ARMOR

January-February 2004

Dismounted Combat Tankers

ARMOR

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Features

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Once More Unto the Breach

Another new year has arrived. I want to thank all our readers and contributors for supporting *ARMOR* and the U.S. Armor Association. I believe our magazine is the finest, most relevant professional journal available. Since 1888, when *ARMOR*'s predecessor, *The Cavalry Journal*, began publication, this magazine has been at the forefront of all professional journals, and it is my intent to raise the bar.

With that, we can't sit on our laurels and pat ourselves on the back. It has been over 20 years since *ARMOR*'s last reader survey. In this issue, we have developed a survey requesting your input to make this journal an even better forum. Please take the time to answer the survey and mail it in or visit our website at *www.knox.army.mil/survey/armormagazinesurvey*. From your own computer, you can complete the survey and, with the click of a mouse, submit it. Technology is great.

Operation Iraqi Freedom introduced the need in our Army and armor forces for dismounted combat tankers. Our armor and cavalry units have quickly adapted to the mission, enemy, terrain, troops, and time available (METT-T), and have shown once again that tankers and cavalrymen know how to respond and overcome asymmetrical threats and nontraditional battlefield operations, and do so effectively.

In light of our ever-changing environment, leaders at the U.S. Army Training and Doctrine Command (TRADOC), the Armor Center, and the 1st Armor Training Brigade should be commended for their efforts in implementing changes after a thorough review of both basic combat training and one-station unit training based on lessons learned from ongoing operations and feedback from the field. The goal is to improve the training in these courses to better prepare new soldiers for joining an "Army at war" by incorporating more field and weapons training. This is great news for our units that are preparing for duty in Iraq and in line with Chief of Staff Army, General Peter J. Schoomaker's intent that all soldiers are to be proficient in basic soldiering skills.

In his article, "Successful Scout Mounted Infiltration," Major Kent Strader addresses the importance of the battalion staff in preparing scouts for mission and combined-arms infiltration training techniques. His article is an excellent reminder of the importance of staff interaction in planning combat operations.

Captain John Nalls' article, "A Company Commander's Thoughts on Iraq," offers his observations on soldiering in Iraq from a company commander's perspective. His experiences, along with his profound and matter-of-fact approach, provide a valuable and keen insight for units preparing to deploy to Iraq or other combat zones.

As mentioned earlier, prior to OIF, the term "dismounted tanker" was an almost sacrilegious thought. But the current contemporary operating environment in Iraq has changed that mentality. Captains Donald Stewart, Brian McCarthy, and James Mullin dispel the myth and offer their perspectives on the necessity of dismounting armor crewmen in their article, "Task Force Death Dealers: Dismounted Combat Tankers."

Stability and security operations continue in Afghanistan and as part of that, the armor community is contributing its expertise at training and shaping the Afghan National Army tanker corps. Captains Jonathan Byrom and Aaron Parker coauthor, "The First Afghan National Army T-62 Tank Gunnery," and describe the trials and tribulations they went through in training this new Afghan army unit.

Not since Vietnam has the U.S. Army been involved in so many large combat operations around the world. War is hell and full of unpredictable situations, but what differentiates us from many other nations is our Army's professionalism and obeying the law of land warfare. Major Dennis Chapman's timely article, "Treachery and Its Consequences: Civilian Casualties During Operation Iraqi Freedom and the Continued Utility of the Law of Land Warfare," reminds us of the importance, no matter how treacherous the enemy acts, of following the rule of law as it pertains to combat operations. Civilian casualties are unfortunate and sometimes an unpreventable by-product of war. We must do our best to mitigate these tragedies and not allow ourselves to be drawn down our enemy's path.

Task Force1-64 Armor learned many lessons during combat operations against Iraqi military and paramilitary Fedayeen forces. On their return to Fort Stewart, Georgia, 1-64 Armor immediately implemented changes in their training strategy by incorporating lessons learned on the battlefield. One of the major lessons that leaders learned was in tank gunnery. In their article, "1-64 Armor's Rogue Gunnery Training Program," Lieutenant Colonel Eric Schwartz, Major Daniel Cormier, and Staff Sergeant Bobby Burrell address how 1-64 Armor has modified tank gunnery to enhance the unit's preparation against future asymmetrical threats.

That's all for now. Please continue to support the magazine and the U.S. Armor Association by writing and providing feedback. *ARMOR's* success is completely driven by its readers. Keep up the great work in defending this Nation. – DRM

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LETTERS

Hayes and Charlton Commended

Dear *ARMOR*,

In the November-December 2003 *ARMOR*, Captain Brian Hayes, "Simplifying the Heavy Brigade/Task Force Operations Order," identifies a true problem in the era of rapid movement of forces on the digital battlefield. He correctly identifies the growth of the long complex order being the requirements at the National Training Center. Unfortunately, he does not clearly suggest a solution!

Let me suggest that subsequent to an initial situation briefing and terrain appreciation almost all subsequent operations will be done by a fragmentary order (FRAGO). The requirement then produces both FRAGOs and situation reports that can be displayed in the turret of the subordinate leader's armored vehicle. LTC Charlton suggests one solution in his article, "Digital Battle Command: Baptism by Fire." He suggests a revamping of the mission data loader (MDL). The MDL's modernization could go beyond Charlton's suggestion. It could include dynamic sequenced overlays that reflect the commander's intent and scheme of maneuver. There should also be the ability to continually update a synchronization matrix based on the flow of the battle. This would provide the situational awareness on current status of enemy and friendly units, in addition to anticipated branches and sequels to the basic plan. These branches and sequels then could become the basis of the FRAGOs mentioned before.

Both Hayes and Charlton are to be commended for their efforts and if they were to collaborate on a solution, the Army could have a much more user friendly command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) system.

COL BRUCE B.G. CLARKE
U.S. Army, Retired

1-35 Armor First to Air Land M1A1s

Dear *ARMOR*,

I read with interest Major Maddox's article, "Checkmate on the Northern Front," in the September-October 2003 issue of *ARMOR*. Although it was an interesting and informative piece on the deployment of Task Force 1st Battalion, 63d Armor, I would like to suggest one correction. Major Maddox states that this was the first time an M1A1 had air landed in support of combat operations. I would suggest that 1st Battalion, 35th Armor, stationed in Baumholder, Germany, has that distinction. Charlie Company, 1-35 Armor, as part Task Force Hawk, air landed a company of M1A1 tanks twice in support of combat operations in the Balkans. Charlie Company left Ramstein Air Force Base and landed in Tirana, Albania. Charlie Company then landed in Skopje, Macedonia, and led ground forces into Kosovo as part of Task Force 1-6 Infantry.

EDWARD L. COX
CPT, U.S. Army

Altieri Takes Hostile Fire

Dear *ARMOR*,

Major Altieri invited us to fire when ready and I'm sure many have. He points out that infantry and medics don't have the protection of several inches of armor — the bad guys don't fire 125mm APDS rounds at grunts, either — that argument is pretty specious. I don't see where improving the morale of tankers and scouts will hurt the morale of infantry — I earned an expert infantry badge during my 5 years in the infantry and wear it with pride — I earned something during my 15 years in armor and would like to wear *that* with pride as well. (I managed to be in the right place at the right time, and in 3 years of Regular Army service and 31 years of National Guard, I never heard a shot fired in anger. But if I had heard one, it probably would be just one, because I was well within the circular area of probability and radius damage of anything the Group of Soviet Forces, Germany, cared to shoot at the 530th and 559th Field Artillery Missile Battalions, and if Ivan came over the line, he would have shot something *big* at them, since their job was to shoot something *big* at him.)

We don't have colored piping on our overseas caps any more, as a matter of fact, I guess we don't have "overseas" (I won't use the more common name) caps any more, so I feel every armed service should have an expert whatever badge similar to the EIB, in the branch color, with a representation of the symbol of the branch — good motivation to learn and *do* your job, whatever it may be, to the best of your ability. And if you come under hostile fire, a silver wreath should surround the badge — you don't have to be Brand X to get shot at, ask Jessica Lynch.

With all due respect, I'd also like to remind Major General Tait that the colors red and white are the colors of a cavalry guidon, just as dark blue and white are the colors of an infantry guidon. Dark blue is not infantry's color — I believe it's officially "robins' egg blue" — like on an infantry shoulder cord or a CIB or EIB; and red and white are not cavalry's colors — "around her neck, she wore a red-and-white ribbon," might be hard to write music to. And a yellow guidon would be just as hard to see against the setting sun during a retreat parade as light blue against a beautiful clear sky.

The next order may move to the firing line.

MSG CARL A. PAVEL
U.S. Army, Retired

Dear *ARMOR*,

I read Major Jayson Altieri's letter with interest regarding the combat tanker badge in the November-December issue.

I must admit he made some valid points. Among them that Sergeant Graves could have chosen to enlist in the infantry branch. I will note that the biggest reasons given by my infantry friends as to why they want nothing to do with tanks usually involves comments about "iron coffins" or the "biggest targets on the battlefield" (many haven't checked the height of the Bradley, apparently). Following his logic, however, the majority of infantrymen in recent actions no more qualify for the CIB than do tankers. Time away from their vehicles is primarily devoted to maintenance, observation posts, chow, and local security. This is not to disparage or belittle their heroism, but I ask does it really involve more courage to charge (run) across a field to assault a position, than it does to deliberately move out and draw tank/antitank fire so your buddies can pick off the shooter? Is it necessary to put a measure on either?

Strictly speaking, following Major Altieri's logic, the only infantrymen that qualify for a CIB would be those assigned as dismounts, in a mechanized unit, or to the 10th, 25th, 82d, or 101st divisions. More to the point by the original standards, only those soldiers in those units who spent 30 days or more in actual combat (define that please) would qualify. On the other hand, how about the cavalry, armor, artillery, or (yes) even quartermaster soldiers who are patrolling the streets and fields of Iraq?I think I understand General Shinseki's logic with the beret; it involves inclusion and appreciation of the total Army. I do not claim to know what General Marshal's intent was when the award was established (reference: Major General Tait's letter). Perhaps Lieutenant General Reno can enlighten us. But it seems to me that in line with General Schoomaker's "every soldier is an infantryman" effort, that, at minimum, soldiers who meet all the criteria of the award, except for MOS, be awarded 11B as a secondary MOS, with service in that MOS for the period of the award and the CIB be granted for that service. Would this "reduce the value of the award"? I would say that the standards for granting it are clearly different today than they were in 1944 or 1968, but that does not mean today's infantryman is less deserving. I do not think so. So perhaps there is room (and reason) to be more inclusive with the original award, rather than create a separate award for each branch.

A retired command sergeant major told me that if you were not Airborne, you were not really in the Army. I understand the pride from which that comes, but can we afford, in this modern smaller Army, to continue to foster these attitudes, which serve to tear down comrades rather than build each other up. This may be the more important question.

1SG TERRY FOLSOM
U.S. Army, Retired

Dear *ARMOR*,

I have written on the subject of a combat tanker badge numerous times over the past 12 years, with my letters appearing in *Army Times*, *Stars and Stripes*, and *ARMOR*. Given my interest in the topic, I was gratified to see the historical background of the issue covered so impeccably by CPT Shawn Monien in his article, "Reinstating the Combat Tanker Badge" (*ARMOR*, September-October 2003). Having said my peace so many times in various fo-

rums, I was not inclined to offer further comment. I quickly changed my mind however, after reading through the "Letters" section of the November-December edition of *ARMOR*. Three letters concerning the combat tanker badge appeared in this section and I'd like the opportunity to address the authors of each one.

First, as a tanker who fought during Desert Shield/Storm, I'd like to express my personal gratitude to retired Major General Thomas H. Tait. Sir, your efforts to secure that which members of our branch have rightfully earned and long deserved are much appreciated. As a lieutenant writing to *ARMOR* 12 years ago, I was unaware of the campaign you were waging on behalf of the badge. A much belated thank you, sir, for the good fight you fought then and for keeping up the fire now.

Retired SGM Healy, with respect, I hope that your prediction concerning awarding the badge proves incorrect. I have always contended that awarding the badge should be retroactive. The badge is an outward symbol of the direct-fire contribution that our branch makes to every hostile engagement the Army fights as a combined arms team. That contribution began 85 years ago on 12 September 1918, when the first American tanks took to the field of battle at St. Mihiel, France, and has been maintained by tankers and cavalrymen since.

