COE Tank Table VIII.

Five engagements, three day and two night, proved particularly challenging to our crews. The A3 engagement presented a moving armored personnel carrier (APC) (900 to1100m) and a stationary rocket-propelled grenade (RPG) team (200 to 400m) during the offense, and the gunner was required to use the GAS, due to primary sight failures. Crews had difficulty performing a rapid short halt and subsequently engaging the RPG with the gunner's M240 using the GAS. One of the A4 simultaneous engagements presented a defilade tank (700 to 900m), an RPG team (100 to 300m), and a station-

ary truck (600 to 800m) that the gunner, loader, and tank commander had to respectively destroy while the coax and gun turret drive (GTD) were both inoperable. The requirement to acquire and engage multiple targets, using multiple weapons with manual controls, proved difficult. The remaining problematic day engagement, A5A(S), presented a stationary BMP (900 to 1100m), a moving "evasive" tank (1500 to 1700m), and a set of troops (300 to 500m). The gunner was required to engage and destroy multiple targets while on the offense and the crew would switch from using high-explosive antitank (HEAT) rounds to Sabot during the engagement, because the stationary PC is classified as more dangerous than the moving tank. Meeting the required engagement time proved the greatest challenge associated with this engagement.

Two night engagements, B2 and B4, created a greater challenge for crews than the other night engagements; largely because they required the gunner to acquire and engage three targets in rapid succession. As expected, night conditions caused the loader and driver to offer less target acquisition assistance, and crews firing from the M1A1 lacked the target acquisition capability afforded by the commander's independent thermal viewer (CITV) on the M1A2. The B2 engagement presented a moving APC (600 to 800m), a stationary BMP (1200 to 1400m), and an RPG team (100 to 300m) while on the offense. The B4 engagement presented three stationary, frontal-view tanks (700 to 900m, 1200 to 1400m, and 1600 to 1800m) while the crew occupied a defensive position and reacted to nuclear, biological, and chemical (NBC) conditions. In both cases, slow times from poor target acquisition proved the greater challenge as opposed to the ability to achieve target hits.

None of these five engagements should be considered "too difficult" or beyond the capabilities of most crews in terms of engagement times or target difficulty. However, they stand out as the most challenging engagements during the conduct of Tank Table VIII. While our lead units could not have predicted that these tasks required additional training focus, our follow-on units ensured that the skills tested by these engagements were given proper focus during the lower tables. Units that consider our experience with these engagements, and subsequently address the required training during preliminary gunnery training and execution of the lower tables, will likely meet with success.

The information in this article represents the collective resources and training lessons learned from the crews, units,

and agencies at Fort Carson that supported the Army's COE-compliant gunnery validation from September to November 2004. Working in close coordination with the Fort Knox Crew Gunnery Branch, the "Mountain Post" team trained 108 tank crews to meet some of the new challenges faced on the modern battlefield. This new strategy provided relevant, useful training for dealing with both close- and long-range threats, and prepared crews for the full spectrum of mounted combat. Many of the crews that participated in this validation support the new strategy, and enjoyed the challenge of being among the first to fire these tables.

Whatever the final outcome of the validation process, rest assured that the Fort Knox team that supported our gunnery remained receptive to comments and feedback, observed first-hand the conduct of the ranges, and were determined to make whatever changes might be necessary to provide tank and cavalry M1 crews the best possible gunnery training strategy.

Notes

[1]Major Herb Skinner and Sergeant First Class Michael Dunfee, "The Future of Tank Gunnery," *ARMOR*, September-October 2004, pp. 20-25.

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Brigade Intelligence Collection Manager

by Major Kent Strader

"Rommel was far superior in his more rapid assimilation of the facts, his more rapid decision about what to do, and the drive behind his command, which forced his troops to success."[1]

— Ronald Lewin,
Rommel as Military Commander

Managing intelligence is the key to shaping the battlefield and setting conditions for success within the brigade area of operations. To manage intelligence competently, a centralized command and control node must be empowered to manage the reconnaissance fight and focus brigade assets, thereby assisting brigade commanders in setting conditions for the main battle. The trend throughout the Army's maneuver brigades has been creating a non-modified table of organization and equipment (MTOE) chief of reconnaissance position, who manages intelligence collection of intelligence, surveillance, and reconnaissance (ISR) assets.

The brigade intelligence collection manager (BICM) is the operations or execution side of the reconnaissance fight, while the S2 is the plans and analysis side. Furthermore, the S2 typically analyzes intelligence while the BICM focuses the reconnaissance effort to achieve the reconnaissance objective. This concept is borrowed from the generation prior to the contemporary operational environment (COE). In the heavy opposing force structure, the regimental reconnaissance company commander wore two hats — the company commander and reconnaissance plan executor.

This article proposes a centralization of intelligence flow and execution, managed by the brigade reconnaissance troop (BRT) commander on the brigade operations and intelligence (O&I) net, in cooperation with the brigade S2, who analyzes the raw data being gathered.

What brigade commanders want reconnaissance to achieve and what they get is hobbled by placing the mantle of chief of reconnaissance (COR) or BICM on the wrong man. Typically, a non-career course captain, who was the best scout platoon leader in the brigade, becomes the COR. He lacks the authority to interact with the brigade staff and the level of professional development necessary to operate at the brigade level, which means he is generally out of his league. Few would venture to pin the BRT commander with the rose of BICM; however, he is best suited and resourced to handle the responsibility. Nevertheless, the central issue is managing the ISR plan, which means ownership. No one will argue that the brigade S3 is the master planner and architect of the ISR scheme of maneuver and resources. However, as the maneuver planning continues into the later stages of the troop leading procedures, his control on the ISR plan is left to the executors. Therefore, he needs a representative, who works in concert with the scheme of maneuver and the brigade commander's intent for reconnaissance.

The BRT commander or BICM is the sole collector of raw intelligence and synchronizes the brigade collection plan to

answer the brigade commander's intelligence requirements (IR) and saturate the brigade zone so that timely intelligence can assist the brigade commander in making judicious, informed decisions. If the brigade commander is the architect of shaping operations, the BICM is the foreman. Brigade intelligence collection managers set the conditions through synchronization of reconnaissance operations and managing the reconnaissance zone, filtering information, adjusting the reconnaissance set as losses occur, and applying fires to shape the battlefield.[2]

The BRT commander is resourced by the MTOE to function as an independent command and control node and has the appropriate communications architecture, with augmentation from the brigade, to command and control every collector within the brigade area of operations (AO). Scout platoon leaders, the combat observation and lasing team (COLT) platoon leader, the military intelligence ground surveillance radar (GSR) platoon leader, engineer reconnaissance platoon leader, tactical air control parties (TACPs), and the chemical reconnaissance section leader should report to and deconflict operations through the BRT commander using the brigade O&I net. Meanwhile, the BRT first sergeant operates not only as the casualty evacuation (CASEVAC) vehicle for the BRT, but the coordination node for the brigade's reconnaissance casualty evacuation operations.

