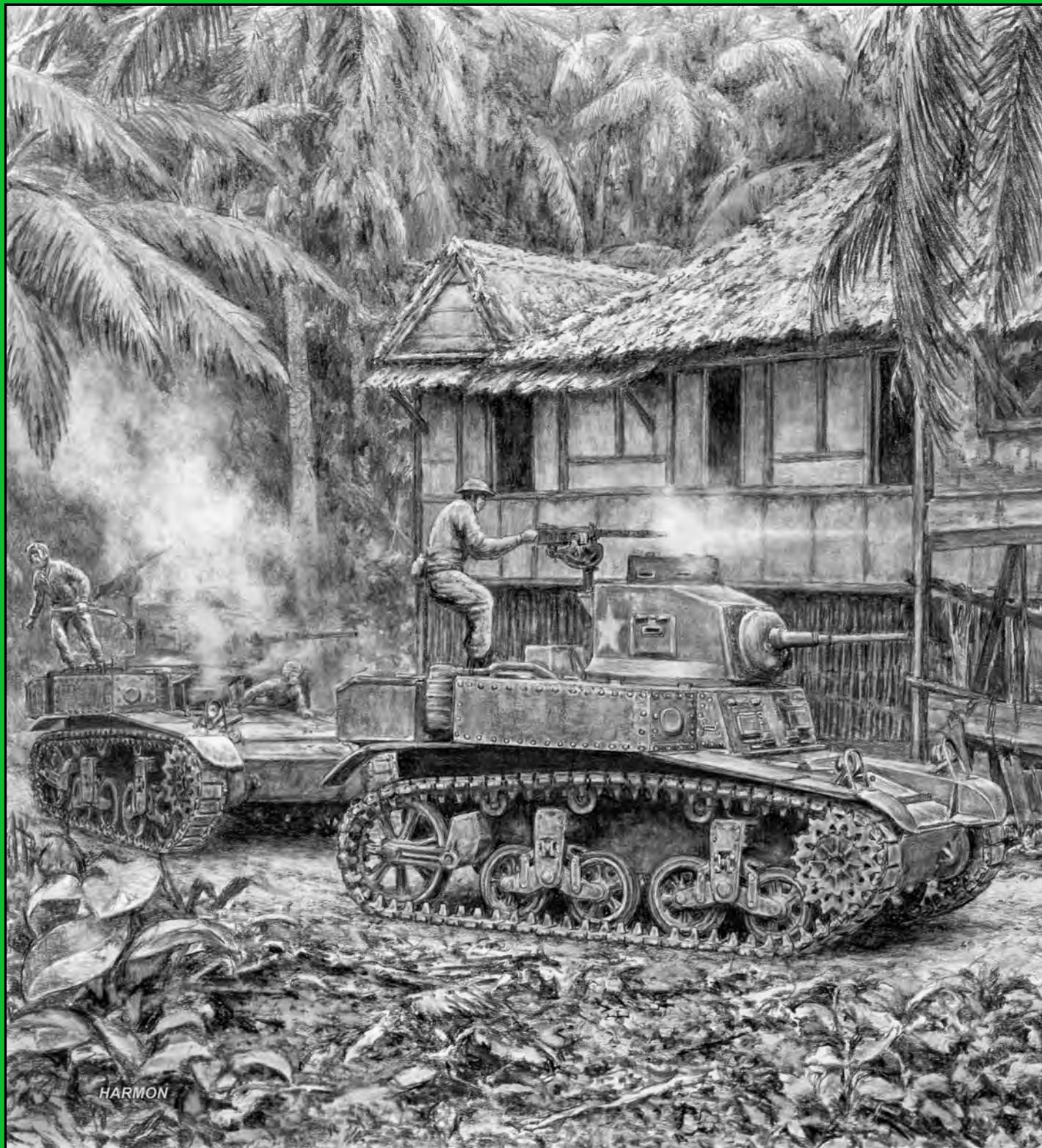
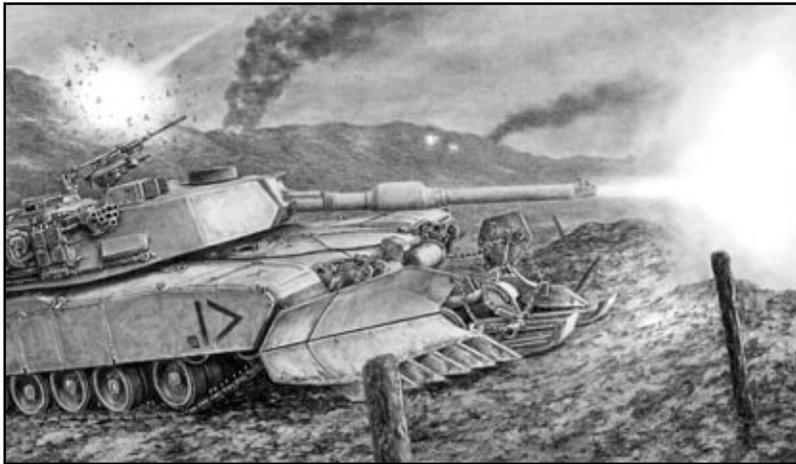


ARMOR

November-December 2002



The 194th Tank Battalion in the Philippines *See Page 26*



Once More Unto the Breach

Thoughts on the edge of the breach: The war on terrorism is proceeding, albeit not at the pace that some would like, and for others, too fast. At times, I reminisce about the old days during the Cold War when we knew who the enemy was and how we would defend against any acts of aggression. I can remember the days spent defending the Fulda Gap from a possible Soviet attack on the edge of the forest near Hunfield, discussing the order of battle with my platoon leaders and platoon sergeants, listening to the boasting about how many T-62s, BMPs and BRDMs we could annihilate once the attack moved into our sector, and having steadfast confidence in our soldiers and equipment. Looking back, defending the GDP seemed easy. We knew our enemy and how he would fight. Today's tasks for our Armed Forces are much more complicated. Are we up to the challenge? Initial success from Afghanistan indicates we are a trained and powerful force capable of fighting and winning.

When I was a second lieutenant, my tank platoon was responsible for the maintenance of a Tank Table VIII range (back then we didn't have high-speed computers and civilian-contracted ranges, and a tank company operated, fired, and maintained its own tank ranges). The day firing concluded, my platoon headed downrange and serviced the targets, refueled the generators, and pieced together the shot-up thermal panels. All seemed to be in good order, and we waited for nightfall. As the sun went down and the moon appeared, the time for going "hot" and putting steel on target was on.

Unfortunately, none of the targets cooperated. As we were looking through the thermal sights and trying to lift targets with the Saab devices, nothing appeared. Minutes turned into hours and the battalion commander became rather impatient with this delay. He was firing his tank on this night. To make a long story short, the battalion commander and I crossed paths on a dusty tank trail in the midst of Blackwell Range, where he vociferously proceeded to rip into me. I quickly accepted the responsibility, even though many things were beyond my control, and he held me accountable to fix the problems and get the range hot. Luckily, I had some great NCOs who knew how to apply some quick fixes, and shortly after midnight we had first round downrange.

The moral of this story is too often no one accepts responsibility. Recently, we have all witnessed our share of individuals laying blame at someone else's feet or shirking responsibility, or worse, blaming the system for failures. The Army is fortunate to have values and systems in place to account for individuals who violate those values.

This issue's cover is a tribute to the soldiers from the 194th Tank Battalion. This National Guard unit was organized in 1941 at Fort Lewis, Washington, and made up of National Guard tank companies from Minnesota, Missouri, and California, and deployed to the Philippines months prior to Pearl Harbor. Almost 52 years ago, these men were part of the first unit to fight against the Japanese during WWII in the Philippines. This pivotal battle for the Philippines was the first combat in the Pacific Theater during World War II to see tank-verses-tank action. Understrengthed, out equipped, and with no hope of reinforcements, these brave men fought a valiant fight for 5 months before surrendering.

Winning the counterreconnaissance fight continues to be an Achilles' heel for our combat units. Major Samuel Butzbach and Captain Charles Lombardo offer recommendations that will better prepare a unit to succeed at this crucial task. Their article provides some excellent tips on how a unit should prepare and execute the counterrecon fight.

SFC Michael Clemens offers first-hand knowledge of how the Armor soldier assignments process works. As one of the professional development NCOs at Armor Branch, he discusses the factors that influence personnel assignments.

One final note for all you subscribers, a quick scan of the current subscriber list indicates there are many of you who have changed locations this summer and have not updated your address. I can't get the post office to deliver your latest edition if you don't update your address. Please e-mail, fax, or send in your change of address. Believe it or not, I get charged from the post office for undeliverable magazines.

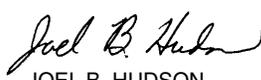
Enjoy! I look forward to reading your comments.

– DRM

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A Student's View of the Armor Captain's Career Course

Dear Sir:

I received several responses to the article that I coauthored with CPT Slider, "Refocusing the Lens," in the July-August 2002 issue of *ARMOR*. When I wrote the article, the intent was to illustrate the theory of supporting Gauntlet-type training scenarios; specifically, how Gauntlets could augment the current Armor Captains Career Course (ACCC) curriculum, not to justify Gauntlets as stand-alone training or the backbone of ACCC.

The last draft I saw of the article did not include the portion about the Combined Arms Battle Command Course (CABCC); it merely addressed integrating Gauntlet-type scenarios into ACCC. In fact, when I signed the release to print the article in *ARMOR*, I did not know that my coauthor had added a CABCC portion and substantially changed the article.

For the most part, I agree with the letters sent in rebuttal to "Refocusing the Lens," as illustrated in my following letter.

Before arriving at Fort Knox for the ACCC, I expected my experience to be like other Army schools — not very intellectually challenging and full of PowerPoint-driven instruction. Nothing could be farther from the truth. I can honestly say that my experience in ACCC was beneficial far beyond my expectations. The small group environment allowed our instructor to increase our critical thinking abilities. I learned a great deal about Army doctrine, but most importantly, the small group methodology taught me how to apply what I learned.

I feel that ACCC truly prepares future commanders by focusing on creating a leadership mentality in its graduates. However, the Armor School does not intend to maintain ACCC's current small group methodology. Initial plans for the Armor School's move to the CABCC focuses on the need to incorporate experience-based training into the Army's Officer Education System. Experience-based training like the Gauntlets executed at the Armor School provide great training opportunities to some students. However, Gauntlet training should not be the focus of a course designed to prepare future company commanders. In its current design, CABCC is broken into three phases, 4 weeks of distance learning (DL) via internet, a 4-week resident portion, and a 2-week combat training center portion.

From a student's perspective, I would like to illustrate the benefits of the small group instruction methodology versus the Armor School's proposed CABCC.

The primary concern is CABCC's reliance on DL to teach the fundamentals of Army doctrine. The second and third order effects of DL's substandard learning process (relative to the current small group format) nega-

tively affect the overall value of a course like CABCC. Secondly, Gauntlet-type training for the second phase of CABCC cannot provide all students with the repetition necessary to make the training universally beneficial. Lastly, the current outline for CABCC does not allow sufficient time for developing a group dynamic capable of fostering truly free intellectual discussion as in the current ACCC.

At my first unit of assignment, I focused on maneuvering and maintaining my tank platoon and, of course, gunnery. I learned some task force-level doctrine as the support platoon leader and battalion S4, but I certainly was not conversant in Army doctrine after I left. It was not until I reached my classroom in the ACCC that I began to truly understand the essential doctrine of our Army and how it applies to company-level operations. The course began with a headlong charge into the military decisionmaking process (MDMP) and intelligence preparation of the battlefield (IPB) covering both processes in (agonizing) detail. Although this portion of instruction was not enjoyable, complete repetition (three times each) of these procedures paid great dividends later in the course as we pared them down to fit our rapid decisionmaking during various field exercises and Gauntlets. Learning the basics allowed us to decide what was important for a given situation and where to assume risk.

My experience in ACCC illustrated that the means were absolutely necessary to achieve the desired end. Relentless discussion on doctrine, the MDMP, and IPB provided the baseline knowledge, allowing our class to tackle difficult situations that eluded cookie-cutter solutions. This kind of intellectual infusion is not possible through DL. The ability of a teacher to constantly challenge students daily is defeated through DL, yet CABCC's method of instruction expects that incoming students will internalize these difficult, yet fundamental, concepts through computer classes.

Although the quantitative results of a completed DL course, such as test scores, may indicate that the student has learned the required tasks; qualitatively the DL student cannot display the same level of understanding as students in a well-structured resident course with handpicked instructors. A good illustration of this is the recent public debate on the validity of the Scholastic Aptitude Test (SAT). The SAT uses a standardized format of multiple-choice questions (similar to DL tests) to determine the academic abilities of high school students applying for college-level courses. Several studies have shown that performance on these types of tests have no correlation to actual performance in college courses. Likewise, it is unlikely that DL tests will indicate anything about an officer's knowledge of Army doctrine. At best, DL tests will show the Army who is good at taking DL tests. Additionally, one study shows that students taking standardized multiple-choice format tests use "surface-level" cognitive abilities while deep cognitive ability

goes untested. Both the SAT and the ACT were forced to offer a written portion in an attempt to mitigate some of the criticisms of their old formats.

Proponents of the DL methodology will argue that, unlike the old SAT format, written exams will be included in a robust DL program like Phase I of CABCC. Through this methodology, soldiers will remain at their home station to complete their DL coursework and remain under the same chain of command. Thus, the student feels (and *has*) little or no accountability to the ACCC distance-learning instructor who is in another state or maybe another country! Inevitably, soldiers are going to remain loyal to their chain of command. When the battalion commander needs Captain Smith for a tasking, do we really expect Captain Smith to tell him "no" because he needs to finish his distance learning courses? Probably not, and young officers who are used to "making it happen" will find it very easy to circumvent the DL method of teaching by using tests printed out by soldiers who have already taken the course. This is already a fairly common practice in National Guard and Reserve units where officers have commitments to their chains of command, as well as their civilian jobs. Similarly, I know several stories of soldier's spouses completing on-line courses for the soldier to get promotion points. Bottom line — completing DL becomes an end achievable *without* the desired means — resulting in a lower standard of training for the rest of the CABCC program.

Learning doctrine is just like learning a foreign language. Full command of a new language takes a great amount of time, study, and eventually immersion in the culture. The DL portion of a course like CABCC cannot replicate the student's immersion into the doctrinal culture found in the ACCC small group format. Learning doctrine [through DL] is like trying to learn a foreign language from listening to a series of tapes, or reading books without ever actually working within the culture. Imagine a captain arriving at a Division G3 plans section with all the doctrinal understanding of a "See Spot Run" children's book. The resulting plans are likely to be confusing and far from efficient.

In ACCC, the small group classroom immerses the student into the culture of Army doctrine daily over an extended period of time, allowing students to become more conversant in the Army's crucial vernacular. So, if doctrine really is the "basis for curricula in the Army Education System" why does CABCC relegate doctrine to a medium that does not promote full and comprehensive understanding? Captains deserve to arrive at their follow-on assignments better prepared than what CABCC seems designed to offer.

During the 2002 Armor Conference, a TRADOC developer of DL programs declared that the DL methodology was "validated" by the National Guard and Reserve DL ACCC program. It would be interesting to see a

comparative analysis of what a resident ACCC graduate knows versus what a DL graduate knows. How do you quantify leadership ability? As long as history has been written, humans have tried to define what makes a great leader different from a good leader. The reason we still do not have a definitive answer is because leadership ability is not quantifiable. Like a great surgeon, the aspects of a person that make them a great leader are intangible. I would not want a surgeon who learned the fundamentals of his profession by DL to operate on me. Likewise, I do not want a commander who learned doctrine through DL appointed over me. DL is an overly simplistic approach to developing leaders for the most complex and difficult human undertaking — combat.

Developing the group dynamic to feed stimulating debate among the small group takes time. Initially, the discussions in my class were reserved and probably too respectful of others' opinions. By the sixth week, however, everyday was like walking into a firefight. Through daily contact in class, at PT, playing sports, and the occasional stable call, our group of 12 captains became a tight-knit group infinitely aware of each other's strengths and weaknesses.

Additionally, our small group instructor's somewhat fanatical attention to properly using doctrinal terms was quickly absorbed by our class. Anyone caught using terms such as, "sweep," "mop-up," or "fix and punch," to describe a tactical situation was immediately subjected to 30 seconds of strenuous exercise. By the middle of the course, everyone in our class spoke the same doctrinal language — greatly streamlining our delivery of orders, and the ability of our subordinates, peers, and superiors to understand our intent.

Everyone shared ideas as we generated our own think-tank guided by our small group instructor to ensure we didn't get too far off the mark. This free-flowing intellectual melee afforded me the ability to learn how to apply tactics, techniques, and procedures through the experiences of others. Most importantly, it allowed me to think critically about how I wanted to do business as a company commander and discuss these issues at length with other military professionals. DL cannot replicate the intangible learning experiences afforded by the ACCC small group format that develop the student's critical thinking ability.

The argument could be made that these intangibles will be present in the second (resident) phase of CABCC. Yet this phase is only 4 weeks long, and is designed to keep officers *out* of the classroom and engaged in several iterations of Gauntlet-style training. As stated above, it took our small group about 6 weeks to create the group dynamic that allowed for truly beneficial group discussion, and most of that time was in the classroom or on TEWTs around Fort Knox. Gauntlets are great tools to amplify specific lessons discussed in the classroom and

greatly add to the overall training experience. Gauntlet training is not suitable as the basis of training for a course designed to prepare future combat company commanders like ACCC, however.

The lack of a coherent group dynamic coupled with the failings of DL will likely result in relatively unproductive training events during Phase II of CABCC. As stated earlier, the ability of Gauntlet-type training to simulate reality gives this training value. Unfortunately, realism is hard to manufacture when the preponderance of soldiers in Gauntlet training are young, inexperienced lieutenants who have never been in line units. Likewise, the young captains who have had the limited chances to discuss doctrine with their mentors and peers will find themselves in command positions while simultaneously trying to learn all the things they don't remember from their DL class. So, instead of "hitting the ground running," these Gauntlets will be mired in teaching the basics to everyone involved without allocating time for lengthy after action reviews or periods of discussion. Even Ranger School spends time in the early stages of the course instructing students on the basics of infantry tactics in a classroom environment.

While a student in ACCC, the most valuable and effective medium for learning tactics and applying doctrine was the small group classroom. I participated in six Gauntlet training events, and although each was valuable in some respect, none of them were particularly realistic. Most of my Gauntlets were with Armor Officer Basic Course lieutenants in simulators or HMMWVs in a 5x5 kilometer training area. During all six iterations of Gauntlet training, I acted as company commander only 4 times. On one occasion, I was in a classroom with a radio to talk to other ACCC students in a classroom playing the *TacOps* computer game. The second time, I was a company commander for only 10 tanks manned by West Point Cadets (here at Fort Knox for Mounted Maneuver Training) for a total of 8 hours. The third time, I was a commander for a terrain walk with AOBC lieutenants. Finally, I commanded 18 AOB lieutenants (after 5 days in their course) and 4 ROTC cadets in a MOUT exercise that lasted 1 hour. I can hardly call these events realistic training.

There were many lessons learned in these scenarios, but having discussed similar missions at length in the classroom prior to execution greatly increased the intellectual dividends. Some things were best illustrated in the field, especially difficulties in command and control. Nevertheless, without classroom discussion to build our knowledge of Army doctrine, the lessons of these exercises would have been largely missed. The value of experience-based training completely depends on its ability to simulate realism. I feel that these experiences by themselves did not contribute to my development as a leader in any truly substantial way. The most valuable learning tool for future company

commanders like myself in the schoolhouse environment is the small group classroom that encourages lively intellectual debate and expands the lessons learned in Gauntlet training. If we want our prospective company commanders to have more experience-based training, I suggest increasing the amount of live-fire training in TO&E units to develop experienced lieutenants who will become future company commanders.

The CABCC assumes too much by centralizing its doctrinal instruction around DL. Students will arrive with a wide variance of doctrinal knowledge resulting in a student body incapable of communicating their intent efficiently. The CABCC design further compounds this deficiency by focusing on Gauntlets that are unrealistic and underresourced. Experience-based training is certainly valid, but training soldiers in unrealistic experiences will reinforce improper techniques necessary to achieve success during each Gauntlet with little applicability to real combat situations.

The Armor School should be applauded for focusing its efforts on developing commanders that are competent in combat situations. Yet the proposed CABCC methodology detracts from a future commander's understanding of Army doctrine in an attempt to force artificial experiences that do not mimic the realities of combat or even real training in TO&E units. For our future company commanders to fully contribute to the lethality of the future U.S. Army, they must have a firm grasp of the Army lexicon — doctrine. The Army cannot build on officers with a weak foundation in doctrine, no matter how many experiences they have.

CPT WILLIAM H. GOIN IV
Fort Knox, KY

Never Deploy Just One Tank With Tank-Infantry Team

Dear Sir:

I am a fairly new member of the Armor Association but I am an avid reader of your fine publication. As a Vietnam Marine tanker, I read with great interest the extremely well-written article by the three active duty tankers entitled "Armor and Mechanized Infantry in Built-Up Areas" in the September-October 2002 issue. The Marine tank that I served on as a crewman participated in the fighting during the Tet Offensive of 1968 in Hue City. I, therefore, feel that I have a modicum of experience in real-life urban combat to make a few comments.

When I was stationed with 5th Tank Battalion at Camp Pendleton in 1967, our tank crews trained extensively with the infantry (albeit they were usually non-mechanized) to work as a tank-infantry team. I am very glad to read that not only the U.S. Marine Corps, but the U.S. Army again feels that this is a

Continued on Page 40

Major General R. Steven Whitcomb
Commanding General
U.S. Army Armor Center



Distance Learning — A Tool for Today and Tomorrow

“Education should occur in distance learning. Learning is the goal, not teaching.”

— General Eric K. Shinseki,
Chief of Staff, Army, 21 June 2001

There are few training initiatives that stir up emotions more than distance learning (DL). If you currently view DL as the enemy, then we are the enemy, because Fort Knox has been a DL trailblazer for TRADOC for the past several years. The reasons why we are using DL are clear: there are operational requirements that drive its use; and the technology is available that allows us to leverage DL as a training tool for the entire force. I'm tackling this controversial issue to address your concerns. Let me say up front that I will not take any action that reduces the standards of the great training programs we have built. I consider that to be my unbreakable contract with the Force.

It seems DL is a topic of two extremes — people are either absolutely opposed to DL or so enamored by it that they believe everything can be taught by DL. The reality is somewhere in the middle. Army Transformation to the Objective Force is driving officer, warrant officer, and NCO Education System changes. We are building capabilities to lead this transformation in the training arena that will enable our Army's Transformation. Some of the required capabilities we are building, such as Assignment Oriented Training and training soldiers and leaders as we expect them to fight, are beneficial if we develop a robust DL capability. This capability will not only connect a soldier to information, but connects the

soldier to a learning environment, anywhere — anytime.

Because of changes in our operating environment, we can no longer afford an “alert-train-deploy” methodology, which depends on major training events that are planned and executed after the alert. We must train our force with the flexibility and precision so that when alerted, we can deploy and employ rapidly. How we attain and maintain that warfighting edge is the challenge. At its best, DL will allow soldiers and units in the field to train in necessary skills when and where the training is needed. Since DL training material is “turn key,” leaders can focus on training and achieving the standard, instead of other time-consuming aspects of training management. The DL training blocks give commanders a monitoring capability so that they ensure the training is done to standard.

Filling the TOE force and increasing the stability for our troops between deployments are two other factors that encourage development of DL instruction. These two factors drive the Armor Center to optimize the time soldiers and leaders spend in the schoolhouse. Units have a tough time maintaining their training and readiness if key soldiers and leaders are away. We should not take soldiers and leaders away from home and their unit training if there is an alternative. DL is a piece of that alternative because it provides continuing institutional training to standard while reducing the time soldiers and leaders spend at the institution.

DL has been around for a while, but the initial results were not spectacular. Initial attempts at DL were similar to a

high-speed correspondence course. Correspondence courses provide information, but do not have the interactivity required to assist learning. Early CD-ROM lessons were an improvement, but are subject to distribution problems and maintainability problems (keeping the material current). The increased capability of the Internet has given us the capability to overcome most of the problems of earlier distance learning. The Internet provides the potential for interactivity and an ability to update training materials and ship those materials to AC and RC forces instantly. “Train as we fight” training challenges that we work through now with DL will be similar to future issues as we increase our reliance on the tactical internet and computerized vehicular command and control systems in our digitized force, Stryker BCTs, and ultimately in the Objective Force.

Distance learning is about soldier learning, not about instructor teaching. At Fort Knox, we believe we have DL about right. We have adopted a model that looks at courseware materials and examines the type and level of learning that takes place. Essentially, we see three levels of training: knowledge-based instruction, which can readily be accomplished through distance learning; applying that knowledge, which may or may not lend itself to a distance-learning format; and problem-solving. Depending on the task being trained, DL may or may not be accomplished in a distance-learning format. So our initial work with DL is aimed at knowledge-based instruction.

Continued on Page 42

Focus Training on the Basics

by Command Sergeant Major Jim Dale, Armor School Sergeant Major

I would like to thank the leaders of the 24th Infantry Division (M) and Fort Riley for the wonderful visit my team and I had from 22 through 24 September 2002. MG Metz and CSM Hearron, your post and soldiers look GREAT!! They are motivated and ready for any mission that might come their way.

I would also like to thank PFC Simms, SPC Dees, CSM Fyffe (Garrison CSM), CSM Hopkins (3d Bde), CSM Riling (1st Bde), CSM Skidmore (2-70th AR Bn), CSM Pring (1-13 Tank), CSM Nobel (1-34 AR Bn), and CSM Moore (2-34 AR Bn), for going out of their way to ensure we had a pleasant trip. I also extend thanks to the soldiers of B Company, 3d Platoon, 2-70th Armor for allowing me to do PT with them.

We also had a great visit with the Manhattan Armory, and met some very professional leaders who are also ready for any mission that might come their way.

For this issue of the "Driver's Seat," I have asked the Armor School Command Sergeant Major, Jim Dale, to write an article about training focus. I would hope that we can use his experiences as a platoon sergeant and master gunner of an armored unit to help better train our soldiers to not make the same mistakes.

*- CSM William J. Gainey
Command Sergeant Major
U.S. Army Armor Center*

I once served as the battalion master gunner in a unit fielding the new M1 Abrams tank. At that time, only a few tankers in the battalion had prior experience on the combat system, so everyone was focused on learning the fundamentals and characteristics of the tank as we proceeded through fielding and training. Shortly after transition, we participated in our first Tank Table VIII gunnery. The results of the gunnery were outstanding, 55 out of 58 tank crews qualified first time down range. You can imagine the pride among the

soldiers of a tank battalion that has done so well.

While serving as a platoon sergeant several years later, my unit and crew did not do as well, so you can imagine the disappointment among the soldiers. The difference in the two situations was our training focus and preparation for gunnery as tank commanders.

We put so much energy into meeting the gates in unit conduct of fire trainer (UCOFT), we forgot to train in the UCOFT. We focused on what the maintenance team had not done, rather than performing preventive maintenance checks and services by the book, using special gunnery and armament accuracy checks to verify that our systems were ready as a crew. We did not take advantage of the snake boards and other tools to learn how to manipulate the switches, knobs, and buttons on the M1A1. After the disappointing gunnery, we brushed ourselves off and developed a plan to become the best in the battalion — we succeeded.

Our plan was simple from a noncommissioned officer standpoint. To succeed, we had to enforce training standards and take advantage of every opportunity to train gunnery. I am reminded of the speech one of my former squadron commanders gave as we prepared for our National Training Center rotation, "for the squadron to be successful, the noncommissioned officers (NCOs) had to ensure our soldiers were trained to standards in individual and crew tasks." He went on to say, "training is just like playing football, the basics of winning the game are to block and tackle well."

As NCOs, we shoulder the brunt of the responsibility to train Armor crewmen to master individual skills to successfully accomplish their mission. There are a myriad of successful training programs in units throughout the Army, but the best must always focus on training crewmen on the most basic task — how to operate the crew station of his assigned vehicle. Tactically, we

must train crews on how to perform individual crew tasks, which contributes to a successful collective task. For example, frequent MILES boresighting is one of the keys to success at a combat training center and contributes immeasurably to the crew's ability to engage and destroy the opposing force (OPFOR). When the fast-moving OPFOR comes across the horizon, every tank needs to be engaged in the battle for the platoon to be successful, and likewise for each platoon if the company is to be successful. Our smaller organizations cannot afford an untrained crew.

My battle buddy and the Deputy Commanding General of the Armor Center tells me quite often, "every soldier has a sergeant who is responsible for his training and welfare, including him." As sergeants responsible for soldiers, focus your energy on training the basics, using our abundance of initiative. You will have successful gunneries, excel during Cav Cup, and defeat the OPFOR at the CTC. Be innovative in your approach to train your crew, but focus on the basics and collective success will follow.

I also believe that the success to training our crews to be combat ready is never forgetting the basics. During my 27 years as a soldier, I have learned that no matter how complex we get, the soldier who knows the basic task will get us through our mission.

I look forward to hearing more from the soldiers in the field. Always take the hard right over the easy wrong and remember, PRIDE IS CONTAGIOUS!!

I am very interested in receiving concerns, comments, and suggestions from soldiers out in the field. Please send all questions and comments to the following email address:

CSM@knox.army.mil



Counterreconnaissance in the 21st Century:

Developing and Defending the Security Zone in the Current Limited Conversion Division Configuration

by Captain Charles T. Lombardo and Major Samuel A. Butzbach

“Counterreconnaissance is an inherent task in all security operations. Counterreconnaissance is the sum of all actions taken at all echelons to counter enemy reconnaissance and surveillance efforts through the depth of the area of operations. Counterreconnaissance denies the enemy information about friendly units. It is both active and passive and includes combat action to destroy or repel enemy reconnaissance elements.”¹

The time is 1900 hours. The task force (TF) has just culminated in their movement to contact. They have sustained heavy combat losses, and are currently at 30 percent strength. The TF will conduct a defense in sector in the next 36 to 48 hours. The TF scout platoon leader is moving to the TF TOC to receive guidance on the upcoming mission. The company team (CO/TM) commander is coordinating his task as the counterrecon commander with the assistant S2 and S3 Air. The brigade recon troop (BRT) is conducting a zone reconnaissance to establish a screen forward of

the brigade. The opposing force infantry recon patrols and engineer recon patrols are moving unopposed in sector through the security zone. In the morning, the TF will begin engagement area (EA) development under enemy observation. The BLUFOR TF will react to enemy artillery for the next 24 to 48 hours. In the meantime, the enemy is gaining critical intelligence in preparation for their impending attack.

Unfortunately, this short vignette occurs all too frequently at the combat training centers (CTCs). The leaders in this scenario — the TF XO, the TF scout platoon leader, counterrecon CO/TM commander, the BRT commander, the battalion intelligence and collection coordinator, and staff officers at various levels — want to do the right thing. The security zone fight has two major problems. First, is getting the aforementioned team together at the right time and location on the battlefield. Second, is focusing the security zone planners and executors on identifying, and more

importantly, destroying the enemy reconnaissance as the enemy attempts to penetrate into BLUFOR sector. This article outlines some systemic problems with counterreconnaissance in today’s limited conversion division (LCD) configuration, such as how to streamline planning cycles to allow for synchronization at the brigade combat team (BCT), TF, and CO/TM level; and how to prepare, synchronize, rehearse, and execute this critical mission to achieve the endstate of enabling the lookers and killers in position to observe, report, and destroy enemy reconnaissance.

Despite the emphasized importance of winning the security zone fight, TFs often fail to plan and provide an adequate product to the counterrecon commander. History at CTCs clearly shows that TFs that are successful in destroying enemy recon elements are also successful in defending 85 to 90 percent of the time. That said, TFs generally do not focus enough on security zone planning, preparing, and synchronizing the

fight. Additionally, the current modification table of organization and equipment (MTOE) omits the fourth maneuver element, and the TF has the added challenge of developing a viable plan that provides enough combat power in the counterrecon to destroy the enemy recon when the scouts identify the enemy in sector.