In the paragraph above, I used the words "rightfully earned and long deserved" with a particular intent. The recognition due to the soldiers of the Armored Force has no "shelf life," nor should an artificial one be contrived and instituted. Consider for a moment the American tanker who faced Tigers in his hopelessly outgunned M4 during the Normandy breakout. How about the Korean War tanker who pushed his M26 to the banks of the Yalu with scores of Red Chinese in front of it? What about the M48 tanker or the ACAV crewman who escorted convoys along Highway 1 in Vietnam while nursing a transmission weak from "jungle busting" in pursuit of an elusive foe? Can anyone honestly say that their contributions are less worthy of recognition because time has elapsed?! These individuals built the reputation the Armored Force enjoys today and are as equally entitled to the badge as the contemporary tanker and scout, if not more so. On reinstating the combat tanker badge, every effort should be made to ensure our comrades from previous conflicts receive what they have earned.

MAJ Altieri, your comments indicate that you do not truly understand the issue at hand. In regards to CPT Monien's article, your comments strike me as non-sequitur and I'd encourage you to reread his article. This is not a question of who faces the greatest danger with the least amount of protection. Were this the case, we'd be well advised to supplement the CIB with an award for those who opt to go into battle wearing nothing more than a pair of boxer shorts and carrying a slingshot. If "protection" or, more precisely, the lack thereof, was the all-important criterion, then by your own logic, the mechanized infantryman who fought from a Bradley should be stripped of his CIB. After all, he had the "benefit of several inches of steel," as well as the "benefit of some type of mechanization." Of course, no one wants to see that happen. However, if mere vulnerability were the issue, I'd submit that a tank has more weapons systems pointed at it in a fight than nearly anything else on the battlefield.

The issue is recognizing participation in direct-fire, ground combat through a specific uniform device. The badge indicates the wearer's personal contribution to that unique form of armed conflict. A combat patch indicating, "I was there," is simply not enough for those at the tip of the spear. As you so accurately pointed out, each of us had a choice as to what we signed on to do in the Army. Many of us opted for combat arms — those that close with and destroy the enemy. While not detracting from the considerable contributions of other branches toward this end, their efforts are conducted in *support* of combat operations; the essence of what we do in this profession is defined by combat arms. If we see fit to recognize one branch that engages the enemy on the ground with direct fire, we need to recognize all branches that have this as their primary battlefield role.

As a final note MAJ Altieri, I question the motivation of anyone who would deny recognition of achievement to those who have rightfully earned it. This is particularly curious when it comes from an individual who is not a member of either of the branches immediately affected by this issue. Allow me to be a bit more magnanimous than others have been: I gladly support branch-specific combat badges for each of the combat arms — armor, infantry, field artillery, air defense artillery, aviation, engineers, and Special Forces. The contributions rendered on the battlefield by the soldiers of these branches deserve special recognition.

RONALD J. BASHISTA
MAJ, U.S. Army

More Badge Comments

Dear *ARMOR*,

Perhaps I can shed a bit of light on the disparate nature of expert and combat badges. One of the key reasons why there are so many infantry-type badges, and virtually none for anyone else, has its roots in World War II. Late in the war, General George C. Marshall bemoaned the fact that few men wished to join the ranks of his beloved infantry. Quite frankly, I find this humorous to a degree, since as the Army Chief of Staff, one would think he could have ensured that sufficient manpower was steered to the infantry. Instead, the way to bring incentive to the PBI (poor, bloody infantry) was to give them a series of distinctive badges to enhance their status. Only over the years have other branches been grudgingly granted a few badges of their own. As serious competitors to the PBI, armor and armored cavalry soldiers have been neglected. Until the U.S. Army has a Chief of Staff with an extensive armor background, this will not change.

ANONYMOUS

Army Transformation Done Right

Dear *ARMOR*,

As the Army continues to pursue rapid transformation, the solution is at hand here and now. The foundation has long since been laid and the project can be completed almost immediately. The solution lies in exploiting our successes in command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) and begins with converting heavy divisions and heavy separate brigades into Armored Cavalry Regiments.

Regarding a lighter, more deployable and sustainable force — we're there! The transformed current force was demonstrated during Operation Iraqi Freedom. We just haven't noticed it as we confuse light forces with light vehicles.

Since the early 1980s, armored family of vehicles (AFV), heavy force modernization (HFM), and armored systems modernization (ASM) were all simplistic modernization approaches of one-for-one swaps with lighter equivalent systems. Their focus on commonality, while trading off capabilities (limited by technologies), guaranteed unaffordable failures.

Those dead-end efforts and even the still-ongoing Stryker Brigade Combat Team (SBCT) have been overcome by events. War came and, like a decade ago, we deployed the heavy divisions. Only this time, the Current Force exploited its advanced C4ISR to confidently deploy a dramatically smaller force. Instead of deploying corps, our heavy divisions sufficed. Situational understanding and precision maneuver achieved efficiency. The Army needs to quit lamenting the logistics cost of sustaining the most lethal, survivable, and maneuverable force on the planet just because the vehicles are heavy — they are "war winners."

Regarding organizational changes — let's do it! The Army has spent decades evolving into Division '86, Army of Excellence (AOE), Force XXI, Mobile Strike Force, Conservative Heavy Division, Army After Next (AAN), and so on. Although combat capability obviously improved through new equipment, the organizational changes were little more than shuffling around subunits. Aside from new equipment (especially aviation), today's heavy division looks much like its WWII ancestor. Even the yet-evolving future combat system (FCS) units of action/units of employment (UA/UE) are simply conventional brigades, divisions and corps, only under new names. What is constantly being sought but never resolved is creating a smaller (brigade-sized) unit with robust combat power and extreme flexibility.

For once, let's try something that we know can work; something that we already have. The Armored Cavalry Regiment (ACR) is the most flexible and potent combat organization we have. It is structured for independent operations over a large area, yet can concentrate tremendous combat power. It is far leaner and yet more lethal than any comparably sized brigade.

The ACR has three cavalry squadrons, an aviation squadron, and a support squadron,

along with regimental chemical, engineer, air defense artillery, and military intelligence companies.

Each cavalry squadron has 3 cavalry troops (9 tanks and 13 cavalry fighting vehicles), a tank company (14 tanks), and a field artillery battery (6 155mm SP). This is the equivalent of a full tank battalion, a full infantry fighting vehicle (IFV) battalion, and a field artillery battery.

Accordingly, even though it has less than 5,000 soldiers, the ACR has the equivalent of three tank battalions, three IFV battalions, a field artillery battalion, and an aviation battalion. Except for the limited artillery, this is twice the combat power of a divisional brigade and is as large as a World War II armor division! Deploying two ACRs together would provide about the same combat power as an entire heavy division while staying below 10,000 soldiers.

The best part is that we know exactly what an ACR is. We have the doctrine, organization, training, materiel, leader development, personnel, and facilities (DOTMLPF) already in place. We know what sort of corps augmentation is needed for tailored and sustained operations. The modular common structure of the various platoons, troops, and companies allow for rapid conversion from existing tank and mechanized battalions and separate companies. Leader development at squadron level and above needs to be intensive, but so what else is new? In fact, isn't that the way it should be?

As an initial step, we should modify existing divisional cavalry squadrons to mirror the organization of regimental squadrons. Adding a tank company and a field artillery battery is an easy first step and leads to doctrinal and organizational commonality. As the conversion of divisions begins, cavalry squadrons can become the cadre or, if needed, elements of the initial deploying cavalry regiment.

Of course, there will be numerous "adjustments" to be considered. Unlike a regimental squadron, the division cavalry squadron has two air recon troops and an aviation service troop. I suggest that they remain until the division cavalry is assigned to a regiment, at which time the aviation assets will either join the new regiment's aviation squadron or revert to the parent division's aviation brigade.

Adding an infantry (mounted rifle) platoon (4 IFVs) to each cavalry troop may be desirable. The total increase to the regiment is 9 platoons of 36 IFVs and about 320 soldiers.

As units convert to ACR structure, brigade recon troops (BRT) of heavy divisions and scout platoons of tank and mechanized battalions become redundant and are a ready pool of trained cavalrymen.

At some point, sooner rather than later, we must also consider (again) a light ACR and squadrons (with emphasis on "A" for "armored"). This is easiest of all, since the 2d ACR (Light) is undergoing conversion plans right now. Just do it. Throw out the never-ending, ever-expanding draft operational and organizational concept and simply use existing doctrine and structure, but substitute light vehicles. Where the ACR has Abrams tanks, substitute Bradleys now as a "page-holder" until a light tank or armored gun system is available. Where the ACR has Bradleys, insert armored personnel carriers or Strykers until a future recon scout vehicle is available. The remaining regimental and squadron units remain identical. DONE!

Really — it's that simple! Pump the bellows and get the fire hot! Forge that transformed thunderbolt!

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

The Light M1 for Light Divisions

Dear *ARMOR*,

A light M1 is not a perfect solution, but such a vehicle can be in units in less than 60 days:

Take the first production series 105mm-armed M1 tank (shorter turret) and remove the special armor package and side skirts to create a tank with a weight of 50 tons or less. Equip three battalions with the light M1 — the 82d Airborne, 101st Air Mobile, and XVIII Corps. This provides the U.S. Army a tank with no capital expenditure, no new training for tank crewmen, no new maintenance training, all parts in the inventory, larger amount of onboard main gun ammo, more types of main gun rounds, and two of these light tanks can be carried in a C5. The empty special armor pockets can be used for additional storage, or armor packages can be shipped separately for field installation. The light M1 will have lower survivability, less firepower than the 120mm, and cannot be air dropped. The one training issue will be crews having less protection against direct fire attack.

CHRIS SCHNEIDER
U.S. Army, Retired

Corrections

In its November-December issue, *ARMOR* printed the Army National Guard Unit List on page 46. While compiling the unit lists, one unit was inadvertently overlooked. We apologize for the oversight and thank Lieutenant Colonel Walter Lord for bringing this to our attention.

The unit, 2d Squadron, 104th Cavalry (RSTA), serves as the recon, surveillance, and target acquisition squadron for 56th Brigade, 28th Infantry Division, and is the Guard's only Stryker Brigade Combat Team. They are actively seeking qualified soldiers to join their ranks. The unit is a member of the Pennsylvania Army National Guard, located at 2601 River Road, Reading, PA 19605; telephone (610) 929-8130; fax (601) 378-4515. Serving as commander is Lieutenant Colonel W. Lord and serving as command sergeant major is CSM R. Heller.

Also, 2-194 Armor, Minnesota Army National Guard was incorrectly listed as 2-94 AR. We apologize for the error.

Author Seeks Consultants on Tank Warfare in North Korea

Dear *ARMOR*,

I have just been commissioned by Berkley books to write a series of novels about near-future tank warfare in North Korea. I am seeking as much information as I can about the units operating in the region (such as First Tank — I've visited their web page). Also, I would like to engage in some e-mail contact with real veterans who can lend their insights to make my books much more believable. If you are interested and have time to answer a few questions via e-mail, I would be happy to thank you in the novels and give you free, signed copies for bragging rights with your buddies and spouses. I wish I could do more, but my name is Peter Telep, not Tom Clancy. Contact me at *ptelep@aol.com*.

PETER TELEP
Department of English
University of Central Florida

75 Years Ago:

Experiments on Motor Transport for Horses

The continuation by the War Department of experiments in transportation of horses by motor has resulted in the issuance of instructions to the Quartermaster General to conduct tests on the carrying of six horses in a truck. These experiments are to be different from the ones conducted so far in that the horses are to stand facing for and aft and three abreast, to facilitate loading to maintain better balance against the sway incident to movement. Heretofore as many as six horses have been loaded in a truck but they have been faced alternately to the sides of the truck. The ordinary Army trucks now in use are believed to be of too short a wheel base to permit transportation of more than three horses facing to the front or rear. If Army trucks of sufficient wheel base and body length are not available, the Quartermaster General will consider the use of a commercial vehicle specially designed for this purpose.

— *The Cavalry Journal,* January 1929

ARMOR Magazine Survey

The purpose of this survey is to improve the quality of *ARMOR* Magazine, produced at Fort Knox, Kentucky. The data you provide will allow us to shape the future of the magazine.

1. How do you usually get a copy of *ARMOR* Magazine?

- ❍ Have a subscription
- ❍ Borrow a friend's personal copy
- ❍ Read it at the library
- ❍ Read the unit's copy
- ❍ Rarely see a copy

2. Overall, how satisfied are you with *ARMOR* Magazine?

- ❍ Very Dissatisfied
- ❍ Dissatisfied
- ❍ Neutral
- ❍ Satisfied
- ❍ Very Satisfied

3. If you were going to decide the content of *ARMOR*, would you give less, more or about the same emphasis to the following kinds of articles?