The BICM provides invaluable assets to brigade commanders, which include sharing intelligence to avoid unnecessary casualties, synchronizing the efforts of his collectors, ensuring necessary redundancy is built into the ISR plan, executing the collection plan, adjusting the collection plan when an asset becomes a casualty, maintaining contact with the enemy throughout the zone, refining targets and recommending a focus of fires during the reconnaissance fight, and preventing collector fratricide through situational awareness. Separating these roles is vital because of how they impact the brigade maneuver. Common trends seen at the National Training Center (NTC) include a lack of centralized command and control of all the battlefield collectors, contributing to intelligence gaps and unnecessary battlefield casualties resulting from a failure to share intelligence; a communications architecture that does not provide timely raw intelligence; an inability to adjust the reconnaissance set when a collector is rendered a casualty; little to no refinement of targeting; ineffective information battle handover throughout the reconnaissance zone; and most importantly, a failure to target and attrite the enemy throughout the depth of the battlefield.

Conversely, opposing forces (OPFOR) at combat training centers (CTCs) are adept at maintaining contact with the player brigade from the time they leave their assembly areas; accurately targeting the brigade with indirect fires and special munitions; triggering artillery delivered munitions; and ultimately setting the conditions for decisive maneuver. This is accomplished with one man on one radio net, who is responsible for the collection of battlefield intelligence and managing the reconnaissance assets within the reconnaissance zone. This creates a cohesive intelligence picture so that, at a glance, the commander can ascertain the course or courses of action that remain open to him prior to and during execution. Up-to-the-minute reporting is forwarded when and where it is needed to effect maneuver.

Adaptation of this tactic, technique, and procedure (TTP) is not as simplistic within a brigade combat team (BCT) as it is in the OPFOR where battalion-sized commands are fought by captains who, in reality, command a company of men with a battalion's worth of vehicles. Therefore, it is more important to streamline the flow of intelligence and keep it centralized for prompt action and optimal situational awareness.

This concept may sound extremely unorthodox and repulsive to battalion commanders who expect to lose their task force scouts to brigade; however, as you will see, this is not the case — in fact, task force scout effectiveness can double. Failure to centralize the brigade reconnaissance effort prohibits the brigade commander's ability to decisively affect the outcome of the battle due to a retarded intelligence management system. Task force and brigade collectors will be unaware of what enemy activity has taken place within their AO prior to infiltration or occupation of a screen line, causing the brigade to wander blindly into enemy contact — centralization could have prevented contact and multiplied efficiency.

Task force commanders reading this article may think they will lose control of their scouts to brigade; this is not the case. If the task force S2 uses the scout pla-

Proposed Brigade O&I Net Structure

Brigade O/I

BRT Commander — Brigade S2 — Brigade TOC

BRT Platoons — Brigade ERT Platoon Leader — Task Force Scout Platoons — Chemical Recon Platoon — COLT Platoon — GSR Platoon
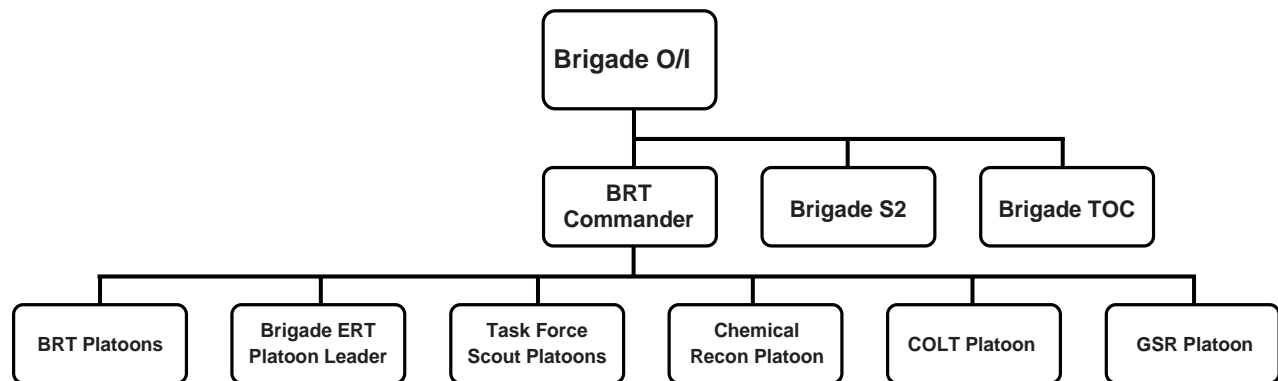
Figure 1

toon internal net as a task force O&I, he can eavesdrop and gather the task forces' pertinent intelligence, as well as converse with the scout platoon leader as needed. Net management is essential to this technique of intelligence management (see Figure 1).

Communications rehearsals are imperative and should be incorporated into the ISR rehearsal. Typically, we see the ISR portion of the upcoming battle amalgamated into the combined arms rehearsal, which is a critical error. If the collectors were infiltrating and gather intelligence the night prior, the guesswork would be taken out of the S2's job, and refining objectives and targets would assist the commander in visualizing the battlefield and providing better guidance.

Instead of the collectors attending the rehearsal, the BRT commander attends and briefs the reconnaissance plan in concert with the task force S2. The BRT commander then provides his commanders a current read of raw intelligence and enemy sightings, which is followed by the brigade S2's analysis. During this rehearsal, the reconnaissance objective and the commander's critical intelligence requirements maybe refined if the collectors have enough time to develop the situation. Task force scout platoon leaders should also attend this rehearsal, which will assist them in visualizing the enemy's counterreconnaissance set, refining lethal and nonlethal methods of obscuration and disruption, and planning infiltration routes based on the brigade assets successes or failures.