Doctrinal Foundation

There is still no stand alone U.S. Army Field Manual (FM) that provides commanders a direction for planning, preparing, and executing. The 17 series covers screening tasks for scouts. FM 71-1, *Tank and Mechanized Infantry Company Team*, discusses defense in sector, defending a battle position, and hasty defense.² With respect to the brigade's portion of the security zone, FM 3-90.3, *The Mounted Brigade Combat Team*, chapter 4, discusses capabilities and mission profiles in security operations.³ FM 3-90.3 fails to address the actual command and control (C2) architecture with BRT integration into TFs. This is the significant negative trend observed with the observation plan at both brigade and TF levels at the Combat Maneuver Training Center. The two separate reconnaissance fights create a gap of intelligence, thus violating the continuous observation of enemy recon elements. Additionally, there is FM 34-2-1, *Tactics, Techniques, and Procedures for Reconnaissance and Surveillance and Intelligence Support to Counterreconnaissance*, which is very helpful to S2s.⁴ FM 34-2-1 identifies what determines good priority intelligence requirements (PIR) and the development of reconnaissance and surveillance (R&S) operations. FM 34-2-1 specifically states that "This is a 'how to' manual. It describes how to:

- Plan R&S operations.
- Task R&S assets.
- Graphically depict R&S operations.
- Execute R&S operations.
- Save time in the planning process.
- Plan for intelligence support to counterreconnaissance missions.

This manual shows you how to succeed in your reconnaissance and counterreconnaissance efforts.⁵ Despite what FM 34-2-1 states, it is not a how to manual for counterrecon operations. FM 34-2-1 lacks the detail required to assist the ground maneuver commander in managing the collection assets in con-

cert with his killers. It is also outdated and does not contain the proper equipment or systems that are present in the Legacy Force.

Time-sensitive planning. The limited time factor in the planning process for the security zone fight is a key consideration. The BRT is moving to reestablish the brigade forward line of own troops (FLOT) and prepare for the deep fight. Available TF scouts are moving to the TF tactical operations center (TOC) with their phase line (PL) to receive guidance and resupply prior to their movement to the screen. The company is executing consolidation and reorganization. The TF sends out a fragmentary order (FRAGO) assigning a company to establish a hasty defense along PL Silver. One problem — the company has not generated adequate combat power to repel an enemy recon force in a TF size sector, and the CO/TM selected is still conducting consolidation and reorganization and has not accounted for everyone.

Task organization and constraints. Unlike the Division 86 MTOE, the LCD has added challenges. First and foremost, the TF has three CO/TMs, not four. In some divisions, the forward support company is attached to the TF and is not organic. By adding the BRT, TFs now have to deconflict the R&S plan. Commanders in the LCD configuration must address different challenges:

- How to task organize for the counterrecon fight, while maintaining significant combat power for the main battle area (MBA).
- Deciding what time in the planning process to task organize the counterrecon force.
- Giving the counterrecon commander enough time to start movement prior to the enemy recon.
- Ensuring the C2 architecture supports the mission, in terms of both battle command and communications.
- Ensuring a unity of command in both tactical and logistics tasks.
- How to transition from the previous mission to establishing a security zone.
- How to transition out of the security zone fight and reintegrate the counterrecon forces into the main defensive belt.
- Ensuring the BRT and TF scouts can provide enough reaction time to displace the counterrecon company back

into either a supporting effort role or a reserve position.

Once you begin to wargame how you will develop this, you have to weigh in the additional variables, such as the BRT's scheme of maneuver, adjacent TF's scouts plan, ground surveillance radar (GSR), and any divisional assets that will be operating in your battlespace.

Plan

Intelligence. The most challenging task in the LCD configuration is managing additional collection assets. With the integration of the BRT, the TF S2s not only manage TF scouts, GSR, and additional forward observers (FOs) internal to the TF, but have the added responsibility of deconflicting cross FLOT assets of the BRT. TF scouts no longer have to escort brigade-level assets. So, how does the BRT counterrecon CO/TM synchronize their movement to the screen and refine their observation plan at the initial stages of the security zone development? There are many points to consider, including who is out there from the BRT; how did they move through the TF sector; what is their observation plan, dead space; and how much reaction time from BRT to TF scout? These questions, if not answered, will hinder the counterrecon CO/TM's ability to position tanks and Bradleys in key positions. This seems to be the major problem with the observation plan in the security zone fight. Scout platoons establishing reconnaissance hand-over lines with BRT platoons and building in the reaction time to allow the killers to actually achieve their tactical task seems to be a tough nut to crack. Many brigades attempt to plan after the security zone is set. Developing the brigade R&S plan late has a major impact on the BRT and a compounding impact on the TF scouts. By not synchronizing the initial observation plan at the brigade level, TFs are developing independent security zone plans that are not congruent with the brigade commander's intent. Figure 1 describes the critical planning times for transitioning offensive operations to defensive operations. The key task is using the TF liaison officer (LNO) to pull the essential information from brigade and push that key information to the TF. Developing the brigade R&S plan, and constant updates by the TF LNO will help the TF commander and S2 in refining PIR. The LNO can also assist the TF S2 by updating BRT locations

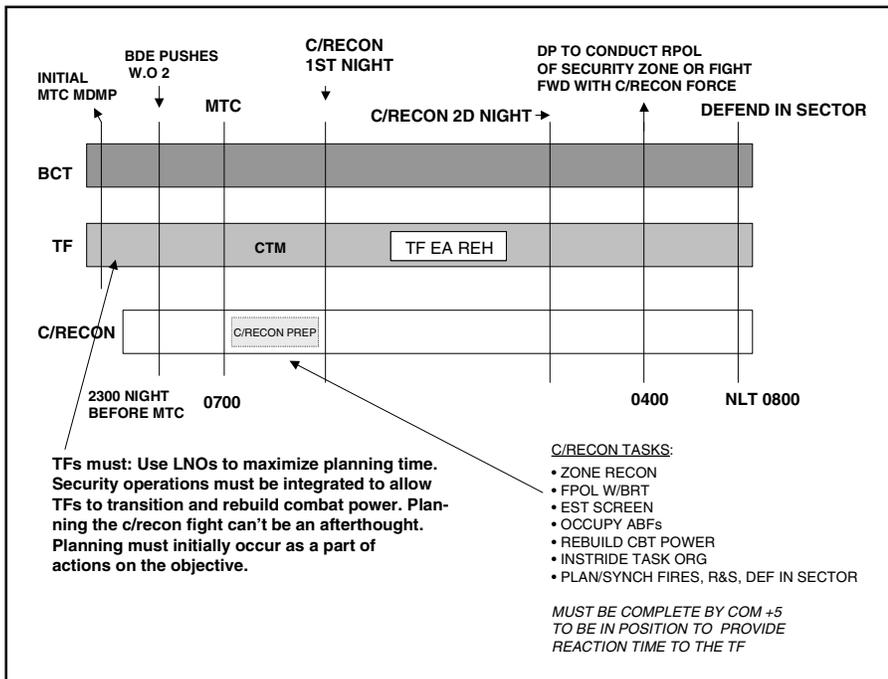


Figure 1. Parallel Planning in Security Zone Fight

throughout the early phase of the counterrecon battle. The BRT's location will help the scouts and counterrecon commander in their intelligence preparation of the battlefield.

Maneuver. The critical task for any military decisionmaking process is time management. It is no different from developing the security zone. The trend observed here is failing to integrate the TF LNO. The LNO can greatly enhance the speed at which the TF receives information from brigade. TFs generally wait for the issuance of the brigade operations order, which is too late. Using multiple warning orders allows the TF to begin the parallel planning necessary to establish the front, rear, and flank boundaries for the counterrecon commander. Therefore, analysis of the enemy's disruption zone must begin immediately. This is where both the brigade and battalion must be well rehearsed on the LNO's role. From a personnel perspective, this is where TFs must assign a very competent lieutenant or captain. All too often, the TF LNO is usually a young second lieutenant waiting for a tank or infantry platoon leader position. He would like to do well, but is just too young and does not know what he does not know.

The second trend observed is failing to plan on the objective. Failure to identify the decision point to transition from offensive operations to establishing the security zone is the genesis of the security-zone dilemma. FM 5-0, *Army Planning and Orders Production*, states,

"To develop a [course of action] COA, the leader focuses on the actions on the objective and works backward to his start point."⁶ It is the detail in analyzing the objective where TFs miss the opportunity to integrate their reconnaissance back into the fight. Other concerns are:

- Ensuring the counterrecon commander has enough combat power to initiate movement into the security zone at the prescribed time.
- Knowing the BRT's location. For example, are they already in sector; and when will the brigade or TF staff brief the counterrecon team?
- Ensuring the situation template is updated, to include when the observation plan and company graphics are due to the TF TOC.
- Knowing when the counterrecon commander will receive the refined graphics from the adjacent unit and the BRT.

Fire support. A consistent point of friction is getting the TF fire support officer (FSO) to submit input into the security zone development when the counterrecon team needs his attention. The FSO is usually in the middle of mission analysis or COA development for the main defensive fight. Using the fire support noncommissioned officer (FSNCO) is rarely observed, and the end result is the counterrecon commander and TF scout platoon do not receive support from the fire support element (FSE). The FSE, along with many

other battle operating system elements, must first articulate which tasks must be done by the entire staff, not just the primary staff officers. The TF XO and the rest of the primary staff must delegate who conducts which tasks. This allows for parallel planning, and by empowering the TF TOC personnel, will help educate the privates first class and other TOC members when they are up at 0200 hours talking and eavesdropping with the counterrecon CO/ TM. If the FSO has briefed his section, he can issue guidance to the FSNCO to assist the counterrecon commander, and the mortar and scout platoons in planning and developing the technical and tactical triggers for using both mortars and artillery. This also ensures identifying both mounted and dismounted avenues of approach.

Integrating GSR, scouts, FO teams, and sniper teams can provide depth and redundancy to the observation plan. Integrating TF mortars requires additional planning considerations such as the command relationship between the mortars and the counterrecon team to determine if they are attached or under TF control. In the Cavalry community, the answer would be troop/company control, such as ground cavalry troop configuration.

Attaching mortars, as well as scouts, prescribes a clearer unity of command. In the fires roll, this unity of command will reduce the clearance of fires and mission processing times. That said, the observed trend in the BCTs is to keep the mortars at TF level. If the mortars remain under TF control, then the entire TOC shifts and the staff must understand their role in the security zone effort, not just the TF FSO.

Positioning mortars is another issue. Positioning them forward to allow the guns to range the scout's named area of interest (NAI) coverage and disrupt enemy recon movement is one option. The other option is to focus the mortar fire in the depth of the security zone. This can create confusion among the multiple elements in the counterrecon force, and it may be too late to use mortars in a security zone saturated with BRTs, TF scouts, GSR, engineer recon teams, and infantry squads. Whatever method is used to support the counterrecon team, the cross talk with the S2, the FSO, and the battle captain/TF XO must occur to ensure clearance of fires in advance of contact.

Mobility/countermobility/survivability. During the initial planning phase

of the security zone, the task organization of the engineers is critical. Attaching engineer squads to the company provides assistance with emplacing hasty obstacles for the scout and tank sections to disrupt the enemy's recon element or turn it toward the counterrecon's EA. Additionally, the engineers can provide analysis with TerraBase or Falcon View, which can be used at ev-

ery level. The TF TOC can use the blowups to identify platoon-level graphics to understand tank platoon hide locations, route to the attack by fire (ABF) position, observation point (OP) locations, and routes where dismounted patrols are conducted. Terrain analysis products can also visualize dead space in the observation plan and assist in target refinement for using indirect fire.

Combat service support. The unit conducting the counterrecon must be the main effort. The S4 and TF XO need to assist the unit commander in his execution. This includes pushing the company/troop trains, to include the forward aid station (FAS), class V munitions packages that consist of M2/3, M1, and mortar ammunition, and designating the main supply route (MSRs) and the routes to and from each OP, mortar firing point (MFP), and tank and Bradley positions. Consolidated reporting should fall under the CO/TM. The scout platoon sergeant should be supported by the company first sergeant, so that the scout platoon sergeant should not have to worry about moving back to the TOC or logistic release point to get supplies. Consolidating the support effort also reduces unnecessary movement in the security zone.

Battle command. Establishing the communications architecture is a sensitive topic. With the development of the BRT, the TF scout is often unable to regain contact with enemy reconnaissance that the BRT identifies in the BCT sector. Figures 2 and 3 depict the new information flow dilemma facing our security zone fight with the LCD.

The lookers, BRT and TF scouts, often cross the line of departure without basic security information — what are the NAIs, their start and stop times, and who is at the front, rear, and flanks? The result is an observation plan with major gaps from the BCT to TF that violates multiple security fundamentals — you must provide continuous reconnaissance, reaction time, and maneuver space, and maintain contact with the enemy. Due to the nature of the security zone development, the lookers and killers do not meet prior to planning or preparation. Brigades are trying to synchronize the R&S effort with consolidated brigade level planning sessions. The problem is timing the R&S meeting. The time that they want to pull the security zone leaders from the entire BCT is at the same time that the counterrecon team is doing their company-level troop leading procedures (TLPs). Most coordination is conducted via frequency modulation (FM) by junior leaders with the initiative to figure out who is actually in their battlespace. An additional trend observed is that TF scouts or BRT scouts are reluctant to go to each other's nets and crosstalk, or to go to the company net and give the spot report to the killers. The reluctance of lookers at all levels to go to each oth-

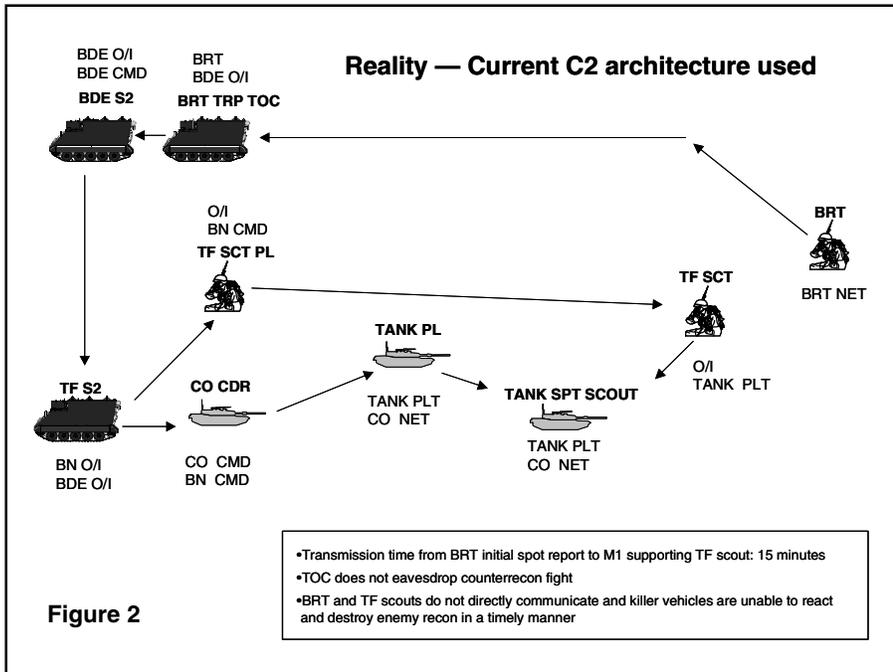


Figure 2

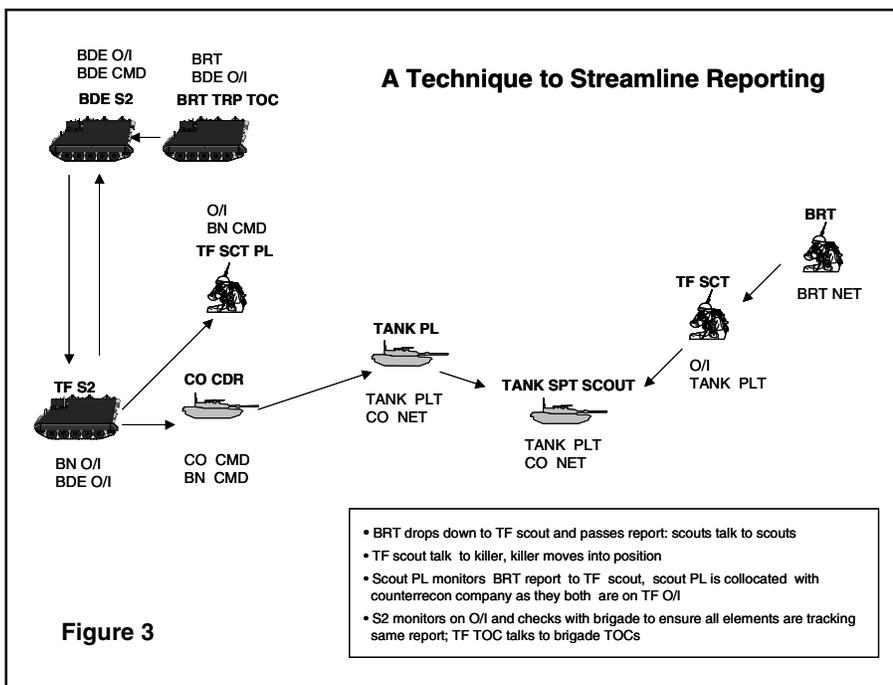


Figure 3

PREPARATION CHECKLIST/COUNTERRECON

TASKS	CO/TM	BRT	TF SCTS	FIRES	ENG	C2
What is my sector of responsibility?						
Location and activities of BRT and TF scouts.						
Task organization. What does the CO/TM commander control?						
Enemy recon routes mounted/dismounted?						
Enemy expected timeline and composition?						
IPB complete, recon complete, FRAGO issued.						
Initial movement with available combat systems.						
Are expected avenues of approach covered by direct fire?						
Rearm and refit; LOGPAC prioritized?						
Direct fire plan developed, sector sketch at TOC complete.						
Common and detailed graphics BRT, TF scouts, CO/TM, TOC.						
Does each crew have FASCAM/obstacle overlay?						
FM rehearsal; sand table rehearsal? BRT, scouts, CO/TM, S2, chief of recon.						
PCIs complete?						
Coordination between lookers and killers complete.						
Rehearsed and timed routes.						
Responsibilities assigned to lookers and killers.						
MEDEVAC plan; how do we extract BRT/scout casualties?						
Integration of responsive fires – mortars.						
Are hasty obstacles emplaced and cited in with direct and indirect fires?						
Scout and CO/TM withdrawal plan, rearward passage of lines – timing, triggers.						
Follow-on mission – main defense, TF/BDE reserve?						
Do crews know counterrecon plan? Is sector architecture and task organization understood by all units?						
Can CO/TM commander C2 from his position?						
Rehearsed closure of obstacles and rearward passage of lines?						
Rehearsed air/ground volcano and MOPMS emplacement?						
Do crews know no-move time?						
Rest plan implemented?						
Timeline disseminated and enforced.						
Did the CO/TM commander provide refined graphics including obstacles, vehicle positions and EAs, TRPs and indirect fire targets to the TF TOC?						

Figure 4. A full-size version of this checklist is available under the “November-December 2002” back issue link on our website at www.knox.army.mil/armormag/.

er’s respective net is the main reason for the current C2 configuration.

Another C2 hot topic is the commander of the recon fight. This unity of command affects all decisions in the security zone fight. At the executor level, can the CO/TM commander handle the mortars, scouts, CO/TM, and coordination with the BRT? With support from the TOC and the TF XO, he can. At CMTC, this point of friction is occurring. Does the TF XO or S3 assist the counterrecon commander during the night, or is it delegated to the battle captain? The function is not so difficult that the battle captain cannot coordinate with brigade on the status of the BRT and adjacent unit information. He can; however, there are certain situations that require the emphasis of the TF XO/S3 or commander. A technique is for the commander to establish events or criteria, commander’s critical information requirements (CCIR), that the command group can use as a “wake up the boss or XO.”

Preparation

Intelligence. Updating the situation template with the order of battle is critical in this phase. Identifying the effects of weather on terrain is also beneficial for the security zone fight. Understanding what is a viable mounted route changes within a matter of hours when heavy precipitation occurs at the CMTC. Cloud cover affects the use of enemy air. Knowing that will also determine the composition of additional mounted and dismounted recon patrols.

Refining the observation plan is another critical tracking task in the preparation phase. The observation plans include the TF and BRT scouts, GSR, infantry squads, and any additional electronic assets that are integrated into the fight. The TF S2 can assist the counterrecon commander in clarifying BRT routes. By understanding the routes that the BRT used in their reconnaissance, the counterrecon commander can determine potential routes that the enemy recon may use to move into the security zone. This will also assist the counterrecon commander in determining the areas with the security zone that still need to be cleared. A common trend is for the BLUFOR to move to a screen line, set OPs without fully clearing templated enemy OPs, then calling the designated counterrecon CO/TM forward to occupy blocking positions without properly clearing the area. Owing the security zone entails zone, area, and

route reconnaissance. This is especially true if the counterrecon force is going to displace and conduct a rearward passage of lines (RPOL) into its supporting effort role, or act as a reserve force.

Maneuver. Using a preparation checklist, such as the example above (Figure 4), will assist the counterrecon commander in helping him “see himself.” The task force TOC should have the same checklist for the main defense belt as well as the security zone. The TF TOC should link the observation plan with this checklist to ensure that vehicle grids, OP locations, and routes are updated. This will allow the development of a common operational picture to be seen by all members of the security zone fight, as well as the TF.

The counterreconnaissance commander initiates movement of available com-

bat power on receipt of the TF fragmentary order (FRAGO). The commander receives minimum initial guidance from the TF, to include task organization; location of the BRT, TF scouts, and any other units operating in sector; graphics that depict sector boundaries; templated mounted and dismounted avenues of approach; no-movement time; friendly/enemy reconnaissance timeline; and civilian considerations. Preferably, the BRT commander, scout platoon leader, and counterrecon company commander linkup with the S2 and S3 to identify and prioritize enemy avenues of approach. Scouts conduct a zone reconnaissance to establish an early screen in depth to assist in the security of the counterreconnaissance unit as it pushes forward with available combat power. Prioritized avenues of approach, both mounted and dismounted, are immedi-



“Understanding that counter-reconnaissance is a phase of the battle is critical. It is not a battle captain, scout, and the unlucky company commander’s mission. It is everybody’s responsibility...”

ately covered with direct fire from available systems. Limited infantry assets are consolidated into focused patrols to key areas. As the unit builds combat power, they position and reinforce forces, and expand their overwatch with the goal of covering all expected enemy routes with direct fire and simple situational obstacles.

Generally, enemy reconnaissance is limited during the first 24 hours. Therefore, the initial counterrecon effort goes to initial positioning, and rehearsals. Ensure that rehearsals — sand table, mounted, and FM — are completed with all leaders, including lookers and killers, present during the initial 18 hours. Section-size engagement areas are identified and tied into direct and indirect fires, and obstacles are emplaced and documented on increasingly detailed graphics. Routes within the security zone and along displacement routes are reconnoitered and timed. Depth is established throughout the sector and specific areas of responsibilities are identified. Units preparing positions and operating in the main defensive area are continually updated on friendly and enemy activities in the counterrecon sector that may effect their activities. The counterrecon company is now prepared to destroy or repel all enemy reconnaissance in sector.

Fire support. The TF FSO and counterrecon company FSO must articulate the intent for indirect fires in support of both direct fire and the countermobility plan. The actual counterrecon battle is not the most ideal situation for using indirect fires. Firing missions on a moving light-skinned armor vehicle is hard to do. However, if the enemy is fixed or slowed at a hasty obstacle, mortars are the best choice, based on their responsiveness. The counterrecon team duties in the preparation phase consist of technical and tactical trigger

refinement. The company FSO can assist the counterrecon commander in refining the observation plan. The company FSO can work with the TF scouts and BRT on observer positions, and refining left and right limit and dead space. By doing this early in the prep phase, the counterrecon CO/TM realize where they can and cannot identify the enemy. A mounted rehearsal will validate the observation plan, and allow observers or killers to adjust their respective position and validate their triggers. Additionally, the mortar platoon can adjust their class V munitions stock, using more illumination and high explosive (HE) verse smoke. The illumination can facilitate rapid acquisition of both mounted and dismounted enemy recon elements. TF responsibilities include compiling the counterrecon plan and disseminating that information across the TF. Also, coordinate with brigade on priority targets and no-fire areas (NFAs) on all observers, killer, and C2 nodes. Finally, emplacing critical friendly zones on potential passage points will allow the TF to reintegrate that valuable third CO/TM back into the main defense.

Mobility/countermobility/survivability. During the preparation phase of the security zone, accounting for the obstacle effort in both the security zone and main defense is critical. It is crucial that the CO/TMs in the main defensive area know the composition and location of the obstacle plan in the security zone.

The counterrecon team must know of the countermobility plan in the main battle area (MBA), especially if they are conducting the RPOL. Marking the passage point and route to their subsequent position is critical. Not only marking the route, but also ensuring the counterrecon team understands the visual signal is very important. In the preparation phase, the engineer commander

and TF FSO, along with the counterrecon team commander, must refine any situational obstacles. The obstacle refinement is addressed initially in the planning phase, when the TF commander decides if the security zone will displace, or if it will fight in place. The actual refinement must be a part of the counterrecon-mounted rehearsal. On completion of the counterrecon rehearsal, the counterrecon team commander, the S2, and the FSO must all annotate the precise grids of all obstacles, and the intent of situational obstacles to be implemented in the security zone fight. The S2, the engineer, the TF FSO, and the commander must be on the ground together at the passage point and other critical areas of the security zone to confirm these critical points. On the completion of the ground coordination with the command and staff, the engineer cell can also update the terrain analysis products for the TF TOC and provide brigade a copy so that all TOCs continue to share a common operational picture.

CSS. As the counterrecon commander is integrating and refining the lookers and killers in the security zone, the TF staff is working with the XO/ISG to ensure the counterrecon fight is receiving the proper support. In the security zone fight, the counterrecon company 1SG is managing his company, plus the TF scouts and possibly the mortars. It is not feasible to develop four breaks of class I/III/V munitions, which causes too much movement in the security zone and degrades the number of eyes focused on the enemy. Allowing the ISG/XO to execute this challenging CSS mission gives the counterrecon commander the flexibility to refit by sections. Consolidating the task organization under one CO/TM reduces the multiple moving units throughout the security zone. Eliminating the moving CSS operators will enhance the overall situ-

ational awareness for the counterrecon team. The TF XO ensures that the TF supports the counterrecon team. The TF S4 establishes a Class III/V push in the MBA for the counterrecon company if they displace back and fight. The TF S4 will also decide whether to push a FAS forward or collocate a definitive care provider with the company medics. The choice to commit the physician's assistant or surgeon forward reduces the died-of-wounds rate. Bottomline — it is the TF's responsibility to ensure that the assets are there for the CO/TM.

Battle command. The most important thing the TF TOC can do for the counterrecon commander is assist him in battlespace management. There are many leaders moving around in the EA. TFs must take the approach that they use during a live-fire exercise. Nobody moves unless the TF TOC knows about it. The counterrecon company must know about all personnel moving in the security zone. The lack of personnel accountability is a great contributor to fratricide and desensitizing the lookers. When the counterrecon force observes multiple soft-top HMMWVs driving around without any knowledge from the TF TOC, that degrades the lookers' ability to observe the important stuff — the enemy. The best thing the TF TOC can do for the counterrecon team is to maintain tight communication with brigade and adjacent TFs.

Execute

Counterrecon company and attachments. The counterrecon team continues to focus on templated mounted and dismounted avenues of approach to destroy the enemy. Destruction of enemy reconnaissance assets must be the primary goal of security zone and counterreconnaissance operations. This implies aggressive execution of the counterrecon mission. Too often, unit leaders do not emphasize this basic imperative to subordinates. There is always the trade-off between stealth, such as hiding in the woods, and the ability to react quickly enough to destroy the enemy before he moves and is lost in the main defensive area. Normally, there is very limited threat to combat systems such as the M1/M2 from enemy reconnaissance assets — hiding in the woods will not accomplish the task. Stealth is only effective as it pertains to the ability of the counterreconnaissance unit to destroy the enemy. Massing direct fires with responsive mortar fires and integrating simple obstacles, such as wire and abatis, are essential.

The relationship between the lookers and killers is critical to accomplish this mission. The lookers must identify, then pass off the target to the killers. They must direct the killer to the enemy. Once the target is transferred to the killers, they have the responsibility to maintain contact, adjust their position as necessary, and aggressively pursue and destroy the enemy reconnaissance. All activities are continually monitored and updated by a decisionmaker at the TF TOC.

Vigilance on the part of the counterreconnaissance unit is key to mission success. Therefore, a workable rest plan must be established within the CO/TM. If the unit initially maintains 100 percent vigilance, then effectiveness will degrade over time. The result is enemy recon elements passing by sleeping soldiers at 0300 hours. We recommend 50 percent vigilance within crew or section, to ensure that there is always a combat system in each sector to react to scout reports.

TF support assets. Critical task in the initial development of the security zone is friendly force accountability. The counterrecon commander can manage the security zone; it is the TF external elements that are difficult to manage.

This article describes some techniques that will assist the staff and troops conducting the counterrecon mission. The preventive measures taken to streamline planning and prevent last minute coordination will pay big dividends on the ground for the lookers and killers trying to protect our battlespace as we prepare for defensive operations. Understanding that counterreconnaissance is a phase of the battle is critical. It is not a battle captain, scout, and the unlucky company commander's mission. It is everybody's responsibility — from the soldier patrolling around the TOC perimeter to the field train's command post gate guard. Security forces in depth is not intended solely for the cavalrymen; it is for everyone in the TF.

This article also focuses on the security zone fight as it applies to the LCD in the current form. That current form is BCTs in the correct size, without the advantages of the latest technology in the M1, M2, M3 series, as well as the Force XXI battle command brigade and below (FBCB2) complement of equipment. Once digitization is integrated into the remaining LCD units, their overall performance will obviously increase in their ability to manage infor-

mation and see themselves and the terrain.

Notes

¹Field Manual 17-97, *Cavalry Troop*, Department of the Army, U.S. Government Printing Office, Washington, DC, 3 October 1995.

²Field Manual 71-1, *Tank and Mechanized Infantry Company Team*, Department of the Army, U.S. Government Printing Office, Washington, DC, 26 January 1998.

³Field Manual 3-90.3, *The Mounted Brigade Combat Team*, Department of the Army, U.S. Government Printing Office, Washington, DC, 1 November 2001 (SS FM 71-3).

⁴Field Manual 34-2-1, *Tactics, Techniques and Procedures for Reconnaissance and Surveillance and Intelligence Support to Counterreconnaissance*, Department of the Army, U.S. Government Printing Office, Washington, DC, 19 June 1991.

⁵Ibid.

⁶Field Manual 5-0 (101-5) *Army Planning and Orders Production*, Final Draft, Department of the Army, U.S. Government Printing Office, Washington, DC, 15 July 2002, TBP.

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So You Say You Want to Kill With Indirect Fires...

by Major John A. O'Grady

Somewhere in Vilslakia: It has been another long day in the box at the Combat Maneuver Training Center (CMTIC), and an even longer after action review (AAR). The senior observer controller (OC) asks, "So commander, how is your unit going to be more lethal next time with indirect fires?" As you are driving back to your tactical operations center (TOC) to start another military decisionmaking process (MDMP), that one nagging question is the only thing keeping you awake — like a strong cup of coffee brewed at the TOC. You are determined to fix the problem, but you just aren't sure how.

OCs on the fire support team witness this phenomenon rotation after rotation, and battle after battle. This article offers techniques that will increase your unit's success with indirect fires. It also serves as a primer for the first fire support coordinator (FSCOORD) or fire support officer (FSO) meeting with the supported maneuver commander.

Target = Resource Place Holder

Many fire supporters do not understand this concept. The moment a commander places a target on that clear overlay in his TOC, he has allocated resources. Some resources he owns, some he shares, and some he does not own at all. Nonetheless, for that target to achieve the desired effects, the commander has to properly allocate resources such as class V munitions, battlefield calculus, primary and alternate observers, and a communications infrastructure.