	Less	Same	More
Platoon-Level Tactics	❍	❍	❍
Company-Level Tactics	❍	❍	❍
Large-Unit Tactics	❍	❍	❍
Historical Analysis	❍	❍	❍
Research and Development	❍	❍	❍
Training	❍	❍	❍
Gunnery	❍	❍	❍
Maintenance	❍	❍	❍
NTC/CMTC Lessons Learned	❍	❍	❍
Communications	❍	❍	❍
Logistics	❍	❍	❍
Professional Development	❍	❍	❍
Leadership	❍	❍	❍
Personnel Management	❍	❍	❍
Book Reviews	❍	❍	❍
Regimental System	❍	❍	❍
Weapons Analysis	❍	❍	❍

Return completed surveys to: USAARMC & Fort Knox
ATTN: ATZK-TAQ (Survey Office)
1109B 6th Avenue, Room 370
Fort Knox, KY 40121

The survey deadline is 3 February 2004. If possible, please take the survey online at: *www.knox.army.mil/survey/armormagazinesurvey*

If you would like to discuss particular concerns about *ARMOR*, please e-mail us at: *ArmorMagazine@knox.army.mil*

Survey questions can be directed to (502) 624-3850.

4. How often have you used *ARMOR* as a source document in preparing briefings, reports, policy papers, and information papers?

- ❍ Never/Not applicable to me
- ❍ Rarely
- ❍ Sometimes
- ❍ Frequently

5. How often do you read the following standard features?

	Never	Seldom	Sometimes	Usually	Always
Commander's Hatch	❍	❍	❍	❍	❍
Driver's Seat	❍	❍	❍	❍	❍
Once More Unto the Breach	❍	❍	❍	❍	❍
Letters to the Editor	❍	❍	❍	❍	❍
Book Reviews	❍	❍	❍	❍	❍

6. Rate your level of agreement with the following statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Articles and information meet my professional needs.	❍	❍	❍	❍	❍
Articles are relevant and valuable.	❍	❍	❍	❍	❍
Articles are normally easy to read.	❍	❍	❍	❍	❍
The graphics enhance the articles.	❍	❍	❍	❍	❍
The graphics are clear and understandable.	❍	❍	❍	❍	❍
The artwork enhances the articles.	❍	❍	❍	❍	❍
The photos enhance the articles.	❍	❍	❍	❍	❍

7. Which one best describes you?

- ❍ Active Duty Officer
- ❍ Active Duty NCO
- ❍ Active Duty Enlisted
- ❍ Retired Military
- ❍ National Guard
- ❍ Army Reserve
- ❍ Military Family Member
- ❍ DOD Civilian
- ❍ Contractor
- ❍ Other

8. How can *ARMOR* Magazine be improved?

Major General Terry L. Tucker
Commanding General
U.S. Army Armor Center

Armor and Cavalry NCOs Leading the Army

As we enter another year, it is important to realize that change is as much about looking forward as it is about reflecting and reminiscing. These are extraordinary times for our Soldiers, who stand in harm's way, protecting our rights and the rights of others. As a Nation and an Army, we have much to be proud of. Over the past 2 years, we have proven that this Nation and its forces are up to any task.

Throughout our Nation's history, scouts and tankers have put it all on the line, and courageously stood shoulder to shoulder to defend any and all threats. Warriors, such as Old Bill and The Tanker, conjure up images of Cavalry and Armor Noncommissioned Officers — images that are forever burned in our minds through pictures and sculptures displayed in hallways, offices, orderly rooms, and headquarters for decades. They epitomize what is expected from tankers and troopers.

The history of Fort Knox is full of stories of great Armor and Cavalry NCOs — men who have left an indelible mark on the Mounted Force and the Army. They have led and trained cavalrymen and tankers since the early days.

Since 1958, when Congress authorized the rank of sergeant major, and in 1967, when the Chief of Staff of the Army created the Command Sergeants Major program, 19 soldiers have held the title of Sergeant Major or Command Sergeant Major (CSM) of the Armor Center and Fort Knox. Each one of these leaders made immeasurable contributions to training, readiness, force development, and building the best NCO Corps in any Army, anywhere.

Command Sergeants Major, such as Orr, Belcher, Gillis, Fryer, and Davis worked hard to build the NCO education system, define the Career Management Field 19 career path, provide relevant guidance for selection boards, and create opportunities for tankers and troopers such as the Excellence In Armor program. Command Sergeant Major John Stephens, the longest serving CSM, held the post from August 1983 until September 1990 and served with Major Generals Brown, Tait, and Foley. My wingman is CSM George DeSario, Jr., and I am proud to serve with him. As the Chief of Armor and Regimental CSM, we count on each other, as we march in the footsteps of former leadership teams like Lynch and Price, Funk and Ross, and Bell and Christian.

Fort Knox has a distinguished honor roll of other tankers and cavalrymen who served here during their careers, including as unit Command Sergeants Major. Sergeant Major of the Army Jack Tilley served as the Basic Noncommissioned Officer Course Division Chief for the NCO Academy (NCOA), and later as CSM for the 194th Separate Armored Brigade. Sergeant Major of the Army designee Kenneth Preston is currently the V Corps CSM and once served as an instructor in the Abrams Master Gunner course at Fort Knox. CSM John Beck, another great leader, served at Fort Knox as the NCOA commandant, and recently retired from his position as TRADOC CSM. CSM Jim Dale served as NCOA commandant, most recently as CSM for the U.S. Army Cadet Command, and will soon assume duties as commandant of the U.S. Army Sergeants Major Academy.

Other "Top Soldiers" who served at the Armor Center and Fort Knox have also moved on to greater responsibilities in other commands. CSM David Lady most recently served as the CSM for USAREUR and 7th Army and is now the CSM for the Space and Missile Defense Command. CSM Carl Christian is the CSM for U.S. Army FORSCOM, and CSM Joe Gainey left Fort Knox for duty as the CSM for III Corps and Fort Hood. Clearly, the position of command sergeant major in armor and cavalry demands the best, which is evident by the selection of these soldiers for other demanding positions around the world.

The cover of *ARMOR* shows dismounted combat tankers. Here at Fort Knox, we acknowledge the requirements of the force and are adjusting training to prepare Soldiers for new combat scenarios, while continuing to balance training for more traditional 19K and 19D skills. As always, our NCOs, led by the Armor Force Senior Trainer, CSM DeSario, are at the heart of this training.

FORGE THE THUNDERBOLT!

The 2004 Armor Conference was originally scheduled for the week of 24 May 2004. Due to a scheduling conflict, the Conference will be held during the week of 17 May 2004. I guarantee it will be yet another spectacular event! I will address the Conference's agendas and highlights in the March-April 2004 issue of *ARMOR*.

CSM George DeSario Jr.
Command Sergeant Major
U.S. Army Armor Center

Combat Vehicle Crewman Uniform Safety In Armor Vehicles Prevents Burns

As the U.S. Army Armor Center's command sergeant major, it is great to visit units across the globe, watch them train, and share my own firsthand training experiences. I recently had the honor of visiting with the 3d Infantry Division at Fort Stewart, Georgia. I would like to thank the soldiers and the command of the 3ID for their gracious hospitality. Command Sergeant Major Kellman, your Armor/Cavalry troopers are magnificent. Also, I extend a warm thanks to Command Sergeant Major Barnello and First Sergeant Stephenson: your gunnery program is right on. Rock of the Marne!

On a trip to Alaska, I had the privilege of meeting the troopers of our newest unit, the 4th Squadron, 14th Cavalry Regiment (Reconnaissance, Surveillance, Target, and Acquisition), 172d Infantry Brigade at Fort Wainwright, Alaska. It was a pleasure to see such dedication in such a young outfit. Command Sergeant Major Dunham, I extend my admiration to your first sergeants for a job extremely well done.

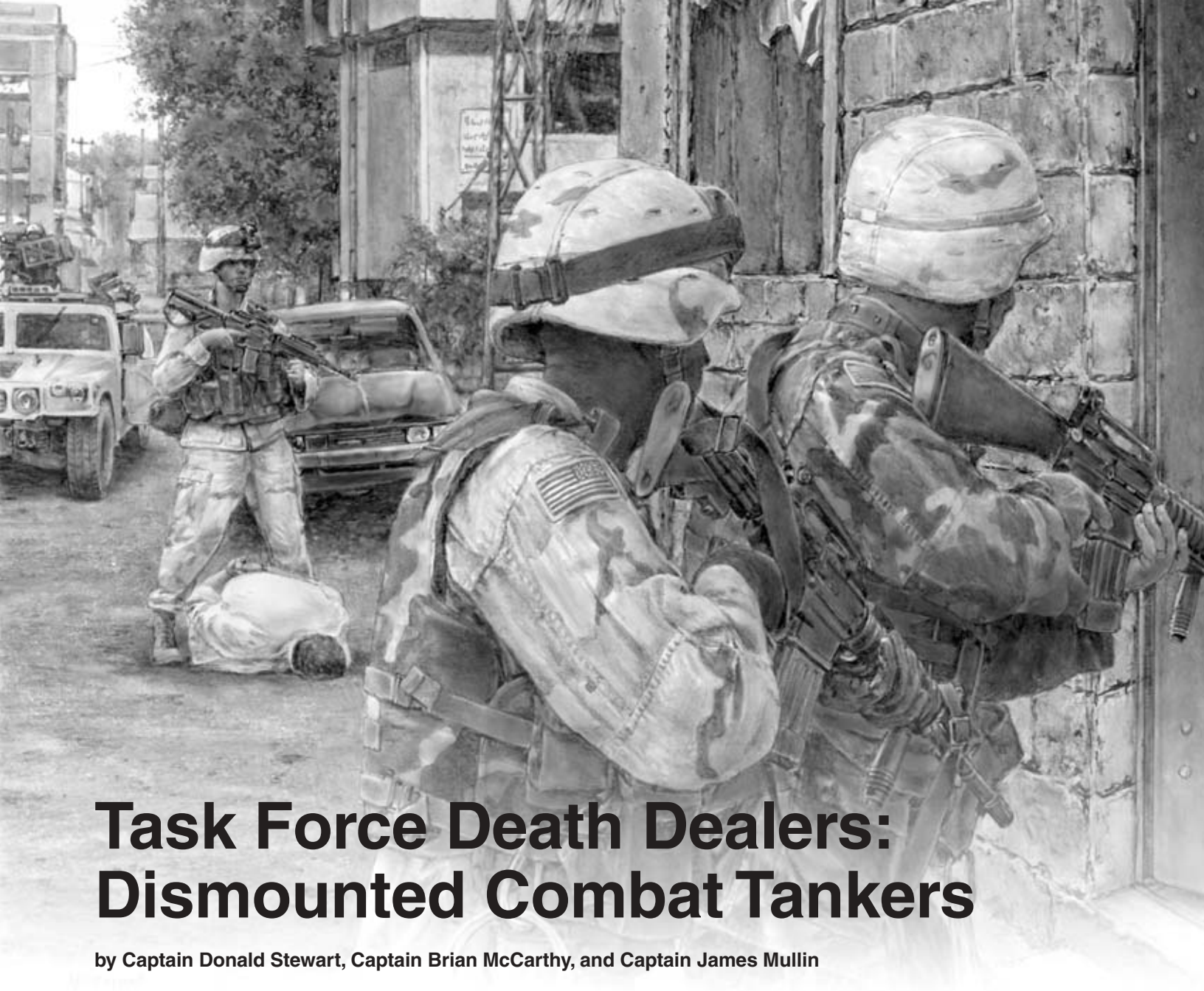
Around this time each year, we address the safety issue of combat vehicle crewmen (CVC) wearing underwear made with synthetic fibers, like polypropylene or polyester, under NOMEX CVC uniforms. The good folks at Assistant TRADOC System Manager-Soldier, here at Fort Knox, have provided vital information to address this very concern — mixing the NOMEX CVC uniform with synthetic underwear is an invitation for pain!

Armor soldiers in the field need to be made aware that a safety hazard exists if this type of synthetic underwear is worn under their NOMEX CVC uniform in the event of a fire. This includes the new moisture wicking tee shirt the Army is in the process of fielding. Nylon and synthetics, such as polyester and polypropylene, melt at about 480-degrees and 300-degrees Fahrenheit, respectively. Heat transfer through the NOMEX (which is resistant to temperatures up to 700-degrees Fahrenheit) could be high enough to melt these synthetic undergarments. I'll use a quote that Chief Warrant Officer Boyd Tacket III made in Flight FAX regarding an experience he had when his aircraft caught fire: "My chest, back, and buttocks were spared from any burns at all due to the cotton underwear that I had on. The burn literally went to where the underwear was and stopped. If I hadn't been wearing my NOMEX protective equipment and wearing it properly, there is no doubt in my mind that I would very probably have either died in the fire or died as a result of the burns I would have received." For your protection, wear underwear made of 50-percent cotton/50-percent wool or 100-percent cotton. These natural fibers won't melt under the heat and will provide protection that will keep the heat away from your body in a flash fire.