Fires are a critical element of this concept; therefore, if the brigade fire support officer (FSO) is not tied into the ISR planning and execution, the plan will fail. Essential fire support tasks (EFSTs) built from the brigade commander's intent for fires are focused on an enemy formation and function; however, the location of targets must initially be based on the brigade S2's enemy situation template (SIT-TEMP). During the reconnaissance phase of the operation, it is especially critical for the brigade FSO to plan fires based on the infiltration routes of the brigade collectors and refine targets based on intelligence collected. That's basically how it works; however, the reality is that fires at the NTC are executed off of templates due to ineffective reconnaissance, which is tied back to decentralized intelligence collection management.

The Shaping Operations Rehearsal

Adding one more rehearsal to an already busy schedule may seem like an improb-

able situation — until you look at the end result. If reconnaissance sets conditions, then intelligence collection is key to battlefield success, and subsequently, the ISR rehearsal, perhaps more appropriately termed the "shaping operations rehearsal," is imperative. If commanders can visualize their reconnaissance effort as part of the mobility effort (obstacle identification and reduction by engineer reconnaissance teams (ERTs) and scouts), a combination of attrition by fires, which takes away key enemy capabilities such as digging assets and mine-laying equipment, and surveillance of the enemy's disposition and strength would shape the battlefield for future success. This is what most commanders and staffs are trying to achieve, but getting there seems to be the

obstacle. This is why a shaping operations rehearsal is imperative. After observing numerous battalions and brigades at the NTC, shaping operations or ISR rehearsals are not currently occurring as part of the BCT battle rhythm; however, any rehearsal is preferable to no rehearsal.

Rehearsals should incorporate all battlefield operating system (BOS) elements to coordinate reconnaissance CASEVAC, fires planning, mobility planning, air defense planning, close air support, chemical reconnaissance, recovery and maintenance operations, and intelligence operations. Therefore, the recommended attendee list should include, but not be limited to the brigade XO, S3, S2, S4, FSO, air defense artillery officer (ADAO), as-

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Shaping Operations Rehearsal Checklist

❏ Roll Call:
- o Brigade S3
- o Brigade S2
- o Brigade S4
- o Brigade FSO
- o ADAO
- o ABE
- o ALO
- o CMO
- o SIGO
- o BRT Commander and 1SG*
- o Task Force Scout Platoon Leaders and Platoon Sergeants*
- o Charlie Med Company Commander
- o Medevac Flight Team
- o TACP Team Leaders*
- o MI Company Commander
- o Chemical Reconnaissance Platoon Leader or Section Leader*
- o Task Force S2s
- o ERT Platoon Leader and Platoon Sergeant*
- o GSR Platoon Leader and Platoon Sergeant*

❏ S3 briefs focus statement and brigade scheme of maneuver

❏ Brigade S2 briefs most probable course of action (MPCOA) and most dangerous course of action (MDCOA) and NAIs

❏ Brigade FSO addresses assets available, EFSTs, targets supporting infiltration, availability of immediate suppression missions, and target refinement requirements

❏ ABE briefs POE, reviews marking and bypass criteria and ERT focus

❏ ALO briefs Commander's Intent for CAS, location of TACPs and concept of employment, relevant air tasking order (ATO) info and ordnance

❏ SIGO briefs locations of retrans and infil routes, retrans plan and redundant commo plan

❏ CMO briefs enemy chemical reconnaissance teams locations, concept of employment, by expected enemy COA for employment of WMDs

❏ Combat health support officer (CHSO) briefs brigade CASEVAC plan

❏ *Collectors address T/O, T/P and scheme of maneuver to include actions on contact, actions enroute, actions at recon objective, specific NAIs and associated PIR and CASEVAC plan

*Denotes collectors who must brief IAW checklist.

Figure 2

sistant brigade engineer (ABE), air liaison officer (ALO), civil-military operations officer (CMO), signal officer (SIGO), BRT commander and first sergeant, task force scout platoon leaders and platoon sergeants, the forward support battalion medical company commander and medical flight lead, all TACP team leaders, the military intelligence (MI) company commander, the chemical reconnaissance section leader, all task force S2s, and all separate collection leaders, such as the engineer reconnaissance platoon leader and platoon sergeant, and GSR platoon leader and platoon sergeant.

The steps outlined in the checklist at Figure 2 are self-explanatory; however it is necessary to elaborate on the collectors. Everyone should use a terrain model/cloth to brief. Each collector addresses individual unit task organization, task and purpose, and scheme of maneuver, to include actions on contact; actions en route; actions at the reconnaissance objective; specific named areas of interest (NAI) and associated priority intelligence requirements (PIR); and CASEVAC plan. Each leader will conclude the back brief with a plan for adjusting the reconnaissance set in the event of losses on critical NAIs. The order of briefing should be by order of movement; for instance, starting with the BRT and ending with the task force scouts. Each element *must* address who he will coordinate with in advance to "pull" him through sector; for instance, a task force scout platoon leader should recite his scheme of maneuver and address how he will coordinate with the BRT and other brigade-level assets to "pull" his platoon through sector. He should be required to address the frequencies and call signs of each element from which he will require assistance. The BICM or BRT commander is then responsible for assisting each platoon leader by reminding him of who he needs to coordinate with prior to movement, and receiving a brief back on changes to infiltration routes and reported or suspected enemy locations. He is responsible for coordinating indirect fires during infiltration.

The issue of dedicated fires in the heavy force has been a subject of some debate across the Army. Should a battery be assigned to fire in support of each BRT platoon or infiltration sector? Based on experience, I have seen probably only five fire missions called for a scout who was in contact. Normally, missions are denied by the brigade fire support element (FSE) because either the observer failed to send an accurate target description or the mission objective did not support the scheme of fires. At the NTC, it appears that the issue is effects based. Will the mission

destroy the enemy or suppress him? Therefore, firing by battery is very problematic because decisive effects cannot be achieved.

The effects the collectors need are suppressive and even if it has not been articulated, protection of ISR assets is an EFST during the reconnaissance/counterreconnaissance phase of any operation. Providing these fires requires the fire support coordinator to restrict the ammunition consumption to support the brigade commander's other EFSTs. The BICM cannot exhaust the controlled supply rate, so someone must enforce the stated trigger when fires must be denied to support the brigade commander's intent for fires and permit the artillery battalion to achieve its EFSTs.