Essential Fire Support Tasks

U.S. Army Field Manual (FM) 3-09.31 (6-71) *Tactics, Techniques, and Procedures for Fire Support for the Combined Arms Commander*, defines essential fire support tasks (EFST) as a "task for fire support to accomplish what is required to support a combined arms operation."¹ Failure to achieve an EFST may require the commander to alter his tactical or operational plan. A fully developed EFST has task, purpose, method, and effects. At task force (TF) level

and below, the commander is merely executing the brigade commander's directed EFSTs. This is much like being tasked as the find-and-fix mechanism in a brigade movement to contact, while the other TF is the destroy/defeat mechanism. It is not optional. The FSCOORD/brigade combat team (BCT) FSO must clearly articulate the EFST to the commander and his staff during mission analysis in terms of task, purpose, method, and effects (this begins the integration of fires). It is critical to understand how the EFST supports or is "nested into" each commander's scheme of maneuver. If at battalion TF level, a commander disagrees or believes that he needs field artillery (FA) fires or close air support (CAS) to accomplish his mission, then he must convince the brigade commander early in the planning process. If he waits until the combined arms rehearsal, it will most likely further desync the plan. Typically, the commander tells his FSO to "fix it." The FSO can try to get additional brigade controlled assets, but will likely fail. Brigade commanders should consider developing an EFST playbook that addresses the most likely EFSTs for a particular mission. To ensure that the FA battalion accomplishes all its given tasks, this playbook should be developed by the brigade commander and the FSCOORD. The TF commander should develop the same thing for his mortar platoons or sections. The *CTC Quarterly Bulletin, 2d Quarter, FY96*, offers an excellent discussion on EFST that is still relevant today. This article is a must read for all maneuver leaders!

A fully developed EFST has a specific task, purpose, method, and effects.² Task describes what targeting objective, such as delay, disrupt, limit, or destroy, that fires must achieve on an enemy formation's function or capability. Purpose describes why and how the task contributes to maneuver. Method de-



scribes how the task will be accomplished by assigning responsibility to observers, including the brigade recon troop (BRT), colts, scouts, maneuver shooters, delivery assets, and providing amplifying information or restrictions. Effects quantify successful accomplishment of the task.

Observer Plans

Perhaps the most challenging thing for maneuver commanders is the observer plan, which must be developed to ensure that the target is resourced at the right time to support the scheme of maneuver. The targets and observers should be depicted in tasks to subordinate units so that it is clear in the order, and responsibility is further fixed on the subordinate maneuver commander. Too often, the only level of detail that is ever planned, briefed, or rehearsed is, "Scouts are the primary observer and 'X' company is the alternate for target #AH2001." Observer plans must be planned, in detail, during the MDMP. The best technique is a combined observer plan and target overlay that shows routes, numbered observer locations, and targets. Written on the bottom of the overlay is the emplacement criteria, the specific observer at each location, the fire support (FS) event or target he is responsible for, and the displace criteria. Some will argue that this is too centralized. It is unreasonable to think that doctrine is top-down fire planning and then allow the resources to properly execute that plan to be decentralized. Additionally, who bet-

ter than the commander and his battle staff to coordinate this critical aspect of the plan? Simply using the S2's situation template and route overlays of enemy recon will avoid poorly placed observations points (OPs) that directly conflict with these routes, which often happens when a company commander and FSO plan locations on their own. Using TerraBase products, or 1:25,000 over flight maps that engineers at brigade/battalion TF level typically have, can help identify covered and concealed routes, and OPs with the best line of sight to the target area. Consider the routes and OP locations like they are targets. They can be refined during planning or execution by the company FSO or company commander, but must still achieve the same task and purpose. Refinement during planning must be received at the TOC 2 hours prior to the combined arms rehearsal (CAR).

Know the Enemy and Terrain

Units typically talk and plan in terms of doctrinal enemy formations, sometimes using actual numbers and vehicle types in those formations. This is sufficient for initial planning; however, at some point the FSO, engineer, and S2 need to determine how the enemy will enter our battlespace, at what rate of speed (it will not be the standard 20 km/hr), and how he will use the terrain to his advantage and disadvantage. This analysis should include determining the type of enemy and doctrinal formations he will use in his attack; determining the actual routes he will use, given his most likely course of action; analyzing the terrain in details such as IV lines, chokepoints or defiles, roads or tank trails, areas the enemy would determine as high risk and how he might mitigate risk by using smoke, diversion tactics, or robust counterrecon; and placing on the map the enemy's probable line of contact (PLC) as he would determine it.

Below is a hypothetical example of an OPFOR attack:

During the initial analytical process, certain things will begin to become evident about the enemy and terrain. You may find that the enemy will travel in column formation from his line of departure (LD) to his PLC, along roads and tank trails, at a speed of 20 to 25 km/hr. Then, in the north, he will remain in column through canalized and hilly terrain from phase line "X" to phase line "Y," but his speed will be slowed to 15km/hr. In the south, be-

FIRE UNIT ASSIGNMENT	FORCE PROTECTION	SPECIAL MSNs / MUNITIONS	C2
POSITIONING (RG)	Q36 PROTECTION	SEAD (TIME HACK)	RETRANS PLAN
AMMO DISTRIBUTION	Q36 MVT TRIGGERS	CPHD (OBSV PSN)	MSU / JUMP TOC
AMMO RESUPPLY TRIGGERS	ZONE ACTIVATION	SMK (BUILD / DURATION)	FSCM
BATTERY MVT TRIGGERS	CF SHOOTER DESIGNATION	FASCAM (MULTIPLE AIM POINTS)	POF / TRIGGERS
MET SCHEDULE	COORD W/ DIVARTY	RAP (HE ONLY / HIGH VOLUME)	HASTY vs DELIBERATE
SURVEY PLAN		RED BAG (QUANTITIES)	OBSERVATION PLAN
TECH REHEARSAL		ILLUM	R&S PLAN
BATTERY REHEARSAL		OUT OF TRAVERSE	
BTRY AZ OF FIRE		HIGH ANGLE	

Figure 1. Scheme of Fires

REF: White Paper and FM 3-09.31

tween the same two phase lines, the enemy will use the rolling terrain and go into column formation of approximately 3 to 6 vehicles per formation. He will use the traveling movement technique in the "low-ground" that runs in the direction of his advance that was created by the numerous IV lines, until he reaches the PLC where he will transition to the traveling overwatch.

Using this TTP, you can better target the enemy. We would no longer put targets in the middle of our engagement areas, where the enemy will not go, but perhaps place linear targets in the low ground, or we may attempt to surprise him by targeting roads as he travels in column at a point prior to his PLC. We see units at the CMTC typically place targets in areas that they can easily observe, and place triggers that allow for a constant 20km/hr rate of movement, regardless of terrain. Units must improve at knowing the enemy and visualizing his use of terrain, if we hope to better place targets and observers to achieve the effects stated in the commander's EFST.

Scheme of Fires

FM 3-09.31 defines scheme of fires as "the detailed, logical sequence of targets and fire support events to engage the enemy in time and space."³ It should mirror the scheme of maneuver. Units rarely use a scheme of fires, or use it in the level of details necessary to make it a worthwhile product.

The scheme of fires is developed initially during the COA development and refined during wargaming. The BCT/TF FSO should be filling it out throughout the process. It serves as an on-the-spot checklist and as a reality check. By being disciplined and thinking through how to accomplish and resource each

task, the unit must focus and prioritize what it will and will not do with fires above and beyond EFSTs (which must appear on the scheme of fires). Instead, units simply place targets on an overlay without any real critical thought as to how the targets will be executed. Ultimately, they end up with too many targets, little or no focus, and unresourced events/targets. Had they used the scheme of fires during planning, they would have known to address the execution of fires in enough detail to develop a plan that might work. Additionally, at the time of the OPORD briefing, the scheme of fires is a 90 percent solution and the only remaining refinements are the observer call signs, refined observer location, and refined target locations from subordinate commanders and FSOs. These refinements should be received by the fire support element (FSE) and incorporated into the final plan prior to the combined arms rehearsal. The scheme of fires is not only a necessary planning and execution tool, but it is important to the FA battalion that is supporting the brigade. The scheme of fires drives much of the planning and execution factors within the FA battalion (See Figure 1). These factors, if not properly planned and executed, may adversely affect the maneuver plan.

Battle Calculus

Know the limitation and capabilities of the FA battalion and your FSE and, more importantly, the relevance of those calculations to your unit. Figure 2 is one example of the type of information you, your FSO, and battle staff must understand. It provides a realistic vision of what an FA (155mm) battalion can accomplish.

Figure 2 shows that in the fire-for-effect (FFE) mode, it takes the FA battalion approximately 28 minutes (in 7-

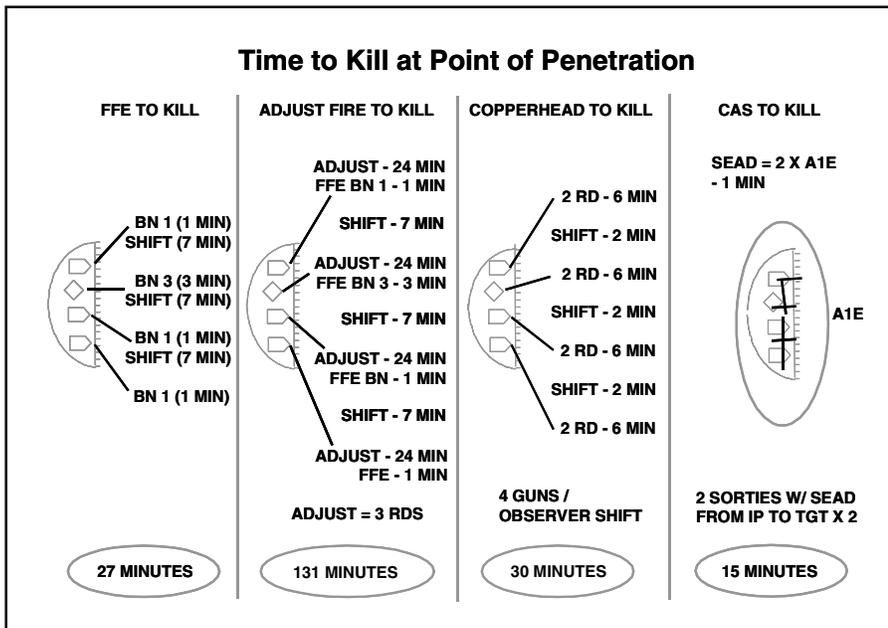


Figure 2

minute shifts) to kill a platoon using the proper volume of fire. It is important to understand that an observer, who can accurately identify each vehicle, provides accurate 6-8 digit grids to each FFE mode. Those are some difficult conditions to meet and resource. Too often, during the planning process, maneuver commanders give unrealistic guidance to their staff and/or FSO. For example, "I want fires to destroy the platoon at the point of penetration." It is probably not because this is unrealistic, but because the commander and the FSO do not really understand the resources — not the least of which is time — that it will take to destroy the platoon. Additionally, during the 28 minutes that you are attempting to destroy the platoon at its point of penetration, what are your subordinate maneuver units doing? What is the enemy doing? What else do you expect indirect fires to do in support of the assault on the objective? Some of the problems with fires not being synchronized with the maneuver plan can be directly related to not understanding the capabilities and limitations of the assets that the field artillery brings to the fight. The FSCoord/FSO or battalion fire direction officer (FDO) can brief you on other means of engagement and time standards associated with them such as group targets and special sheafs.

Incorporating Mortars

Mortars are the TF commander's indirect fire support asset, which equates to four 120mm mortar tubes in heavy units. Unfortunately, they are one of the most underused combat multipliers in

the TF. The most prevalent reasons for this include poor understanding of capabilities and limitations; no ownership by anyone else in the TF, other than the mortar platoon leader; no standard tactical mission assigned, only priority of fires that shift too many times during the fight, with no way of knowing when that priority shifts, which results in no focus of fires; no essential tasks directed to mortars; too many tasks to allow for movement, resupply, and friction; poor visibility at TF level of maintenance, communications, and class V, including resupply vehicles, during the plan, prep, or execute phase; and little or no support from the FA battalion with survey and meteorological (MET) data to ensure accurate predicted fires.

To fix or mitigate some of these issues, a commander must understand the capabilities and limitations of his mortar platoon, such as rates of fire, ammo capacity on the track and resupply vehicle; and mission training plan standards for emplacement and displacement, both mounted and dismounted. This data should be used to overlay the training level of the mortar platoon.

We often see units with unrealistic expectations, and as a result, they overtask the mortar platoon. Much like the battle calculus that was addressed with the FA battalion, you need to do the same thing with the mortars. The mortar platoon leader must be a part of the MDMP process. This ensures visibility of the mortar platoon and its status. Too often, potential issues that were initially ignored become undeniable during the combined arms rehearsal, or worse

yet, execution. No more than two essential tasks should be given to the average mortar platoon. This allows the mortar platoon leader to focus on quality mounted rehearsals, manage class V effectively, provide flexibility for battlefield friction, and still accomplish these tasks to standard.

The mortar platoon leader must be included in the back brief to the commander to ensure he understands essential mortar tasks (EMT) and scheme of maneuver to support those tasks. There is no doctrinal definition for EMT; however, just like an EFST, the EMT has a task, purpose, method, and effects. Failure to achieve an EMT may require the commander to alter his tactical plan. Developing potential EMTs by mission type should be part of the SOP. Additionally, as part of the SOP, the mortar platoon leader should give the S3/XO a more specific brief prior to the OPORD briefing, as well as some required prep for combat reports to ensure the mortar platoon is progressing and ready for combat.

The XO/S3 should have oversight of the mortar platoon. By placing a field grade officer as the oversight agent for the mortar platoon, it relieves the mortar platoon leader of staff burdens, such as logistics and maintenance, allowing him to focus on troop leading procedures. During execution, the mortar platoon leader should report to the S3 his slant, location, and essential task that he is executing or the next task he will execute. The S3 should have the mortar internal net loaded on his vehicle radio. This way the mortar platoon is not overlooked, out of range, desynced with the rest of the TF, or unable to support at the proper time and place. In this same vein, the FSO should brief the S3 and mortar platoon leader prior to the OPORD on how he has coordinated with the FA battalion for survey and MET support for the mortars. If the plan is not coordinated by that time, it will most likely not be coordinated by LD.

Another reason the mortar platoon is overtasked or loses focus is because of the failure to assign support relationships for mortars. When support relationships are clear, then the standard tactical missions and inherent responsibilities are also clear. Instead, units only address priority of fires and nothing more. Become familiar with FM 7-90, *Tactical Employment of Mortars*, specifically, paragraph 3-2 and table 3-1.4

Copy table 3-1 and put it in your smart book — refer to it during MDMF.

Using Artillery Delivered Family of Scatterable Mines (FASCAM)

This discussion is clearly directed to brigade commanders. If war is a thinking man's sport, then FASCAM is a thinking man's munition. Often units try to time the employment of FASCAM to separate the FSE from the advanced guard main body, or a similar use. However, there are other options:

Fire short duration FASCAM early in the deliberate attack (DATK). Fire on the templated motorized rifle platoon (MRP) farthest from the point of penetration in a 200 x 800, medium density, aerial-denial artillery munitions (ADAM) and remote antiarmor mine systems (RAAMs) configuration with the attitude (orientation) along the general orientation of the vehicles as you suspect them to be on the ground. This requires the S2 and engineer to template down to individual vehicle positions, using TerraBase and other products for assistance. Attempt to confirm with scouts or the BRT actual fighting positions. Shoot the FASCAM so that it is complete well prior to your first EFST after LD. Employing FASCAM in this fashion will likely deny the enemy fighting positions, making him less survivable; force him to decide to either fight above ground or use his engineers to clear paths to fighting positions; limit or deny routes from hide positions to fighting positions, or alternate positions; deny favorable terrain to the enemy; and potentially cause him to attempt to enter fighting positions early to bypass FASCAM. Even if you are successful in achieving just one of these effects, this maneuver forced the enemy to fight on your terms, and you have not caused the guns to be tied up at another critical point of the battle.

Fire short duration FASCAM on prep days of a DATK. Firing on templated OPFOR obstacles will require the S2 and engineer to conduct detailed analysis of when and where the enemy is likely to place obstacles and dig motorized rifle platoon (MRP) fighting positions. Putting FASCAM at these locations potentially "catches" engineers working in and around that area and effectively stops, delays, or limits, the enemy's ability to work, thereby reducing the robust obstacle plan. Additionally, you may choose to place FASCAM on the templated MRP where you intend to penetrate, which may limit the enemy's ability to prepare vehicle

fighting positions to standard. Either way, you have once again affected his decision cycles and scheme of maneuver.

Fire FASCAM along templated most likely dismounted and mounted recon routes. Again, the S2's level of detail goes up, but the potential payoff is huge. More planning on the FA side is required since we would likely shoot unconventional dimensions and composition of FASCAM. Consider ADAM only along dismounted routes and RAAM only along mounted routes. The size of these would be more like 50 x 50, 100 x 100, 100 x 50, and 200 x 100. At best, the division track and regimental recon may have an engineer recon patrol with it or near by. Otherwise, minefields placed at the proper places and the proper times can kill, delay, or disrupt an unsuspecting enemy and significantly limit his ability to get an early read of your disposition. Couple this with some effective use of illumination along these same routes, linked to times the S2 has said he will enter sector, and we have potentially further limited his recon effort. Imagine the conversations on the enemy's radio nets during the night as they start to encounter an enemy who is thinking! You have potentially caused blind spots that he now must reseed, divert other assets to, or accept risk with. Either way, you have entered his decision cycle and brought the fight to him.

Granted, there is some risk associated with employing FASCAM and illumination. However, acceptance of risk and to what level will always remain a commander's business. Have the FSCO-ORD/FSO or FA battalion fire direction officer explain, in detail, the technical intricacies of proper employment and ensure that the engineer is included in this meeting.

Fire Support Rehearsals

Suffice it to say, if you do not rehearse well, you will not execute well. Since fires are a BCT asset, the BCT commander should participate in the rehearsal. The BCT commander/S3 and TF commander/S3 should observe the rehearsal with the FSO to confirm the communications structure. This will ensure the observers are set and can observe the trigger and target area. It is best to use frequency modulated (FM) communications to conduct the rehearsal just as it will be executed. By doing so, you confirm your communications structure with all key participants. Whoever is listed as an alternate

or primary observer must be on the net during rehearsal. Ensure that your fire support rehearsal is on the BCT, TF, and company timelines, and does not conflict with subordinate rehearsals and road marches. Getting all observers, especially scouts and maneuver shooters, to participate seems to be the biggest challenge for the FSO. When I say observers, I mean the actual private, sergeant, and lieutenant, with his radio on the net and participating. No other standard is acceptable! Be a ruthless commander and support this!

This article offers some suggestions to the commander on how to successfully assess how well fires are getting into the fight. If I have at least stimulated thought and discussion between commanders and fire supporters, then I have been successful. The commander has to make it work — good luck.

Notes

¹U.S. Army Field Manual (FM) 3-09.31 (6-71), *Tactics, Techniques, and Procedures (TTP) for Fire Support for the Combined Arms Commander*, U.S. Government Printing Office, 29 September 1994, Washington, DC.

²Ibid.

³Ibid., p. A-4.

⁴FM 7-90, *Tactical Employment of Mortars*, U.S. Government Printing Office, Washington, DC, 9 October 1992, paragraph 3-2, table 3-1.

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Developing AAR Skills for Observer Controllers and AAR Facilitators

by Major Mark J. Hovatter



“Sir, you are supposed to be at the brigade conference room in 30 minutes. You don’t want to be late again,” the ISG dutifully pointed out. CPT Jones looked at his watch and recoiled in dismay. “Where did the morning go?” he thought to himself as he walked toward the brigade headquarters. The brigade commander’s officer professional development (OPD) lunch sessions were the last thing on his mind this morning. Jones had been in command for almost a month now and was truly “drinking from the fire hose.” In less than a week, his tank platoons would be rolling out for platoon situational training exercise (STX) lanes, and he was just trying to get his feet beneath him, and training was one of a thousand priorities right now. But the National Training Center train-up was fast and furious, and there wasn’t a moment to breathe anywhere on the schedule.

Two months ago, COL Nelson had taken command of the brigade and things had been very different since. Well known for his bizarre behavior and never-ending energy, COL Nelson was truly colorful. One of his initiatives had been bimonthly company commander OPDs, and he so far had conducted every one. One of the OPDs was conducted at the range during gunnery to minimize the time leaders were away from their units. But all of his OPDs were focused on near-term events. Jones did not know what today’s OPD was about, nor did anyone else.

The brigade’s company commanders filed into the conference room and were met by Nelson at exactly 11:45. He was always painfully punctual. Each officer in the brigade religiously synchronized his watch with pluggie time every morning to ensure that they would not be considered “tardy” to a meeting, as late officers were usually “reinforced” with the importance of timeliness. “Today, gentlemen,” Nelson began, “we will start to work on fixing a systemic problem, not just in the brigade combat team, but in the Army as a whole. Our

after action reviews (AARs) are not meeting the standard. Our leaders lack critical skills in collection, analysis, and, most importantly, in communications that make AARs the high payoff event they need to be. Today, we are going to work on AAR facilitator skills.” There was a bit of nervous tension among the captains. Most were convinced that Nelson’s statements applied to someone else, not them.

Nelson continued, “Today we will be conducting AAR training in a low-cost environment. You will be divided into player units, collectors, and two facilitators. There are two different written scenarios. The scenarios are for platoon STX lanes very similar to the ones we will be conducting next month. Written on the boards are the two task organizations for the teams. Once the facilitators have read the information sheets, the clock starts. You will have 30 minutes to prepare your AAR. The first AAR will be from Blue Team, and then White Team will go immediately after. Questions gentlemen? OK, Blue Facilitator and White Facilitator, here are your information sheets.”

The two captains read their information sheets, which gave each one the training objective, the scenario for the STX lane, a timeline for the execution of the lane, and a series of observations that the senior observer controller (OC) had made. The captains nodded that they understood the task and began to assemble their respective Blue and White OC teams. Each OC team included two observers and an opposing forces (OPFOR) commander. The observers had their own information sheets, which had their specific observations for the lane. The OPFOR commander had an information sheet, which had his plan and what happened during the lane. Meanwhile, the player unit counterparts were reading their own information sheets, which gave their side of what happened. There was a platoon leader sheet, a platoon sergeant sheet, and two wingmen sheets.

Each captain familiarized himself with the events of the lane. On the conference room tables were all of the field manuals (FMs) and mission training plans (MTPs) that could possibly apply, and most importantly, TC 25-20, A Leaders Guide to AARs. The hotseat AAR facilitators were struggling with all of the data that each of the collectors had and turning it into a coherent AAR. The observers’ sheets had many observations, but what did it all mean? Meanwhile, there were training aids to be constructed hastily and an agenda to be mapped out. The 30-minute buzzer came too quickly.

“OK, Blue Team, let’s go ahead and take a run at this AAR.”

This scenario is one brigade commander’s effort to fix a systemic problem in units today. How do we train AAR facilitators in an environment where every training dollar must prepare units for combat? Today’s training environment is one of incredible pace, with little room for error. Personnel turbulence, decreased time in key troop positions, and stability operation deployments are major contributors to reduced tactical skill in leader positions. These causes are having a direct effect on training quality. Many leaders are thrust into performing duties as an OC without having the prerequisite tactical skills to really provide meaningful feedback to training units. Additionally, these ad hoc OCs do not have the communications skills that come from repetitive performance of the AAR task, so AAR quality suffers. The corollary to these conditions is that junior leaders have poor models of how AARs are conducted and replicate those substandard models in their own training. As an Army, we must find a way to develop AAR facilitator skills in our leaders.

It All Begins With Battle Focus

To improve AAR facilitators, we first must address key problems in the process of training and building AARs. Chapter 1 of Army Readiness and Train-

ing Evaluation Plan (ARTEP) 71-1-MTP, *Mission Training Plan for the Tank and Mechanized Infantry Company and Company Team*, discusses the now popular 8-step training model.¹ A possible parallel process is the AAR Handrail shown in Figure 1, which focuses on the OC and building the AAR. This process is not designed to replace the 8-step training model; it is designed to complement it.

Battle focus is the concept used to derive and prioritize peacetime training requirements from wartime missions.² The key word in this sentence is “prioritize.” All Army unit training should be directly related to a unit’s mission essential task list (METL). There simply is not enough time to train everything, so METL focuses unit’s scarce training resources to optimize specific mission sets.³ From a unit’s METL, we can identify training deficiencies and develop training exercises to correct deficiencies. Deficiencies are prioritized, and then corrective tasks are nominated to become training objectives for an exercise.

This step, when truncated, is a root cause for poor quality AARs. Too often, units plan situational training exercises (STX) and lane training exercises (LTX) based on what the unit did during the last combat training center train-up, with no regard for whether the previous train-up netted success. The end result is LTXs with no clear training objectives, or objectives that do not

have the degree of specificity that they require. Commanders must issue a clear intent for the training objectives for each iteration of a given STX/LTX, and be very specific. Training objectives are written in the form of task, conditions, and standards, and are specified in the unit’s MTP manuals. However, the MTP standards are intentionally generic and only a start point. A commander must refine those products by proposed iteration and define success for OC teams. These very specifically designed criteria give an OC team a start point from which to design key learning objectives for leader tasks in the AAR.

Developing the LTX/STX Lane

How much is too much? Too often, leaders are over ambitious on the number of tasks that they want to train and try to make every STX lane the panacea for all of their training shortfalls. In one “magic” run, units go from U (un-trained) to T (trained) on their METL assessment and do not require any additional training. Unfortunately, the reality is that if we cannot provide adequate OC coverage for a task, then that task cannot be trained during this STX lane. The long pole in the tent for scope of STX lane tasks is the OC team’s ability to observe those tasks and provide feedback. Performing tasks with no OC coverage is the functional equivalent of firing at a known distance range target that you cannot tell if you hit or miss, and you never get to see the

target. Do not be afraid to reduce the scope of an STX lane if it cannot be covered with OCs.

So if we start out with a given task, and we have well-defined training objectives, we should be able to quickly scope the feasibility of the lane in OC resources. OCs must be in a position to see the success criteria and build the AAR given the training objectives. We can phase the execution to a certain extent, so that tasks occur sequentially rather than simultaneously, but at some point, the critical path will be the ability of OCs to see the events. More importantly, OCs must be in position to perform their battlefield effects tasks of providing “information feedback (intrinsic and extrinsic).”⁴ Intrinsic feedback refers to information that is inherent to task performance. For example, a unit must see where its artillery is landing to assess its effectiveness. Extrinsic feedback refers to information provided in the AAR, coaching and mentoring during the exercise and take-home packet information.⁵ When we shortchange OC coverage in a training event, we not only compromise the quality of the AAR, we risk the fidelity of the exercise in presenting a realistic picture of the battlefield, which drives the commander’s decision process. Blaming commanders for bad decisions made on incomplete intrinsic feedback potentially turns the exercise into a negative learning event. Therefore, if we find that we cannot give adequate coverage based on OC availability, then we have to reasonably reduce training objectives.

Choose the AAR Site

The first consideration in choosing the AAR site is how often to conduct AARs. Considering the average soldier’s attention span when determining how often to conduct AARs is a must. If an AAR exceeds 45 minutes, you begin to exceed a soldier’s “tracer burn-out.” Given this constraint, consider giving in-stride AARs at phased intervals to provide timely feedback. Unit leaders may not be able to recall the planning phase of the operation as well the next day, so cover issuing the operations order at an in-stride AAR early on. That way, units can leverage improved task performance early, versus continuing to make the same mistakes. There are two caveats to in-stride AARs. First, try to minimize conducting AARs during prime time, specifically daylight hours or during company logistics package. AAR windows that occupy lead-

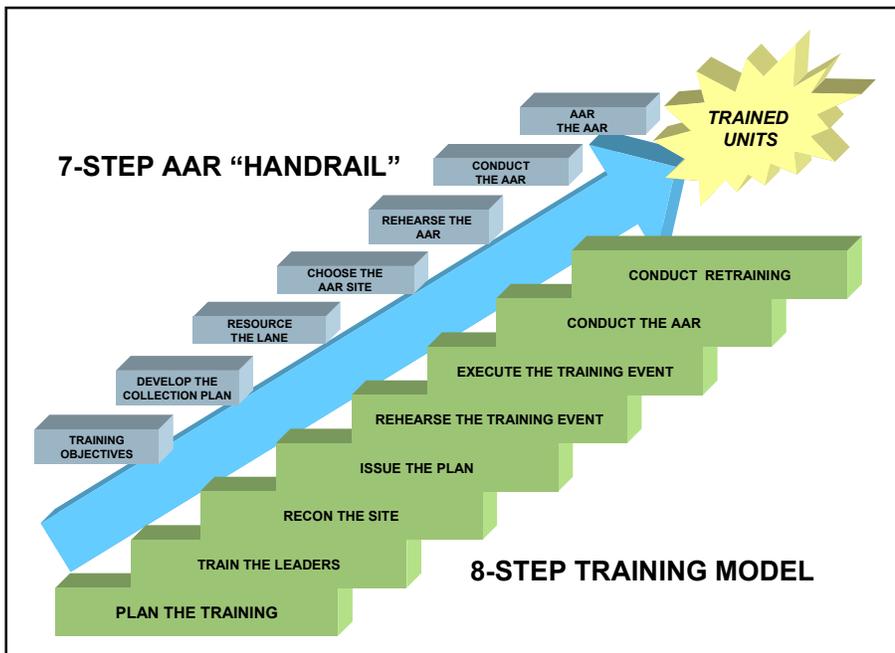


Figure 1

KEY INDICATORS	AAR THEMES					
	PLANNING/ PREPARATION/ TIME MANAGEMENT	TACTICAL MOVE AND MANEUVER	BATTLE COMMAND	BREACH MECHANICS	SUPPORT BY FIRE	MAINT AND LOGISTICS
EQUIPMENT FAILURE (LOW STARTING CBT POWER)	X					X
MISSION FAILURE (CBT POWER ATTRITED)		X			X	
MISSION FAILURE (BREACH)				X	X	
BOS SYNCH FAILURE INDIRECT FIRES		X	X			
BOS SYNCH FAILURE ENGINEERS			X	X		
SITUATIONAL AWARENESS	X		X			

Figure 2

ers' precious daylight hours will not be well received, nor will soldiers concentrate on the task at hand when food is waiting for them. Second, be aware of the desire to steer a player unit into a given course of action. Focus only on the training objectives, and never discourage initiative.

Once you determine the logical breaking points for in-stride AARs, the next step is to choose AAR sites that support them. Training Circular (TC) 25-20, *The Leader's Guide to After-Action Reviews*, provides very specific guidance on considerations for the AAR site, which facilitators should review prior to site consideration.⁶ The start point from which to consider AAR sites and required logistics is how well it facilitates the training objectives. Facilitators must give close scrutiny to time and to key points, such as training aids, which will contribute to unit success.

One of the toughest tasks relating to the AAR site is selecting training aids, device simulators, and simulations (TADSS), then leveraging their capability to drive home learning points. TADSS range from portable dry erase boards, detailed terrain models, to the high resource spectrum of combat training center AAR vans and the close combat tactical trainer (CCTT). The CCTT is the most manifest example of underused TADSS AAR capability. Units frequently use CCTT to train their companies, but the quantity of data available in a virtual simulation once a training event is completed is usually overwhelming to the AAR facilitator. Capability is frequently unused based on facilitator knowledge of the system and the technician's willingness to explain. All of this occurs with very little time for experimentation, as one of the

strengths of CCTT is the ability to do multiple runs, and CCTT time is a precious resource. Key to success in the CCTT environment is the facilitator's familiarity with all of the system's capabilities. The best way to do this is to visit the CCTT facility when another unit is using it and view their AAR preparation. This will give the facilitator an idea of what will or will not work. CCTT could also be a great officer professional development vehicle to train AAR skills, simply by watching other units conduct AARs, and by using these observations as a discussion vehicle in developing AAR skills.

Rehearse the AAR!

We would never consider conducting a deliberate attack without some kind of rehearsal, yet we frequently conduct AARs without rehearsing. The type and time spent on rehearsing will certainly depend on the preparation time available. At a minimum, OCs should rehearse the collection plan and key battlefield effect events (intrinsic feedback). OCs can identify routes that support moving OC vehicles, and can determine the time required to move to observation locations and points where battlefield effects must be replicated. Rehearsal also gives OCs an opportunity to validate the trafficability of the lane. It also validates the technique that will be used to simulate battlefield effects for rules of engagement such as mine clearing line charge launch. In virtual environments, the rehearsal can focus on the intrinsic feedback that must be replicated by "white cell" or other support individuals, such as higher and adjacent units actions. Executing a rehearsal prior to beginning a training unit's execution will pay dividends in AAR quality.