Lastly, keep your NOMEX CVC uniform clean. Oil, grease, or household starch will cause the NOMEX fabric to burn. Dry cleaning or laundering to remove these contaminates will restore the NOMEX's fire retardant state. Don't be the soldier who survives a vehicle fire only to find yourself with melted polypro stuck to your skin. Worn properly, the CVC uniform will protect you from burns, should the unexpected happen in your combat vehicle. So make sure you are wearing underwear made of 50-percent cotton/50-percent wool or 100-percent cotton under your NOMEX CVC uniform. If you have any additional questions on this subject or other CVC clothing and individual equipment, please contact the Assistant TRADOC System Manager-Soldier at Fort Knox, Lieutenant Colonel Craig Carson, DSN 464-3519, or Mr. Larry T. Hasty, DSN 464-3662, commercial (502) 624-3519/3662, or e-mail *craig.carson@knox.army.mil* and *larry.hasty@knox.army.mil*.

Thanks to Mr. Hasty for his dedication to our Armor troopers; and thanks to all our troopers and leaders.

IRON DISCIPLINE!



Task Force Death Dealers: Dismounted Combat Tankers

by Captain Donald Stewart, Captain Brian McCarthy, and Captain James Mullin

Iraq remains a combat zone and the enemy's tactics continue to evolve toward a form of guerrilla warfare, and the Army continues to tailor its operations to deal with the threat. Terrain, enemy, civilians, and mission — these competing factors have forced the Death Dealers of Task Force 1st Battalion, 67th Armor Regiment (TF 1-67) to adopt an outside-the-box mentality instead of employing a traditional armor role during Operation Iraqi Freedom.

The old tanker cliché of "death before dismount" has officially gone by the wayside and has led to the unimaginable dismounted armor crewmen. The current contemporary operating environment (COE) in Iraq calls for tankers to dismount. However, a large number of tankers continue to ride steel on most missions, and tanks remain a critical element in the COE.

The 3d Infantry Division's (ID) charge into Baghdad reaffirms the Abrams' speed and lethality on the battlefield. Continuing this trend, the 4th ID employs tanks daily and continues to engage the enemy with its M1A2SEP. Firepower and accuracy, psychological effect, speed, and survivability — the tank brings all of these to the fight.

When thrust into an urban environment, tanks can act as mobile roadblocks or control crowds with engine exhaust. This article addresses terrain, civilians, enemy threat and weapons, and friendly tactics, techniques, and procedures (TTP), and encourages follow-on forces to form training plans at home station prior to deploying. The Death Dealers are doing nothing revolutionary in Southwest Asia, but these issues do warrant the attention of the force so that follow-on forces can train to prepare for Iraq's COE.

The Terrain

A country the size of California, Iraq has several distinctly different environments. Central Iraq, the 4th ID's area of operations, is definitely not a desert environment. There is a fair share of sand and open terrain in the area, but central Iraq is primarily in the Tigris River valley.

Besides palm groves and farmland, the Tigris, Euphrates, and Diyala Rivers further divide the country. Additional obstacles include large concrete canals, some as wide as 6 meters and as deep as 4 meters. Additionally, farmers have cut numerous canals and irrigation ditches throughout the land, few of which are represented on maps; on imagery it is impossible to tell the extent of the irrigation. Cross-country travel, although possible in the area, is limited by both the thick palms and irrigation canals.

"New lieutenants and staff sergeants are oftentimes senior leaders on the ground and must know how to react to any situation. At home station, tactical vignettes can be used to rehearse actions on contact so that these section leaders, tank commanders, gunners, loaders, and drivers know what to expect and have an idea of how to react."

We conduct many operations in urban areas, which presents an additional set of issues. In many cities, the infrastructure has crumbled from more than a decade of neglect. The streets are narrow, many with a web of low-hanging power lines and canals that impede vehicle movement. Additionally, most families have adobe walls ranging in height from 1-to-3 meters surrounding their homes.

Task Force 1-67 has found it necessary to confirm routes into and out of an area, and when at all possible, conduct a reconnaissance of all routes. Additionally, we found that in built-up areas, the military grid reference system (MGRS) gives way to a terrain index-reference system (TIRS) and an urban reference system. Our brigade combat team (BCT) has a consolidated TIRS overlay. When planning missions, the task force uses Falcon view and ArcView satellite imagery and tactical unmanned aerial vehicle shots, on which we then number all of the buildings within the target area of operations to give ground and air elements a common, more precise set of graphic control measures.

Civilians

Iraqis tell us regularly, and it is probably true, that 90 percent of the Iraqi people want us here and appreciate what we are doing. The other 10 percent becomes the problem when trying to maintain stability among an entire population. Force protection must always be the primary focus. The Iraqi people, especially the children, are very friendly and courteous. They have had little to no exposure to the outside world for more than 30 years and are eager to learn about Americans and want to engage soldiers in conversation. Generosity and gift giving are cornerstones of their culture, and because of this, it is difficult not to become complacent.

Everyone has a weapon. When the Hussein regime fell, soldiers simply left their posts and ran home, many with as much armament as they could carry. Rocket-propelled grenades (RPG), assault rifles, and mortars are the weapons of choice. Most citizens were merely looking for self-defense against the ever-present Ali Babba; but the more nefarious purchased and stockpiled weapons for anticoalition activities. They have them in their homes and cars, and buried in yards and gardens. The arms dealers and anticoalition personnel with large weapons caches use any means to hide weapons, to include hiding them in Mosques and cemeteries. Dismounted units carry AN/PSS-11 mine detector sets to search for buried weapons and contraband. The mine detectors work well when adjusted properly — we have found weapons buried up to 2-feet deep.

To better protect our soldiers and combat complacency, especially at fixed sites, we rotate troops often. Each company has an area of responsibility, so soldiers become familiar with the area and its people, and can spot when something has changed or does not seem right. We have also installed Kevlar doors on all M998s to offer increased protection against small arms and thrown objects.

Enemy

The enemy continues to refine their tactics. One of those foreign to the Death Dealers before deployment was using improvised explosive devices (IED). There is a plethora of ordnance throughout the country, giving prospective bomb makers a great deal of ammunition. We have encountered IEDs that have been rigged in soda cans attached to telephone poles; 1.5-liter water bottles left on the road; explosives stuffed in the carcasses of dead animals; and 155mm artillery shells, daisy-chained together and placed along the shoulder of routes used mainly by coalition forces.

Vehicle commanders and drivers need to be observant of objects and loose soil in and around the roadway. Also, look for berms and structures 20 to 30 meters away from your location that can provide cover and concealment from which to command detonate devices. Once we identify an IED, we establish a cordon 300 meters away from the device and secure the area. The tactical operations center will then contact the explosive ordnance disposal (EOD) and they will assess the situation.

Additionally, avoid setting a routine. The enemy continually collects intelligence, knows soft points, and is acutely aware of times, routes, and composition of logistical convoys. Unlike conventional operations and experiences at combat training centers where it is important to establish a battle rhythm, in Iraq we found that unpredictability is essential to force protection. We have also conducted offensive operations against our resident bombers. Using pattern and terrain analysis techniques, the task force S2 identified areas where IEDs were prevalent or likely. We used two tanks to establish observation posts and await am-

bush opportunities. From a distance of over one kilometer, the section engaged and observed several individuals drive up to the target area, dig holes in the roadway, lay wires, and began removing artillery shells from the bed of their truck.

Rocket-Propelled Grenades

RPGs are simple and inexpensive enemy weapons. The enemy uses them to snipe at convoys in an effort to execute an ambush. The RPG attacker prefers a concealed position from which he can see vehicles approaching along the route. Typically, they shoot at night with either no sight or a crude sight, and likewise, are not very accurate.

As with IEDs, leaders must look at locations conducive for firing RPGs. It is imperative that crews maintain individual sectors and sections maintain sectors. Scanning discipline is key because the launch flash of an RPG only lasts about a second, and soldiers must act quickly to capture or destroy the enemy before he flees the scene.

Friendly TTP

Due to the nature of current combat operations in Iraq, our primary mounted maneuver unit is the section. Tank sections conduct mounted patrols, and therefore, conduct actions on contact as a section. New lieutenants and staff sergeants are oftentimes senior leaders on the ground and must know how to react to any situation. At home station, tactical vignettes can be used to rehearse actions on contact so that these section leaders, tank commanders, gunners, loaders, and drivers know what to expect and have an idea of how to react. As in any situation, we continue to refine and rehearse our actions and TTP. As previously mentioned, leaders must know and rehearse individual and section sectors of fire.

Dismount!

Task Force 1-67 is a tank-heavy Force XXI task force with two pure M1A2SEP tank companies, an M2A3-equipped mechanized infantry company, a headquarters and headquarters company (HHC), and a forward support company (FSC). While an awesome organization designed for high-intensity combat, it is not the optimal task organization for our current battlefield in northeastern Iraq. After 3 months of dismounted patrols and raids, our infantry brothers, scouts, and mortars were working nonstop, and to be perfectly honest, the 19Ks were tired of hearing the words "traffic control point." In an effort to maximize combat power and maintain flexibility, the task force instituted a dismounted training plan.

Initially, the plan was to train tankers on the basics of dismounted security and patrolling so they could conduct dismounted patrols in the tank company's area of responsibility (AOR), and facilitate interaction with the Iraqi people. However, after a couple of dismounted armored crews were trained, we realized it offered greater flexibility to the task force in the form of increased capability — more boots on the ground — across the full spectrum of operations.

Since validation in country, our dismounted tankers perform a myriad of tasks. They conduct foot patrols throughout their AORs, stand sentry in watchtowers, and execute raids, including air inserting onto objectives. In preparation for deployment in the COE, units must cross-train soldiers on basic infantry tasks. When possible, get the infantry involved. They are the subject-matter experts, and having infantry involved in training your tankers fosters mutual team spirit and confidence. At a minimum, train basic patrolling and focus on built-up areas and actions on contact. If possible, incorporate an expert and train room-clearing techniques.

Air insertion has been key to gaining surprise and quickly securing an objective. As 19Ks are generally not familiar with Army aircraft, units need to familiarize them with both UH-60s and CH-47s. Schedule static load training at home station regularly to train and familiarize crews. Training before you arrive puts you ahead of the power curve.

Equipment

Increased dismounted operations have necessitated redistribution of equipment. As tank companies traditionally do not train to operate dismounted, they are likewise not equipped to operate dismounted. For instance, we have to cross level M16/M4s within companies to fully equip two squads. Cross leveling across the task force allows us to operate like this regularly. Lack of night vision devices is the biggest shortfall. Additionally, more wheeled assets, squad radios, such as integrated communications and laser-designating devices, would help conduct dismounted operations more safely and efficiently.

Operational readiness has been difficult to sustain. High operational tempo coupled with extreme temperatures has reduced mean time failure on many assemblies. Road wheel arms and engine exhaust seals have been the two biggest problems. The

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supply system took a while to catch up with both the distances and the demand, but is now consistent, if not swift. Be flexible in your task organization; you cannot use it if it is broken. We regularly used tanks with broken number two arms on perimeter guard —they could fight but could not roll outside the gate.

Force XXI Battle Command Brigade and Below (FBCB2) — the backbone of Force XXI — has worked very well. It gives us an amazing advantage over the enemy. The ability to pull up imagery, quickly analyze a route (to include march time based on the route speed), the ability to navigate along that route, and the situational awareness to see all of your units vectoring in on the target is amazing. It is a beautiful sight to watch the FBCB2 screen and see all of your units closing on the objective from multiple directions, on time, as planned, all while keeping radio chatter to a minimum.

Vehicle commanders can post enemy icons to orient friendly units. Additionally, FBCB2 has allowed us to operate over extended distances because it retransmits through any system, not just those operating on our net identification. If we get out of voice communication range, we can usually send a text message (e-mail) situation report or spot report. Like any electronic system, it does not fare well in extreme heat, and repair parts have been slow to arrive, but it definitely has given us a marked advantage.

Civil Affairs

Prepare your company fire support officer (FSO) to be your civil affairs/information officer. As a company commander, I was responsible for a town of about 10,000 people, including the function of the town. The executive officer was the security officer, and platoon leaders served as minister of public works (water and electricity), minister of oil (gas and propane), and minister of education. The FSO tracked the progress and kept a database of people and locations within the town. The task force set up city councils in each of the larger towns within the area of operations so that with our help, they could get the city functioning until the government was running. Our focus was to help in whatever way we could to get the city functioning.