The task force is not relieved from the responsibility of providing fires to support its own organic ISR assets. Mortars must support the reconnaissance fight from the line of departure to maximum safe extent of range to help service contacts in the brigade zone. Therefore, the task force mortars should be employed forward with a counterreconnaissance company during the security or reconnaissance fight. In the reconnaissance fight, destruction of a target is not the desired effect; suppression is preferred to allow the collector to break contact and survive the engagement. Linear smoke missions to screen a collector or a section infiltration route should be standard operating procedure at likely enemy contact locations.

A Final Note on Collector Net Management

The intelligence collector manager must have the capability to manage information. The element leader must be prepared to manage two specific nets: the brigade O&I and his internal platoon or section frequency. For instance, the task force scout platoon leader sets his vehicle radios on the brigade O&I net and his platoon internal frequency net, while his platoon sergeant sets his vehicle radios on the battalion command net and platoon internal net. This allows the platoon leader or element leader to coordinate and deconflict the actions of the platoon within the brigade reconnaissance zone while his platoon sergeant keeps the parent battalion informed. Brigade-level assets do not experience the same friction, except in the case of the lone collector or TACP who has one radio and whose location is not disseminated to all collectors in the brigade AO. His lack of situational awareness and desire to be positioned in the most advantageous observation post does

not take into account other collectors whose fire missions are subsequently denied because they were unaware of the lone collector operating in their battle space.

NTC observer/controllers have observed brigades that do not adequately plan and track fire support coordination measures planned to protect ISR assets. Contrary to expectations, Force XXI battle command, brigade and below (FBCB2) systems have not noticeably improved this situation. A centralized manager who has constant situational awareness of all elements forward of the forward line of troops has been the missing ingredient in making the system work.

The principles are basic and flexible. The problem is simple and the solutions are achievable. If leaders will commit to coordinating our reconnaissance efforts throughout the brigade AO, we can eliminate the pain of denied fire missions. Perhaps some may say this is too hard to achieve with all the other rehearsals and meetings that require attendance; however, I will remind you that the enemy has defeated you without firing a shot when you surrender the focus of your reconnaissance assets — you are no longer setting the conditions for success.

Notes

[1]Ronald Lewin, *Rommel as Military Commander*, Barnes and Noble, Inc., New York, March 1999.

[2]It is imperative that the brigade intelligence collection manager refine targets and attack within the brigade commander's guidance with a minimal amount of interference from the fire support coordinator once infiltration begins.

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REVIEWS

The Cold War — A Military History by Robert Cowley (Editor), Random House, September 2005, 461 pp., $27.95 (hardcover)

If one compares the duration of the Cold War, 1946 to 1991, against two world wars and any number of major campaigns or decisive battles, it is remarkable how relatively little has been written about such a significant period of history. Perhaps the explanation is in the name, "Cold War." Not only did it drag on for more than four decades, but, if our recollections serve us, it was at such a strategic level to be distant from everyday life: Warsaw Pact and NATO armies at stalemate in Germany; the nuclear arms race; the Berlin Wall (audacious escapes and its final collapse); and spying and defections. The latter, of course, was vicariously accessible through a number of James Bond movies that portrayed the specter of communist intent. But as World War III never materialized, perhaps there is a misconception that no actual fighting took place, reducing analysis to hypothetical "what ifs?" This is, of course, far from true.

Robert Cowley has edited some 30 articles into *The Cold War – A Military History.* This collects all the key components and episodes of the Cold War into one logically formatted and easy-to-read publication of 461 pages. Once you have read this fascinating anthology, you will be struck by just how real and 'hot' the Cold War was both at the strategic and tactical levels.

East-west tension and an ongoing struggle of politics, economics, military strength, technology, and intelligence underscores the book at whatever level it is addressing, which at its most intense, draws the proximity of World War III frighteningly close. Cowley has ensured the reader is left with no doubt as to just how close World War III was by including every near collision: the Berlin airlift of 1948-49; the Soviet-backed Chinese intervention in Korea during 1950-53; the Suez crisis of 1956 when Krushchev threatened to 'nuke' London and Paris if their troops were not pulled out; Francis Gary Powers' U-2 airplane being shot down over the Urals in 1960; the Berlin Wall being built in 1961, where tanks on both sides had a hostile stand off; and pivotal, although only one-third into the 'war,' the Cuban Missile Crisis of 1962. There are contemporary lessons throughout at all military levels.

Perhaps not as well known, the book explains how alarmingly close the world came to war as late as 1983: Pershing II missiles threatened Moscow; a KGB 'superalert' was triggered by a realistic NATO nuclear response exercise; Korea passenger liner KAL 007 was shot down in Russian airspace killing 269 passengers; Lech Walesa defied the communist government of Poland and won the Nobel Peace prize; and nearly 250 U.S. Marines were killed in Beirut. Days later, the United States attacked the Caribbean island, Grenada, a friend of Moscow's ally Cuba. "Washington was in an aggressive mood." When you read this, while reasonably recent, it seems like distant history if superimposed on today's world map of global terrorism and incipient multi-polarism.

What makes this history readable is much of its anecdotal style that includes the reader in a story as if it is yet to be determined. The result is gripping, even though the outcome is known. "Soviet premier, Nikita Khrushchev, observed that Berlin was the 'testicles of the West,' which he only had to 'squeeze' to make his adversaries scream. Ten years before (1948), Moscow's most painful pressure here closed all road, rail, and river traffic from occupied West Germany. The response to this audacious blockade was the Berlin Airlift, which lasted eleven months; it was one of the most dangerous moments in the Cold War." The portrayal of how desperate it was to deliver the necessary daily tonnage of supplies through a narrow air corridor, often with overloaded planes, while being buzzed by Red fighters, is exciting to read. "By remaining steadfast in Berlin, the Western allies placed an outer limit on Soviet expansion in Europe. The Russian threat to Berlin helped spur the creation of NATO in 1949, an alliance that included the German people. The tender testicles of the West had become the loose sphincter of the East, an opening through which thousands of East Germans were fleeing every year. The Berlin Wall went up in 1961 to staunch the flow."

As well as a strategic-level narrative that recounts and analyzes history, the book engages with the personnel who meet the enemy. At the same time as brave allied pilots maintained the lifeblood of Berlin, a British warship was fighting a very different war in China. HMS Amethyst had legitimately been patrolling the Yangste River when it was attacked and immobilized by Chinese gun batteries. The writer tells a riveting story of how a crew, whose captain and first lieutenant were killed, waited for a Royal Naval officer to leave his desk in Hong Kong and make his way by land to skipper the distressed ship. After 101 days at anchor, struggling to survive, the ship steals away downstream at night within the shadow of a larger passing vessel. A potentially strategic crisis is averted by the courage of a ship's crew (*The Yangste Incident*).