Another method for rehearsing the AAR is to fight the battle in a constructive simulation, such as TacOps, and use that as a trial run for the AAR to be given to training units. The flexibility of *TacOps* to adapt to different locations through constructed maps gives the OC team the ability to have a live "driver" to potential AAR strategies. Warfighting skills are sharpened through practice, and AAR skills certainly follow this same model. Constructive simulations like *TacOps* give us a "cheap" platform to develop AAR skills prior to the exercise, and can serve as a vehicle for senior leader's OC certification, all with substantially less cost than live simulation.

Developing AAR Skills

Getting the most from an AAR requires technical and tactical competence, analytical ability, and communication skills. If the collection plan is effective, then the facilitator will be presented with significant observation data. To borrow from U.S. Army Field Manual (FM) 101-5, *Staff Organizations and Operations*, much of this information is useful, but not pertinent, to the commander during decisionmaking. Commanders and staffs who understand this can avoid potential information overload by using effective systems to accurately and rapidly convey necessary information.⁷ At this point during AAR preparation, we are actually in an information management exercise, determining what information is pertinent to learning or to unit improvement. The mechanism by which we manage information for mission execution is by commander's critical information requirement (CCIR). I propose a similar technique for OCs to determine the

method by which they approach the preparation phase of an AAR.

TC 25-20, *The Leader's Guide to After Action Reviews*, gives us three techniques for conducting the AAR: chronological order of events, battlefield operating system (BOS), and key events/themes. Chronological order of events and BOS are popular AAR techniques for task force and above AARs, but take a closer look at analyzing key events/themes, which are more effective for company teams and below. By analyzing an STX task with the help of the MTP, we can identify potential themes for an AAR. If we identify these themes early, we can prepare a framework for an AAR conducted along those themes. Our next step is looking for indicators that will identify a specific theme as the highest payoff for unit improvement. Figure 2 represents an indicator to theme correlation matrix. This table is not meant to be all-inclusive, just an example of a technique using the breach an obstacle task previously developed.

After we have constructed a "straw man" of what themes we would approach given a specific indicator, the OC team can build a shell for an AAR that prepares them to discuss any identified themes. The next step is to classify observations into the category of indicators given above, and use these as a mechanism to lend meaning to the reams of potential data. The OC can also use critical observations as the deciding factor for what AAR theme they will choose, in much the same way that priority intelligence requirements and friendly force information requirements drive commander's decision points. This system provides a way to organize chaos and approach a meaningful theme. It also gives the OC a chance before the exercise to think about how to approach AAR execution under time constraints. Remember, we only have approximately 45 minutes to make our case, and 15 minutes of that time can easily be chewed up in the TC 25-20 AAR agenda items, such as AAR rules, training objectives, and friendly/enemy missions.⁸ We want to make as much money as possible during that 30-minute window. It is all about what is important, and enables training objectives.

Don't Do All of the Talking

An AAR is a professional discussion of an event, focused on performance standards, that enables soldiers to dis-

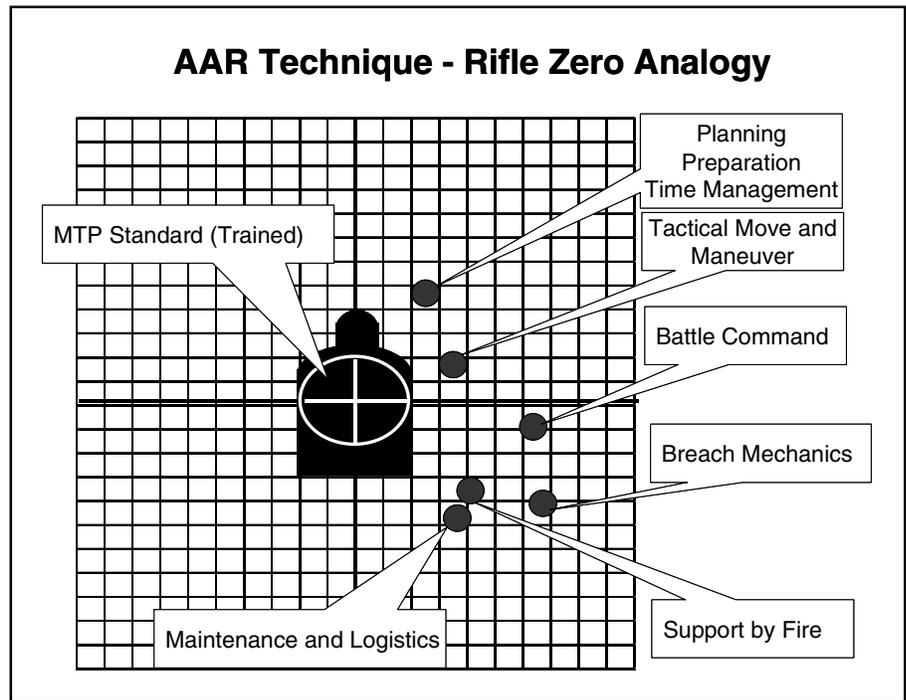


Figure 3

cover for themselves what happened, why it happened, and how to sustain strengths and improve on weaknesses. It is a tool that leaders and units can use to get maximum benefit from every mission or task.⁹

A critical point to an AAR is that it is not a lecture. The most critical part of the definition is "soldiers discover for themselves." The challenge for the facilitator is how to promote this self-discovery, but stay on track, and make the entire experience a positive one. OCs are not evaluators. It is not their charter to judge units as trained, practiced, or untrained. They enable the unit to learn for itself. The crux of this is in communications skills. Soldiers need to know how their performance relates to Army MTP standards. Once the "what happened" portion of the AAR is completed, the facilitator must focus on the "what do we sustain or improve." There are numerous vehicles for eliciting unit participation in the AAR process. Not all participation gets to the issues at hand. For example, a facilitator should be aware that using the subunit sustain and improve technique will often not focus on one solvable theme. The facilitator's goal is to get the conversation focused on the theme, and focus leaders on fixing the issue. One method for the facilitator to keep the unit on track is the rifle zeroing analogy, which is a model for AAR structure.

In the rifle zeroing analogy, the facilitator starts by drawing a representation of a zero target on a dry erase board or

butcher chart. Then, the facilitator will place dots on the target based on the success of the unit in relation to Army MTP standards, as shown in Figure 3. Unit leaders, as a function of the AAR, guide the facilitator in how much they feel they are off target. For example, in the breach scenario that has been developed up to this point, the facilitator would ask the leaders, "In breach fundamentals, where would we assess our performance in relation to the target?" The unit leader can either go up to the dry erase and mark it out, or have the AAR facilitator mark it. The facilitator goes through each of the identified themes and has the unit mark the target. When this initial process is over, if the unit has a realistic view of its performance, the facilitator chooses the aspect that the unit assessed as farthest off target. He then asks leading questions to direct the unit to what actions must occur to bring that strike closer to the zero target. For example, how can we get the company closer to center of mass on breach mechanics? The training unit should present the solutions that will correct that strike, and the facilitator guides the solution process by reinforcing doctrine. The goal of the facilitator is to get a commitment from the unit to take the actions to move that "strike" to the Army MTP standard. Sometimes a unit does not have a realistic view of its performance. In these cases, the facilitator must use observations of the OC team to assist in marking the "strike" of the bullet. The facilitator can use other analogies to the rifle

zero, such as grouping, steady hold, and breathing as methods to graphically portray unit performance on the lanes tasks. In a perfect run of the lane, the unit would have a tight group in the center. That represents a trained unit.

Often, many training issues do not make it into the actual AAR because of time constraints. OC teams produce take-home packets (THPs), which address these concerns. Unfortunately, the task of compiling the THP is often overwhelming, and timeliness of the THP is critical if the unit is going to correct identified deficiencies in another lane. OC teams should have a format for how they are going to address THPs from the start, so that they can be rapidly assembled and passed to the training unit at the completion of the AAR. Specific information worksheets that are completed by the OC team during lane execution can be stapled together and given to the unit right away and serve as an effective, timely THP. In this case, a timely 80 percent solution wins out over a 100 percent solution executed too late.

AAR the AAR

The AAR OC should take time to analyze if key points were made and if the AAR was effective. One technique to enable this event is to have at least one of the OCs observe the AAR with a specific focus on the AAR execution. The AAR observer can also make notes about what the player unit's comments are, and use this to adjust the collection plan or refocus other OCs.

The AAR observer can address questions such as: do we need to adjust our current collection plan for information for the AAR; is the AAR technique effective; are training aids being used effectively; and did the AAR OC do all of the talking? Closely tied to the collection plan is the effectiveness of the AAR technique. Is the current technique producing the self-discovery effect that is critical to AAR effectiveness? If not, then adjust the AAR technique prior to the next iteration of the STX lane.

What Senior Leaders Should Look For

Senior leaders, who get a chance to watch AARs conducted in their organizations, have an opportunity to see their units from many perspectives. Often, it is easy to only focus on the training unit alone, and not take advantage of a

couple of leadership indicators while observing an AAR. Senior leaders can evaluate the climate of the organization as a whole by observing if leaders are candid in accepting shortfalls in their organizations. If a unit is less willing to accept training shortfalls, and this becomes systemic, it is possible that an environment of zero-defects could be perceived within the organization.

It is important to observe how many people participate in the AAR. The more people who participate and stay actively engaged in the AAR is an indicator that units want to get better, and are usually well disciplined.

A critical factor is observing how the unit commander accepts constructive criticism. Unit leaders who accept constructive criticism and make changes are often mature leaders.

Senior leaders need to provide feedback to the OC team on the quality of the AAR. Take time to recognize OCs and AAR facilitators who do a great job, and work with teams that need more instruction. OCs that demonstrate good AAR skills are a resource to help train other potential OCs. The end result is highly trained units and better leaders.

AARs are integral to our training methodology. But the skills to give a good AAR do not come easy and must be developed over time. Our purpose is not to replace TC 25-20, but to supplement it with specific techniques, tactics, and procedures that will help senior leaders develop AAR facilitators and help OC teams conduct better AARs.

COL Nelson wrapped up the OPD session with some closing remarks: "Gentlemen, you now understand what is involved in performing AARs to standard in this brigade. Skills in performing AARs don't come overnight, or from reading just one manual. They come from regular use and experience. The platoon STX lanes that are coming up next week are a start point for you to develop AAR skills. From now on, use every opportunity you can to develop these skills. And I may just be coming down to see what progress you are making. Now let's get back to work."

CPT Jones left the OPD with a new perspective on what was involved in performing AARs to standard, and really "making money" when we expend resources on important training events. As he walked back to the motor pool,

he began organizing an AAR of the STX preparation week in his mind.

Notes

¹Army Readiness and Training Evaluation Plan (ARTEP) 71-1-MTP, *Mission Training Plan for the Tank and Mechanized Infantry Company and Company Team*, Headquarters, Department of the Army, U.S. Government Printing Office, Washington, DC, February 1999, pp. 1-10, Figure 1-2.

²U.S. Army Field Manual 25-100, *Training the Force*, Headquarters, Department of the Army, U.S. Government Printing Office, Washington, DC, 15 November 1988, pp. 1-7.

³ARTEP 71-1-MTP, pp. 1-11.

⁴John E. Morrison and Larry L. Meliza, *Foundations of the After Action Review Process*, Special Report 42, United States Army Research Institute for the Behavioral and Social Sciences, online at http://call.army.mil/products/spc_prod/aar/aar.htm, July 1999.

⁵Ibid.

⁶Training Circular (TC) 25-20, *The Leader's Guide to After Action Reviews*, U.S. Army Combined Arms Center, Fort Leavenworth, KS, November 1993.

⁷U.S. Army Field Manual 101-5, *Staff Organization and Operations*, Headquarters, Department of the Army, U.S. Government Printing Office, Washington, DC, 31 May 1997, p. 1-1.

⁸TC 25-20.

⁹Ibid.

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Training and Winning Against the Threat

by Captain James D. Maxwell

The current situation in Iraq facing the U.S. Army should trouble every single leader in the force. We could potentially face a very different enemy in Iraq in 2003 than we faced in 1991. Iraqi leaders can read *The Bear Went Over the Mountain, The Other Side of the Mountain*, and *Blackhawk Down*.¹ Our actions in Afghanistan have been closely watched. The first thing we need to do, as leaders, is accept that we could very well face this threat. The second thing we must do as leaders is *demand* the tools we need to train. Money, equipment, facilities, and time: professional leaders telling their boss, "Sir I need ..." instead of, "Sir, we'll make it happen." Leaders need to get on a war footing and focus their energies on quickly adjusting to fighting on a nonlinear, noncontiguous battlefield. The third thing we need to do is evaluate the tasks we train and adjust our mission essential task lists (METLs) to reflect the most likely threat we will face in the near future.

We have accepted that we will probably not fight our next fight in Iraq with two corps conducting a huge envelopment, following the luxury of the air force isolating the enemy for 3 weeks prior to a decisive 100-hour ground fight. Now we must change our training mentality, evaluate our METL, and focus training to operate on a nonlinear and noncontiguous battlefield.

Evaluate and Change Mission Essential Task Lists

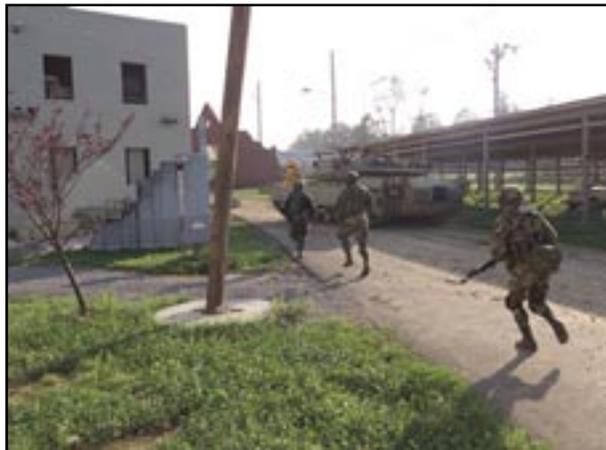
Commanders face an enormous challenge today — quickly restructuring their METL to reflect the threat we will face in our next war. At the brigade combat team (BCT) level, movement to contact is a task in which we must remain proficient and trained. How we execute that movement to contact needs to change. Collective tasks at subordinate levels must reflect the threat on a nonlinear, noncontiguous battlefield, with an enemy using restricted and urban terrain to maximize his effectiveness and

prohibit our ability to freely maneuver our mounted forces. Furthermore, METLs must reflect the protection and movement of combat service support (CSS) assets. BCT and task force (TF) commanders must focus company/team (CO/TM) commanders on using light infantry, attack helicopters, and coordinating close air support (CAS). CO/TM commanders need to train with these assets to increase proficiency, knowledge of capabilities and limitations, and allow tactics, techniques, and procedures (TTP) to develop at their

levels. Since the decisive actions in a nonlinear, noncontiguous environment occur at TF and CO/TM levels, commanders must evaluate and focus their METLs to reflect the threat and environment.

Using Zussman

By not rotating units to Zussman Urban Combat Training Site at Fort Knox, Kentucky, we are wasting a huge training resource. What are you waiting for? Requisition 36 M1A1s and 36 M2A3s,



"By not rotating units to Zussman Urban Combat Training Site at Fort Knox, Kentucky, we are wasting a huge training resource."

Photos by Robert L. Stevenson



“The principles of fighting in urban terrain are similar to fighting in restricted terrain. Both cause commanders to think of the threat three dimensionally. The fights at the NTC need not be in Central Corridor. Fights need to be in the Northern Corridor, Hidden Valley, Bike-Beacon, and TV Hill areas, using the restricted terrain and difficult passes. Company commanders and platoon leaders are going to lead men through the decisive actions, requiring the training to prepare for them.”

hire contractors to maintain and operate a draw yard, and dedicate observer controllers and an OPFOR company. Using Zussman gets battalion and company commanders fighting in an urban environment today. We know the threats we are going to face; we need to train to face them. Two-week rotations would allow the maximum number of units to train.

We are going to fight together, let's train together. Attach Rangers, infantrymen, and other special operators to build TTPs. We need not learn through bloodshed. One of the problems the Soviets faced in Afghanistan, and one we faced in Somalia, was predictability. This predictability is, in part, generated by failure to develop several sets of TTPs applicable to different task organizations capable of accomplishing the same task. We should build TTPs that units can use in several situations, with several different task organizations, and remain flexible and innovative in dangerous situations.

Train soldiers and leaders to fight and win. We already know that actions in the contemporary operating environment (COE) will be small-unit action, with decisive action taking place at the task force level and below. Our training plans should reflect the environment and threat as outlined in the COE. One tool we have at our disposal is Zussman. The facility is on the Chief of Armor's turf! We hold the trump card! We are using Zussman to train fresh second lieutenants attending the Armor Officers Basic (AOB) Course, an audience with hardly a grasp on maneuver to begin with, let alone the COE. Zussman should be used to train CO/TM commanders from Fort Hood, re-enforced with light infantrymen and Apaches operationally controlled for fire support. I understand and appreciate the importance of introducing young officers to the difficulties of urban combat because I participated in a 2-day exercise with AOB students, but my appreciation for having the facility available for the leaders on my left and right as CO/TM commanders is infinitely greater.

Change NTC Rotations

I may not be the Grand Dalai Lama of Mohavia, but I have been in enough fights and have seen enough to have opinions and suggestions. The NTC is working hard to create military operations in urban terrain (MOUT) villages, build a railhead, expand the training area, retool the OPFOR, and a million other things. My suggestions focus more on tailoring BCTs to fight the threat we read and hear about daily.

Task Organization. BCT task organization needs to reflect the most effective task organization for an urban or restricted terrain environment and fighting small, decentralized units focused on killing Americans. A BCT needs to train with one mechanized TF, one armored TF, and one light air-assault capable infantry battalion. Without infantrymen protecting mounted forces, and without mounted forces reacting quickly to protect light infantry, many Soviet soldiers died in Afghanistan.

The BCT needs a robust engineer package and an Apache company or platoon attached. “That is not the way we fight.” Clear your head sir, we are not fighting the Soviet hoard or the Gulf War you fought as a CO/TM commander. We are fighting platoon- and company-sized elements. Attack helicopters, supporting air assault infantry units and mounted forces in decisive fights seemed to work with the Soviets, but it took them 5 years and many wasted soldiers to figure it out.

We are training mounted BCT commanders to use infantrymen, gain an understanding of their capabilities, and fully realize their utility. How many readers have been killed by TF Angel or TF Destroyer at the NTC? We are also training TF commanders to operate on a nonlinear, noncontiguous battlefield with the full spectrum of capabilities available for use in a fight. TF commanders today have spent their careers fighting against an enemy on a linear battlefield. TTPs developed over the years are no less valid in a different threat environment; however, they do need to be re-evaluated and vali-

dated at one of the three combat training centers. Most importantly, CO/TM commanders and platoon leaders train against a realistic threat within a task organization similar to one in which they will fight in combat. CO/TM commanders will effectively employ light infantrymen and use attack helicopters in a direct support role, causing the enemy to fight in several directions and ultimately lose.

Terrain. The principles of fighting in urban terrain are similar to fighting in restricted terrain. Both cause commanders to think of the threat three dimensionally. The fights at the NTC need not be in Central Corridor. Fights need to be in the Northern Corridor, Hidden Valley, Bike-Beacon, and TV Hill areas, using the restricted terrain and difficult passes. Company commanders and platoon leaders are going to lead men through the decisive actions, requiring the training to prepare for them. Rephrasing that, “Sir, this is how I need to train my company. I want to fight and win. I want to train hard. I want to blink today so I don't bleed tomorrow.” For example, Iraqi forces have ambushed and destroyed a supply convoy in Al-Awshitz pass along main supply route (MSR) 3. Reports indicate between 60 and 80 enemy soldiers, armed with rocket-propelled grenades and medium to heavy machine guns. TF 2-12 attacks to clear Iraqi forces via Al-Awshitz pass NLT N+4 to reopen coalition lines of communication.

Is this an unrealistic scenario? No! This one is taken directly from the vignettes in *The Other Side of the Mountain*.² How would you fight this? I suggest infantry units conducting an air assault to isolate the enemy by deploying on the flanks and rear to deny his ability to re-enforce and escape, closely followed by the tanks leading the mechanized infantry into contact, supporting the deployment of the dismounted infantry sections, adding synchronized attack helicopters to cause the enemy to fight in yet another direction, and providing fire support to the ground force commander. By using one light infantry company to clear one ridge, sup-

ported by tanks and Bradleys, the dismounted infantry suppressing and fixing the enemy along the second ridge, supported by tanks and Bradleys, and both efforts supported by a section of attack helicopters, we are fighting a combined-arms fight at the CO/TM level in restricted terrain, with a determined enemy holding the key and dominant terrain. Can TF commanders execute this fight today? Most definitely. The true difficulty lies in the symphony of maneuver elements, fire support, and command and control. Can company commanders execute this fight today? Can platoon leaders? I would bet the farm the OPFOR would meet its objectives. Would we regain the pass and reopen the MSR? Yes, but we must keep the objective of the enemy in mind: kill as many Americans as possible. I want to train to avoid that.

In talking with a senior officer attending the Armor Officers Pre-Command Course, who is now a brigade commander at Fort Hood, the comment was made that the brigade commander's job is easy, while the job of his subordinates is definitely more difficult. The days of brigade commanders pointing to a grid square and directing CAS in support of the TF tasked with being the advance guard of the BCT main body in a movement to contact is temporarily on hold. The threat we face dictates the way we train, not the other way around. The enemy always has a voice in how the day goes.

Convoy Security. During your upcoming NTC rotation, position your brigade support area near McClean or Nelson Lake and try to get it through the Northern Corridor to the Flagpole in one piece. Would a group of 23 Iraqi soldiers, each armed with an AK-47 rifle, and equipped with eight RPG-7s, attack the CO/TM with tanks and Bradleys, or would they attack the fuel and supply trucks? We have clearly stated and accepted that we will probably fight on a noncontiguous, nonlinear battlefield. A huge challenge will be CSS operations. One of those five fights at the NTC needs to be a forward support battalion (FSB) displacement security mission. A brigade commander may need to use one-third or more of his combat power to protect his CSS movements from one area of operations to another. Noncontiguous dictates, rather than implies, that the BCT commander will not move unhindered between sequential areas of operations. The enemy

will attack soft-skinned vehicles for two reasons — the American inside is easier to kill and the probability of his survival is far greater. This is going to be a huge challenge for us since we, as leaders, are accustomed to operating on a linear, contiguous battlefield. The challenge of protecting our CSS assets is one we should start training for immediately.

The FSB and forward support companies (FSC) do not have the ability to protect themselves with active security measures. The CSS community has a service-oriented mindset, which complicates the problem. Their focus is the provision of goods and services, not necessarily the security of the units and teams providing them. When focused on convoy security, CSS units use passive measures, rather than active — their role on the battlefield is not reconnaissance and security. Think of it in terms of passive air defense measures versus active air defense measures. Our responsibility as maneuver commanders is the active security of our CSS assets. For every soldier assigned to an FSB with a rifle in hand, there is one less soldier processing parts, turning wrenches, or coordinating with maneuver units to ensure we are sustained to execute combat operations. We may laugh and say, "It's not my problem," but the problem definitely becomes ours if we want fuel, ammo, food, maintenance support, and water.

Maneuver commanders must create conditions for their battlefield operating systems to function under optimal conditions, and we must admit that we habitually assume support will always be there. The task is very difficult. Keep in mind that we, as an Army, have trained for decades to conduct CSS operations on a linear and contiguous battlefield, that the enemy prefers to strike soft-skinned vehicles versus tanks and Bradleys, and the trend of continued centralization of maintenance and supply assets into FSCs. Training this task, and the associated collective tasks, becomes more difficult to synchronize, resource, and execute. Urgency to develop functional TTPs given the COE is needed from both the combat arms and CSS communities. We have to protect our logistical tails. This requires that we develop, test, and validate TTPs at the NTC.

As leaders, we are ultimately responsible for the execution of combat operations and we must train ourselves to

operate in an environment to which we are not accustomed. We have to remove ourselves from our comfort zones. We must focus our unit's training plans to win fights on a nonlinear and noncontiguous battlefield. We must train our subordinate leaders to operate in the same nonlinear and noncontiguous environment, and focus their training plans for success. We must force the combat support and CSS communities to train and operate in a manner capable of optimal effectiveness and utilization within our training plans. Lastly, we must provide the facilities and opportunities to our subordinate commanders and leaders to train their units on a nonlinear and noncontiguous battlefield, with the full difficulty of protecting and sustaining their units and lines of communication, with an emphasis on using CAS and light infantry. The only way we can win the war tomorrow is to train for it today. Right now, somewhere, in some desert, someone is thinking of doing one thing and one thing only — killing an American.

Notes

¹Lester W. Grau and David M. Glantz, *The Bear Went Over the Mountain: Soviet Combat Tactics in Afghanistan*, Frank Cass Publishers, London, UK, original Cass publication 1998, 2001 republication; Ali Ahmad Jalaili, *Other Side of the Mountain: Mujahideen Tactics in the Soviet-Afghan War*, Frank Cass and Company, London, December 2002; Mark Bowden, *Blackhawk Down*, Atlantic Monthly Press, New York, NY, March 1999.

²Jalaili, *Other Side of the Mountain*.

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Executing the Double Retrograde Delay:

The 194th Tank Battalion in action during the Luzon Defensive Campaign 1941-42

by Major William J. VandenBergh

As the United States' participation in World War II loomed in 1941, much of America's early fighting strength came from the U.S. Army National Guard. The 194th Tank Company was one of them.

Arriving at Fort Lewis, Washington, on 22 February 1941, the 194th Tank Company reorganized with two other National Guard tank companies to form the 194th Tank Battalion. Company A from Brainerd, Minnesota; Company B from St. Joseph, Missouri; and Company C from Salinas, California, were relieved of their prewar assignment to the 34th (Minnesota), 35th (Missouri), and 40th (California) Infantry Divisions.¹ The 194th Tank Battalion, commanded by Major Ernest B. Miller, now joined her sister National Guard battalions, the 191st, 192d, and 193d for training.

The American defensive plan had been set for several years. The task of the Philippine army and U.S. Army ultimately would be to defend Manila Bay with the purpose of denying Japan its use, and to allow for reinforcement from the Territory of Hawaii.² The Philippine Division would assume these tasks. Manila Bay could only be denied Japan by occupying the Bataan Peninsula and the Island of Corregidor, which guarded the harbor.³ The plan was to defend for up to 6 months, until relieved by the U.S. Pacific Fleet stationed at Pearl Harbor. The final reorganization was converting the Philippine Division into five separate commands — the North Luzon Force, South Luzon Force, Visayan-Mindanao Force, Reserve Force, and Harbor Defenses of Manila. The 194th Tank Battalion was allotted to the South Luzon Force, while the 192d Tank Battalion was reassigned to the North Luzon Force.⁴

Intelligence reports confirmed that Japanese forces had made several small landings on Luzon between 9 and 10 December 1941.⁵ Unable to introduce

U.S. combat power against these remote sites and unwilling to divide forces, U.S. forces could do nothing but wait for Japanese troops to arrive.

U.S. forces, along with the Philippine army, planned to occupy multiple consecutive defense lines oriented from west to east on Luzon. The tactical plan was to delay along these lines until reaching their final line that ran from west to east along the Bataan Peninsula. By 1800 hours on 12 December, a warning order was received from Tank Group Headquarters directing the movement of the battalion toward the strategic Calumpit Bridge.⁶ The Calumpit Bridge was the decisive point of the campaign. Located at the intersection of the road to Bataan, its capture by Japanese forces would leave friendly forces stranded. Movement began late in the evening. The reconnaissance platoon would lead the way. The battalion had over 160 vehicles, consisting of 54 tanks, 19 half-tracks, and the rest were jeeps, trucks, reconnaissance cars and a few motorcycles.⁷ Night movement was difficult and fraught with danger. Civilian traffic clogged the roads and several tanks and trucks went off the road. The battalion finally reached its position at 0600 hours on 13 December 1941. The tankers were mentally and physically exhausted, while their uniforms were soaking wet from humidity and perspiration. Lieutenant Ted Spaulding and the reconnaissance platoon had done its job well. Captain Charles Canby, the battalion executive officer, and Captain L.E. Johnson, the S3, led quartering parties to their battle positions. Miller lit a cigar and lay down on the steps of a local elementary school, and within seconds he was asleep. He was awakened 10 minutes later by Captain Spoor, the S2, who was incredulous when he observed Miller sleeping with a cigar protruding from his mouth. Miller, Canby, and Spoor mounted two half-tracks from the reconnaissance pla-



toon and departed for Tank Group Headquarters.⁸

The battalion maintained these positions until 24 December 1941. On 22 December, Miller was ordered to Manila to meet with Brigadier General James R.N. Weaver. Weaver, newly promoted, informed Miller that his Provisional Tank Group Headquarters was relocating to Fort Stotsenburg so that it could support either the North Luzon or South Luzon Force. Miller was ordered to withdraw his battalion and support the North Luzon Force in opposing the landings that had just occurred in the Linagayen Gulf. The following day, the battalion was ordered more specifically to the Agno River near the town of Carmen. Company C, along with a maintenance section, would be detached and left with the South Luzon Force.⁹ The only map the S2 could find was a civilian Standard Oil map. Soldiers in the battalion could see Japanese aircraft moving high overhead as clouds of black smoke arose nearby when bombs struck their targets. Company A had been at the receiving end of one of these attacks as they passed between Cabanatuan and San Jose along Highway 3. Luckily, the bombs had just missed them. By 1900 hours on 24 December, the battalion was in its new position. Meanwhile, south of Manila, Company C made its way slowly southeast past Manila along Highway 1. The South Luzon Force was moving to block enemy landings in the East at Lamon Bay.¹⁰

For the North Luzon Force, the first defensive line ran from the central part of Luzon, west to east. Known as the Carmen Line, named for a town along the Agno River, this was where the men of the 194th Tank Battalion would receive their baptism of fire. The 194th Tank Battalion took up positions just south of the Agno River, defending a crossing site into the town of Carmen. Filipino engineers had rigged the bridge for detonation earlier. The battalion was given the mission of defending a 25-mile front from Carmen to the east, to Highway 13 to the west. Conducting a quick terrain analysis with the S2, Miller determined that tanks, friendly and enemy, could not operate successfully along most of the 25-mile front. Miller dispatched Filipino infantry patrols along the Agno River, west to Highway 13, to detect Japanese infiltration. Company A, commanded by Captain Ed Burke, would defend from battle positions to the immediate east of Carmen, while Company D, commanded by Captain Jack Altman, would defend to the west of Company A. One platoon of Company A would be north of the river.¹¹

In South Luzon, Company C had reached the town of Soria. The Japanese 18th Infantry Division had landed at Mauban and Atimonan.¹² Japanese troops were moving west along two axes aimed at Soria and the larger city of Lucena. Company C was directed against the Mauban landing. The terrain was very rugged and mountainous between Soria and Mauban. It was poor tank country with abundant antitank ambush positions. One section of half-tracks was assigned a liaison mission to patrol Highway 21 just east of Mt. Banahao. This patrol was charged with maintaining contact between the 1st Infantry to the north and the 52d and 53d Infantry in the south.¹³ Major Ralph E. Rumbold, an adviser to the Philippine army, approached 2d Platoon from Company C and directed its members to move up a narrow trail, travel like "hell," and shoot their guns.¹⁴ The platoon leader, Lieutenant Robert F. Needham, begged Rumbold to allow them a quick reconnaissance of the trail to assess the terrain and enemy situation, but he refused. Rumbold explained to him that his task was to perform a demonstration with the purpose of improving the morale of the Philippine soldiers. Additionally, he claimed to know

that the Japanese had nothing bigger than a .50 caliber machine gun. One last plea for caution failed to convince Rumbold, and Needham ordered his five tanks up the trail.¹⁵

The five tanks spread out in column formation. As the lead tank turned the first sharp corner, the second tank in order of march lost sight and accelerated to regain visual contact and close the distance. One second later, a thunderous crack of a Model 95, 75mm antitank gun echoed through the valley, reverberating along the mountain walls. The split-second acceleration of the second tank sent the round flying past the turret, impacting harmlessly between the number two and three tanks. With no place to back up, the tanks roared forward, machine guns firing suppression.¹⁶

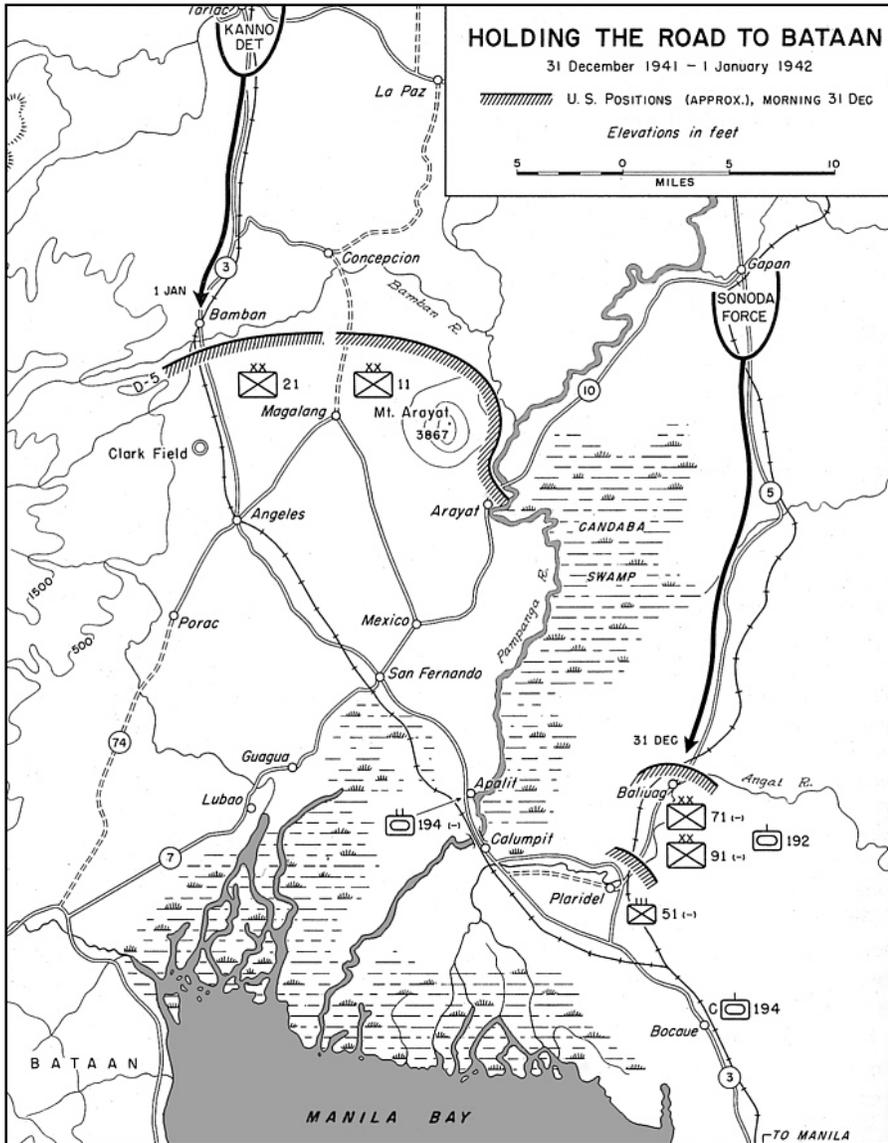
The next obstacle was a roadblock comprised of wood logs built up in a square. Japanese soldiers had set the logs on fire, adding branches with leaves to create a thick smoke. The second tank lost contact with the first tank and smashed through the obstacle, cleared the smoke, and ran straight into another log wall with a second 75mm gun facing them. With no other option available, other than certain death, the driver smashed through the logs and drove right over the antitank gun. The three-man Japanese crew barely got out of the way in time. The second tank continued for another quarter-mile, destroying Japanese positions and machine-gunning their crews.