It is also necessary to include cultural awareness training in your home station training plan. Many Arab conventions are quite different from ours, especially regarding women. For example, in the Arab culture a man is forbidden to touch a woman unless they are married. To maintain cultural sensitivity and facilitate cooperation between Iraqis and Coalition Forces, our task force created female search teams. The task force deploys a team of female soldiers from the FSC on every raid and to every deliberate checkpoint. These soldiers underwent training from the military police and linguists regarding personnel searches and cultural awareness.

Although focused for a high-intensity conflict, Iraq has shown that our TTPs have to adjust to the changing environment. Flexibility is the key. We are not breaking any new ground, merely raking over it. Tanks continue to provide overwhelming firepower, protection, and shock effect to any fight. However, to be successful in the COE, we must remain flexible and continue to evolve in our tactics, training, task organization, and equipment. Missions require only the services of highly trained, motivated soldiers, like the dismounted armor crewmen of TF 1-67 Armor.

CPT Donald Stewart is currently en route to his new duty station at the Combat Maneuver Training Center, Hohenfels, Germany. He received a B.A. from Bellarmine College in Louisville, KY. His military education includes Armor Officer Basic Course, the Armor Captains Career Course, and the Combined Arms and Services Staff School. He has served in various command and staff positions, including commander, B Company, 1st Battalion, 67th Armor Regiment (1-67 AR), 4th Infantry Division (Mechanized), Iraq and Fort Hood, TX; assistant S3, 1-67 AR, Iraq and Fort Hood; executive officer, Headquarters and Headquarters Company, 2d Brigade, 1st Infantry Division (M), Schweinfurt, Germany; executive officer, B Company, 1st Battalion, 77th Armor Regiment (1-77), 1st Infantry Division (M), Kosovo and Schweinfurt; platoon leader, C Company, 1-77 AR, 1st Infantry Division (M), Kosovo and Schweinfurt; and assistant S4, 1-77 AR, 1st Infantry Division (M), Schweinfurt.

CPT Brian McCarthy is currently serving as an assistant S3 with Task Force 1-67 AR, 4th Infantry Division (M), in Iraq. A graduate of the Virginia Military Institute, he received his commission through officer candidate school. His various duty assignments include executive officer and scout platoon leader, E Troop, 9th Cavalry, 3d Infantry Division (M), Fort Stewart, GA; and scout platoon leader, 4th Squadron, 7th Cavalry, Camp Garry Owen, Korea.

CPT James Mullin is currently serving as commander, B Troop, 1-67 AR, 4th Infantry Division (M), in Iraq. He received a B.S. from the United States Military Academy. He has served in various positions, including S3 Air, 1-67 AR, Fort Hood, TX and Iraq; executive officer, C Company, 1-77 AR, 1st Infantry Division (M), Schweinfurt, Germany; platoon leader, C Company, 1-77 AR, 1st Infantry Division (M), Kosovo and Schweinfurt, Germany; and assistant S3 (LNO), 1-77 AR, 1st Infantry Division (M), Kosovo and Schweinfurt, Germany.

A Company Commander's Thoughts on Iraq

by Captain John B. Nalls

This article shares some of my experiences in Iraq that will help prepare commanders and platoon leaders on what to expect and how to better prepare soldiers for the tasks ahead. These tasks are not covered by a supplement or manual, and are not a joy to learn in midst of a firefight. I know there are more than a hundred correct responses to every issue. These opinions are based on my experiences as a tank and headquarters company commander in an armor battalion preparing for and executing combat operations in a stability and support environment.

Before Deployment

Equip all of your soldiers, even the diehard "death before dismount" tanker noncommissioned officers, with either M4s or M16s. Also, the headquarters and headquarters company commander, the battalion commander, XO, S3, and staff will want M16s/M4s. An M9 makes a nice decoration, but is not worth spit in a firefight. The folks who think differently usually learn the hard way — after their first engagement. You do not want the "old man" to take his driver's rifle during a raid, as I have seen happen.

Get dismount kits for your M240Bs. You will need crew served weapons; all you can muster. Determine ways to mount M240s and M2 .50 calibers on your trucks — all your trucks. Get the parts to turn your M1A1 tank version .50 cals into flexes — you will need the flexes in your trucks. I'm a nice guy, but when I go home, I'm taking my .50s with me, as my unit is M1A2SEP equipped, and the flex .50 is our baby. The good news is most of the up-armored high-mobility multipurpose wheeled vehicles (HMMWVs) come with .50s. However, due to the limited number available for the task force, you will want crew served weapons on everything.

Train your drivers to drive with no lights — not even blackout markers. The noncompliant forces (NCF) will track your movements by your blackout lights. They have plenty of rocket-propelled grenades (RPG) to launch. Do not be a target. Expect mounted patrols from a mismatch of different HMMWVs. The parade-ground, pretty-boy type will really hate what we are doing to trucks in Iraq, as they look like something out of a Mad Max movie. But nothing is worth the price of losing a soldier, if we know we can prevent it.

Prepare your HMMWVs at home station. Most of us have removed the doors from our trucks to increase our fields of fire when returning fire. Canvas doors offer no protection and only serve to reduce your fields of fire while on the move. Order Kevlar blankets and purchase infrared lights and mount them on trucks. Sandbag everything. Either fabricate or order mounts for crew served weapons for every HMMWV, take them to a range and have them fire stationary and on the move, both during daylight and darkness. Have the tank commander fire his M16 from a moving truck while seated.

While in Iraq, your convoy will get ambushed. I know all the range control geeks are going to have a heart attack when you make this suggestion. Any one of them is welcome to ride a patrol with me in Iraq. This is what we do, and what we should train. Experiencing an ambush for the first time is unpleasant, especially while a hail of RPG and small-arms fire rains down from multiple directions.

Train as many combat lifesavers (CLS) as you can. Order the correct number of CLS bags needed — not what is indicated on the MTOE. Several companies sell stocked CLS bags for about 25 dollars. Most of these companies accept government credit cards. The budget geek who tells you it is too expensive needs to be around when the frantic scramble for the CLS bag occurs. He would only have to witness it once in his career for him to get the point. Since there are no rear areas over here, he just might.

Train your soldiers — all of them, even the cooks, clerks, and command drivers, on dismounted operations. Teach dismount-

ed patrol, ambush, and counterambush techniques. Tankers, scouts, mortarmen, you will need to do this. Teach everyone how to react to ambushes — mounted and dismounted. You cannot take your tanks and personnel carriers everywhere.

Teach your soldiers how to clear houses. Set inner and outer cordons, and designate search teams to enter houses. Develop your techniques before you go to Iraq. Beat up your boss so you can train with tactical human intelligence teams and tactical psychological operations teams before you deploy. I know this will be difficult because most of these units are either Army Reserve or National Guard. These soldiers can keep crowds back with their speakers, and their translators will help you sort out good guys from bad guys. They can identify the difference between deeds to homes and instruction manuals for mortars. Unless you can read and write Arabic, you are just plain out of luck.

Train your first sergeants how to process detainees. Have military police and military intelligence soldiers teach you how to do the paperwork correctly, to include witness statements. If the paperwork is incomplete, really bad people end up getting released. Do not get frustrated if you have to redo a form. Getting the yardbird orchestrating attacks off the street is far more important to the lives of your soldiers than a little wounded pride over a screwed up form.

Get your mind right. You will be in firefights. Your tankers will dismount. Mentally prepare your families and your soldiers for what lies ahead. Commander, you will take casualties. Make sure your supply sergeant knows how to inventory and ship personal effects. Ensure your soldiers' deployment readiness is tight, to include NCOs getting involved with soldiers' finances. If one of your soldiers is having marriage difficulties now, you can bet they are not going to get any better during a yearlong deployment.

Prepare your soldiers to deal with wounded and dead Americans and Iraqis. You will see and treat them. Tell your medics up front they cannot save every life — people will die. An intravenous infusion and a few bandages will not save a man whose lungs are shredded by a 5.56 round, even if the guy was shot on the operating table at the combat support hospital.

Tell family support groups what to expect. Do not sugarcoat the message. If you do, spouses will think they have been lied to, and you will lose their trust. Tell the spouses the truth; hold back nothing. For example, Specialist Jones cannot come home because granddad passed away, the family has financial problems, or the first baby is born. Ensure your soldier's family members know how to contact the American Red Cross in the event of a family disaster. Your family support group leader must be willing to contact family members for all your soldiers, not just the married ones. Know your soldiers' family support group contact and keep the rosters tight. Mom and Dad want to know how Johnnie is doing just as badly as a husband, wife, or fiancé. Get accurate contact information from spouses who return home for the deployment duration.

While In Iraq: What to Expect and a Couple of Recommendations

Not all of Iraq is a big desert. The river valleys are loaded with date palm groves, vineyards, and sunflower fields. The ground is covered in waist- to chest-high grass. Vegetation is very thick. The roads are elevated from the fields, and are usually bordered by walls, fences, or canals, which cross the landscape in all directions of the compass. Most groves are separated into 5- to 10-acre plots surrounded by walls or fences. The walls and fences provide good cover and make great obstacles, as do the canals. Most canal bridges will not support a tank's weight.

The towns and villages have narrow streets; more narrow than Europe. Electrical wires hang about 8 to 10 feet off the ground and cross each other in no particular pattern. Running an M1 tank through these areas is possible, but due to the amount of collateral damage, it would be unwise. Remember, we are restoring the Iraqi infrastructure, not destroying it. Most buildings are made of bricks and concrete, while others are made of adobe-style mud.

Key leaders (platoon sergeants and up) need to carry a couple of body bags and sets of rubber gloves. Initially, my battalion chain of command felt it was counterproductive to morale. What was actually counterproductive to morale was the pieces of human remains my soldiers had to pick up and place on a litter and cover with a blanket because nothing else was available. Remem-

"Train your soldiers — all of them, even the cooks, clerks, and command drivers, on dismounted operations. Teach dismounted patrol, ambush, and counterambush techniques. Tankers, scouts, mortarmen, you will need to do this. Teach everyone how to react to ambushes — mounted and dismounted. You cannot take your tanks and personnel carriers everywhere."

"Teach your soldiers how to clear houses. Set inner and outer cordons, and designate search teams to enter houses. Develop your techniques before you go to Iraq. Beat up your boss so you can train with tactical human intelligence teams and tactical psychological operations teams before you deploy."

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ber, not all casualties will be Americans. We are a civilized nation, and we recover the remains of our enemies and civilians as well.

Expect combat stress and have your chaplain and medics locate and tie into your servicing combat stress teams. Have the combat stress teams pay periodic visits to your soldiers. It will pay off in the long run. Let your soldiers know that the effect of combat stress makes you no less a man.

Think before you announce, "on the way" with a high-explosive antitank round. The NCFs will fire at you from or near occupied homes. Once the sun comes up, you will see several small children emerge from these homes. Imagine if you would have let go with your big gun. How many deaf children on the block did you create? How will this impact community relations? Use appropriate force. Yes, there are times to let loose the big bullets, and I am more willing to let one fly than most, but make sure it is an informed decision, and a price you are willing to pay.

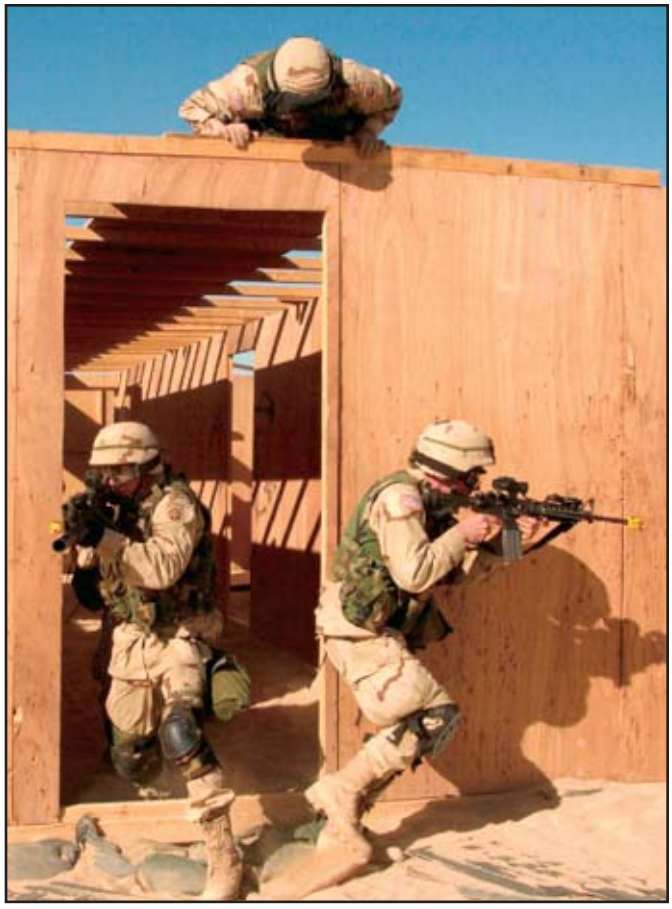
A Trip Down Canal Road

The B Company, 3d Battalion, 67th Armor Regiment commander and I planned a simple night operation to engage and destroy a few NCFs along a specific narrow road where our elements were ambushed in the past. Our combined team consisted of two M1064 mortar tracks, two M1A2SEP tanks, three up-armored HMMWVs, and my M1025 scout HMMWV. The HMMWVs and personnel carriers were armed with .50 cals. We had two Kiowa Warrior helicopters from E Troop, 1st Squadron, 10th Cavalry in support. Our battalion S2 and S3 joined our mission.