The less obvious aspects of the Cold War, the wars by proxy, which punctuate the second half of the 20th century, are addressed to varying degrees. These wars were either fought by states or factions that were aligned and thus supported by East or West, such as Arab-Israeli wars or Afghanistan's Muhjahideen against Russia, or by America and it allies fighting communist expansion, most notably in Korea and Indochina. The book, rightly, does not attempt to cover the myriad wars where either superpower had a hand. The Korean War and Vietnam War, however, are described prolifically, so much so that the reader may forget the book's title. But much of it is written from the hilltop view of commanding generals, especially in Korea where the reader follows a detailed chronology of General McArthur's victories and woes, and General Matthew Ridgway's ascent. Just how desperate the war became once the "Chinese hordes" advanced is chilling, even when reading it now. The air war also receives much analysis, which ranges from General Curtis E. Le May's strategic stand to the advent of the fighter jet and the brave men who piloted these machines in duels over Korea.

For the thousands of soldiers who fought in Korea and Vietnam, it would be churlish to suggest they were fighting in a cold war, for the tenacious enemies and extreme terrains led to fierce and prolonged engagements. There are some thrilling stories: the French failure at Dien Bien Phu, "the greatest single Communist military triumph of the Cold War." There is a captivating account of how U.S. Marine Corps mettle led to tactical victory in the Battle of Khe Sanh in parallel with a strategic scrutiny of its sad irrelevance. One chapter is dedicated to a fascinating interview with General William Westmoreland, who gives candid first-hand opinions of the war in Vietnam, earthy questions that the reader might have easily wanted to ask.

The Cold War is historically detailed and accurate with many stories that give it the excitement of a novel. It is a comprehensive record encompassing a wide selection of subjects that the layman might not normally consider or simply be unaware of. It is a must read for the generation who lived the Cold War. For the younger generation, it will seem irrelevant and yet so important, if one is to understand the architecture of a world that is still transforming in the Cold War's aftermath. If the book has any weaknesses, they are twofold. Firstly, ten maps are the bare minimum to illustrate the many operational areas discussed. Secondly, and perhaps applicable to future readership, the 'battle of boredom' on the motor pools of Germany does not receive mention. There are many legendary anecdotes available that describe the constant rehearsal for the hostile act, which for the ordinary soldier was their Cold War.

M.R. WOOLLEY
Major, British Exchange Officer

Rise of the Vulcans by James Mann, Viking, New York, 2004, 426 pp., $25.95 (hardcover)

In *On War*, Clausewitz wrote that war is an extension of policy by other means. As the United States enters the 21st century and finds its way as a sole superpower nation, we would do well in remembering what Clausewitz wrote. As professional soldiers, we have an obligation to inform policymakers of the effects of using military power and do our best to forecast the real second- and third-order effects of using power in a region or in pursuit of a policy objective. James Mann's book is a must read for all professional officers, especially those junior and mid-career officers who will rise to lead our Army and other services in this opening stage of the 21st century.

Professor Seyom Brown of Brandies University wrote about the illusion of control that is a somewhat natural extension of the use of precision-guided munitions. The extension of control of munitions to control outcomes is a peril-

ous leap. Control of operations and then the use of military operations to attain policy objectives are guided by civilian policymakers, as it should be in our Republic. The value of *Rise of the Vulcans* is in the tale of the rise to personal power and the personal development of the major advisors of the President.

Mann writes well. He outlines the personal development of Vice President Cheney, Secretary of Defense Rumsfeld, National Security Advisor Rice, Secretary of State Powell, Deputy Secretary of State Wolfowitz, and Deputy Secretary of State Armitage. Mann outlines the divergent careers of these five influential people and how they all came to be together on the current team of advisors to the President. The background of these people serves to describe the views they hold now. In all instances, as the poet wrote, "the child is father of the man."

Mann outlines the rise to power of these influential people. Mann discusses Powell and Armitage and their early days as military officers in Vietnam, and the influence of that service on their outlook toward the use of power is clearly articulated. Equally important is the rise of the men in the Defense Department, Rumsfeld and Wolfowitz, and how they grew to view the world and our country's role in the affairs of the world. Dr. Rice worked in several Republican administrations, first as a Soviet specialist and then becoming a trusted overall foreign policy and security advisor to the current President. We serving officers really do need to know how these people came to power and how they came to believe the way they do, if we are to be effective in providing coherent military advice. This will remain true irrespective of the party in power.

The value of Mann's book is in the picture it paints of these powerful people. This book must be studied, and when the outcomes of future elections are known, the study must continue as new faces enter the circles of power in Washington. Clemenceau, President of France during World War I, said war is too important to be left to the generals. In the world in which we live, serving officers must realize the intent of that quote, as well as its converse — the development of policy is too important to be left to politicians.

The nature of military advice must change as we enter in the 21st century. War is a state of belligerence. In this century, we will contend with organized nation-states, failing nation-states, failed nation-states, and inter/intra-national groups, all of which will have their own agendas and motivations. The use of the military element of national power, from sending a dental team to Tegucigalpa, to the next major combat operation, will be guided by policy. No matter where we serve, our obligation is to understand the policy, and when in a position to do so, inform or even assist in crafting the policy.

Deputy Secretary of State Richard Armitage is quoted as saying, "History began on 11 September." In a sense, this was a defining day in the rise of this extraordinary group of Americans. The role they played in defining the foreign policy of the United States must be studied, as the U.S. military will be executing this policy for many years to come. Such is the influence of the changes in American foreign and defense/security policy that even changes in administrations will not materially change how we operate.

War is so important to the survival of the Republic that it must be studied continuously, and the study of the people who make our policy, as well as the policy itself, is a major part of that study. There can be no dividing line between policy and war. The baseline condition that will define the service of the majority of officers and soldiers in America's 21st-century Army will be conflict, not peace, as it was in the 20th century. All serving officers must come to grips with that fact right now.