Finally the tank commander realized that the only way out of this jungle hell was to turn around and head back. As he headed back, the crew continued to destroy Japanese machine gun positions.¹⁷ As the second tank approached the ambush site, the first tank could be seen off the trail in a rice paddy. Black smoke was rising from it and many machine gun impacts were observed. Needham lay dead with this crew. As the second crew looked for a way out, a Japanese 75mm antitank gun hit their tank. A direct hit destroyed the idler sprocket, but more seriously sheared off the rivets, which flew around inside the turret like machine gun bullets, wounding one of the crew. Several crewmen could be seen evacuating the survivors, but the platoon had no combat power. The number two tank crew decided to play dead. They closed their

hatches and remained silent.¹⁸ Two separate groups of Japanese soldiers attempted to enter the tank, only to give up. The Japanese soldiers departed the area by 0500 hours on 26 December, allowing the crew to escape and evade through the jungle.¹⁹

Returning from a tank group commander's call, Miller and Spoor approached the tactical operations center (TOC) in their jeep, observing heavy Japanese artillery fire coming down on the battalion. As they pulled up to the TOC, they watched in dismay as one of the battalion transportation section trucks loaded with tank ammunition caught fire and detonated. Taking cover behind a large tree, Miller, Johnson, and Spoor, avoided the blast, but received the detonated and still smoldering remnants of a main gun round that landed next to them.²⁰ They moved away quickly. The staff gave Miller a quick update and informed him that the battalion had been in contact with the enemy since shortly after his departure. Facing them across the river was the 2d Formosa and the 4th Tank Regiment, with artillery in support.²¹ Japanese forces had attempted setting up several gun positions and river crossings, all of which had been repelled at long range by the 37mm main guns on the tanks. The M-3s would have to shoot and then scoot to a new position to avoid the artillery and mortar counterfire. The Philippine infantry had been intimidated by the attacks and had melted away into the jungle. Several hundred Japanese soldiers lay dead or wounded. The Japanese were relentless in their use of indirect fire and intensified its use throughout the day. Probing continued throughout the evening as small groups of Japanese crossed at dusk.

During one action, Captain Ed Burke drove north in a jeep toward Carmen to check on Lieutenant Harold E. Costigan's platoon. He was ambushed, fell out of the jeep, and rolled wounded into a ditch as Costigan's platoon fired their turret-mounted .30 caliber machine guns. Sergeant James A. Bogart, a tank commander, ordered his gunner to fire. The gunner put three belts of .30 caliber ammunition through his machine gun, eliminating a large amount of Japanese soldiers. The accurate, withering fire tore apart the small Japanese patrol, eliminating it as a threat. By this point, the town was crawling with Japanese soldiers. Costigan moved his platoon to



Map from *The Fall of the Philippines*

supplementary positions on the south bank. Burke was later recovered by the Japanese and interned. During the move, the platoon discovered a roadblock position that Japanese soldiers had set up. Not missing a beat, the platoon fought its way through the roadblock. Just as they were clearing the position, a Japanese infantryman jumped on one of the tanks and attached a thermite grenade covered with sticky glue. Within a matter of minutes, it burned through the armor, and the crew was forced to abandon the tank. Costigan recovered the injured tankers and moved to his next position.²²

At 0250 hours on 27 December 1941, the battalion detected significant Japanese vehicle and track movement from north to south along Highway 3 that led to Carmen. This element was the advanced guard for the Japanese 4th Tank Regiment.²³ The lead Japanese recon-

naissance car moved slowly down the road with its lights dimmed. The blocking position was comprised of three M-3 tanks and two half-tracks. Though small in size, the battalion had carefully built a battle position defense that tied in all barriers and obstacles with direct fire from the tank main guns, machine guns, and a 75mm gun mounted on a half-track. The barriers were comprised of logs placed vertically in the roadway, supported by barbed wire, razor wire, and tangle foot. When the lead vehicle of the Japanese column was about 150 feet away, Miller initiated the ambush by firing his main gun at the lead vehicle. A fusillade of deadly fire swept away the Japanese armored column. The 37mm and 57mm main gun rounds hit their mark, while .30 caliber machine-gun fire cut the survivors to ribbons as they attempted to dismount. After a 15-minute battle, the surviving Japanese soldiers retreated north to

await reinforcements. The ambush had so shaken the Japanese that they halted their advance and dug in a defense at Carmen, fearing a counterattack.²⁴

The battalion's retrograde from Carmen that morning was haphazard. Radio difficulties prevented effective communications between Company D in the west and the rest of the battalion. Captain Jack Altman was aware of Captain Burke's apparent loss and was concerned that the battalion had departed or was no longer combat effective. Several attempts had failed to locate the battalion TOC. Having heard the heavy action in Carmen and concerned about being flanked, Altman took the initiative and moved his remaining nine tanks, Company A's six tanks, and one half-track along an old carabao trail they had reconnoitered the day prior. It led them to a railroad bed that would eventually parallel Highway 3. A short distance from the town of Moncada, the tanks crossed over to Highway 3 and moved toward the bridges in the town. To their dismay, they discovered that the Philippine engineers had blown the vehicular bridge too early, and the railroad bridge was in shambles. Apparently the 11th Division commander had countermanded Miller's order to keep the bridges intact.²⁵ The river bank was steep and the river was deep and wide, preventing their crossing. Altman ordered the main guns and several key components removed and cached in the jungle. Upon completion, Altman discreetly marked his map and effected a river crossing with his men. His plan was to linkup with the battalion and determine a new crossing site so he could recover his tanks. This decision had been made with hope that some of the men could return later with guides and bring the tanks south. This expectation could not be fulfilled, and the tanks were lost for the rest of the campaign.²⁶ Soldiers used the collapsed bridge girders to work their way across the river. Across the river, Altman sent a team to the town of Tarlac for help. A short distance away they discovered a jeep on patrol, which they used to contact the battalion headquarters. Shortly thereafter, they were picked up by battalion trucks and issued K rations.²⁷ Miller and the battalion prepared for the next fight.

The Double Retrograde Delay to the Bataan Peninsula

The second defensive line was formed to the south of the Carmen Line and

was known as the Tarlac Line. Reconnaissance and preparation of the line was conducted on 28 December 1941, and defensive positions were prepared. Events began to rapidly overtake the carefully laid plans.

U.S. Army and Philippine units from the North Luzon Force to the east were in heavy contact, and were obliged to continue movement south to the next line at the Bambam River. At 1930 hours, Miller and Johnson met with Weaver and confirmed the move.²⁸ Weaver informed the others of his plan to retain the 192d Tank Battalion, along with one platoon from the 194th Tank Battalion in the north, to cover the retrograde to Bataan. The 194th Tank Battalion was to move quickly south and secure the Calumpit Bridge. They were progressing toward the most critical part of Phase II of War Plan Orange III. Miller recalled, "The Tank Group Commander ordered me to hold the Calumpit Bridge at any cost and to shoot anyone who attempted to blow it."²⁹

On 28 December, the battalion departed in good order to the Bambam Line. The move was made at night, but under full illumination from the moon.

"The Tank Group Commander ordered me to hold the Calumpit Bridge at any cost and to shoot anyone who attempted to blow it."

The tankers had suffered from a steep learning curve, both tactically and technically, but were bringing their collective experience to a new level. This time, the battalion had prepared for the trip by caching 55-gallon fuel drums at regular intervals to allow for refueling. Miller sent what was left of the reconnaissance platoon forward to confirm the route. This was fortuitous as several miles north of the bridge lay a well-concealed ambush comprised of several 37mm towed antitank guns, manned by jittery Philippine troops.³⁰ The area to be defended was the strategic Calumpit Bridge, a key chokepoint and mobility corridor to both Manila and the Bataan Peninsula. Comprised of two spans, they were the single most important real estate on Luzon, with the exception of Bataan and Corregidor. The bridges were modern steel girder bridges over



The 194th Tank Battalion was tasked to secure and hold the Calumpit Bridge, shown above, a key chokepoint to both Manila and the Bataan Peninsula.

300 feet in length.³¹ One bridge was for rail, the other for vehicles. Upon arrival, the battalion established battle positions to defend the bridge. Additionally, battalion officers liaised with U.S. engineers who had mined and rigged the bridge with enough explosives to ensure no future use by the Japanese. There was no room for error or premature destruction. Thousands of soldiers and hundreds of vehicles would need to pass across the bridge, or the defensive strategy for Bataan would be compromised. Shoot-to-kill orders quickly re-established civil and military order.³² For 10 days, the 194th Tank Battalion held the bridge on both sides of the river, allowing the South Luzon Force to evacuate to the Bataan Peninsula.³³

Back in Southern Luzon, the tank crew from 2d Platoon, Company C, having met several other platoon survivors, had just spent 5 torturous days escaping the enemy and evading capture in the jungle back trails that led to Manila Bay. As the survivors entered Manila, they discovered that the Philippine army and the U.S. Army had evacuated the city earlier that day. They headed straight to the Philippine general hospital for treatment, then managed to catch the last boat to Corregidor. From there, they reached the battalion field trains located on Bataan, completing their venture.³⁴

Around dusk on the evening of 31 December, the maintenance section that supported Company C arrived at the bridge. Around midnight, Company C made the crossing and the battalion regained combat power.³⁵ At around 2200

hours, Weaver and his aide, Major Pettit, visited Miller's TOC. Miller recalled, "They notified me that I had been promoted to Lieutenant Colonel effective December 19th."³⁶ After the formalities, Weaver pulled Miller to his map and briefed him on the next phase of the operation. The 194th Tank Battalion would move to San Fernando. There it would find a position where it could defend the critical four-way intersection of Highways 3 and 7. By this time, Japanese forces could see that U.S. and Philippine forces were moving toward the Bataan Peninsula. Both the North and South Luzon Force had to cross through this intersection to get to Bataan. The road intersection at San Fernando would become hotly contested in a very short time. By 0500 hours, the battalion had pulled out from its Calumpit battle positions knowing that the bridges would be blown soon. As the battalion moved in column down Highway 3, a large explosion could be heard above the roar of the tanks.³⁷

The battalion closed in on its new battle positions around 0400 hours on 1 January 1942. As tanks were ground guided into their positions and concealed, Miller realized that it was New Year's Day. As the soldiers caught up on their rest, Miller walked from position to position and shook their hands. Later that day, Miller ordered additional reconnaissance and surveillance patrols to the east, near the small town of Mexico.³⁸ A 194th Tank Battalion platoon lay hidden in covered and concealed positions, listening for enemy movements. Japanese air activity had been heavy, but few U.S. or Philippine

targets had been successfully destroyed. From the east, over the din of aircraft, came the sound of mechanized movement, which began one of the few tank-on-tank engagements of the Luzon Campaign, and for that matter, the entire war in the Pacific.³⁹ The sounds seemed to come from enemy tanks, but up to this point, there had been no tank-on-tank combat. Through his binoculars, the platoon leader observed five Japanese Model 89A medium tanks approaching. The Japanese platoon had elected not to conduct a reconnaissance of the area, and stopped in the middle of an open field to determine its location. The Japanese would quickly learn that they were in the middle of the 194th engagement area. Wasting no time, U.S. forces initiated fire, beginning a short, lopsided engagement. Within several minutes, all five Model 89s had been destroyed, and several others had black smoke pouring out of the turrets.⁴⁰

By 0100 hours on 2 January, the Philippine army began its withdrawal from San Fernando. Within an hour, the very last element of the 192d Tank Battalion crossed the Highway 3 River Bridge just south of San Fernando.⁴¹ Miller displaced the battalion and at his command, observed the bridge disappear in a geyser of water and a cloud of black and gray. The battalion completed its move to their new defensive line; the Guagua-Porac Line.⁴² The Guagua-Porac Line was a defensive line 10 miles long that blocked the two remaining roads that led to the Bataan Peninsula. Porac was to the north and Guagua was located on Highway 7. After meeting with his S2, Miller concluded that the major Japanese push would be along Highway 7 to Guagua.⁴³ Therefore, he decided to set up a defense in depth just south of town. Not willing to be surprised by the Japanese, he further directed the establishment of three combat security outposts in all directions from which the Japanese could approach. In the northeast, one platoon from Company C moved to establish and maintain a combat security outpost near the village of Betis. The two other positions were located to the south along Highway 7 in the town of Lubao and in a swampy approach from the village of Sexmoan.

Japanese forces initiated their attack on Betis on 3 January. Under intense artillery fire, the platoon was obliged to withdraw back to Guagua. The rest of the day was spent eliminating small

pockets of Japanese soldiers who were attempting to infiltrate the battalion's position.⁴⁴

Several days later, Japanese artillery fire from the 48th Mountain Artillery became much more intense. Miller was concerned about the lack of infantry support from the 11th Infantry Regiment of the 11th Division that he had been promised. He decided to send out his reconnaissance platoon leader to find them. Lieutenant Ted Spaulding jumped into a jeep, headed toward San Jose, and found the 11th Infantry Regiment north of Layac.⁴⁵ Before his eyes were a column of soldiers completely asleep in their trucks and tracks. Apparently, the lead truck stopped to get directions long enough for the entire column to fall asleep! Spaulding cautiously walked from vehicle to vehicle to awaken the troops and explain their route back to the 194th. They were a pitiful sight — tired men with their dead tied to their jeeps.⁴⁶

By 5 January, rounds from the Japanese 48th Mountain Artillery were dropping on top of the battalion. Enemy aircraft were making sweeping runs at targets of opportunity. Japanese infantry small-arms fire was striking the hulls of the tanks. By 1300 hours, Miller received the radio call to withdraw to Porac. The 194th Tank Battalion, however, would block Japanese forces until all U.S. and Philippine soldiers had passed. Spoor and Johnson were very concerned about the blocking positions to the south. Little had been heard from either force, so Miller sent Spoor and Johnson down to investigate.⁴⁷ To their dismay, they found that the positions had been evacuated. Miller ordered the two officers to remain in position at Lubao with their tanks until relief arrived. As the S2 and S3 drove off, Captain Fred C. Moffitt dismounted and re-established the blocking positions. Hustling to conceal the tanks, one of the TCs observed three Philippine constabulary officers approaching along an open field with white flags of truce. Behind them were between 500 and 800 Japanese soldiers from the 3d Battalion and the 2d Formosa, with the towed artillery from the 48th Mountain Artillery.⁴⁸ The two tanks and two half-tracks opened fire. Machine guns roared at cyclic rate as brass shells began bouncing off the floor of the half-tracks. The Japanese soldiers had placed too much faith in the U.S. soldiers not firing at the Philippine constabulary and now they were being massacred in the open

with no cover. The firing ceased several minutes later. The moans and screams of several hundred wounded Japanese soldiers could be heard along with an occasional gunshot. The surviving Japanese soldiers crawled away to regroup. Minutes later, Japanese fighters arrived and bombed the town of Lubao. The fires created an inferno that leveled the town.⁴⁹ At Lubao, the 194th Tank Battalion and Company A, 192d Tank Battalion established new defensive battle positions overlooking a turnip field. There was no infantry to support them. During its movement to Lubao, the battalion was issued 20 Bren Gun Carriers that had been diverted to Luzon. The Japanese attack marooned a vessel belonging to the Canadian government and carrying a cargo of universal carriers for two Canadian motorized infantry battalions in Hong Kong.⁵⁰ The men mounted .30 caliber machine guns among the half-tracks and M-3 tanks. As the men completed their defense, Quinlan, the S4, arrived with hot food. Spirits rose!

As night arrived, the full moon afforded excellent visibility. That night, Miller became concerned about the lack of communications between the Tank Group Headquarters and his battalion. He dispatched the S3 to group headquarters a little after midnight. Miller and Spoor decided to get some much-needed sleep. Spoor kept tossing and turning. "What in the hell's the matter with you?" asked Miller. Spoor was uncanny in the way he could almost literally smell trouble.⁵¹ Shortly before 0200 hours, the two officers heard soldiers challenge what sounded like a Filipino. Moments later, shots were fired and a Japanese soldier replied, "We are the peepul who are not afraid to die by boolets."⁵² Following this dialog, he preceded to grunt and moan in Japanese, causing both officers to smile from the perverse humor. A second shot made the soldier go quiet.

Soldiers scrambled to their tanks, half-tracks, and carriers. Japanese soldiers could be seen advancing across the open field and belatedly attempted to use smoke to conceal their movement. The battalion opened fire and the normal slaughter occurred. Tracers flew through the air and small fires were burning. One was near U.S. positions and was directly threatening the highly flammable M-3 tanks. Lieutenant Petree and his platoon were near the fire. On his own initiative, Petree dismounted the tank and put out the fire. As he ran

back to his tank, he was shot down. Noticing the manner in which the officer dropped, Miller drew a line to the rear of his battalion's position! There, in a palm tree sat a Japanese soldier. Miller swung the turret mounted .30 caliber machine gun around and blasted the tree. Shortly after, a badly mangled body dropped to the ground. Petree survived his wounds for a week, but eventually died. By 0300 hours, the Japanese gave up the attack and withdrew, leaving hundreds of dead and wounded on the turnip field. Japanese forces would cease all local operations for 2 days.⁵³

By 0200 hours on 7 January 1942, Phase II of War Plan Orange III was completed when the last unit — the 194th Tank Battalion — passed through the defensive line on the north end of Bataan near the town of Layoc. The Luzon Campaign had been costly for both the Americans and the Japanese. The North Luzon Force was reduced from 28,000 soldiers to 16,000 largely by the deserting Filipino soldiers who returned to their homes.⁵⁴ The South Luzon Force had 14,000 of its original 15,000 troops remaining. The Japanese suffered close to 2,000 casualties since the landing. This number included 627 killed, 1,282 wounded, and 7 missing.⁵⁵

The 194th Tank Battalion contributed significantly to the success of the double retrograde delay to the Bataan Peninsula. The timely application of shock and effect consistently delayed the Japanese and bought the defenders of Bataan critical time to reorganize for the final battles. In the end, the Philippine Defensive Campaign was doomed.

For the first time during World War II, a Japanese offensive had been blocked with no hope for victory without reinforcement. It quickly became apparent that a long siege for the Bataan Peninsula was about to begin. As time went by, the men began to suffer from dengue fever, malaria, diarrhea, dysentery, and famine.

On 12 March 1942, President Franklin D. Roosevelt ordered General Douglas MacArthur back from the Philippines and to Australia to orchestrate the American offensive in the Pacific. Lieutenant General Jonathan M. Wainwright assumed command of all forces on Bataan and Corregidor. The stalemate continued until the final Japanese assault on 3 April 1942. Within 7 days, American resistance ended. Following the surrender of forces on Bataan, weary sur-

vivors began the infamous Bataan Death March. Thousands of Americans and Filipinos would die from random acts of Japanese brutality. The Philippines now began a brutal occupation that came to an end with the return of U.S. Armed Forces in October 1944.

The lineage of the 194th Tank Battalion is perpetuated by the 1st and 2d Battalions, 194th Armor, Minnesota Army National Guard; and Company C, 1st Battalion, 149th Armor, California Army National Guard.

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⁵³Miller, 132.

⁵⁴Morton, 230.

⁵⁵Ibid.

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The Armor Soldier Assignment Process During Army Transformation

by Sergeant First Class Michael S. Clemens

As the Army continues to transform, changes affect armor soldiers. This is not only relevant in day-to-day operations in platoons and companies, but can also be seen at the assignments process level. After serving as a 19D professional development NCO for the past 6 months, I realize there are several assignment issues that should be discussed to help soldiers better understand the assignments process.

The Professional Development NCO and Assignments Manager

Each armor military occupational specialty (MOS) has a two-person team consisting of an Armor NCO and a civilian assignments manager. This team works hand-in-hand to ensure that the assignments process runs smoothly; however, each has different responsibilities. The civilian assignments managers oversee soldier assignments, but do not manage NCO assignments. They coordinate all assignments for the Married Army Couples Program, Exceptional Family Members Program, and specialized training, and they maintain a career management information file (CMIF) on all staff sergeants (SSGs) and above. This file contains copies of NCO evaluation reports (NCOERs), service school academic evaluation reports, enlisted records briefs, official DA photos, and all DA Forms 4187 (Personnel Action). CMIFs are for assignment purposes and are not official files. The professional development NCO is tasked with balancing Army readiness requirements and NCO career development. He makes recommendations and decisions on all requests and assignments for Armor soldiers. He nominates soldiers for special duty assignments, conducts briefings and personal interviews, and spends the majority of his time responding to field inquiries. These inquiries include e-mail messages, telephone calls, and DA 4187s. Armor branch NCOs respond to every inquiry with a researched and informed answer.

Assignment Process Influences

Needs of the Army. The first priority during the assignments process is Ar-

my readiness. The U.S. Army Chief of Staff's manning the force guidance outlines this process. The first step in this plan is to fill the 10 divisions and two armored cavalry regiments (ACRs) to 100 percent. This ensures that our war-fighting units are prepared to deploy, fight, and win. As professional development NCOs, our requirement is to ensure we assign soldiers to modification table of organization and equipment (MTOE) units so that they can accomplish their mission. Additionally, Active Component (AC) positions, Reserve Component (RC) positions, observer controllers, drill sergeants, and recruiters will be filled and maintained at 100 percent. Second phase of the plan is manning the early deploying units such as the 75th Ranger Regiment. The third phase of the plan is manning the table of organization and equipment units such as the 11th ACR. The final phase of the plan is filling table of distribution and allowance (TDA) units such as those at Fort Knox.

In addition to the priority assignments discussed above, other TDA assignments include tactical NCOs at the U.S. Military Academy, military science in-

structors for the Reserve Officer Training Corps, equal opportunity and inspector general advisors, and instructors at various installations. Most important is supporting the home of Cavalry and Armor at Fort Knox. Staff sergeants are nominated for drill sergeant, recruiter, and instructor positions. There are a very limited number of AC/RC assignments for this rank. Every nominative assignment has a unique set of prerequisites. Soldiers nominated for drill sergeant and recruiting duty undergo a thorough screening and background check before being placed in these positions. A soldier will not be placed on a nominative assignment if he is not branch certified for MOS and rank, does not have 24 months time on station, has a record of demonstrated poor performance, has prior UCMJ action, has a GT score of less than 100 (95 is now acceptable for drill sergeant duty), or does not have a high school diploma (GED with 1 year or more of college is acceptable). Remember, we are entrusting the future of not only the Armor branch but the Army to these soldiers.

Branch Certification. Armor branch assigns soldiers to Army requirements



that allow the soldier to develop and refine warfighting skills, taking into consideration the soldier's preferences. The guidelines for MOS and branch certification can be found in the Enlisted Professional Development Guide. This guide is a tool to ensure that NCOs focus on improving warfighting skills, and on expanding doctrinal and leadership competency by serving in key leader positions at each rank. Troop assignments in MTOE units are the premier assignments for developing these skills. Though the minimum time to become branch certified is 18 months, NCOs should strive to remain in these positions at least until they show trends of success or excellence with two or three NCOERs. Soldiers are responsible for managing their careers and must seek to become MOS certified by taking advantage of every opportunity to expand their military and civilian education and maintain warfighting skills. Nominative assignments are important, but soldiers must stay current in their MOS and strive to return to MOS-certifying assignments as soon as possible. Before any NCO is placed on assignment instructions (AI) for a nominative or TDA position, they must be branch certified. The professional development NCO will review the NCOERs by checking rank, duty position, and the number of months served to ensure the soldier meets this certification before issuing AI. Soldiers are discouraged from serving in back-to-back TDA assignments, unless there are extenuating circumstances. If a soldier is currently serving in a TDA assignment and is selected for promotion, he can expect to be reassigned to an MTOE unit to give him the opportunity to serve in an MOS-certifying position.

Soldier preferences. As part of the Army's transformation, the Enlisted Personnel Management Directorate (EPMD) has developed several programs to provide soldiers with assignments of choice. The Assignment Satisfaction Key (ASK) is a virtual link to PERSCOM. Soldiers may access this site using their Army Knowledge Online name and password. Once they are linked to the site, they have an opportunity to update their personal information, as well as choosing three CONUS and OCONUS preference locations (the first two must be to one of the 10 divisions/ACRs). Soldiers may also volunteer for assignments, airborne training, drill sergeant duty, and ROTC and recruiter duty. Every soldier's preference and volunteer locations (if listed) are taken into considera-

tion and supported as much as possible during the assignments process.

The Drill Sergeant Assignment Preference Program and the Detailed Recruiter Assignment Preference Program allow soldiers to be assigned to one of their three CONUS preferences or OCONUS volunteer locations if the assignment supports Army readiness requirements. The soldier must have preferences listed using the ASK. If Armor branch is unable to support one of the soldier's choices, then we will make every attempt to contact him and offer him three choices that we can support.

For soldiers en route to a dependent-restricted tour, there is the Homebase and Advanced Assignment Program (HAAP). This program provides eligible soldiers with advanced notice of their follow-on assignment on completion of the restricted tour. To the extent possible, a HAAP will be made to one of the three CONUS preferences listed in ASK. However, the guidelines for HAAPs are the same as with all assignments — needs of the Army, professional development, and soldier's preference. Soldiers may request to have their HAAP changed. To change your HAAP, you must submit a properly endorsed DA 4187, listing three locations in order of preference to which you are requesting assignment.

Many soldiers request to attend professional development schools en route to their next assignment. The general rule for any temporary duty en route to school is that the unit to which the soldier is being assigned must have a valid requirement for that particular skill identifier. For example, if a soldier wishes to attend pathfinder school, his gaining unit must have a valid pathfinder coded (F7) position for him to fill. Once our office has verified that there is an authorized position, we can then reserve that soldier a seat in the class.

PERSCOM Guidance. There are several other PERSCOM specific rules that factor into the assignments process, including time on station requirements, 12-month notification, "fences" and stabilizations, retention control points (RCP), and reenlistment/extensions. Eligibility criterion for a CONUS-to-CONUS move is 48-months time on station. For a soldier to move with less than 48 months on station, the appropriate authority at EPMD must approve the move.

Currently, PERSCOM is testing the feasibility of giving senior NCOs a 12-month notification before moving on

permanent change of station (PCS) orders. The minimum notification time for all soldiers is 150 days. Senior Armor NCOs should understand that a 12-month notification might not be practical in all situations. Armor branch attempts to give every soldier the maximum notification time possible before their actual PCS date.

Many units are currently "fenced" and their soldiers are stabilized for an operational deployment, force modernization, or transition to a brigade combat team. A "fence" is a PERSCOM-imposed code that prohibits soldiers from leaving a certain unit unless PERSCOM coordinates with the unit before reassigning soldiers. Soldiers are stabilized for various reasons, such as reenlistment, pre/post-deployment recovery, identified for deployment, drill sergeant/recruiter duty, and many others. Stabilized soldiers generally cannot be moved until 60 days after the stabilization has been terminated. These 60 days allow the soldier time to out process or take leave before he reports to the gaining unit.

PERSCOM EPMD assigns soldiers based on their RCP. For example, a sergeant first class with 20 years in service may be placed on assignment with the assumption that he will remain in the Army until his 26-year RCP. Soldiers at this stage in their careers should ensure that their preferences in ASK are correct and reflect a final tour decision. We do take soldiers' preference into consideration, but there are no guarantees that the needs of the Army will match that preference.

Reenlistment also impacts the availability of certain assignments. PERSCOM does not allow career branches to make changes to reenlistment assignments or changes on soldiers in the bonus extension and retraining program. Any change to a reenlistment assignment or stabilization must be pursued through the unit career counselor to the retention division at PERSCOM. Essentially, Army readiness determines what locations will be available as reenlistment options. The retention division is the approving authority on all actions involving reenlistment contracts.

NCO Education System scheduling and conditional promotions. This is an area that needs to be understood by each individual soldier and leader. Armor branch schedules all scouts and tankers for basic NCO courses (BNCOC) and advanced NCO courses (ANCOC).

PERSCOM maintains an Armywide order of merit list for 19Ds and 19Ks who are promotable to staff sergeant and eligible to attend BNCOC. Soldiers are scheduled for BNCOC if they are conditionally promoted staff sergeants, have made the cut-off score in their primary MOS, and then according to points and date of rank. Prior to releasing the sergeant first class promotion list, Armor branch sends out e-mail messages to unit commanders and command sergeants major requesting a date to schedule their soldiers for ANCOC. This allows the chain of command an opportunity to review their long-range training calendars and have input as to when soldiers will attend ANCOC. This works extremely well and we will continue to request chain of command input on scheduling ANCOC. Armor branch schedules soldiers for ANCOC based on feedback from the soldiers' chain of command, PCS dates, special duty assignments, and sequence numbers.