Our plan was to conduct a presence patrol through the town of Al Abbarah, and split into two separate groups of one tank, one M1064, and two HMMWVs to cover two additional villages along the Dyalia River Valley. Once we reached a designated point, we would turn around and head back the way we came and linkup for the trip through the hotspot near Al Abbarah. During the time when our forces were split, we had 2 kilometers between us.

Varying routes is a very important thing to do; however, in this particular area, there is only one bridge that can support the weight of tanks and we were restricted to using the same route in and out. The Kiowas provided route reconnaissance for our move into and out of the river valley, thus mitigating the tactical risk of using the same ingress and egress routes. Or so we thought.

The move in went on schedule, the tanks, personnel carriers, and HMMWVs rolling along smoothly while the Kiowas, who dropped to our company frequency, flew ahead observing anything unusual. We split from each other, turned around at the appropriate point, and linked back up on schedule. Negative contact. We held our move back through Al Abbarah for 15 minutes to allow the Kiowas to observe any NCFs attempting to set a trap for us on the way back through, thus allowing us to ambush those who were trying to ambush us. Easy 14 and Easy 16, the Kiowa pilots, spotted nothing through the thick canopy of date palms, and no activity along the roadways on either side of the canal. We started our move back, the Kiowas with us the entire way.



The ambush was initiated by seven 152mm artillery rounds hidden in the weeds on the shoulder of the roadway that paralleled the canal. They were daisy-chained together. The lead tank absorbed the bulk of the blast, shrapnel cutting through the main gun tube in several locations. The blast created a debris field of dust and asphalt, denser than any smoke screen I have ever seen. The truck in front of me stalled in the debris field. To my rear, one of my mortar tracks engulfed the narrow roadway. Then the small-arms fire started. We could not go forward or backward. We were in the kill zone, unable to move. Tracers flew over, under, in front of, and behind my truck. Every soldier in my truck returned fire. My supply clerk and .50-cal gunner laid down blistering fire, as the rest of us fired our M16s out the windows; aiming at the muzzle flashes from both sides of the road.

There is a time when training takes over your actions, and this was one of those times, which is why it is so important to train to standard all the time. I counted six separate muzzle flashes from the left side of the road, and four separate muzzle flashes from the right side of the road. With my magazine empty, I grabbed a fresh one and seated it firmly. An RPG flew over top. I shot at muzzle flashes until they stopped blinking. Then, as abruptly as it started, it stopped. The firefight lasted about 45 seconds: it was the longest 45 seconds of my life.

Grabbing the hand mike while yelling for a crew report, I learned that our S3 was wounded. I fed reports to the tactical operations center (TOC) while our team split into two separate columns. The wheels and the personnel carriers raced to the brigade aid station, and the tanks turned around at our rally point and moved in to secure the ambush site. Easy 14 and 16 responded to the ambush site with 14 rockets, once we were clear. I believe it was their rocket run that settled the hash of the NCFs for the remainder of the night.

"Train your first sergeants how to process detainees. Have military police and military intelligence soldiers teach you how to do the paperwork correctly, to include witness statements. If the paperwork is incomplete, really bad people end up getting released."

The tank commander on B22 knew something was wrong. His tank lost turret power, so he lost the thermal imagery and the commander's independent thermal viewer. Still, he did not hesitate to move back in and secure the ambush site. He requested artillery illumination to aid observation. I will never forget his words over the net when he was told his request was denied: "Illumination denied. I've lost turret power; I have my nods and my .50. Hooah. I will stay until relieved. White 2 out."

Our battalion quick reaction force relieved the crew on B22 a couple of hours later. The rest of the patrol drove back to our forward operating base. The B Company commander and I reported to the battalion TOC and debriefed the battle captain and the battlefield information center. I volunteered to take the battalion XO out to the ambush site at first light. We were fortunate to only suffer one casualty, as the following day we learned several things about the techniques used by our enemies.

We discovered only four of the seven daisy-chained artillery rounds detonated. God was with me — my truck was beside one of the rounds that did not explode. My scout platoon found detonation wire and traced it back along a wall between two fields, out of sight from the road. We found a stake and a screwdriver. The device was most likely fired by a car battery, and the screwdriver was used to complete the circuit. From the position of the individual who initiated the blast, he must have been in communication with a cohort who had direct observation of the roadway, because he was unable to observe the roadway from his position.

On the left side of the road, the NCFs used a cinderblock wall for cover, and the canal as an obstacle. From the right side of the road, they used climbing rigs (used for harvesting dates) to shimmy up palm trees and engage us with direct fire, using a wire fence and depression as an obstacle. Once return fire became too hot, they dropped from the trees and fled through the groves, which have a floor 8 to10 feet lower than the roadbed. Our rounds passed harmlessly over their heads.

We discovered a small cache of hand grenades, RPG projectiles, and explosive materials. We pieced together the daisy-chained artillery rounds that initiated the ambush and the RPG launch that signaled break contact. We questioned the local populace and found them all to be very upset by the massive amounts of firepower displayed a few hours earlier, but claimed ignorance as to who planted the improvised explosive device (IED) and who was responsible for the ambush.

We learned a few days later that, shortly after we departed the area, a funeral was held. We were unable to determine how many had "died" the day or evening prior, or from what cause. A funeral may be for one or many. The local populace tends to keep to themselves; as during the Baath party rule, it was better to be ignorant of what your neighbor was doing for reasons of self-preservation.

One of our challenges is to teach the Iraqi people not to fear the truth of any situation. Thirty-five years of living under a ruthless dictator whose retributions were swift and terrible will take a long time to flush out.

Conclusively, I offer a few recommendations based on my limited experiences and observations. In no way does this apply to the whole of Iraq, as each area has its own particularities. Train — both physically and mentally — for what lies ahead. Learn tactics, techniques, and procedures during your upcoming leader recons. During transfer of authority, talk to those of us who are here, experiencing it now. Bring fresh ideas into the fight. Learn from us. We have knocked our unconventional enemies back on their heels, when it's your turn to jump into the ring, may you deliver the knockout blow.

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1-64 Armor's Rogue Gunnery Training Program

by Lieutenant Colonel Eric Schwartz, Major Daniel Cormier, and Staff Sergeant Bobby Burrell

On 5 April 2003, Task Force 1st Battalion, 64th Armor Regiment (1-64 Armor), 3d Infantry Division, was directed to conduct a mounted attack into the heart of Baghdad. The goal was to destroy the enemy's will to fight by demonstrating our superiority and ability to attack into their strongpoint defenses in and around the city at will. The mission, which lasted 2 hours and 13 minutes, was to attack along Highway 8 from the south of Baghdad (Objective Saints), through the heart of the city to the Baghdad Airport (Objective Lions). Throughout the mission, the task force was in constant contact with enemy forces. The soldiers and leaders were incredulous when they first heard of the mission — they never expected to attack into a city of over 6 million inhabitants with a task force numbering just over 700 soldiers.

The soldiers who participated in the attack performed remarkably. They directly contributed to the decisive success of Operation Iraqi Freedom (OIF) as they broke the will of the enemy forces in the city, which lead to the rapid conclusion of major hostilities. The attack debunked the notion that heavy armored forces are not the weapons of choice in urban terrain. Task Force 1-64 Armor demonstrated the essential capability of heavy armored vehicles, which are able to sustain numerous hits from enemy fire, while protecting the crewmen inside. They reconfirmed that armored forces have an extreme shock effect on enemy soldiers and established a foundation for the modification of doctrine and future tactics, techniques, and procedures. The attack also revealed the necessity for armored crews to master all of their weapons systems and be prepared to engage and fight the enemy in very close terrain.

Six Months Later

The soldiers of 1-64 Armor recently completed a Level I tank gunnery, which allowed them to critically compare their experiences in OIF with the Army's tank gunnery training program. The results are a picture of many successes due to the exceptional training that tank gunnery provides. The training also revealed some clearly identified shortfalls in current gunnery training. This article addresses the shortcomings of the current gunnery training program and begins the debate and the process of modifying tank gunnery training to better prepare soldiers for future combat.

Operation Iraqi Freedom revealed a need to train armored crewmen to fight under close combat conditions and in urban terrain. The difficulties of an urban environment are numerous. The crew must acquire targets three dimensionally. The limitations of the main gun of the M1 Abrams tank, which can only elevate 20 degrees and depress 10 degrees, forces the loader and tank commander (TC) to acquire and engage targets on rooftops and in basements. The nature of close urban terrain will at times prevent the main gun from engaging targets, except those to its direct front. The enemy's ability to attack from perpendicular alleyways or doorways, and then quickly hide, prevents the tank's main gun from reacting decisively. Therefore, if crews button-up and rely on their armor protection and gunner's weapons, they limit their ability to engage enemy targets and must rely on mobility or supporting fires to survive attacks. This is a potentially deadly scenario, as the Russians learned in Grozny. These problems paint a general picture of the problems faced by tank crewmen. They present the necessity for well-trained and coordinated task force operations to adequately conduct mounted urban operations. We are not advocating tank companies as the solution to military operations in urban terrain (MOUT). We are suggesting that to integrate tanks into urban or close terrain warfare, we need to develop focused training programs for tank crews to prepare for this type of combat.

As we avoid preparing solely for past wars, we must also be willing to learn from those wars past and adjust training to better prepare soldiers. Any effort to predict future conflicts will be limited by unforeseen events. Our Nation's enemies will adapt their tactics and change their preparations based on their own conclusions and experiences in OIF. However, we can adapt our training to prepare for likely combat scenarios. Any analysis of potential future combat scenarios leads

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to the conclusion that enemy forces will seek to fight in close terrain. Close terrain, whether urban or otherwise, negates some of our technological advantages. Therefore, close terrain offers our enemies the best chances of success, and it will be the enemy's environment of choice or eventual necessity. The armor community can no longer afford to focus primarily on the conventional fight. We must adapt our training to likely future scenarios and, for the purpose of this article, tank gunnery must adapt to the changing threat environment.

Our "rogue gunnery" proposal focuses on Tank Table VIII qualification for two reasons: standards in weapons training and resource limitations prevent us from developing an ideal training system; and crew-level gunnery, from Tank Tables IV to VIII, is *ideally* a foundation for further tank crew training, but because of current limitations, it is the primary live gunnery crew training event. We developed our modifications under existing conditions and focused on tank gunnery tables as training events that have the most realistic impact on developing combat-ready crews. We also realize that current loader and TC weapons station capabilities produce some risk. Therefore, we decided to focus our modification approach on crew-level training and not at platoon or section level. This currently appears to be the safest way to integrate necessary training changes. These two factors resulted in our recommendations being focused on *immediate*, applicable, and safe changes to tank gunnery training.

To begin our analysis, we applied a systematic method to capture our lessons learned from OIF. While deployed, we conducted a tank crew survey in which every crew in the task force participated. We reviewed unit after-action reviews (AARs) and conducted interviews with key leaders, master gunners, and soldiers to accurately capture lessons learned from OIF. Our collection method stressed impartiality. The surveys were anonymous to avoid "bragging." We also stressed to crews and leaders that their comments would help to reform tank gunnery training, which would save lives.

The survey results reveal that when compared to current tank gunnery training, there is a need for revision. For example, during OIF, the gunner engaged targets 47 percent of the time, the loader 32 percent of the time, and the TC 21 percent of the time. The current Tank Table VIII qualification crewmember-to-target breakdown has the gunner shooting roughly 92 percent of the time, the loader 0 percent, and the TC 8 percent. Another example is that crews were forced to fire at multiple targets in close terrain. This increases the crew's observation area and also demands rapid response from all crewmembers. A final example is overemphasizing defensive gunnery (60 percent in gunnery versus 10 percent in OIF), tank targetry (almost 50 percent in gunnery versus 2 percent in OIF), and long-range engagements in our current gunnery training. These glaring differences mandate we adapt our gunnery training.