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KEVIN C.M. BENSON
COL, U.S. Army

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Insurgency and Terrorism: From Revolution to Apocalypse (2d Edition, Revised) by Bard E. O'Neill, Potomac Books, Washington D.C., 2005, 216 pp., $21.95 (paperback)

Bard O'Neill's *Insurgency and Terrorism* should be on every military professionals reading list and is a must read for anyone deploying to Afghanistan, Iraq, or any potential hotspot around the world. This book provides the reader with a framework for studying insurgencies that is easily understood and has plenty of real-word examples to help explain the strategies, methods, motivations, and organizational structures of the enemy the United States is currently fighting or may be engaged with in the future. Whether one is able to get their hands on the first edition or the revised second edition, the results will be the same, a greater appreciation and understanding of the enemy, the battlefield, and what is required to fight and win in the 21st century.

There are three aspects of O'Neill's work that will help prepare the reader for combat. First, the author clearly describes the current world situation and how the United States fits into the new environment. No longer is the paradigm east versus west on the continent of Europe; it is small wars fought with unconventional means, in unfamiliar areas, where failure to understand the situation and circumstances will have significant repercussions. Second, he establishes a structure from which to study the nature of any insurgency. Using five key categories, O'Neill characterizes an insurgency and allows for an in-depth understanding of its nature, strategy, environmental factors, support requirements, and organizational structure. Finally, the book provides recommendations on how to deal with problem sets that the reader could face when fighting an insurgency. The most valuable information for those tasked with conducting counterinsurgency operations is recognizing that failing to completely understand the enemy will likely lead to flawed policies and actions of the part of the host nation and supporting U.S. forces.

Since the earliest battles, strategists have attempted to gain as much knowledge as possible about their enemy to gain the advantage. *Insurgency and Terrorism* provides a method for studying and categorizing enemy actions, which delivers part of the answer. Unfortunately, the other part of knowing your enemy can only be gained on the ground. Without a doubt, Mr. O'Neill's book arms soldiers and leaders with a way to define the threat and develop ways to defeat it.

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MIKE MONNARD
MAJ, U.S. Army

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War, Terror & Peace in the Qur'an and in Islam: Insights for Military and Government Leaders by T. P. Schwartz-Barcott, Army War College Foundation Press, Carlisle, PA, 2004, 363 pp., $28.43 (hardcover)

"Do not try to do too much with your own hands. Better the Arabs do it tolerably than that you do it perfectly. It is their war, and you are to help them, not to win it for them. Actually, also, under the very odd conditions of Arabia, your practical work will not be as good as, perhaps, you think it is. It may take them longer and it may not be as good as you think, but if it is theirs, it will be better."

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— Colonel T. E. Lawrence, Twenty-Seven Articles, The Arab Bulletin, 1917

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If timing is everything, then T.P. Schwartz-Barcott's *War, Terror & Peace in the Qur'an and in Islam* is a book for our times. With coalition forces decisively engaged in two ground wars against Islamic terrorists, the arrival of a book that defines the Muslim center of gravity is both useful and needed to help defeat a determined and elusive enemy. Schwartz-Barcott helps answer the fundamental questions of how, without making a moral judgment, current and future leaders in government and the armed forces can more effectively deal with Muslim proponents of the *Qur'an* regarding peace, terror, and war.

The author walks the reader through the basic history and development of the *Qur'an* and makes the assumption that most readers have never read in depth Islam's holiest book. The *Qur'an* is a collection of sacred revelations from Allah (often translated as "God" in English), to Muhammad that occurred during the last 22 years of his life, 610-632 A.D. The *Qur'an* contains about 80,000 words organized into more than 6,000 verses in 114 chapters.

Schwartz-Barcott's book is useful and informative both in its layout and content. The purpose of the book, in the words of the author, is to accurately and fairly summarize what the *Qur'an* has to say about war and peace; reconsider some of the key events in the military history of Islamic fighters and groups; evaluate a variety of interpretations of the *Qur'an* regarding military operations; and suggest a set of responsible policies and procedures for military and government leaders who are dealing with *Qur'an* oriented people and organizations — not just adversaries — but also coalition partners, neutrals, and members of the armed forces.

The book develops these constructs by dividing the chapters into three themes. Chapter 1

outlines the author's methodology of analyzing the *Qur'an* with regard to war and peace. In Chapter 2, Schwartz-Barcott presents over 100 verses from the *Qur'an,* categorized according to topics, and evaluates how readers of the passages would react to their intent. In particular, he explains how the *Qur'an's* passages led the 9/11 highjackers and al-Qaeda members to declare war on the world. Chapters 3, 4, and 5 analyze more than 225 battles fought by Islamic forces from the days of Muhammad right up to Operation Iraqi Freedom. Chapter 6 is unique in that it shows how the *Qur'an* sets out rules of engagement (ROE) for Islamic fighters that are not too different from the ROE guidance used by the U.S. military today. Finally, Chapter 7 and the Epilogue offer suggestions and solutions for civilian and military leaders to use for defeating Islamic terrorism and sustaining a lasting peace. The author has done a very good job of walking the reader through his methodology to conclusions that are both substantive and useful.

In addition to the outline of the book, charts and graphics provide a useful comparison of the different battles and adversaries faced by Islamic forces since 633 AD. This comparison is not just a useful historical footnote, it shows the diversity of forces and successes that Islamic fighters have faced over the years. This is an important lesson for any military or political planner who believes short victories are possible in the Middle East. Schwartz-Barcott does not imply that military and political victories are impossible against Islamic forces, but he does assert that the measures of effectiveness western armies use to determine victory may need to be reassessed. Western leaders would do well to remember that while our forces may be fighting a secular battle, at the heart of every Islamic fighter (whether as an adversary or ally) is a strong link between religion, politics, and warfare. The author shows that long after the Persian, Byzantine, Visigoth, Crusader, European, and United States military forces, to name a few, have won decisive victories again Islamic armies, the fundamental belief in the religion of Muhammad has sustained the defeated Islamic peoples long after invading armies have departed.

War, Terror & Peace is not based on one man's interpretation of events; the author uses a number of well-respected eastern and western sources as evidence and background. The chapters are well footnoted; in fact, some are as informative as the main chapters. Schwartz-Barcott makes particular efforts to use objective interpretations based on cultural and historical context. It should be noted that the author uses, as a sign of respect and sensitivity to Islam and Muslims, the Islamic word Qur'an (short for al-Qur'an), rather than the spelling that was popularized by the British more than a century ago.

I highly recommend this book for any soldier deploying to the Middle East. *War, Terror & Peace* does the same thing for interpreting and understanding the Islamic religion and its centers of gravity as *On War* does for operational warfare. This book is a must read.