Conditional promotions continue to be a topic of concern at PERSCOM and for Army leaders. Sergeant first class promotions are accepted under the condition that soldiers will attend and graduate from ANCOC within 12 months of

promotion. Soldiers who are denied enrollment, declared a no-show, fail, or otherwise do not meet graduation requirements prior to their sequence number will be removed from the promotion list. Unless otherwise ineligible, soldiers removed from the promotion list will be considered for promotion at the next scheduled board. Staff sergeant promotions are accepted under the condition that soldiers will attend and graduate from BNCOC within 12 months of promotion. Failure to attend will result in administrative reduction. Soldiers who are conditionally promoted to SSG and fail to attend, or fail to graduate from, BNCOC will be administratively reduced and must appear before, and be recommended by, a local promotion board to regain promotable status. Soldiers who are released from BNCOC or cannot attend due to medical or compassionate reasons, as determined by PERSCOM, will not be reduced in grade. Those promotions will remain conditional.

We have a dedicated team at Armor branch with extremely talented NCOs and civilians whose primary mission is to ensure the health of career management field 19, while professionally de-

veloping the force. As discussed in this brief article, there are many factors that influence the assignments process, and we have only touched on a few of the major issues. We encourage every soldier with a question concerning current assignment instructions, future assignment considerations, or branch certification issues to contact us. Everyone who works at Armor branch is dedicated to ensuring that the right soldier is in the right place at the right time.

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The Armor Captain's Career Course

Not High School and Not Ranger School!

by Captain William E. Stebbins Jr.

"I shall always urge that the tendency in the future should be to prolong courses of instruction at the colleges rather than to abridge them and to equip our young officers with that special technical professional knowledge which soldiers have a right to expect from those who give them orders, if necessary, to their deaths. Professional attainment, based on prolonged study, and collective study at colleges, rank by rank, and age by age — those are the title reeds of the commanders of the future armies, and the secret of future victories."

— Winston Churchill

As the U.S. Army undergoes the necessary throes of modernization and transformation to meet future chaotic challenges, virtually no weapons system, institution, or martial methodology will remain hidden from intense, strategic scrutiny. We are undergoing a comprehensive examination of our warfighting modus operandi to determine how best to adapt to, and properly defeat, any and all future adversaries. We are on the offensive, proactively engaged to defeat the staggering array of future threats instead of yielding the initiative and remaining comfortable in our established military parameters.

In the March-April 2002 issue of *ARMOR*, Major General R. Steven Whitcomb, U.S. Army Armor Center Commanding General, devoted his editorial to the very important topic of officer education. He explained his purpose for writing the piece as, "motivating us, the Mounted Force soldiers, [into] talking about these thoughts on future training." I agree. Future training initiatives need to be aggressively debated and dissected by the corps of professional warfighters to ensure flawed designs are not quietly slid in through the back door.

This article offers my humble views on officer education — specifically focusing on the Armor Captains Career Course (AC3). Having experienced the course as a student, and most recently, having taught it as a small-group instructor (SGI) for over a year, I bring a few insights to the table worthy of consideration.

Captains Course Under Scrutiny

Currently, AC3 is pending profound transformation. It is currently an 18-week course where (very) newly promoted company grade officers are primarily taught the fundamentals of task force (TF) and company-level combat, and support and stability operations, as well as the military decisionmaking process (MDMP). They receive instruction from an SGI in a classroom of up to 14 students, including foreign officers. During this time, junior officers, fresh from their first duty station and long ride in the saddle (nowadays usually including any of the increasingly ubiquitous deployments), shake off the dust, recharge their batteries, get to know their families once again, and focus on tactics and leadership without the distraction of unit static.

Immersed in the small-group dynamic, students cross-pollinate their varied experiences, study historical battles for the gleaming of timeless lessons, gain an in-depth working knowledge of the MDMP, develop strong ties with foreign officers, and discuss leadership and command tactics, techniques, and procedures (TTPs) and philosophies in preparation for their imminent guidon exchange.

Suddenly, the successful AC3 design has a potential successor in the wings. It is in danger of being supplanted by a design considered to be more relevant and modern. In November 2002, the AC3's proposed heir, the Combined Arms Battle Command Course (CABCC), will be nominally tested in two small groups at Fort Knox. CABCC will be a 10-week course consisting of three phases: a 4-week distance-learning (DL) phase where knowledge-based instruction will be taught to nonresident students remaining at their duty station; a 4-week TDY resident phase where students go to Fort Knox to conduct execution-centric 'Gauntlet' exercises, such as multigrade, multiechelon training events, using the close combat tactical trainer, *TacOps* (a computer plug and play game), and live exercises with tanks and HMMWVs; finally, a 2-week TDY course with their SGI to a combat training center (CTC) to observe a BLUFOR unit's progress during a rotation.

Amputated from the traditional course material are brigade-level operations, the MDMP, all but a cursory familiarization with intelligence preparation of the battlefield (IPB), battle captain, and staff rides. Perhaps the most egregious surgical procedure, however, is substituting DL self-guided learning for traditional resident, small-group instruction.

Further, due to the DL, internet nature of Phase I of the course, combined with the pruning of overall course material, Marine and foreign officer attendance appears to be in varying states of jeopardy. Permutations of the course with respect to phase length and other training details continue to change so this article cannot vouch for the veracity of the above program of instruction, but the essence of CABCC is accurately portrayed.

In a nutshell, the proposal is to reengineer AC3 into a shorter course that is execution-centric instead of knowledge-in-culcation-centric; field, simulator, and computer game-based instead of classroom-based; a TDY deployment instead of a PCS move; and rapid-FRAGO-based instead of MDMP and detailed 5-paragraph OPORD-based. In its progenitors' own words, it seeks to be more like a mounted Ranger school than a high school.

Innovation divorced from reality is meaningless. It must be wedded to truth, it must be tied to validated principles of commonsense, otherwise innovation is but a cacophonous cymbal — loud, but imparting no beauty to the symphony. History speaks to us repeatedly about the folly of innovation without truth. The American War for Independence, initiated and perpetuated by principles of Judeo-Christian Biblical

truth, resulted in the birth of the world's freest, fruitful, and globally powerful nation. By stark contrast, the French Revolution, incubated and fed by pernicious pseudo-concepts did not reap a similar harvest. Mob chaos and horror at the blood-soaked guillotine abounded as the revolution enslaved all within its ravenous scythe.

Change for change's sake wastes taxpayer money, disrupts validated systems, and simply squanders a lot of good soldiers' time and energy. Transformation in all its facets, including officer education, must derive its foundation from reality to be of any immediate and lasting value to our Army. It must not be parasitically used as a host for just any aspiring theorist's good ideas regardless of the reams of spreadsheets in his briefcase.

New ideas or methodologies in the officer education realm will have tangible, irreversible effects that profoundly impact on our nation's security and warfighting lethality in this time of ongoing asymmetrical war. As such, these new ideas must be subjected to well-reasoned, critical analysis prior to endorsement.

"We must be bold to change when change gets us increased combat power and bold to reject bad ideas. We must keep our eyes focused on combat power results...not captured or dazzled by technology."

— Retired General Fred Franks

Realistically Altering the AC3

So what is reality with respect to this topic? What is driving this perceived urgent need to radically alter the fundamental framework of AC3?

Surveying the myriad reasons currently articulated by those advocating this change, you find that they fall under the following general points, which we will examine respectively:

- Superior training method. Assuming that there is a better training methodology to be employed in developing captains. Experience-based versus knowledge-based.
- Technology. Assuming that DL technologies have advanced to the point that all necessary 'bookwork' can be more effectively and economically taught remotely.
- Shortage of captains. Perceived lack of pre-AC3 company-grade officers in line units.
- Cost. PCSing students to Fort Knox is too costly and/or the current AC3 price tag is now unbearably exorbitant.
- Advent of new leadership requirements. Assuming that combat leaders of our new digitized, futuristic battlefield must possess a new set of skills not previously required (or emphasized) in past cohorts.

Experience-Based Training Superior to Knowledge-Based Training?

An idea has been advanced that knowledge-based training — studying and debating doctrine, tactics, and martial theory in a classroom — is antiquated, inefficient, and not what future company commanders *now* need at their advanced courses. The superior methodology for developing combat

leaders, it is held, is experience-based training where students are repeatedly given leadership opportunities during various training events where their performances serve to teach and coach them more efficiently than an instructor in a classroom environment. The accumulation of this 'library of experiences' then ostensibly enables future leaders to recognize 'patterns' and make exponentially faster command decisions than their classically trained peers.

Confucius, the 5th century B.C. Chinese philosopher (who, incidentally, never served a day under arms or led men into battle), is oft intoned in an effort to shore up support for the experience-based camp, "I hear and I forget. I see and I remember. I do and I understand. I do the task several times and I know. I do the task many times and I master the task."

The great Kong Qiu, (his real name), articulated an observation that the more 'hands-on' you demonstrate something, and the greater the frequency of doing this hands-on task, the more perspicuous it becomes to the student. What he is expressly not trying to convey in this contextually 'lifted' quote is that all classically trained academic instruction should be, wherever possible, supplanted by experiential training. Though myself a fan of experience-based training and the current slate of Gauntlet events executed in AC3, I reject an approach that is exclusively Gauntlet-centric, devoid of classical classroom instruction.

This is *not* a zero sum game. We do *not* have to choose exclusively between classroom-based knowledge instruction and experience-based field training. Rather, we can intelligently combine *both* methodologies to develop a superior course. To advocate one exclusive approach and impugn the other unnecessarily hampers our transformational efforts.

Hardcore, academic, knowledge-based classroom instruction (of which Confucius was a staunch advocate) has a distinct and vital place in a professional warfighters' erudition. It is in no way antiquated, passé, inferior, or something to be shunned in an effort to appear 'transformed,' modernized, and relevant.

The idea is firmly advanced that TRADOC schools must evolve into "battle schools" of experiential learning due to increasing constraints placed on live tactical training at home station. Say again? TRADOC schools must now make restitution for perceived line unit training deficiencies?

Once again, I must strongly disagree. First, resourcing does not currently preclude quality company-level maneuver training. While in command at Fort Hood, ample opportunities to plan and execute company-level maneuver training without OC scrutiny existed for all to capitalize on, as opposed to my lieutenant years in Germany during the early 1990s. In fact, we were admonished if we failed to rack up a prescribed quarterly mileage goal. This similar experience has been repeatedly collaborated by peers who commanded elsewhere.

Secondly, the belief that TRADOC schools, such as AC3, should become training centers or battle schools is flawed thinking. Making restitution for perceived line unit training deficiencies is not within the AC3 mandate, scope, or purpose, nor should it be!

Our Army conducts live training at the world-class CTCs, as well as at homestation training, and it is at these places that you train established SOPs with units of habitually-ros-tered soldiers operating the full complement of combat systems that they will deploy with. That is good training. What we do not need is yet another training center.

"I think there is no activity more important in a man's preparation for war than his periodic return to school duty, not so much because of what he learns in mere facts and knowledge as because during that period he is relieved of the ordinary routine duties... For that period he is given an opportunity to think, think in terms of war, without limit on the scope of his ideas."

— General Dwight D. Eisenhower

Further, we expressly do not need a new "battle school/training center" that hastily pits soldiers and leaders together for the first time, struggling to fight within the parameters of a contrived SOP that seeks to standardize how to fight unorthodox, nondoctrinal equipment compositions that would be fought nowhere else but at the diminutive Gauntlet training area at Fort Knox! That is not training as you fight. It does not build a library of battle-centric experiences that you can draw on in the chaos of combat to expedite and streamline your decisionmaking; that is, unless as an Army we are preparing to fight hastily organized, ad hoc units of HMMWVs or companies of less than 14 tanks.

Contrary to the community of theorists who seek to demean or malign as prehistoric knowledge-based instruction where students exercise that which differentiates us from the animal kingdom, it is my opinion that we expressly need to retain and defend the institution wherein are taught tactics and war-fighting theory underpinned by the crucial framework and cosmology of military history.

Many authors admit that experiential training scenarios must be realistic, and therein lies the rub.

Rub 1. Realism means individuals of all ranks assigned to units that train together daily and operate under a tactical SOP enforced by their commander. Realism is not two or three isolated ranks of peer students brought together for the very first time struggling with an SOP that is not uniquely their own.

Rub 2. Realism for a commander means maneuvering 14 tanks or 10 tanks and 4 Bradleys, or 6 tanks and 8 Bradleys (you get the picture). It is not maneuvering nondoctrinal, unorthodox combinations of HMMWVs, or a company of but 6 tanks.

Rub 3. Realism is maneuvering a company against a robust, finely trained enemy on a sufficient expanse of terrain to permit true maneuver. It is not maneuvering an ad hoc company of lieutenants and captains for 40 minutes on the same 5x5 kilometer postage stamp parcel of terrain that offers only limited maneuver options to the adversaries.

Such exercises do not invigorate or stimulate battle command skills, nor do they provide experiential lessons that can be applied to a true chaotic battlefield. All training is not good training; only good training is good training.

In fact, my guess is that if we placed this current, self-imposed educational dilemma in his lap, Confucius might respond with, "Practice does not make perfect. Much practice does not make perfect. Only perfect practice makes perfect."

The ultimate goodness derived from Gauntlet events is the interaction and mentorship between captains and lieutenants in the basic course. AC3 students reap tangible rewards in the practice of writing and articulating their orders to subordinates, while the Armor Officer Basic lieutenants get a first-hand feel for what it will soon be like in their first units.

Both learn that effective radio communication is indispensable.

These are the tangible benefits of a Gauntlet. What is not harvested, in fact what cannot be harvested (despite the press reports), are real-world tactical maneuver TTPs — the library of experiences — which one can purportedly draw on in battle to solve tactical dilemmas.

Finally, the CTCs have a very difficult time approximating battle realism; such are the logistical requirements of such a ponderous endeavor. But our nation provides the financial resources for the CTCs to accomplish this effect and they do so to the greatest degree possible. However, to entertain a notion that Fort Knox and its schools with their vastly inferior resources (compared to a CTC) could even come close to approximating reality for worthwhile live exercises is ambitiously quixotic. Further, the funding that would be required to meet this minimum realism standard stands in direct opposition to the aforementioned cost argument that is supposedly requiring AC3 transformation in the first place.

Knowledge-based, knowledge-retention training is always the precursor to hands-on, effective training. Ranger school cannot be done via DL. In Ranger school, students are given countless hours of resident (not DL) instruction on small-unit tactics, which students then employ in the mud. They do not take students, issue them their gear, and disgorge them into the Floridian swamps to somehow, through discovery learning, try to impress their instructors that they are worthy of the coveted tab. You do not complete a Ranger school DL, nonresident module prior to attending. You learn the information the old-fashioned, relevant way — eyeball to eyeball.

In a similar vein, interns are not relieved of years of hard-core medical school and instead tossed the scalpel and challenged to plod their way through a patient's abdomen in hopes of successfully locating and extracting the ruptured appendix to be validated as a physician.

Unfortunately, and amazingly, some in the thick of this evolving problem advocate an approach bordering on 90 to 100 percent experience-based instruction — the stuff you would expect to read about in silly, apocryphal science fiction novels — basically the "throw 'em in the swamp over and over again and let 'em figure it out" approach. This appears to lack balance and discernment.

Just to recap: CABCC includes a DL phase where students remain at homestation and absorb requisite knowledge over the internet. By tackling knowledge-based curricula at home station, the student officer assumably saves the Army money by not PCSing twice during one year, and effectively learns everything he needs to know prior to his TDY to Fort Knox, where he then immerses himself in almost nothing but experience-based Gauntlet training to construct the alluded-to 'library of battlefield experiences.' Dispensing with the litany of obvious objections this new course design elicits, for the moment let's advance forward and address the DL issue in a bit more detail.

DL Technology: To Boldly Go Where No Student Has Gone Before

Germane to this discussion, in fact essential, is whether or not the existing course should be transformed into a DL-flavored coursette at all. What is driving this particular change? Is the technological tail wagging the digital dog? Just because we have emerging DL technology, does part of the armor community feel compelled to make it the paramount medium of knowledge training to the detriment and loss of SGI mentorship and student experiential cross-pollination?

Having taken (and continuing to take) DL courses, and having taught (and continuing to teach) AC3 in the small-group fashion, I can, with a modest degree of authority, claim that I can teach any tactical topic quicker and better in person where students answer to me and are not competing with numerous other distracters, than can be taught to them in the remote, DL manner. By reverse conclusion, I challenge that anything taught in residence requiring 6 hours of explication (for example), will require twice that amount of time, or 12 hours at a minimum, to teach via DL and achieve the same level of understanding!

Further, a high preponderance of DL instruction will likely, because of its inherent inefficiency, result in poorly absorbed topics demanding subsequent SGI review and amplification when the student finally arrives at Fort Knox. The problem is this 'catch-up' period is currently not built into the pending CABCC design.

I maintain that any existing DL designs that do not multiply the time needed for teaching any topic by two, is flawed in design from the outset and predestined for a degree of failure! And if my assumption is correct, then the timesaving aspects of CABCC are beginning to rapidly evaporate. We might likely be producing poorly trained, doctrinally illiterate company grade officers for our nation, in return for negligible savings in educational time and money.

So who is qualified to cast judgment on the above assumptions? Those who have never taught IPB or the MDMP to a young, newly promoted company grade audience? Those who have never personally taken DL courses and therefore have no frame of reference as to the efficaciousness of such courses? Those who attended an advanced course years ago and have but a cursory snapshot idea of what is now AC3? The answer is rhetorical.

Balance is what we should strive for. DL prep work may well have a beneficial place in the officer education system framework, but in addition to, and not in lieu of, resident subject matter expert instruction. DL mentorship, however, is virtually impossible.

Where are all the Company Grade Officers

Another argument posed for AC3 truncation and DL maximization is a perceived shortage of pre-AC3 officers serving in line units. It appears that suddenly the outcry for company grade officers to remain in their line units longer and not PCS for 18 weeks to Fort Knox has hit critical mass, requiring a pronounced overhaul of AC3. If we shorten AC3 and retain them in our line units (as they execute the 4-week DL phase), so the theory goes, this paucity will be minimized.

If lack of captains in the force is a significant impetus driving the need for a shorter AC3, then we need to admit that

there are other, larger reasons behind the disease. To abruptly reengineer and curtail the course based on this reason is akin to treating the symptoms as opposed to curing the disease. Worse still, it is a treatment, much like 'blood letting' during the War Between the States, that may do infinitely more harm than good to several waves of AC3 graduates — entire year groups of company commanders.

As an Army committed to providing the very best education for its officers, we need to isolate the real problem — treat the disease. That said, it is entirely outside of the scope of this article to address officer retention strategies. However, tacking on yet another TDY deployment (CABCC), after an already robust string of real-world deployments and CTC rotations, may just exacerbate the officer shortage dilemma beyond its current precarious level.

Minimizing the importance of institutional periods of warrior instruction and the quality family time that goes hand-in-glove with said periods might be viewed as demeaning and disrespecting the often-touted, vociferously proclaimed notion of 'caring for Army families.' This applies equally to single, as well as married officers with children. All professionals need to recharge their batteries from time to time. Again, back to the balance thing. Burning the candle at both ends without surcease is not the way to endear wives, children, and fathers.

The AC3 mandate is to produce doctrinally fluent, tactically savvy company grade officers, armed with the mental arsenal to command with unparalleled proficiency. It is not to solve Army officer retention problems.

Saving Dollars at Leaders' Expense

Any worthwhile discussion on AC3 transformation necessarily must orbit about the axis of purpose, regardless of cost. What must we achieve? What must we train new company grade combat arms officers? I pose that if our endstate is not a confident, well-resourced, doctrinally sound company grade officer, but rather a quantifiable sum of monies saved, then we are perilously off course.

In a perfect world, financial resources and officer strength should not drive AC3 redesign. This is not a perfect world, however, and reality dictates that budgetary restraints must be dealt with. The issue then becomes where we draw the line. What aspects of our national defense do we consider exceedingly important and not to be toyed with? I submit that officer education — the erudition of our leaders and warfighters — is one of those hallowed areas that we must fight to preserve inviolate.

Are we willing to merely accept dwindling pools of financing even if we know that it will degrade the education of our officer corps? Should this be a battle to wage — to convince those who manage the purse strings that a strong, invincible military requires a cadre of doctrinally proficient, well-rounded and aggressive leaders, and that this cannot be accomplished on a shoestring budget?

It is a very dangerous proposition to cut costs at the expense of officer education — the warfighting erudition of those men who lead our nation's sons and daughters into harm's way. We may save some money in the short term — and those savings will look brilliant on spreadsheets — but in the long run, the exorbitant cost of potential lives lost as a result of poorly schooled leaders would border on the criminal.

It is expressly our burdensome and grave mission — duty — to ensure potentially myopic, savings-centric politicians understand and accept this truth. These are the meaningful, behind-the-scenes battles that must be fought and won, even as our forces are fighting and winning in the harsh landscapes of distant lands today. It does a great disservice to our nation's citizenry to kowtow in obeisance to uncontested financial restrictions and knowingly hobble our warrior education to save a few dollars.

If the new threat and OPFOR paradigm is a ruthless, vulnerability-seeking, freethinking enemy — and our Army has said that it is with the advent of the current operational environment — then I maintain our leaders require more training, more mentoring, and more immersion in the theory of tactics and battlefield TTPs — not less! Further, we are currently engaged in a war on terrorism that threatens fellow Americans on our own soil and promises to be a protracted war at that; this is not the time to be budgetarily Spartan in the officer education realm.

Enter Tomorrow's Warfighter

In seeking to develop a transformed leader-training methodology, theorists have struggled with first defining the model, combat proficient future leader. From this definition, then, would spring the methodology best suited to arrive at the goal.

Recent protransformational articles claim that in current and future environments, leaders' decisionmaking time will be cut in half, and that windows of opportunity for seizing the initiative will be shorter. Therefore, tomorrow's leader must be a rapid decisionmaker. This is the first assumption with which I must disagree. With the advent of revolutionary command, control, communications, computer, and intelligence (C4I) systems, future warfighting is predicated on exponentially higher degrees of friendly and enemy situational awareness (SA) than ever before. If one has 80 to 90 percent SA — exponentially more SA than we have ever had in the past — then one would have more, not less, time to analyze the situation and determine what course of action to follow. This is because warfighting operates in a pervasive SA fog — we struggle to ascertain the enemy's array from stale human intelligence reports, even as we fight to determine our own friendly situation. Often, our perception of the battlefield is drastically different than reality. In that type of uncertain battlefield, you have to adapt quickly to what will turn out to be the truth of the situation when it finally (at the last moment), rears its ugly, fanged head.

I am saying that leaders should have more time if digital/SA systems work as advertised, and as they are being briefed. You cannot make a logical argument for shorter decisionmaking times and briefer windows of initiatory opportunity in an SA-enhanced, digital environment, unless you concede that digitization simply does not now, or in the near future, truly aid SA truth.

One of CABCC's prime assumptions is that future leaders will have less time and must become fully versed in rapid decisionmaking (RDM). The emphasis is on time-constrained decisionmaking, transmitting these decisions through bare-boned FRAGOs, and then execution. As such, and as you would expect, in proposed CABCC curriculums, the MDMP and the full-blown IPB process will not be taught.

I trust no one would debate that making tactically sound, rapid decisions on the battlefield is a good thing. I think it is one of the hallmarks of a true martial leader. What I challenge is the notion that the nature of future conflict exponentially necessitates this skill. As stated above, I maintain that this ability was more necessary on the past legacy battlefield where our common operational picture was more fully obfuscated and uncertain for longer periods of time.

Defending AC3

AC3, in its present form, is a live companycommand.com. For all the reasons that many admire the pioneering, beneficial website — cross-pollination of real-world, helpful TTPs, sharing experiences, and the vicarious learning dynamic — are the same reasons that resident AC3 is to be preferred over a DL-intensive, non-SGI-mentored course. Again, it is a 'live' companycommand.com, but even more than that, it is one that a student must report to daily for 18 weeks; he has no recourse but to be fully immersed in his craft. He does not have the luxury of not logging on Monday or Friday, or even weeks at a time, due to other competing requirements. AC3 is his requirement and he is 'logged on' for 4 months of intensive warfighting and leadership training under the scrutiny of his SGI.

We are already successfully incorporating experience-based training into AC3 while maintaining balance. Stagnant classroom instruction devoid of any hands-on experiential training is foolish, especially when so many opportunities and so many technologies exist to maximize experiential learning. As such, Gauntlets are being executed while simultaneously preserving the irreplaceable goodness of resident, small-group instruction where tactics and leadership are discussed in great detail. There is simply no need to cannonball off of the diving board into the deep end of the extreme pool. Knowledge-based and experience-based — they both have their place.

It is easy to make sweeping pontifications on courses based on dollar amounts that fit into tidy spreadsheets. What is missed by simply analyzing that which can be quantified, however, are those intangible, but far more important, qualities and results that are harvested in the small-group classroom over 18 rigorous weeks.

Coda

I admit that perhaps not fully cognizant of the resource-constrained environment driving our perceived necessity to radically alter an already successful AC3 and other courses like it, I do believe I am in possession of at least the problem's basic parameters. Lack of company grade officers in line units, and a dwindling education budget, coupled with a dangling carrot of increased technological capability (DL) that promises to help us as a force leverage our time better, all combine under the expansive umbrella of transformation and provide opportunities for leaders to enact change in many different areas. In this type of environment, it is easily construed that to resist any change placed on the table is to be a myopic, 'legacy' heretic actively employed in the anti-transformation resistance movement. Ludicrous, but often evidenced.

Change for change's sake is fool's gold. All change is not beneficial, therefore new initiatives and new course designs need to be scrutinized with discernment and not blindly ac-

cepted. It goes without saying that our senior leaders are working diligently to create the best possible educational course design that answers all of the e-mail simultaneously. We must present new ideas before the Armor community, discuss and debate them vigorously, and only when we have a logical, well-reasoned understanding of the impacts, begin changing courses and effecting educational patterns.

If the foundational assumptions of new ideas are valid, then they have nothing to fear from a robust barrage of healthy criticism and professional debate. If invalid, the assumptions will shatter and our Army will be saved the disgrace of an unsound and damaging escapade in Pandora's digital box.

This is easily done by canvassing the entire cadre of SGIs in existing courses, past and present, as well as soliciting detailed feedback from past and present students to identify impacts different course designs will likely elicit.

We must take care not to launch into a quest for the digital grail, rabidly seeking change for change's sake. There are universal, unchanging principles. Leadership will never become supplanted by something else more advanced and scintillating. The machine will not replace the man. Being diligent stewards of taxpayers' money is noble, but this must never be at the egregious expense of degraded warfighting leadership and proficiency.

As an Armor Corps, we can continue to believe the publicity reports without doing any requisite study and analysis of our own, and keep marching down this particular primrose path to company grade leader transformation until we find that we are saturated with doctrinally illiterate, shallow-thinking, reactionary leaders, *or* we can cut to the marrow and salvage the goodness of knowledge-based training and use Gauntlets in their proper, supporting role. The choice is ours and we must decide which methodology or theory we are to endorse, for we will live with the results in what promises to be a protracted, turbulent war-torn future.

CPT William E. Stebbins Jr. is currently a small-group instructor at the Armor Captains Career Course, 3d Squadron, 16th Cavalry Regiment, Fort Knox, KY. He is a Distinguished Military Graduate from Kent State University. He has held various command and staff positions, to include tank platoon leader, scout platoon leader, during Operation Able Sentry, Macedonia; tank company XO, 2-37 and 2-63 Armor, Vilseck, Germany; brigade planner, 2d Brigade, 1st Cavalry Division, during Operation Joint Forge/SFOR5, Bosnia; and commander, C Company, 1-12th Cavalry, 1st Brigade, 1st Cavalry Division, Fort Hood, TX.

LETTERS continued from Page 4

viable combat tool and that it is training to hone this edge of their sword. However, it interests and worries me that these fine men have written "For extremely restricted terrain, the breach force might have one tank and one Bradley, plus dismounts with MCLC and engineers as a redundant means to breach." I realize that the authors go on to say that the support force of the remaining tank and Bradley will be kept in reserve, but in my humble opinion, you never, ever deploy a single tank, especially in a built-up area. From my perspective, Marine tankers never deploy an individual tank (ever). From past experience, the few times that someone forgot this cardinal rule, and only one tank was actually sent out with a small amount of infantry, disaster usually was not far behind. I know from personal experience that when the enemy ambush occurs, the infantry have a lot more to worry about than defending a "big, noisy rocket propelled grenade magnet." Tanks tend to defend each other the best. If this is a cost-cutting maneuver, let me assure you that the loss of lives and equipment will not be worth the "savings" today.

The other comment that I would like to make has little to do with this article, but it has a lot to do with the effectiveness of the current tanks available for combat today. In my opinion, the M1 Abrams tank is not fully equipped to fight massed enemy troops. The M1's main gun ammunition was designed to fight the armor of the Soviet Union on the

plains of Central Europe. The U.S. Army designed the tank to strictly employ antitank ammunition. To my absolute amazement there are no antipersonnel rounds available (yet). In Vietnam, we served on M48A3 medium gun tanks that had the following main gun ammunition: high-explosive, white phosphorous, canister, and flechette for antipersonnel, plus high-explosive antitank and shot for armor. It is my understanding that the current planners have finally seen the light and are developing a canister (antipersonnel) round for the M1's main gun. This will make the M1 even more desirable to use in the tank-infantry team.

JOHN WEAR
New Hope, PA

General Dynamics – Ordnance and Tactical Systems was recently awarded the development contract for the XM1028 120mm canister round for the Abrams tank. Second quarter, FY05 is the expected delivery date of rounds to U.S. Forces Korea. – Ed.

Heavy/Light Integration in MOUT

Dear Sir:

I read with great interest the article in the September-October 2002 issue of *ARMOR* about heavy/light MOUT integration ("Armor and Mechanized Infantry in Built-Up Areas!"

by CPT Rouleau, SFC Wyatt, and SFC Barcinas). I would offer the following comment for consideration on this subject: Read the USMC's MCWL X-File 3-35.37, which can be found at <http://www.mcwl.quantico.usmc.mil/>. You will note that the Marines have done much the same sort of thing, thereby saving time and effort "reinventing the wheel." Also, you may find that even the graphics are extremely similar to what was published in your journal, further suggesting room for joint collaboration.

CPT P. DRAKE JACKSON
2-310th Regt (TS)
Devens, MA

In the text of the above-mentioned article, the authors address adapting TTPs from the U.S. Marine Corps' Project Metropolis. We received a request from CPT Rouleau, asking us to specify that the graphics used in the article "were altered to reflect Army operations, but the base was partially provided by the Marine Corps Warfighting Lab, Quantico, VA, Project Metropolis AAR 1999." Unfortunately, the information was received too late to publish. – Ed.

More on the Pentomic Division

Dear Sir:

"Keeping the Sword Sharp" by MAJ Harold M. Knudsen (*ARMOR*, Sep-Oct, pages 12-

16) was interesting and thought provoking, but the author's description of the Pentomic Division of the 1950s is incorrect, having one too many echelons.

The post-WWII Infantry Division had three regiments. Each regiment had an HHC, service company, tank company, heavy mortar company, and a medical company, and three infantry battalions. Each infantry battalion had an HHC, three rifle companies, and a weapons company.

The Pentomic Infantry Division had five "battle groups," each comprising an HHC, five infantry companies, and a combat support company. With about 1,300 soldiers, the "battle group" was somewhere in-between a battalion (917) and a regiment (3,774) in size.

Still, the remainder of the division was quite conventional, with a divisional HHC, tank battalion, recon squadron, engineer battalion, signal battalion, DIVARTY brigade, aviation company, and division trains (transportation battalion, ordnance battalion, medical battalion, quartermaster company, and band).

Ironically, follow-on studies noted that losing a single battle group to a nuclear strike resulted in a loss of 20 percent of combat strength, whereas losing one of nine battalions resulted in a loss of only 11 percent (go figure!). Also, a personnel management problem was that there were no command slots for infantry lieutenant colonels.

The armor division was never converted to "Pentomic" and remained essentially unchanged. Eventually, sanity prevailed and all divisions came under the Reorganization Objective Army Division (ROAD), which is based on the WWII armor division's "combat command" structure and the precursor of the subsequent DIV 86, Army of Excellence, and Force XXI organizations employed today.

CHESTER A. KOJRO
LTC, AR, USAR (Ret.)

Correction

In the article, "Army Accepts First Stryker MGS," back cover September-October 2002 edition, we erroneously listed the commander's .50 caliber "machine gun" as main gun. We apologize for any confusion.