We are not saying that current gunnery training has ill prepared our crews for combat. On the contrary, we believe the emphasis on mastery of weapons systems, to include degraded modes, crew integration, and safety, were essential combat enhancers in preparing our crews to win decisively. Some shortfalls exist, which can be remedied with modifications to selected engagements of current gunnery tables.

Gunnery modifications must focus on two main areas. First, we have to reduce the "gamesmanship" of gunnery, which requires modification of the current scoring system. Presently, our scoring method rewards crews that master the intricacies of scoring. The brake time given for obscuration, experienced crews, to the detriment of combat training, have mastered stoppage and defilade. Crews need to fight through their problems, as opposed to using them to increase their scores. We believe that efforts by leaders to prevent crews from applying "gamesmanship" are doomed to fail. The only solution is a scoring system that rewards crews who fight their tanks. This might require giving partial points for "suppression" of targets — a crew that has a main gun malfunction could then use an alternate weapons system to engage and suppress a tank. We have to build an adaptive focus into our gunnery scoring, which will reward crews who use initiative and train as they will fight.

Second, we have to adapt tank gunnery to train crews for the asymmetrical fight. This means increasing crew close combat competence and integration. Modifications should be focused in crew capability and environment realism. Crew capability training focuses on better preparing tank crews to fight in close or urban terrain. The glaring conclusion here is that loaders must be trained to fight their weapons station. The loader's ability to use his M240 was essential to Task Force 1-64 Armor's survival in urban and close terrain. This requires upgrading the loader's weapons station for survivability (gun shields) and safety (M240B kits). The close fight also demands that TCs fight with .50 cals and be prepared to use personal weapons as well.

Engagements must force crews to engage enemy targets at short range, on the move, and with multiple weapons systems simultaneously. All of these changes can be implemented immediately with slight modifications to gunnery engagements. We will have to create a three-di-

mensional fight to replicate a realistic training environment. Possible solutions are mock buildings that can be assembled on ranges with targetry presented from basements to rooftops. Safety constraints may limit this training and force us to conduct close combat training in simulations or with multiple integrated laser engagement simulation (MILES). Regardless of the method chosen, crew and unit training for close combat is essential to maintaining our train-as-you-fight focus.

Rogue gunnery is a way to begin training crews for close combat. It offers an immediate solution that can be applied to crew live-fire training today. These modifications were intended to be a first-step approach to changes to tank crew training. We expect to build on our rogue gunnery experiences and that upgrades to training resources will permit more realistic and unit-level close combat training for our soldiers in the future. This near-term approach focuses on modifying tank gunnery engagements to better replicate the close fight, integrate all crewmembers' weapons systems, and build crew competence and confidence.

To modify tank crew gunnery, we first looked at the current 10-engagement package laid out in U.S. Army Field Manual 3-20.12, *Tank Gunnery (Abrams)*.[1] We attempted to identify redundancies in the engagement package, which we saw as potential opportunities to modify or implement changes. We then developed engagement scenarios that maintain a focus on safe crew training and the limitations of current ranges. We did not change our focus on safe training by retaining all of the current scoring and focus on crew fire commands. Finally, we tested our pilot program during gunnery density, which resulted in recommended changes to three target engagements.

Figure 1 shows recommended modifications to Tank Table VIII (A-day) engagement scenarios. The B3S task is assumed to be a daytime engagement. This allowed us to sustain some of the other day engagements that we felt trained essential skills. Of course any modifications that increase loader and TC integration of firing will have to be on the day portion of tank gunnery training.

On the A1 task, the engagement was modified to train the crew to integrate all machine gun fires. The first set of troops is presented with subsequent targets on a delay. This allows the TC to ensure the loader has properly identified the target and his M240 is oriented within the range fans. A personnel carrier (PC) target presents 15 seconds later for the TC to engage with .50-cal, allowing the loader and TC to simultaneously engage targets while in the defilade. A third set of troops presents a 25-second delay, which allows the TC to decide whether to have the loader (gunner traverses turret to the right) or gunner engage. The loader is given 100 rounds of 7.62mm ammunition to account for the limitations of the current weapons station. Scoring adjustments will have to be made to account for the longer time it takes the loader to engage troop targets. An M240B modification could possibly reduce both the scoring problem and the ammunition requirement to 50 rounds. Under current scoring standards, no break time is given for stoppage since there are three machine guns and the crew can switch to alternative weapons. This also reinforces the focus on training crews to fight through their problems.

On the A5 task, the engagement was modified to replicate a close fight on the offense. A moving PC presents with a second PC presenting on a 15-second delay. This allows the gunner to fire and adjust,

Proposed TT VIII Training — A (DAY)

Task #	CONDITIONS	Proposed TT VIII Targets		Ammunition 120mm SABOT	120mm HEAT	.50	7.62 mm TC	7.62 mm GNR	7.62 mm LDR	Training Intent: All tasks train target acquisition and crew integration/ synchronization/switchology
A1	DEF, GNR system Inop	Troops 15-second delay, exposed 35 sec	300-500m				100		x	Trains the LDR and TC to coordinate fires
		Stationary PC, 10-sec delay, exposed 50 sec	600-800m			100		x		
		Troops 25-sec delay, exposed 35 sec	300-500m				50		x	
A2 S	OFF-NBC	Stationary PC, exposed 75 sec	1400-1600m		1				x	Trains the GNR to engage enemy in NBC, also trains the crew to fight in NBC with change in weapons system
		Stationary PC, exposed 75 sec	600-800m		2				x	
		Troops 15-sec delay, exposed 60 sec	600-800m				50		x	
A3	DEF, LRF, GPS, TIS Inop	Stationary Turret, exposed 60 sec	700-900m	1					x	Trains the GNR to use the GAS
		Stationary Frontal Tank, exposed 60 sec	1000-1200m							
		Stationary Frontal Tank, exposed 60 sec	1400-1600m							
		Moving Tank, exposed 50 sec	1200-1400m	2					x	
A4	DEF- Long Range	Moving Tank, exposed 50 sec	2200-2400m	2					x	Trains the GNR to engage long-range targets
A5	OFF	Evasive Flank PC, exposed 50 sec	600-800m	1				x		Allows the LDR, GNR, or TC to engage troops based on crew decision
		Stationary PC 25-sec delay, exposed 50 sec	600-800m	2				x		
		Troops 40-second delay, exposed 75 sec	100-200m				50		x	
		Troops 40-second delay, exposed 75 sec	600-800m				50		x	
B3 S	DEF	Stationary Tank, exposed 75 sec	1400-1600m	2					x	Trains the crew to coordinate and integrate fires
		Defensive PC 15-sec delay, exposed 60 sec	700-900m			100			x	
		Troops 25-sec delay, exposed 50 sec	200-300m				50		x	
		Troops 25-sec delay, exposed 50 sec	300-500m				50		x	

Changes

Figure 1

"Second, we have to adapt tank gunnery to train crews for the asymmetrical fight. This means increasing crew close combat competence and integration. Modifications should be focused in crew capability and environment realism. Crew capability training focuses on better preparing tank crews to fight in close or urban terrain. The glaring conclusion here is that loaders must be trained to fight their weapons station." Photo by SPC Mason Lowery

and the TC to fire the .50-cal while on the move. After a 40-second delay, two sets of troops present, allowing the crew to engage with multiple weapons choices. This also trains the loader transition from loading to acquiring and engaging targets. To present this scenario safely, the tank had to be down range, allowing an expansion of the safe firing area. Additionally, crews had the option of performing a short halt based on TC evaluation of crew capability.

On the B3S task, which is similar to A1, the engagement was modified to train the crew to integrate all machine gun fires, while building the loader transition from loading to acquiring targets and firing. A stationary tank presents with a PC and two sets of troops on a 25-second delay. This allows the gunner to engage the tank and then transition the crew to close fighting of their weapons stations. The TC must ensure the loader has properly identified the target and his M240 is oriented within the range fans. The TC has numerous methods to attack this engagement. He can remain in defilade and attack with the loader and TC machine guns, or go to hull-down and include the gunner's coax machine gun.

To better prepare our tank crews for combat, we must *implement* OIF lessons learned into our gunnery program. This will ensure crews are prepared for both conventional and asymmetric fights in close terrain. Our proposals for gunnery are an immediate solution to current tank gunnery training. They build better crew integration and competence in all weapons systems and emphasize close fighting capabilities, while sustaining conventional skills. Future tank gunnery modifications should modify the current scoring system to reduce gamesmanship and teach crews to fight through problems. Additionally, we should develop live-firing scenarios that replicate the urban three-dimensional fight. These modifications will begin the process of training tank crews and units as they will fight.

Notes

[1]U.S. Army Field Manual 3-20.12, *Tank Gunnery (Abrams)*, U.S. Government Printing Office, Washington, D.C., 1 October 2001.

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Treachery and Its Consequences:

Civilian Casualties During Operation Iraqi Freedom and the Continued Utility of the Law of Land Warfare

by Major Dennis P. Chapman

Among the themes pervading our recent invasion and occupation of Iraq, two merit particular attention: civilian casualties and Iraqi violations of the law of war. While both phenomena are ubiquitous in the annals of warfare, their occurrence during Operation Iraqi Freedom illuminates a crucial fact — collateral injury to civilians and violations of the law of war do not merely occur in parallel. However, they are often causally linked. Many tragedies in Iraq amply demonstrate that where one or more parties to a conflict regularly disregard customary moral and legal constraints on the conduct of operations, increased civilian casualties inevitably result.

On 31 March 2003, a van sped through a U.S. military checkpoint near Najaf, Iraq. After the driver ignored warnings to stop, the troops opened fire, bringing the vehicle to a halt. Inside, soldiers found seven women and children killed — all unarmed.[1] Within hours, U.S. Marines south of Baghdad gunned down an Iraqi driver at a checkpoint and, like the women and children above, he proved unarmed.[2] Tragically, these are only two of a number of such killings by coalition forces in Iraq during Operation Iraqi Freedom.

How did these tragedies occur? Why did American servicemen — overwhelmingly decent, moral, well-trained, and well-disciplined young men and women — find themselves mistakenly killing the very innocents they were sent, in part, to save? They did so because they were provoked: not by the innocent victims themselves, but by agents of the dying Iraqi regime.[3] The soldiers and Marines who fired these shots did so because they were afraid of becoming the latest victims of Baath Party treachery.[4]

Early in the invasion, American troops fell victim to suicide attacks by fighters posing as civilians, sometimes feigning distress. On 29 March 2003, a man posing as a taxi driver approached a checkpoint and gestured for the soldiers manning it to approach his vehicle, as if requesting assistance. When soldiers did approach, he detonated a car bomb.[5] Two weeks later a vehicle stopped near a checkpoint and discharged a hysterical, pregnant woman. As our troops approached to offer assistance the driver detonated another car bomb.[6]

These attacks, where Iraqi fighters exploit the protected status of noncombatants as cover for attacks on coalition troops, create a climate of apprehension and mistrust among our soldiers, who find themselves not knowing whether the people coming and going around them are civilian noncombatants or a covert and deadly threat.[7] While civilian casualties always occur in war, the ambiguous and uncertain environment spawned by this enemy misconduct almost certainly exac-

erbates the situation, greatly increasing the risk of harm to innocent civilians and causing many needless casualties among them.

In deliberately disguising themselves as civilian noncombatants, Iraqi fighters violate one of the most widely accepted norms for the conduct of warfare. The hideous and all too foreseeable consequences of these acts point the way to a renewed understanding of the rationale — the moral basis — for the constraints on combat action that we know collectively as the law of war.

"War is cruelty, and you cannot refine it."[8] So wrote William Tecumseh Sherman, an early practitioner of total war. Is he right? He certainly has a point. By the mere act of maintaining an armed force, society implicitly accepts that, under certain circumstances, the ordinary rules by which we live our lives may not apply: rules against killing, against destruction of property, and against compelling citizens to act against their will (by serving in the armed forces). When a government makes the decision to go to war, it has concluded that the controversy at issue or the values at stake are so profoundly important or so dangerously threatened that such extreme measures are justified.

Having accepted the infliction of such damage as sometimes necessary and appropriate, why do we muddy the waters by attempting to shield certain persons from the ill effects of war, while deeming others legitimate targets and thus fair game to be killed? Having once deemed it necessary and proper to seek and exploit almost any advantage in our quest to weaken and destroy our enemy, why do we cloud the issue by singling out certain practices and stratagems as perfidious and hence prohibited?