JAYSON A. ALTIERI
MAJ, U.S. Army

Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam *(With new preface and foreword)* by Lieutenant Colonel John A. Nagl, University of Chicago Press, Chicago, IL, 2005, 280 pp.,17.00 (paperback)

As the United States enters its fifth year of the war on terror, military leaders are conducting low-intensity and counterinsurgency operations in several different areas around the world. Of the different books produced on this subject, LTC John Nagl's *Learning to Eat Soup with a Knife* is an absolute must for those who want to gain valuable insight on some of the hard lessons of fighting an insurgency before actually getting on the ground. The book expertly combines theoretical foundations of insurgencies with detailed historical lessons of Malaya and Vietnam to produce some very profound and topical implications for current military operations. The true success of the book is that Nagl discusses all of these complex issues in an easy-to-follow and straight-forward manner.

Nagl begins his book by providing the reader with a background of the classic theories of fighting insurgencies from a variety of famed strategists. Here, he sets the foundation for the rest of the book concerning some of the critical approaches that apply at not only the strategic level, but at operational and tactical levels as well.

The reader is then given a thorough account of the British experience in Malaya, which has been regarded by most military historians as one of the few examples of a successful counterinsurgency operation in the modern era. The

British "blue print" is one that stresses innovation and adaptability, which is a central theme throughout. Nagl then contrasts the operations in Malaya with the United States' experience in Vietnam. Fortunately for the reader, Nagl does not attempt to explain the entire Vietnam War, but instead focuses (and rightly so) on why the U.S. military chose the path it did. One of the great insights that the author provides is that the United States, in fact, was adaptive in Vietnam, but in many cases, did not adapt enough or adapted the wrong techniques.

The "hard lessons" that Nagl discusses are extremely relevant for military leaders today. The 2005 paperback edition has a great preface by the author after he returned from a year-long deployment in Iraq (the original hardcover edition was published in 2002), in which he updates some of his original conclusions. Additionally, the reader is treated to a foreword from the Army Chief of Staff, General Schoomaker, where he sums up the importance of the book by stating: "For the twenty-first century, we must have an Army characterized by a culture of innovation and imagination…it [Nagl's study] suggests how to encourage that spirit of innovation."

I read this book upon returning from my tour in Iraq after commanding a company on the ground for a year. I was amazed at how insightful and "true" the conclusions were and wished that I had read it before I deployed. At just over 200 pages, it is a relatively "quick," but extremely valuable, read that leaders from the squad level up cannot afford to miss.

NICK AYERS
CPT, U.S. Army

COMMANDER'S HATCH from Page 4

At 11 weeks, the M1A1 course is the longest of all the functional courses at Fort Knox; it also has the most stringent prerequisites for attendance. The M1A2 transition course is only three weeks long, but requires completion of the M1A1 course as a prerequisite. In light of the changes occurring in the Army, the utility of the Master Gunner Courses remains undiminished. The need for competent master gunners has not decreased under modularity. Although pure tank battalions are going away, the number of tank companies in the active Army will be reduced by only one. In fact, due to the high likelihood of attachment to a mechanized infantry company or even a light infantry company, we may need a master gunner in every tank platoon. Clearly, we still need to train our tankers to be M1 master gunners.

I know that commanders are dealing with many competing priorities. I understand that with the advent of the Army Force Generation Model, units have limited time during the reset phase to allow their Soldiers to attend courses. I also realize that our functional courses at Fort Knox are competing for time with mandatory Officer Education System and NCO Education System courses. I ask commanders to consider the great benefit in attending the functional courses at Fort Knox. Our legacy as leaders is in large part measured by how well we train the next generation. I encourage everyone, from all branches, who are involved with reconnaissance organizations to take advantage of these great courses and the leader-enhancing benefits they offer.

FORGE THE THUNDERBOLT!

ARMOR Operation Iraqi Freedom Article Index

Compiled by Dr. Robert S. Cameron, Armor Branch Historian

The listing below includes every article related to Operation Iraqi Freedom published by *ARMOR* through December 2005. This consolidated, annotated index provides a quick reference for readers interested in armor and cavalry operations in Iraq. Note that many of the articles published include lessons learned, descriptions of operations conducted, and training recommendations. Collectively, they provide an introduction to the operational environment in Iraq and can help prepare units and soldiers for upcoming deployments there.

Many of the 2003 and 2004 articles can be accessed online at: *www.knox.army.mil/ArmorMag/index.htm.* The remainder of the articles listed in the index will be available online soon. Copies of any of the articles listed may also be obtained by submitting a request to *ArmorMagazine@knox.army.mil* or *ARMOR,* ATTN: ATZK-DAS-A, Building 1109, 201 6th Avenue, Suite 373, Fort Knox, KY 40121-5721.

Air-Ground Integration *CPT Shawn Hatch* (JUL-AUG 05, pp. 18-22)

Air-ground operations in asymmetric environment, including urban operations; addresses planning, synchronization, hover operations, security

Battle Command

Blue Force Tracking — Combat Proven *CPT James Conatser and CPT Thane St. Clair* (SEP-OCT 03, pp. 20-23)

Overview of use of Blue Force Tracking by 2d BCT, 3ID; includes description of fielding, NET, technical aspects, and principal applications

Digital Battle Command: Baptism by Fire *LTC John W. Charlton* (NOV-DEC 03, pp. 26-29, 50)

1-15 IN commander's perspective regarding implementation of digital C2 in combat environment; use of digital maps, graphics; navigation during zero-visibility conditions; FBCB2 use for battle tracking and SA; includes recommended fixes and improvements

Operational Thinking in a Tactical Environment and Targeting in Iraq *MAJ Bill Benson* (MAY-JUN 04, pp. 11-14)

S3, 1-68 AR outlines operational environment challenges to planning and conducting combat/stability operations in Iraq; discusses staff actions, planning, battlefield visualization, and a targeting tool for combat/stability operations

Using the Patrol Brief in Baghdad *CPT Sean Kuester* (JUL-AUG 04, pp. 29-33)

Use and import of briefing patrols and related format; includes description of AO in Baghdad, nature of threat/challenges, and examples of patrol experiences from perspective of tank company commander, 1-37 AR

Logistics

The View From My Windshield: Just-in-Time Logistics Just Isn't Working *CPT Jason A. Miseli* (SEP-OCT 03, pp. 11-19)