Death Traps Complements Read of Irwin's Book

Dear Sir:

I would like to add some observations about *Another River, Another Town* by John Irwin, which was reviewed by SFC Miller in the July-August 2002 issue of *ARMOR*. Irwin's memoir reveals that he participated in a unique episode of armor history, which is set in context when his book is read along with *Death Traps* by Belton Cooper. Cooper's book provides the "big picture" surrounding the events which Irwin experienced.

Irwin (on page 82 of his book) recounts how he and his tank crew received a slightly used "Super Pershing" as a replacement for their Sherman, which had fallen victim to a Panzerfaust. By this time (post-Battle of the Bulge) the 90mm-equipped Pershing had been introduced into the ETO, but the unique version he and his crew received, the M-26A1E2, was something very special indeed for its time. The E2's 90mm main gun was 70 calibers long, producing a muzzle velocity of 3850 fps. Along with its heavier armor and other features, the Super Pershing was able to more than evenly take on a King Tiger, although one wonders at how it was successfully maneuvered through the small towns of Germany without denting its muzzle brake.

Belton Cooper served as a liaison officer for the ordnance battalion of the 3d AD to the forward deployed combat commands/task forces of the division. He helped prepare the Super Pershing for deployment and introduced it to its first crew (page 280 of his book). Cooper's principal duty was to coordinate the collection/recovery, repair, and ultimate return to service (if repairable) of battle damaged tanks and other vehicles of the 3d AD. What happened all too often when a Sherman encountered any German tank of later vintage than a Mark IV or an 88mm AT gun probably inspired the title of his book. His account gives graphic illustration to the saying "amateurs talk tactics, professionals talk logistics." Additionally, Cooper's book (unlike Irwin's) includes a section of captioned Signal Corps photographs that illustrate the events he recounts. For the price conscious, Irwin's book should be available as a "trade paperback" next year, while Cooper's book is already available.

CLIFFORD R. BELL, JR.
Analyst, National Imagery
and Mapping Agency
Washington, DC

From a Tank Commander's Eyes

Dear Sir:

As a tank commander at the National Training Center (NTC), I take great pride in playing a critical role in training U.S. mechanized forces. Each month, the 11th Armored Cavalry Regiment deploys to the vast training area with the sole purpose of being the best training tool in the world.

Each rotational unit differs in compositions, strengths, weaknesses, and experience. There is no doubt that each unit arrives at Fort Irwin prepared to, in old tanker terms, "kick ass and take names." However, for the opposing forces, we see the same mistakes rotation after rotation.

I would like to address BLUFOR's tendency to piecemeal into contact on offensive missions. Most unit commanders attack in the standard task force in column concept, and tend to stay away from the riskier task force abreast concept. However, with task forces

attacking in column, the OPFOR is able to fix, and most often destroy, the lead task force, retaining a significant amount of combat power. Often, the unit commander relies on this safer course of action, yet problems arise when this lead task force commits one company at a time. Understandably, the unit commander, in an attempt to preserve his own combat power, commits his lead (or breaching) company, who (per doctrine) commits one platoon to breach, with one platoon in a support by fire, and the other platoon waiting to assault through. In short, the problem is only one platoon attempts to penetrate either the advanced guard or breach an obstacle belt that is always overwatched by multiple combat systems, such as AT-5s, BMPs, and T-80s. One remedy for small-unit leaders is to attack with multiple platoons or companies. As with all breaches, this action must be closely synchronized with effective cross talk and must be rehearsed at home station. However, the more weapons systems placed on the OPFOR, the more likely the platoon, company, or task force will be successful. Thus, unit commanders can reinforce that success, rendering the OPFOR defenseless.

I would also like to address the lack of focus placed on the OPFOR's antitank systems. Although, as a tanker, I would like to pride myself as the biggest and best weapons system on the NTC battlefield, the fact is the AT-5 systems are the major killers. OPFOR commanders keep these vehicles under their personal control at all times so that they can personally emplace them. This is a testament to their lethality. It is extremely important to remember that these systems are highly mobile and are hard to distinguish in the desert environment. It is also important to remember that these are the only systems in the OPFOR inventory with extended range beyond 4 kilometers. Therefore, these weapons systems should be number one in priority of targets. To counter their mobility, a possible remedy is to focus artillery fire on these targets, which are highly vulnerable to any indirect fire with the MILES II system. Also, units could give recon elements (BRTs and scouts) the secondary mission of destroying these systems. It is common for these mounted AT-5 systems to be credited with 10 or more confirmed kills in a simulated battle. The status of these systems has and will continue to make or break task force-sized elements.

Another observation is the lack of maneuver at the platoon and company level. Often these elements will remain in a picture-perfect wedge, which allows the OPFOR vehicle ample opportunity to engage. Also, these elements move too slowly, too predictably, and with little or no direct fire support. A simple solution is to break the rigidity of movement formations, and instead use the terrain with bounding overwatch, and focus on the section level (wingman concept). Common sense mandates that one cannot engage while being fired on. However, I have seen little of this in my experience at the NTC. I commonly see platoons moving in wedges toward obstacle belts, often avoiding broken

ground to maintain visual contact with all elements in the platoon. I rarely see vehicles using low or broken ground when a road is easily accessible. Platoon leaders and platoon sergeants must train tank commanders to use the terrain to their utmost advantage. This begins at home station when conducting training, and would make a dramatic difference in platoon and company success in the maneuver portion of the NTC deployment.

The lack of knowledge of the MILES system in BLUFOR units is yet another problem. MILES, whether we all like it or not, rules the NTC battlefield. MILES laser systems often lose their boresight after moving only a short distance. This cannot be helped; it is the nature of the beast. As a tank commander, I realize that failing to boresight rarely happens, despite officers often blaming unit failures on a lack of boresighting. However, I know that I will often verify the MILES boresight during movements, only to find the laser is nowhere near the sight. Many platoon leaders (OPFOR commanders) have felt the wrath of superiors due to this. A long-

term solution is to adjust the MILES system, perhaps by finding a better cradle to fit the laser. However, on our level, the short-term solution is to simply train tank commanders and gunners to verify each shot through the scope (if you have a loader, even better). This makes each round count, instead of wasting 4 to 5 rounds on each target.

We here at the NTC are neither liars nor cheats. We did not sell our souls to the Russians or the fictitious Krasnovia. Although, it hurts our pride somewhat, we do want rotational units to be successful. In the past few months, I have read a great amount of bickering in *ARMOR* about the OPFOR cheating and that we do not have the same commitments as other FORSCOM units. Addressing the first issue, I must quote my former squadron commander, LTC Timothy Norton, when he stated that "cheating in the 11th Armored Cavalry Regiment is not tolerated in any way," and as a small-unit leader, I can attest to this fact. The NTC is extremely muddled due to the same commitments and maintenance issues that other units incur. We, too, have a red cycle, CTT, TCGST

training, gunnery, and are tremendously short on personnel. For example, my platoon has five tanks to maintain, along with a 2½-ton truck and a water buffalo, and until just recently, we accomplished this with 11 enlisted and one officer. We spend 2 weeks a month in the field, and so all of this training and tasking (including gunnery) are accomplished in 2 weeks instead of 4 weeks. We still use the Vietnam-era Sheridan tanks, visually modified to replicate the Russian T-80, which incur great abuse, month after month, year after year. We have no trained mechanics and parts are nearly impossible to come by. The old cliché of fixing a tank with lacing wire and green tape damn near holds true.

Some readers will understand my viewpoints, and others understandably will not. However, after two tours here, I have noticed the same trends time and time again. I am hopeful that some of my fellow tank commanders and small-unit leaders will take notice and file these observations away for future use. ALLONS!

JOHN D. VOCCIO
SSG, USA

Commander's Hatch from Page 5

Fort Knox is converting, or piloting, a number of courses to a partial distance-learning format. I want to emphasize the point that these courses will continue to have a resident component. The knowledge, application, and problem-solving skills will still be integrated when soldiers and leaders come to a training institution. But having a DL knowledge-based portion has many advantages. It means soldiers and leaders will show up with a common ground-work that will lead to faster learning in residence. It will also mean that the force can use the instruction at the time and place that it is needed. Imagine the value of a downloadable, interactive tank boresighting block of instruction that your Armor soldiers and leaders can train with that moves at their speed and monitors their proficiency in the task!

We are currently working on the 19D/K Reclassification Course, Scout Leader Course, 19D BNCOC, M1A2 Tank Commander Certification Course, and M1A1 Master Gunner Course. We are converting a portion of the 19D/K Reclassification Course currently being taught in The Army School System (TASS) battalions. This course was formerly taught as a series of Inactive Duty Training (IDT) weekends with a final Active Duty Training (ADT) phase of 2 weeks. When the program of instruction rewrite is complete, the IDT phase will be done via DL, followed by an ADT resident phase in the TASS

battalions. We will pilot this course in January '03 with two TASS battalions. We have also begun work on 19D BNCOC for the TASS battalions. Current materials are being taught during IDT and ADT. Converting approximately 15 days of material to DL will see this course brought up-to-date with resident instruction at Fort Knox. The 15 days of resident training, which follows, will be performance and experience based. When students arrive for resident training, they will focus on problemsolving and operational application of the training they have received through DL. We will pilot this course in March '03.

The next course we are working is the Scout Leader Course. The current course is 19 days of resident instruction. The DL course will consist of a 40-hour DL phase of web-based instruction, followed by a 10-day resident phase. We will pilot this course in January '03. Recently, we began converting the M1A2 Tank Commander Certification Course. The 15-day resident course will now consist of a 40-hour DL phase of web-based instruction, followed by a 10-day resident phase. Our tentative pilot date is fourth quarter FY03.

The final course that we are working on is the M1A1 Master Gunner Course. I know there is a lot of emotion generated by this conversion. I am staying close to this one, and I think we are doing this right. The Master Gunner Course is considered by many to be our

best course. As I stated before, I don't want to do anything to change that. The current course is 11 weeks of resident training. The pilot course will consist of 9 weeks of resident instruction here at Fort Knox and approximately 56 hours of DL instruction.

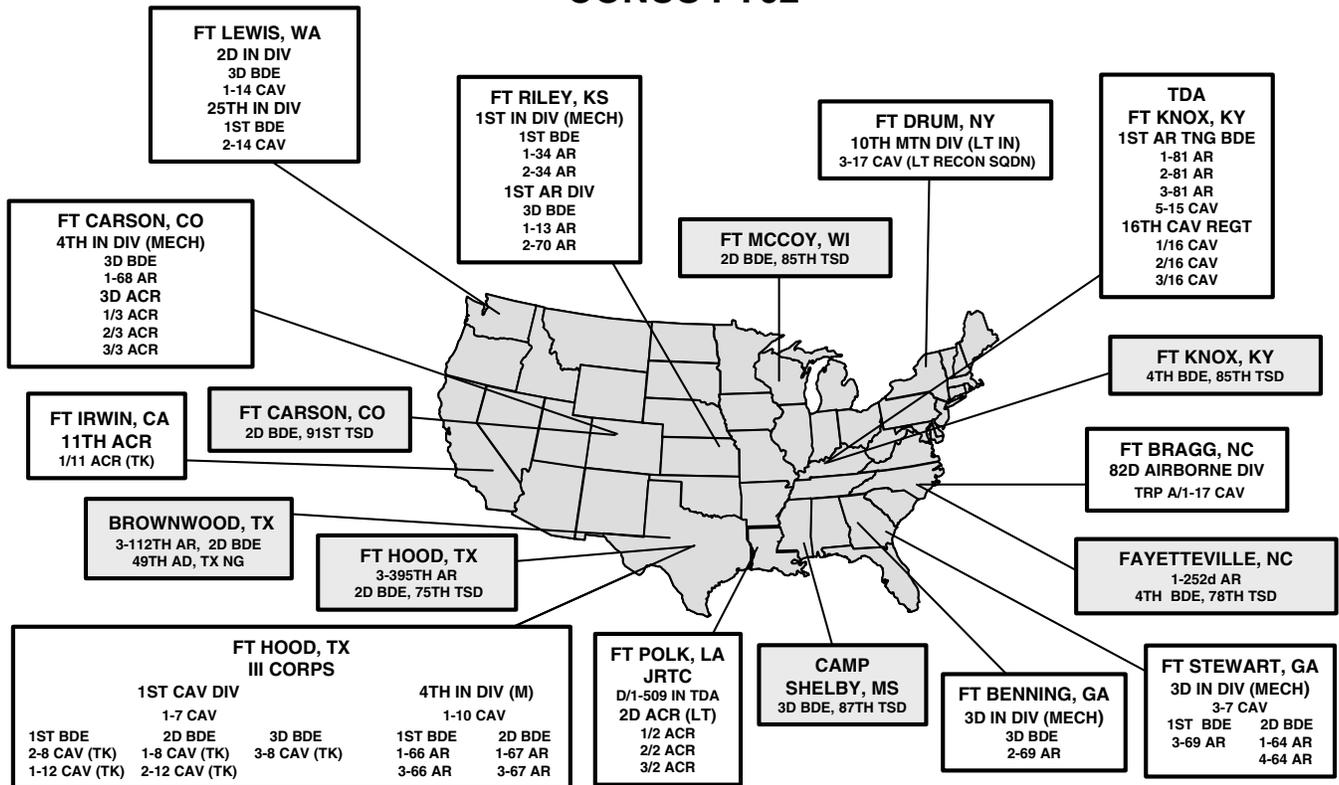
There are a number of concerns with DL. Because it is a new technique, we need to be very careful while selecting tasks for conversion, and we need to make very sure that we are maintaining standards. This also calls for unit commanders to commit time and resources so soldiers and leaders can take these courses during duty hours, much like the time we dedicate to Sergeant's Time Training. We recognize this will be difficult since units are already resource constrained. These are Armywide concerns and I am committed to helping find solutions and am convinced our soldiers and leaders will meet these challenges.

The Armor Center is leaning forward in the saddle to continuously improve the distance learning strategy and take it to new levels by developing outstanding and challenging learning. The Force is the ultimate judge of this training strategy's usefulness and flexibility. I ask that you join me in giving this strategy a chance. Understand it and where it can best be used — together we can employ this cutting-edge capability to hone our skills and knowledge.

FORGE THE THUNDERBOLT!

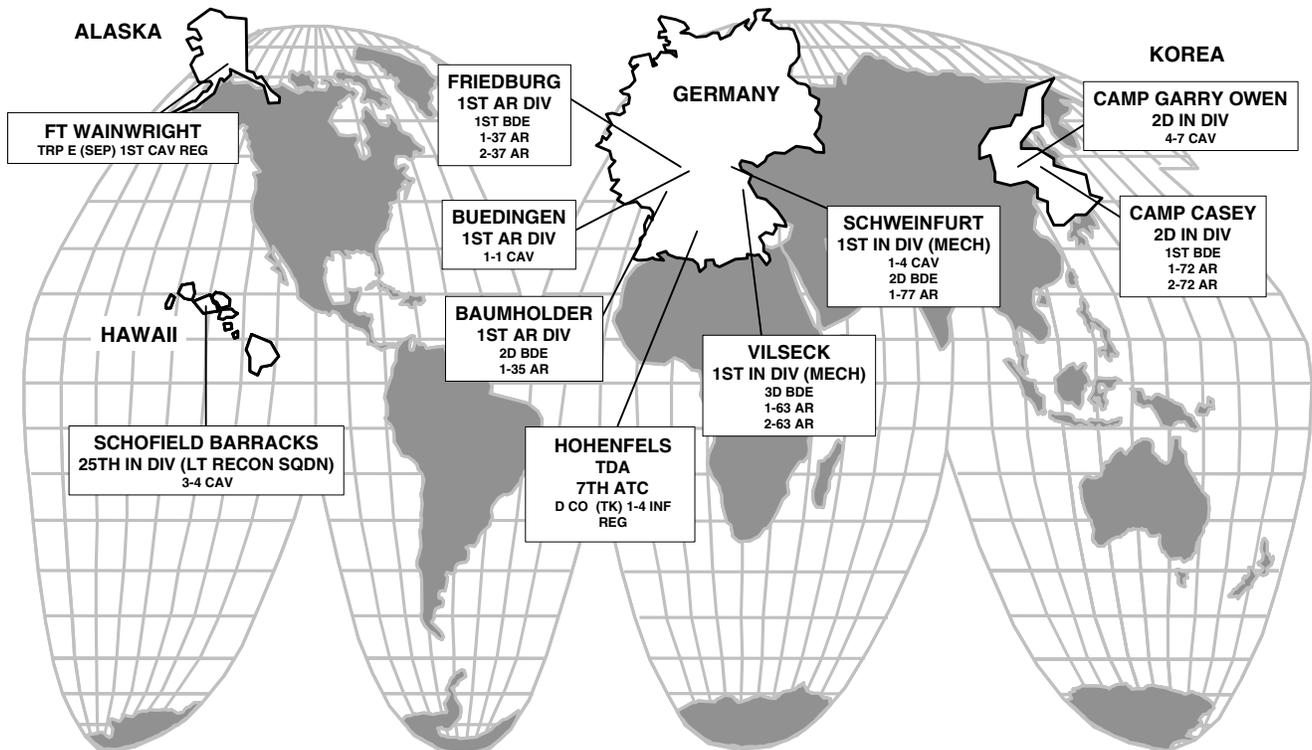
Active Component Armor/Cavalry Geographical Locations

CONUS FY02



Note: Gray boxes indicate Active Component support to Reserve Component units (AC/RC Commands).

OCONUS FY02



Active Component Units

Source: Office, Chief of Armor, Armor Proponency Division

<u>V CORPS</u>	<u>Unit</u>	<u>Location/APO/ZIP</u>	<u>DSN</u>	<u>Equipment</u>	<u>CDR</u>	<u>CSM</u>
1 AD	1 BDE	Friedberg, GE 09074	324-3821		COL M.S. Tucker	CSM Lucero
	1-37 AR	Friedberg, GE 09074	324-3072/3071	M1A1/HMMWV	LTC T.S. James Jr.	CSM Kennedy
	2-37 AR	Friedberg, GE 09074	324-3238/3080	M1A1/HMMWV	LTC R.P. White	CSM Houston
	2 BDE	Baumholder, GE 09034	485-7290	(IN CSL)	COL J.D. Johnson	CSM Ash
	1-35 AR	Baumholder, GE 09034	485-6368	M1A1/HMMWV	LTC R.E. Douglass	CSM English
	1-1 CAV	Buedingen, GE 09076	321-4884	M1A1/M3A2	LTC C.E. Williams	CSM Cooke
	DIV CAV			3 GND X 2 AIR		
	2 BDE	Schweinfurt, GE 09226	353-8728/8679	(IN CSL)	COL R.A. Dragon	CSM Beam
	1-77 AR	Schweinfurt, GE 09226	353-8648/8821	M1A1/HMMWV	LTC D.B. Hubner	CSM Fourhman
	3 BDE	Vilseck, GE 09112	476-2791		COL D.J.H. Pittard	CSM McLane
1-63 AR	Vilseck, GE 09112	476-2527/2767	M1A1/HMMWV	LTC K.H. Riddle	CSM Peters	
2-63 AR	Vilseck, GE 09112	476-2748/2850/2450	M1A1/HMMWV	LTC J.J. Kulp	CSM Bartoszek	
1-4 CAV	Schweinfurt, GE 09226	353-8602/8258	M1A1/M3A2	LTC J.H. Chevallier	CSM Rose	
DIV CAV			3 GND X 2 AIR			
8TH ARMY	1 BDE	Camp Casey, Korea 96224	730-2770		COL A.R. Ierardi	CSM Zettlemoyer
	1-72 AR	Camp Casey, Korea 96224	730-4998/4991/6629	M1A1/HMMWV	LTC C.E. Queen	CSM J.T. Williams
	2-72 AR	Camp Casey, Korea 96224	730-2229/2941/2965	M1A1/HMMWV	LTC N.B. Jocz	CSM Keifley
	4-7 CAV	Camp Garry Owen, Korea 96224	734-2862	M1A1/M3A2	LTC W.V. Hill III	CSM Middlebrooks
	DIV CAV			3 GND X 2 AIR		
PACOM	3-4 CAV	Schofield Bks, HI 96857	(315) 456-9340	HMMWV	LTC T.J. Hansen	CSM C. Taylor
	LT RECON SQDN			1 GND X 2 AIR	(AV CSL)	
25 ID	3 BDE	Ft. Lewis, WA 98433	357-2720	(IN CSL)	COL M. Rounds	CSM Story
	1-14 CAV	Ft. Lewis, WA 98433	357-8532/7494	IAV	LTC J.E. Cashwell	CSM Shover
	1 BDE	Ft. Lewis, WA 98433	357-9331	IAV	LTC M.A. Davis	CSM Egan
	2-14 CAV	Ft. Wainwright, AK 99703-6154	(317) 353-9655	HMMWV	CPT J.A. Coulon	1SG Kimball
I CORPS	TRP E/1 CAV					
	LT RECON SQDN					

<u>III CORPS</u>	<u>Unit</u>	<u>Location/APO/ZIP</u>	<u>DSN</u>	<u>Equipment</u>	<u>CDR</u>	<u>CSM</u>
1 ID (M)	1 BDE	Ft. Riley, KS 66442	856-4014		COL A.W. Connor Jr.	CSM Rilling
	1-34 AR	Ft. Riley, KS 66442	856-5616/4588	M1A1/HMMWV	LTC J.B. Swisher	CSM Noble
	2-34 AR	Ft. Riley, KS 66442	856-9068	M1A1/HMMWV	LTC G.A. Brinegar	CSM Moore
	3 BDE	Ft. Riley, KS 66442	856-5014		COL R.D. Gold	CSM Hopkins
	1-13 AR	Ft. Riley, KS 66442	856-4511/5899	M1A1/HMMWV	LTC F.V. Sherman Jr.	CSM Pring
	2-70 AR	Ft. Riley, KS 66442	856-5820/1036	M1A1/HMMWV	LTC J.D. Ingram	CSM Skidmore
	1 BDE	Ft. Hood, TX 76546	737-0831		COL M.A. Ryan	CSM Hernandez
	1-12 CAV	Ft. Hood, TX 76546	737-0823	M1A2/HMMWV	LTC T.E. Meredith	CSM Lawrence
	2-8 CAV	Ft. Hood, TX 76546	737-3516/4178	M1A2/HMMWV	LTC J.W. Davis	CSM Squabro
	2 BDE	Ft. Hood, TX 76546	737-6560/0702		COL M.D. Fornica	CSM Ciotola
1 AD	1-8 CAV	Ft. Hood, TX 76546	737-0431/7659	M1A2/HMMWV	LTC M.S. Bell	CSM Lee
	2-12 CAV	Ft. Hood, TX 76546	737-0683	M1A2/HMMWV	LTC J.F. Pasquarrete	CSM Booker
	3 BDE	Ft. Hood, TX 76546	737-6701/3930	(IN CSL)	COL K.R. Wendel	CSM Boyink
	3-8 CAV	Ft. Hood, TX 76546	737-1968/1552/7404	M1A2/HMMWV	LTC R.J. Campbell	CSM Small
	1-7 CAV	Ft. Hood, TX 76546	737-2811/9063/3394	M1A2/M3A2	LTC W.R. Salter	CSM Lightsey
	DIV CAV			3 GND X 3 AIR		
	1 BDE	Ft. Hood, TX 76546	738-2886/2840/8434		COL D.M. Campbell Jr.	CSM Wilson
	1-66 AR	Ft. Hood, TX 76546	737-3794/3837/3763	M1A1/HMMWV	LTC R.F. Gonsalves	CSM Moody
	3-66 AR	Ft. Hood, TX 76546	737-3468/3456	M1A1/HMMWV	LTC L.A. Jackson	CSM Keeler
	2 BDE	Ft. Hood, TX 76546	738-7502/2166		COL D.E. Rogers	CSM F. Johnson
1-67 AR	Ft. Hood, TX 76546	738-2083/5988/6583	M1A2 SEP/HMMWV	LTC R. Valdivia	CSM Barnett	
3 ACR	3-67 AR	Ft. Hood, TX 76546	738-1958/3435	M1A2 SEP/HMMWV	LTC M.A. Young	CSM D. Roberson
	1-10 CAV	Ft. Hood, TX 76546	738-7797	M1A2 SEP/M3A2	LTC T.D. Martin	CSM List
	DIV CAV			3 GND X 2 AIR		
	3 BDE	Ft. Carson, CO 80913	691-5132/6755	(IN CSL)	COL F. Rudeshiem	CSM D. Johnson
	1-68 AR	Ft. Carson, CO 80913	691-4567/2777	M1A1/HMMWV	LTC R.G. Piscal	CSM Cheesbrew
	3 ACR	Ft. Carson, CO 80913	691-6445		COL D.A. Teeple	CSM Caldwell
	1/3 ACR	Ft. Carson, CO 80913	691-9668/5159	M1A2/M3A2	LTC W.T. Dolan	CSM Cooper
	2/3 ACR	Ft. Carson, CO 80913	691-2952	M1A2/M3A2	LTC T.L. Green	CSM Teel
	3/3 ACR	Ft. Carson, CO 80913	691-8862/3903	M1A2/M3A2	LTC H.A. Klevenaar III	CSM Thompson
18 ABN CORPS	1 BDE	Ft. Stewart, GA 31313	870-8655	(IN CSL)	COL W.F. Grimsley	CSM Deshield
	3-69 AR	Ft. Stewart, GA 31313	870-4595/4314	M1A1/HMMWV	LTC E.P. Marcone	CSM J. Moore
	2 BDE	Ft. Stewart, GA 31313	870-7663		COL D.G. Perkins	CSM Smith
	1-64 AR	Ft. Stewart, GA 31314	870-7643	M1A1/HMMWV	LTC E.C. Schwartz	CSM Barnello
	4-64 AR	Ft. Stewart, GA 31313	870-7690/7600	M1A1/HMMWV	LTC P.D. deCamp	CSM Oggs
	3-7 CAV	Ft. Stewart, GA 31313	870-7420/7428	M1A1/M3A2	LTC T.R. Ferrell	CSM Berhane
	DIV CAV			3 GND X 2 AIR		
	3 BDE	Ft. Benning, GA 31905	784-4111	(IN CSL)	COL D.B. Allyn	CSM Baker
	2-69 AR	Ft. Benning, GA 31905	784-2211/2856	M1A1/HMMWV	LTC J.R. Sanderson	CSM Fite

<u>Unit</u>	<u>Location/APO/ZIP</u>	<u>DSN</u>	<u>Equipment</u>	<u>CDR</u>	<u>CSM</u>
2 ACR	Ft. Polk, LA 71459	863-0509/2060		COL T.A. Wolff	CSM Blackwood
1/2 ACR	Ft. Polk, LA 71459	863-4585/2502/4412	HMMWV	LTC M.E. Calvert	CSM Morris
2/2 ACR	Ft. Polk, LA 71459	863-8206/8204	HMMWV	LTC J.R. Armstrong	CSM Waters
3/2 ACR	Ft. Polk, LA 71459	863-0884	HMMWV	LTC R.A. Burns	CSM Johndrow
82 AB DIV	TRP A/1-17 CAV	239-9060	HMMWV	CPT F. Carmanlau	1SG Clark
10 MTN DIV(LT)	3-17 CAV (LT RECON SQDN)	341-9052	HMMWV 1 GND X 2 AIR	LTC R.P. Mason (AV CSL)	CSM Troxell
<u>FORSCOM</u>					
JRTC	D/1-509 IN	863-0484	M551	CPT B. Sawyer (IN CSL)	1SG Reed
11 ACR	11 ACR 1/11 ACR(TK BN)	470-3499 470-3706		COL J.A. Moore LTC R.B. Akam	CSM S. Flood CSM Glenister
<u>TRADOC</u>					
1 ATB	1 ATB 1-81 AR 2-81 AR 3-81 AR 5-15 CAV	464-6843 464-6345/7910 464-2645 464-1313 464-8286/8226	M1 M1 M3	COL J.L. Ballantyne IV LTC S.B. Edwards LTC R.W. Symons II LTC T.T. Seidule LTC C.E. Honore Jr.	CSM Green CSM Washington CSM Wilson CSM J. Davis CSM Hester
16 CAV	16 CAV 1/16 CAV 2/16 CAV 3/16 CAV	464-7848 464-7965/4072 464-6654/7481 464-5855	(VEH. SPT.) (AOB/SPLC) (AOAC/CLC) (PCC/BMOC)	COL G.T. Lockwood LTC E.G. Clayburn LTC J.K. Chesney LTC E.S. Glascock	CSM Doan CSM Ashley CSM Colter CSM G. Davis

Marine Corps Tank Battalions

Source: U.S. Marine Corps Detachment – Fort Knox

<u>Unit</u>	<u>Parent Unit</u>	<u>Location</u>	<u>Phone/DSN</u>	<u>CDR</u>
1st Tank Battalion	1st Marine Div	MCAGCC, Box 788260, 29 Palms, CA 92277	957-6793	LtCol J.J. Bryant
2d Tank Battalion	2d Marine Div	Box 20091, Camp Lejeune, NC 28542	751-1851	LtCol M. Oehl
4th Tank Battalion (Reserve)	4th Marine Div	9955 Pomerabo Rd., San Diego, CA 92145-5295	577-8109	LtCol S.L. Dickey &I LtCol R.M. Hanson
8th Tank Battalion (Reserve)	4th Marine Div	439 Paul Rd., Rochester, NY 14624-4790	(716) 247-3330	LtCol M.F. Campbell &I LtCol J.F. Ahern
Marine Detachment Fort Knox		Garry Owen Regt. Rd., Bldg 2372, Fort Knox, KY 40121	464-5950	LtCol E.T. Dunlap

Army National Guard Units

Source: Office of the Special Assistant to the Commanding General (ARNG), Fort Knox

Divisional Brigades

	<u>Brigade</u>	<u>Division</u>	<u>Address</u>	<u>Phone</u>	<u>Fax</u>	<u>Commander</u>	<u>CSM/OPS SGM</u>
1st Army	2d Bde	28th ID	125 Goodridge Lane Washington, PA 15301-0020	(724) 223-4570	(724) 223-4426	COL M. Neeper	CSM T. Honkus
	55th Bde	28th ID	900 Adams Ave. Scranton, PA 18510-1004	(570) 963-4558	(570) 963-3139	COL J. Gronski	CSM V. Conti
	56th Bde	28th ID	2700 Southampton Rd. Philadelphia, PA 19154-1299	(215) 560-6010	(215) 560-6036	COL P. Catlin	CSM R. Curran
	1st Bde	34th ID	107 E. Chestnut St. Stillwater, MN 55085-5115	(651) 297-4355	(651) 297-4453	COL Ostapenko	CSM S. Rannenburg
	37th Bde	38th ID	5999 Airport Dr. NW N. Canton, OH 44720-1483	(614) 336-6040	(614) 336-6066	COL P. Bronsdon	CSM T. Dillon
	46th Bde	38th ID	1200 44th St. SW Wyoming, MI 49509-4399	(616) 249-2741	(616) 249-2740	COL W. Ewald	CSM J. Shipley
	3d Bde	42d ID	27 Masten Ave. Buffalo, NY 14204-1097	(716) 884-2713	(716) 885-1439	COL P. Genevieux Jr.	CSM R. Wishman
	50th Bde	42d ID	Bldg 3654, Florida & Saylor Pond Rd. Ft. Dix, NJ 08640	(609) 562-0608	(609) 562-0625	COL S. Hines	CSM R. Trainor
	86th Bde	42d ID	363 Fisher Rd. Montpelier, VT 05602-8904	(802) 828-2987	(802) 223-4936	COL M. McCoy	CSM D. Labarron
	5th Army	149th Bde	35th ID	2729 Crittenden Dr. Louisville, KY 40209-1199	(502) 637-1250	(502) 607-2650	COL K. Edwards
2d Bde		40th ID	7401 Mesa College Dr. San Diego, CA 92111	(858) 573-7043/7004	(858) 573-7019	COL L. Haskins	TBA
3d Bde		40th ID	240 N. 2d St. San Jose, CA 95112	(209) 550-0339/0341	NA	COL C. Bradfield	CSM B. Mehninger
2d Bde		49th AD	5104 Sandage Ave. Ft. Worth, TX 76115-3799	(817) 923-1010	(817) 924-7018	COL J. Johnson	CSM R. Brownlee
3d Bde		49th AD	1775 California Crossings Dallas, TX 75220-7098	(972) 556-0350	(972) 401-0610	COL D. Blackorby	CSM B. Hendry
36th Bde		49th AD	15150 Westheimer Parkway Houston, TX 77062-1600	(281) 558-1742 ext. 3811	(281) 558-6206	COL E. Spurgin	CSM H. Rigsby III