CSS operations, problems, and lessons learned from HHC commander, 2-69 AR during transition period from major combat operations to stability and reconstruction; experiences underscore criticism of just-in-time logistics

The Support Platoon in Baghdad *1LT Jeffrey M. Kaldahl* (NOV-DEC 03, pp. 10-12, 21)

Operations of support platoon from perspective of platoon leader in 2-37 AR; focus on dispersed operations, NCO role, supply transport, mission set, and supply vehicles

Logistics Transformation *CPT Matthew Reiter* (JUL-AUG 04, pp. 44-46)

Supply recommendations by class type for OIF rotation; based on 3-17 CAV (AVN) experience but generally applicable

Sustainment Operations and the Forward Operating Base *CPT Jay Blakley* (MAR-APR 05, pp. 39-42)

1-13 AR FOB operations, including security, facility maintenance, quality of life, CSS

Fault Trend Analysis: A Proactive Maintenance Approach *CPT Walt Reed* (JUL-AUG 05, pp. 36-39)

Lessons learned and logistics guidance based on analysis of 1-14 CAV (RSTA) experience

Route Ownership versus Route Concession *CPT Robert B. Gillespie* (SEP-OCT 05, pp. 18-20)

CSS route security operations of 1-17 CAV; problems, lessons learned, recommendations for future operations

The Unit Field Ordering Officer in Iraq *CPT Michael L. Burgoyne* (SEP-OCT 05, pp. 37-40, 45)

Description of roles, responsibilities, and utility of the field ordering officer and relation to unit logistics

Training

Preparing for Iraq: A New Approach to Combined Arms Training *CPT Chad Foster* (NOV-DEC 03, pp. 6-9)

Principles to guide training for operations in Iraq; including urban operations, small unit actions, HUMINT activities, integrated action of combat forces with MP, MI, and CA assets

1-64 Armor's Rogue Gunnery Training Program *LTC Eric Schwartz, MAJ Daniel Cormier, and SSG Bobby Burrell* (JAN-FEB 04, pp. 17-20)

Assessment of tank gunnery training and recommended improvements in detail based on combat experience of 1-64 AR

Time for a Change in Tank Gunnery *SFC Timothy L. Gray* (MAR-APR 04, pp. 37-38)

Recommended tank gunnery changes to reflect operations in Iraq from NCO, 1-66 AR; includes M1A1 loader's and commander's weapons, close range engagements (under 500 meters), engaging targets from HMMWV windows

Train for the Fight *CPT Todd J. Clark* (MAY-JUN 04, pp. 32-34)

Lessons learned/training recommendations from troop commander, 2ACR

Arming the Knight for Dismounted Combat *CPT Mike Sullivan* (MAY-JUN 04, pp. 7-10)

Guidance for training tankers in dismounted operations by O/C CMTC

Sharpening the Spear: Training the Armor Crewman for Future Battlefields *CPT Geoffrey Wright* (JUL-AUG 04, pp. 15-19, 38)

Training measures of 2-37 AR, lessons learned, and recommendations for armor crewmen training; including dismounted operations, marksmanship, short range engagements, wheeled operations, driver training, PT

Task Force 1-77 Armor — Back in the Saddle *SSG James L. Gibson* (NOV-DEC 04, pp. 23-25)

Tank gunnery training in preparation for OIF rotation

Theater Immersion: First Army Post-mobilization Training *LTG Russel L. Honore and COL Daniel L. Zajac* (MAY-JUN 05, pp. 13-19)

First Army RC training principles in preparation for OIF deployments; theater immersion principle applied to 278 RCT and 155th BCT

From the Ashes: Rebuilding the Iraqi Army *MAJ Mike Sullivan* (JUL-AUG 05, pp. 44-47)

Experiences of OC team from CMTC sent to Iraq to help train new Iraqi army

Ethics/Law

Treachery and Its Consequences: Civilian Casualties During Operation Iraqi Freedom and the Continued Utility of the Law of Land Warfare *MAJ Dennis P. Chapman* (JAN-FEB 04, pp. 21-25, 49)

Overview of law of land warfare (FM 27-10), background, relevance to Iraq, and continued utility of restraint — even in a counterinsurgency against terrorists

The Law of War: The Rules Have Not Yet Changed *LTC (Ret.) David P. Cavaleri* (SEP-OCT 05, pp. 26-33)

Background regarding purpose and nature of law of war and applicability to COE

Civil-Military Interaction

The Government Support Team in Fallujah *CPT Gregory Mitchell and CPT Christopher Haggard* (MAY-JUN 04, pp. 15-19)

Description of operations and related challenges facing 3d ACR government support team; including public relations, detained persons, property seizures, political climate, claims

Engaging the Population and Local Leaders *1LT David A. Tosh* (SEP-OCT 04, pp. 41-43)

2ACR scout platoon leader's lessons learned regarding interaction with Iraqi civilians, including cultural awareness items, dealings with children, and Shi'ite perceptions

Winning with the People in Iraq *CPT Jason M. Pape* (MAR-APR 05, pp. 35-38, 42)

1-13 AR efforts to work with Iraqi population in area of operations and related lessons learned

An Armored Task Force Approach to Civil-Military Operations *CPT Jason Goodfriend and CPT David Levasseur* (JUL-AUG 05, pp. 26-32)

1-77 AR operations to support civil government and reconstruction; including unit organization for civil-military operations, interaction with civil affairs and PYSOPS, planning actions, targeting, interaction with civilian leaders, and funding

Intelligence

Tactical Intelligence Shortcomings in Iraq *MAJ Bill Benson and CPT Sean Nowlan* (MAR-APR 05, pp. 18-22)

Tactical intelligence problems encountered by TF 1-68 AR and adaptive measures, including S2 operations, detainee handling, tactical HUMINT team, mobile interrogation team, radar

The Human Intelligence Game for Armored/Mechanized Units *CPT Timothy J. Morrow* (MAY-JUN 05, pp. 39-43)

1-22 IN S2 perspective on gaining, assessing, and applying HUMINT in counterinsurgency operations; tools and techniques

Human Experience

Post Traumatic Stress Disorder *CPT K.C. Hughes* (JUL-AUG 05, pp. 15-17, 48)

Post traumatic stress disorder background, warning signs, treatment options

Historical

The German Werewolf and the Iraqi Guerrilla *CPT Brian K. Glasshof* (NOV-DEC 04, pp. 13-16)

Comparative analysis between German Werewolf organization in 1945 and Iraqi terrorists 2005

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