Separate Brigades

	<u>Brigade</u>	<u>Associated Div/Corps</u>	<u>Address</u>	<u>Phone</u>	<u>Fax</u>	<u>Commander</u>	<u>CSM/OPS SGM</u>
1st Army	30th SIB	24th ID, XVIII Corps	101 Armory Dr. Clinton, NC 28328-9730	(910) 251-7227	(910) 251-7245	BG D. Hickman	CSM L. Morgan
	48th SIB	24th ID, XVIII Corps	P.O. Box 4848 Macon, GA 31208-4848	DSN 468-3319	(912) 751-6202	BG R. Rigdon	CSM W. Kegley
	155th SAB	III Corps	P.O. BOX 2057 Tupelo, MS 38803-2057	(662) 891-9705	(662) 891-9701	COL(P) C. Woods	CSM G. Cowley
	218th SIB	24th ID, XVIII Corps	P.O. Box Drawer 280 Newberry, SC 29108-0280	DSN 583-1620 (803) 806-2013	(803) 806-2040	COL H. Newton	CSM J. Sexton
5th Army	278th ACR	V Corps	POB 10167 Knoxville, TN 37939-0167	DSN 921-3201	(865) 582-3208	COL M. Haston	CSM Pippin
	81st SIB	I Corps	1601 W. Armory Way Seattle, WA 98119-8175	(206) 378-6512	(206) 378-6599	COL(P) O. Hillman	CSM A. Ohler
	116th SAB	I Corps	4650 W. Ellsworth St. Boise, ID 83705-8175	DSN 422-4659 (208) 422-4664	DSN 422-4667	COL(P) D. DeArmond	CSM J. Reeves
	256th SIB	V Corps	1806 Surrey St. Lafayette, LA 70508-2016	DSN 863-1207	(318) 262-1422	BG J. Basilica	CSM J. Mays

Units by State

<u>ST</u>	<u>Unit</u>	<u>Parent Unit</u>	<u>Address</u>	<u>Phone</u>	<u>Fax</u>	<u>Commander</u>	<u>CSM/OPS SGM</u>
AL	1-131 AR	149th Bde, 35th ID	2301 US 231 S. Ozark, AL 36360-9470	(334) 774-8075	(334) 774-2858	LTC R. Byrd	CSM J. Haney
AR	E/151 CAV	39th SIB	591 Hwy 243 Marianna, AR 72360-9604	(870) 295-3355	(501) 212-7858	CPT J. Pfisher	1SG J. Baker
CA	1-185 AR	81st SIB	266 E. 3d St. San Bernardino, CA 92410-4897	(909) 383-4534	(909) 884-7753	LTC K. Lochner	CSM R. Reynolds
CA	2-185 AR	2d Bde, 40th ID	7401 Mesa College Dr. San Diego, CA 92111-4997	(858) 573-7011	(858) 573-7040	LTC T. Swann	CSM R. Pond
CA	1-149 AR	3d Bde, 40th ID	140 Colonel Durham St. Seaside, CA 93955-7300	(831) 393-8407	(831) 393-8406	MAJ(P) M. Malanka	CSM W. Clark
CA	1-18 CAV	40th ID	950 N. Cucamonga Ontario, CA 91764-2999	(909) 983-5998	(909) 983-1174	LTC A. Guiterrez	CSM E. Hackney
FL	E/153 CAV	53d SIB	900-1 SW 20th St. Ocala, FL 34474-3517	(352) 732-1210	(352) 732-1211	CPT R. Kephart	1SG V. Robinson
GA	E/108 CAV	48th SIB	1015 S. Hill St. Griffin, GA 30223-4858	(770) 229-3281	(770) 229-3282	CPT J. Alderman	1SG S. Jones
GA	1-108 AR	48th SIB	P.O. Box 36 Calhoun, GA 30703-0036	(706) 624-1340	(706) 624-1341	MAJ(P) J. King	CSM D. Knowles

<u>ST</u>	<u>Unit</u>	<u>Parent Unit</u>	<u>Address</u>	<u>Phone</u>	<u>Fax</u>	<u>Commander</u>	<u>CSM/OPS SGM</u>
IA	1-113 CAV	34th ID	3200 2d Mech Dr. Sioux City, IA 51111-1348	(712) 252-4347	(712) 252-4348	LTC R. Johnson	CSM W. McCarty
ID	2-116 CAV	116th SAB	1069 Frontier Rd. Twin Falls, ID 83301-3371	(208) 422-7000	(208) 422-7411	LTC G. Thomas	CSM W. Nuttall
IN	E/238 CAV	76th SIB	500 E. Spring St. Bluffton, IN 46714-3738	(260) 824-3328	(260) 824-3199	CPT M.T. Ficcus	1SG R. Spade
KS	1-635 AR	1st Bde, 40th ID	1709 S. Airport Rd. Manhattan, KS 66503-9795	(785) 539-0241	(785) 539-3487	LTC J. Andrew II	CSM J. Romans
KY	2-123 AR	149th Bde, 35th ID	920 Morgantown Rd. Bowling Green, KY 42101	(270) 338-8922	(270) 607-2250	LTC S. Campbell	CSM R. Bogle
LA	1-156 AR	256th SIB	400 E. Stoner Ave. Shreveport, LA 71101-4241	(318) 676-7614/ 7613	(318) 676-7616	LTC J. Marze	CSM G. Sonnier
LA	A/108 CAV	256th SIB	500 Fairgrounds Rd. Natchitoches, LA 71457	(318) 357-3195	(318) 357-3195	CPT M. Williams	1SG E. Reliford
MD	1-158 CAV	29th ID	18 Willow St. Annapolis, MD 21401-3113	(410) 974-7400	(410) 974-7304	LTC P. Burke	CSM J. Duvall
MI	1-126 AR	46th IN Bde, 38th ID	1200 44th St. SW Wyoming, MI 49509	(616) 249-2756	(616) 249-2740	LTC S. Houseal	CSM L. Ott
MN	1-94 AR	1st Bde, 34th ID	4015 Airpark Blvd. Duluth, MN 55811-5793	(218) 723-4769	(218) 723-4876	LTC K. Gutknecht	CSM D. Julin
MN	1-194 AR	1st Bde, 34th ID	1115 Wright St. Brainerd, MN 56401	(218) 828-2392	(218) 828-2524	LTC R. Sackett	CSM D. Hanson
MS	A/98 CAV	155th SAB	2310 Hwy 15 S. Louisville, MS 39339-2310	(662) 773-5331	(662) 773-8583	CPT J. Forsythe	1SG K. Smith
MS	1-198 AR	155th SAB	P.O. Box 158 Amory, MS 38821-0158	(662) 256-3741	(662) 256-5066	LTC L. Journey	CSM R. Coleman
MS	2-198 AR	155th SAB	P.O. Box 278 Senatobia, MS 38668-0278	(662) 562-4494	(662) 562-4232	LTC C. Phillips	CSM J. Detton
MT	E/163 CAV	11th ACR	P.O. Box 4789 Helena, MT 59604-4789	(406) 841-3655	(406) 841-3658	CPT J. Westfall	1SG R. Wood
NC	E/196 CAV	30th SIB	P.O. Box 265 Elizabethtown, NC 28337-0265	(910) 862-3242	(910) 862-3407	CPT R. Bumgardner	1SG J. White
NC	1-252 AR	30th SIB	P.O. Box 64158 Fayetteville, NC 28306-0158	(910) 484-1849	(910) 484-5132	LTC G. Thompson	CSM D. Schawb
NE	1-167 CAV	35th ID	2400 NW 24th St. Lincoln, NE 68524-1892	DSN 279-1750 (402) 309-1750	(402) 309-1783	LTC T. Kadavy	CSM T. Eyley
NJ	5-117 CAV	42d ID	2560 S. Delsea Dr. Vineland, NJ 08360-7093	(609) 696-6702	(609) 696-6798	LTC M. Schuite	CSM D. Kenna
NJ	2-102 AR	50th Bde, 42d ID	550 Rt. 57 Port Murray, NJ 07865-9482	(908) 689-1068/ 1355	(908) 689-0403	LTC F. Duifer	CSM W. Kryscinski

<u>ST</u>	<u>Unit</u>	<u>Parent Unit</u>	<u>Address</u>	<u>Phone</u>	<u>Fax</u>	<u>Unit Commander</u>	<u>CSM/OPS SGM</u>
NV	1-221 CAV	11th ACR	6400 N. Range Rd. Las Vegas, NV 89115	(702) 632-0505	(702) 632-0540	LTC S. Spitze	CSM J. Haynes
NY	E/101 CAV	27th SIB	300 Main St. Geneva, NY 14456-2698	(315) 789-0134	(315) 789-0229	CPT D. Bauer	1SG Steenberge
NY	1-101 CAV	3d Bde, 42d ID	321 Manor Rd. Staten Island, NY 10314-2498	(718) 442-8728	(718) 442-8607	LTC M. Costagliola	CSM F. Gillmore
NY	1-127 AR	3d Bde, 42d ID	27 Masten Ave. Buffalo, NY 14204-1097	(716) 884-3337	(716) 885-1439	LTC C. Pfeiffer	CSM W. Hines
OH	1-107 CAV	2d Bde, 28th ID	4630 Allen Rd. Stow, OH 44224-1038	(614) 336-6778	(614) 336-3782	LTC J. Perry Jr.	CSM Whatmoughy
OH	1-147 AR	37th Bde, 38th ID	68 Shady Brook Dr. Cincinnati, OH 45216	(513) 761-2030	(614) 336-6586	LTC R. Green	CSM L. Shank
OH	2-107 CAV	38th ID	2555 Countyline Rd. Kettering, OH 45430-1506	(614) 336-6690/ 6694	(614) 336-6648	LTC J. Harris	CSM D. Cain
OK	E/145 CAV	45th SIB	319 E. Polk McAlester, OK 74501	(918) 423-0973	NA	CPT M. Harsha	1SG B. Schultz
OR	G/82 CAV	116th SAB	822 W. Highland Ave. Redmond, OR 97756	(541) 548-3213	(541) 548-1456	CPT J. Dimeling	1SG R. Walker
OR	3-116 AR	116th SAB	404 12th St. La Grande, OR 97850-2802	(541) 963-4221	(541) 963-7865	MAJ(P) C. McCabe	CSM J. Brooks
OR	F/82 CAV	29th SIB	350 W. Maple Lebanon, OR 97355-1936	(541) 451-5758	(541) 451-7602	CPT L. Simshaw	1SG G. Black
OR	E/82 CAV	41st SIB	1630 Park Ave. Woodburn, OR 97071-3333	(503) 982-1811	(503) 981-8523	CPT W. Prendergast	1SG M. Storm
PA	1-104 CAV	28th ID	5350 Ogontz Ave. Philadelphia, PA 19141-1693	(215) 329-2622	(215) 560-4169	LTC A. Gray	CSM M. Morte
PA	1-103 AR	2d Bde, 28th ID	565 Walters Ave. Johnstown, PA 15904-1298	(814) 533-2443	(814) 533-2611	LTC P. Logan	CSM T. Wieczorek
PA	2-103 AR	55th Bde, 28th ID	900 Adams Ave. Scranton, PA 18510-1004	(570) 963-4644	(570) 963-3121	LTC A. Stankinas	CSM R. Schimelfenig
PA	3-103 AR	55th Bde, 28th ID	580 US Route 15S Lewisburg, PA 17837	(570) 523-3468	(570) 522-0560	LTC A. Schafer	CSM B. Smith
PR	E/192 CAV	92d SIB	PO Box 1152, Camp Santiago Salinas, PR 00751	(787) 824-7467	NA	CPT D. Davila	1SG W. Borges
SC	B/202 CAV	218th SIB	P.O. Box 1006 Beaufort, SC 29901-1006	(843) 524-4929	(843) 524-0720	CPT D. Mixon	CSM J. McCrackin
SC	1-263 AR	218th SIB	1018 Gilchrist Rd. Mullins, SC 29574-9317	(803) 806-1073	(803) 806-1036	LTC C. Murff	CSM J. Harrelson
TN	1/278 ACR	278th ACR	413 County Rd. 554 Athens, TN 37303-6420	(423) 744-2807	(423) 744-8304	LTC W. Honeycutt	TBD

<u>ST</u>	<u>Unit</u>	<u>Parent Unit</u>	<u>Address</u>	<u>Phone</u>	<u>Fax</u>	<u>Unit Commander</u>	<u>CSM/OPS SGM</u>
TN	2/278 ACR	278th ACR	4401 W. Stone Dr. Kingsport, TN 37660	(423) 247-2278	(423) 247-2399	LTC F. McCauley Jr.	CSM N. Aldridge
TN	3/278 ACR	278th ACR	P.O. Box 2189 Cookeville, TN 38502-2189	(931) 432-4117	(931) 432-6252	LTC J. Gentry	CSM J. Kyle
TX	1-112th AR	3d Bde, 49th AD	700 N. Spring Creek Pkwy. Wylie, TX 75098-6083	(972) 442-4679	(972) 442-4858	LTC M. Campsey	CSM J. Meurer
TX	2-112th AR	2d Bde, 49th AD	2101 Cobb Park Dr. Ft. Worth, TX 76105-2185	(817) 531-8737	(817) 531-3463	LTC C. Mitchell	CSM K. Boyer
TX	3-112th AR	2d Bde, 49th AD	5601 FM 45 S Brownwood, TX 76801-9734	(915) 646-0159/ 8221	(915) 646-0340	LTC R. Neal	CSM D. Bunnell
TX	4-112th AR	36th Bde, 49th AD	1700 E. 25th St. Bryan, TX 77802-1305	(979) 822-9059	(979) 823-2995	LTC M. Alayon	CSM E. Chambliss
TX	5-112th AR	3d Bde, 49th AD	2109 Warren Dr. Marshall, TX 75672-5512	(903) 938-4613	(903) 935-2428	LTC P. Hamilton	CSM J. Merrill
TX	1-124th CAV	49th AD	2120 N. New Rd. Waco, TX 76707-1098	(254) 776-1402/ 1821	(254) 776-5829	LTC W. Smith	CSM A. Craddieith
VT	1-172 AR	86th Bde, 42d ID	St Armory, Fairfield St. St. Albans, VT 05478-1727	(802) 524-7904	(802) 524-7906	LTC M. Lovejoy	CSM M. Larose
VT	2-172 AR	86th Bde, 42d ID	15 West St. Rutland, VT 05701	(802) 786-8800	(802) 786-8017	LTC P. Fagan	CSM K. White
WA	E/303 CAV	81st SIB	622 4th Ave. SE Puyallup, WA 98372-3301	(253) 840-4670	(253) 840-4587	CPT D. Palmer	1SG C. Ulrich
WA	1-303 AR	81st SIB	24410 Military Rd. Kent, WA 98032-4110	(253) 945-1831	(253) 945-1800	MAJ R. Kapral	CSM K. May
WV	1-150 AR	30th SIB	2915 Old Bramwell Rd. Bluefield, WV 24701	(304) 589-3361/ 3362	NA	LTC R. Scarbo	CSM Osborne

TASS Armor Battalions

Region

A	1st AR Bn, 254 Regt	P.O. Box 277 Sea Girt, NJ 08750-0277	(732) 974-5995	(732) 974-5975	COL W. Walsh	CSM Duffer
B	1st AR Bn, 166 Regt	Bldg 10-12 Ft. Indiantown Gap, PA 17003-5002	(717) 861-8240	DSN 491-2809	LTC J. Jahnke	MSG S. Mosholder
C	1st AR Bn, 218 Regt	5411 Leesburg Rd. Eastover, SC 29044-9732	(803) 806-2401	(803) 806-2332	LTC Faxton	CSM Mungo
D	1st AR Bn, 117 Regt	Bldg 638, Vol Trng Site Smyrna, TN 37167	(615) 355-3708	(615) 355-3719	LTC J. Pippin Jr.	MSG D. Schmidt
E	1st AR Bn, 145 Regt	8208 S. Perimeter Rd. Columbus, OH 43217-5930	(614) 336-6443	(614) 336-6447	LTC D. Barbee	MSG S. Mitcham
F	1st AR Bn, 131 Regt	P.O. Box 5218 Austin, TX 78763-5218	DSN 954-5158	(515) 406-6973	LTC R. Casey	CSM L. Wesch
G	1st AR Bn, 204 Regt	5050 S. Junker St. Boise, ID 83705-8150	(208) 422-4850	(208) 422-4860	LTC B. Kelley	MSG D. Treat

REVIEWS

Armored Car: A History of American Wheeled Combat Vehicles by R.P. Hunnicutt, Presidio Press, Novato, CA, 2002, 340 pages, \$95.00 (hardcover).

In the Foreword, General Gordon R. Sullivan (Ret.), states that there is no better time for this book. He has his crosshairs zeroed in on the target as today's Army prepares to field a major force of functionally wheeled armored combat vehicles for the first time in history — the Stryker. These new vehicles are designed primarily for strategic deployability in low- to mid-intensity combat situations.

In Part I, the author begins his developmental history in 1898 with the introduction of Colonel Royal P. Davidson's Duryea light three-wheeled armored car, armed with a .30 caliber Colt machine gun. At first, the vehicles were fitted with a gunshield and later with armor plates. Only a few reached the Mexican border in 1916, but never saw combat. During World War I, a number of armored cars were developed and used by the British and Canadians. The American Expeditionary Force deployed none and, as a result, after the war there was a lack of interest. In the 1920s, the Army evaluated a series of stripped-down commercial vehicles referred to as "cross-country cars," which served with the cavalry's armored car troop as part of the Experimental Mechanized Force in 1928, and in 1930-1931 with the Mechanized Force. In 1931, the first armored car, the M1, was standardized. The vehicle was designed by the Ordnance Department and built by James Cunningham, Son, and Company. The M1 became a prominent part of the Mechanized Cavalry at Fort Knox. One of many interesting developmental histories in Hunnicutt's book is his discussion of the scout car, introduced in 1932 as a light-weight cavalry reconnaissance vehicle. As a result, heavy armored cars were deleted from Army requirements in 1937. The following year, the last M1 was delivered.

In Part II, Hunnicutt depicts the move to the lightweight M8 and M20 armored cars used for reconnaissance during World War II and the ill-fated superior M38. The M38 had greater cross-country mobility due to less weight and an excellent independent suspension system. A general board on mechanized cavalry units was established after the war to analyze equipment and tactics. The board recommended the improved M38 for the post-war Army over the light tank. Instead, Army doctrine gave the role of reconnaissance to light tanks. Subsequently, the Stilwell Board recommended that armored cars be eliminated from future Army requirements. However, the M8 and its variants served with the constabulary in Germany until after the Korean War.

In Part III, the author covers the Cold War period. The war in Vietnam brought about new requirements — a need for an armored car for escort duty and military police work. As a result, the Army turned to a commercial source.

In Part IV, the book details an interesting history on efforts to improve cross-country mobility with the Lockheed Twister, an interesting but inauspicious vehicle. The Army, however, was more interested in a track vehicle for scout and reconnaissance purposes. This part of the book also depicts various experimental programs and the development of the high-mobility multipurpose wheeled vehicle (HMMWV) to replace the jeep. In addition, there is considerable historical information supported by numerous pictures on the development of the light armored vehicle (LAV) adopted by the Marine Corps. In the fall of 1999, an Army transformation program was announced with emphasis on wheeled combat vehicles. The author effectually moves his picture-documented history through this developmental process that eventually produces the Stryker variants. This time, the wheeled combat vehicle was designed for prompt force projection in full-spectrum operations. Concluding, Hunnicutt states "at long last, the wheeled combat vehicle will have a major role in the U.S. Army."

Armored Car is timely and a must read to understand the wide variety of vehicles developed by the U.S. military to satisfy user demands leading up to today's debate over strategic, operational, and tactical mobility. The book's organization will easily satisfy readers, including the arrangement of numerous interesting pictures and the references and research data. The view drawings by Michael Duplessis are an improvement. *Armored Car* is the last of 10 monumental volumes and worth the cost. In our lifetime, it is doubtful that a military historian will reach the depth of Hunnicutt's developmental history of American fighting vehicles.

GEORGE F. HOFMANN, PH.D.
History Professor
University of Cincinnati

Eisenhower: A Soldier's Life by Carlo D'Este, Henry Holt & Company, New York, 2002, 848 pages, \$35.00.

Carlo D'Este has again produced a comprehensive, well documented military history to join his *Decision in Normandy*, *Fatal Decision*, and *Patton*, among others. With 100 pages of notes, 21 major primary sources, and 10 pages of secondary sources, this is a serious work of history. The professional military historian or soldier should consider *Eisenhower* a must read, however, it may be a bit much for recreational readers. D'Este thrives on detail, particularly concerning Eisenhower's relationships with his family, his mentors, the leaders of World War II, and his subordinates.

Eisenhower's family was generally antiwar and certainly less than enthusiastic about his choice of career. His brothers were type A personalities with differing goals and ambitions, which meant that they were seldom close to Dwight. His wife, Mamie, came from a wealthy Denver family, which did nothing

to prepare her for the hardships of Army life. When the going got tough, Mamie went home to her parents. She also spent much of World War II writing self-absorbed, whining letters; this reached a peak following John's graduation from the Military Academy. She wanted to ensure that John would not serve in combat even though he was an infantry platoon leader.

Eisenhower's mentors, particularly Fox Conner, Douglas MacArthur, and George Marshall, were the best of the best. Marshall, who was a deft talent spotter, was to become the most important of these. Major Dwight David Eisenhower made the pages of his famous black book, along with most of the Army's top World War II leaders. D'Este points out that Eisenhower was anything but the reluctant warrior seen in previous biographies. He was a very ambitious officer who, after spending World War I training troops in the United States, said "By God, from now on I am cutting myself a swath and will make up for this." He, of course, did just that, finishing number one at the U.S. Army Command and General Staff College, and following his stellar performance during the Louisiana Maneuvers, becoming George Marshall's chief of war plans. This set the stage for his moving from lieutenant colonel to general in just over 16 months, and receiving his fifth star less than 2 years later.

Winston Churchill and Eisenhower maintained a healthy respect for each other throughout the war, although Eisenhower spent a great deal of time struggling against the Prime Minister's more innovative strategic initiatives, including his Balkan strategy, which seemed unabated even as the war drew to a close.

Bernard Law Montgomery was perhaps the most serious cross Eisenhower had to bear, especially after D-day. Montgomery, perhaps the most overrated general of World War II, constantly campaigned to take over command of allied ground forces from Eisenhower, while failing to take Caen on D-day (a D-day objective in his own plan — finally captured in late August), failing to close the Falaise Gap, failing to clear the Scheldt estuary (which might have significantly improved the logistics situation by opening the port of Antwerp), and most significantly, failing to succeed with Market-Garden. Montgomery's performance, or lack thereof, and Eisenhower's failure to relieve him, may have added months to World War II in Europe. Another serious adverse impact on SHAFE logistics, as D'Este points out, was Eisenhower's chief logistician J.C.H. Lee. Although Eisenhower was never happy with Lee's performance, he failed to replace him. An example of Lee's incompetence can be seen when he moved his headquarters from Normandy to Paris (using hundreds of trucks and thousands of gallons of gasoline), while Bradley's Army Group was stopped cold for lack of fuel.

Omar Bradley was an Eisenhower favorite, but even he was frustrated by his treatment

from his superior, specifically by the logistics priority given to Montgomery when 12th Army Group's way to Germany was wide open.

Bradley was also more than unhappy when Eisenhower gave all of 12th Army Group's troops, except the 3d Army, to Montgomery during the bulge. His long friendship with George Patton, was initially strengthened when Patton took over II Corps in North Africa from Lloyd Fredendall after Eisenhower waited far too long to relieve him. This, plus Patton's performance in Sicily, would have assured command in France if it had not been for the soldier-slapping incident, which unfortunately created problems for Eisenhower that were not appreciated.

D'Este does nothing to clear up the enigma of the relationship with Jacob Devers, the commander of the 6th Army Group. Eisenhower did not like him, and there are strong indications that the feeling was mutual.

Don't expect D'Este to clear up Eisenhower's "special relationship" with Kay Summersby. D'Este clearly believes their relationship was platonic, but he does little to support this position, except to note that her London lover was Major Dick Arnold (USMA 32), while she remained married to Lieutenant Colonel Gordon Summersby, who was serving in India.

D'Este paints a picture of Eisenhower as an intensely ambitious and self-confident officer with a fiery temper who was universally regarded as a smart, efficient, well-organized staff officer. However, such diverse observers as MacArthur, Montgomery, Bradley, and Patton seriously questioned his command ability.

Every book has a few shortcomings and this one is no exception. D'Este tends to occasionally leave the reader concerned about chronology as he skips back and forth in time and space with abandon. D'Este also tends to draw on many other authors' work quite frequently, which, at times, makes it difficult to follow the analysis and to determine whose work is whose.

The book ends relatively abruptly with the end of World War II in Europe. Perhaps this means that D'Este plans a second volume to cover Eisenhower's post-war activities. If so, it could fill the same void for that period that this tome does for World War II.

DAVID L. FUNK
BG, USA, Ret.

A Command Post at War, First Army Headquarters in Europe, 1943-1945 by David W. Hogan, Jr., U.S. Army Center of Military History, Washington, DC, 2000, 360 pages, \$40.00. Available online at <http://bookstore.gpo.gov/sb/sb-098.html>, S/N 008-029-00345-7

A Command Post at War is a new offering from the Center of Military History, which examines an area of military historical study

that has previously received little notice — the organization and workings of a higher level headquarters during conflict. Hogan's study specifically looks at the headquarters of First U.S. Army during its European campaign in World War II. Officers currently serving, or who expect to serve, on higher level military staffs should take note that this is a book worth their time.

At first glance, much of Hogan's material seems very familiar. After all, much has been studied and written about the western European Theater of World War II, and Hogan repeats much of that familiar story here. However, most of what has been written about the U.S. Army's war in Europe has told the story of Patton's Third Army, or provided the lofty perspective of General Eisenhower's SHAPE headquarters.

Hogan offers a slightly different perspective for those whose view has been colored by the emphasis placed on Patton's exploits or combat accounts at the tactical level. Hogan reports about the war in western Europe by relating the experiences of an Army staff, that had to cope with difficult operational, administrative, and logistical details to successfully bring thousands of soldiers and pieces of equipment across hundreds of square miles. And, because he writes about the First Army, the familiar story includes vignettes and characters about which readers may have less knowledge. First Army planned and executed the American part of the Allied invasion of German-held France, and then conducted operations in conjunction with other American and Allied armies. How well the Army commander and staff did this is the basis for Hogan's story.

The First Army staff included many II Corps veterans from the North Africa and Mediterranean campaigns, brought to England by General Omar Bradley, where they joined First Army staff members from stateside. This mixing created tension that Hogan argues never completely dissipated. In addition, several staff principals, including the Army G2 and G3, did not always get along. These petty animosities and jealousies affected how well the staff worked together, and thus, influenced how well the Army performed in operations. Hogan's portrayal of these officers, including Army commander Courtney Hodges, is not always complimentary. Nonetheless, Hogan argues that the Army performed competently, if not always brilliantly, during its operations. In some cases, like the final offensive after seizing the Remagen bridgehead, First Army's exploits rivaled anything done by other American armies during the war.

As our Army copes with similar problems in regional conflicts or operations other than war, staff officers may glean valuable lessons or insight from the experiences that Hogan records here. This well researched and written story of the First Army offers excellent insight into the complexities of running a large military headquarters in the midst

of conflict. While many of his observations may not surprise seasoned staff officers, Hogan's conclusions will confirm what many of us have learned from personal experience: that personal relationships and the commander's persona greatly influence the performance and, therefore, the success of a military organization. This book will certainly interest military historians and students with an interest in World War II, and should be given serious consideration as a study assignment for student officers in the Command and General Staff College.

STEVEN C. GRAVLIN
LTC, Armor, Ret.

The Secrets of Inchon: The Untold Story of the Most Daring Covert Mission of the Korean War by Commander Eugene Franklin Clark, U.S. Navy (Retired), G.P. Putnam's Sons, New York, 2002, 325 pages, \$26.95.

This book, a remarkable narrative by a true hero of the "Forgotten War," details an operation conducted by the author, Commander Eugene Franklin Clark, prior to the amphibious landing at Inchon. Working in concert with two Korean officers, Clark spent 2 weeks, prior to the decisive battle of the Korean War, conducting invaluable amphibious reconnaissance and leading untrained villagers in commando raids on local communist forces. In a manuscript written for his family and published after his death, Clark weaves a readable tale that if presented as fiction would be hardly believable, yet describes a mission as daring, heroic, and strategically important as any in the history of the first major armed conflict of the Cold War.

The author, a World War II mustang, describes his mission in gripping detail, from planning and preparation, to his team's extraction shortly before the start of the invasion. While Clark is extreme in his modesty and effacement, his unspoken bravery and unwavering devotion to accomplishing his mission is clear. As the days go by after his team's insertion, Clark expertly enlists local villagers to aid in accomplishing his mission. Retaliatory communist incursions into the village grow in size and intensity for the duration of his mission, ending only with the arrival of the extraction force.

From clandestine reconnaissance, to organizing indigenous forces, to wartime governance of occupied territory, Clark's work could be read as a guerrilla warfare how-to manual. An invaluable addition to every warrior's library, this memoir should be a must read for anyone seeking insight into unconventional warfare, and the ability to overcome extreme adversity and personal hardship to accomplish the mission.

SGT MICHAEL A. ROSS, USMCR
World Basic Information Library
Foreign Military Studies Office
Ft. Leavenworth, KS

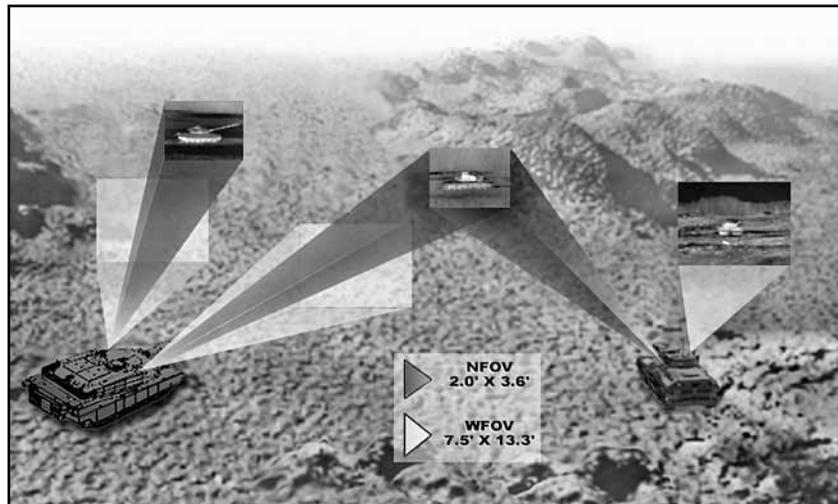
Fort Hood Unit Receives 1000th SGF

Company C, 1st Battalion, 8th Cavalry Regiment, 1st Cavalry Division, Fort Hood, Texas, recently received the 1000th fielded Second Generation Forward Looking Infrared (FLIR) imaging device with their new M1A2SEP Abrams tanks. The Second Generation FLIR (SGF) can see through smoke and haze, and twice as far as the First Generation FLIR. The tanks equipped with the new SGF can acquire and identify targets at greater distances, which enables the crew to have hunter-killer capabilities, allowing the gunner to engage targets in one direction, while the tank commander simultaneously looks for additional enemy targets.

Through a program called Horizontal Technology Integration, the electro-optical components that make up the SGF are used in the night systems for four key weapons platforms: the M1A2SEP Abrams tank, the M2A3/M3A3 Bradley Fighting Vehicle, the Line of Sight Antitank platform, and the Long Range Advanced Scout Surveillance System, which is currently deployed in Kosovo and Afghanistan. This technology ensures key battlefield improvements to the combined arms team, providing a common battlefield picture to the warfighter and ensures logistic supportability.



The diagram at right shows the trajectory for the SGF wide and narrow fields of view. Above right, a view of a woodland through the SGF.



ARMOR

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