We do so because we disagree with General Sherman. While war certainly is hell, we reject the temptation to conclude that because it is hell we are released from all moral restraint during armed conflict. Although we accept the premise — reluctantly — that violence is sometimes a necessary and appropriate means of settling international controversies, it remains a *disfavored* means: a method of last resort to be used only under exceptional circumstances and, most importantly, the scope and impact of which is to be strictly limited to the objects in question. To the extent possible, the damage inflicted should relate to the objective and end state sought; it should never be inflicted arbitrarily or vindictively. Toward this end, society at large has erected a structure of rules, norms, and agreements that aim to limit the social costs of war. We know these rules collectively as "international law" or the "law of armed conflict."

International law differs significantly from the national law of individual countries. Whereas the domestic law of states is generally founded on compulsion — that this, the power of the state to compel compliance — international law is built on the twin bases of *consent* and *consensus*. The basic laws governing the behavior of states are simply those customs and practices that most countries acknowledge as appropriate. This is known as customary law, the "consensus" component of international law. Like the common law with which we are familiar in English-speaking countries, customary international law develops and changes over time as social and political norms evolve.

The second basis of international law consists of the treaties and agreements by which states voluntarily undertake to regulate their own conduct.[9] This is the "consent" component of international law. U.S. Army Field Manual 27-10, *The Law of Land Warfare*, sets forth a list of such treaties that pertain to armed conflict. The most prominent of these are the Geneva Conventions of 1949 and the Hague Conventions of 1907.[10]

The twin pillars of consent and consensus exist in a state of tension. The idea that no state can be bound except by its own consent is the foundational concept

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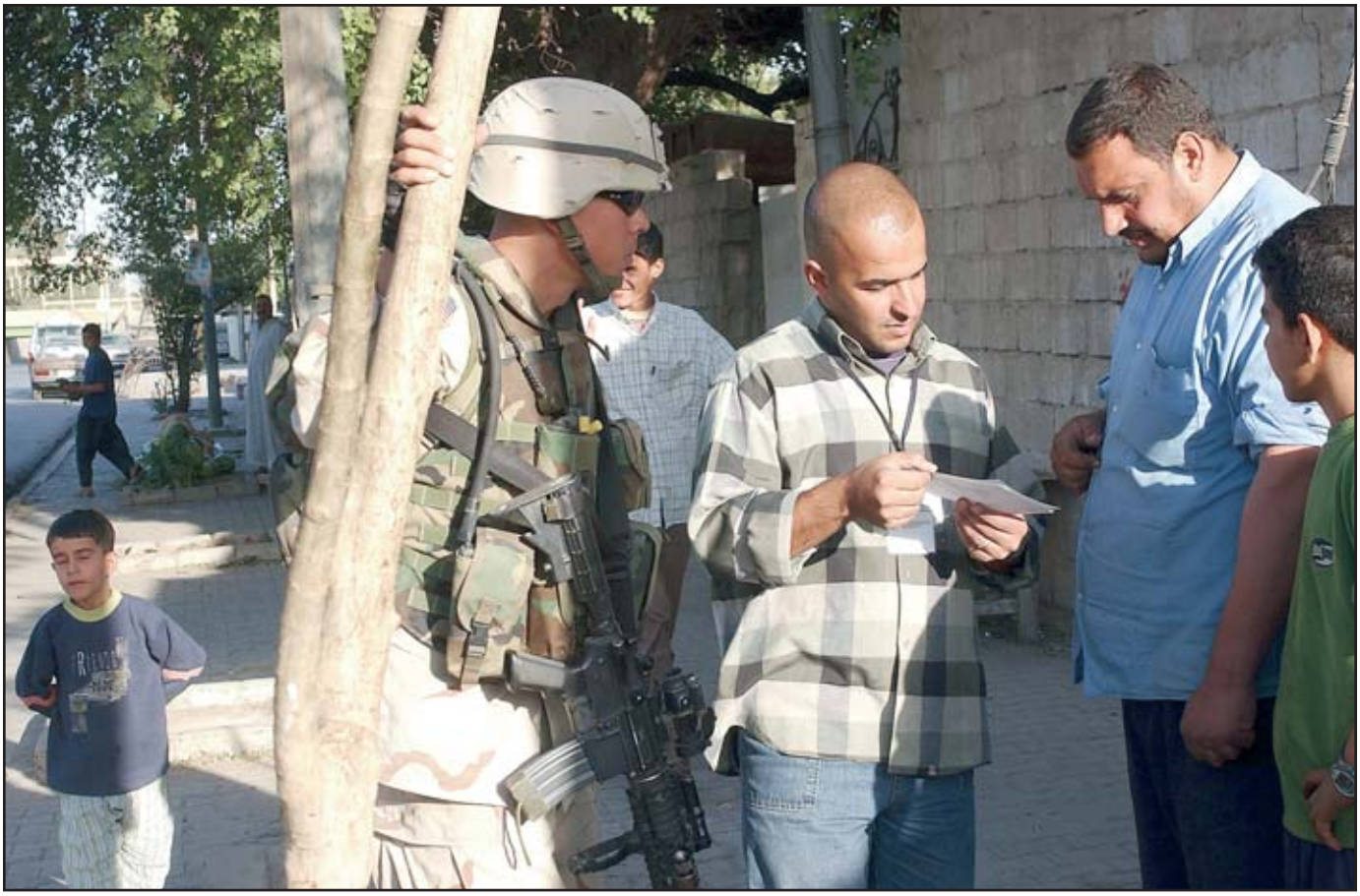

"During the course of Operation Iraqi Freedom, fighters loyal to Saddam Hussein violated all of these. The most common such violation — and the one attended by the most tragic results — attacking U.S. forces while under civilian disguise. Protecting civilians from the evil effects of battle has long been a fundamental goal of the law of armed conflict. To that end, international law has long sought to "maintain the distinction between combatants and noncombatants with as much clarity as possible."

of international law, one vigorously maintained by many countries. Despite this, the international community expects every state to adhere to the basic standards of customary law, whether or not a given country acknowledges such an obligation. The importance of consent in the international system has led some to argue that international "law" as such does not exist at all. At the opposite extreme are those who argue that the evolving web of multinational organizations, treaties, conventions, and institutions currently in place has displaced the principle of consent, and that the wide recognition and legitimacy of these international structures invest them with quasi-legislative authority. In my view, the truth lies in the middle: the principle of consent not only endures, but remains the cornerstone of the international system. That said, it is perfectly clear that states are not absolutely free to act in any manner they deem fit, save for restraints that they voluntarily assume. While states may not be compelled to take specific, detailed actions without their own consent, they must still adhere to the broader standards of conduct embodied in customary international law, whether they consent to be bound or not.

A final, critical note on the concepts of consent and consensus — while treaties generally do not bind states not signatories to them, *they may constitute evidence of what the customary international law is*. Furthermore, some treaties or their provisions may achieve such widespread acceptance and legitimacy that they may come to be accepted as declaratory of customary international law — that is, *they may be incorporated into the customary law of nations and become binding on all states as a result*.[11]

The law of war seeks to limit or restrain the social costs of war in three ways: by protecting "both combatants and noncombatants from unnecessary suffering;" by "safeguard[ing] certain fundamental human rights of persons who fall into the hands of the enemy, particularly prisoners of war, the wounded and sick, and civilians;" and by "facilitat[ing] the restoration of peace."[12] In pursuit of these aims, international law imposes certain standards on all combatants in armed conflicts. These include requirements to wear uniforms or distinctive insignia and to bear arms openly; prohibitions against abuse of flags of truce or equivalent symbols, and against the misuse of symbols such as the red cross or red crescent; and rules concerning the status of cultural and humanitarian sites during wartime.[13]

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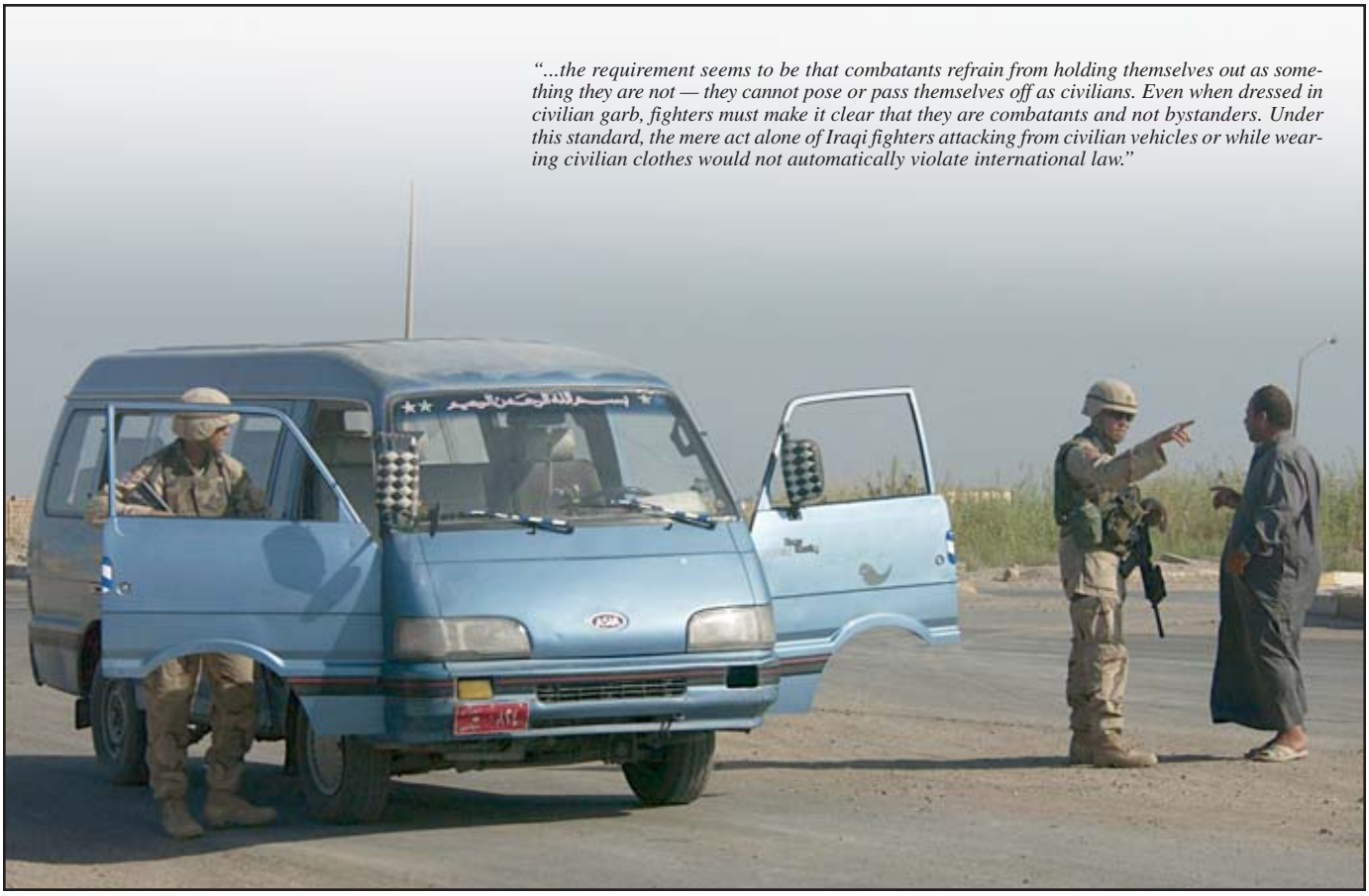
Prior to 1977, this was accomplished by focusing heavily on wearing uniforms and distinctive insignia. The Hague Convention (IV) of 1907 sought to incentiv-



"...the requirement seems to be that combatants refrain from holding themselves out as something they are not — they cannot pose or pass themselves off as civilians. Even when dressed in civilian garb, fighters must make it clear that they are combatants and not bystanders. Under this standard, the mere act alone of Iraqi fighters attacking from civilian vehicles or while wearing civilian clothes would not automatically violate international law."

ize compliance with this norm by establishing the following qualifications for the status of belligerent, and hence for the protections afforded to legitimate combatants under international law: "the laws, rights, and duties of war apply not only to armies, but also to militia and volunteer corps fulfilling the following conditions:

1. To be commanded by a person responsible for his subordinates;
2. Have a fixed distinctive emblem recognizable at a distance;
3. To carry their arms openly;
4. To conduct their operations in accordance with the laws and customs of war."[15]

The rationale for such qualifications is clear: "The concealed combatant certainly has an advantage over the uniformed soldier, but it is a price that others must pay. It inevitably leads to increased casualties among the civilian population, as the uniformed adversary can no longer clearly distinguish between combatant and noncombatant."[16]

The Hague Convention standard has been weakened in recent decades with the negotiation of the 1977 Protocols to the Geneva Convention of 1949. As noted in one commentary: "A majority of states that participated in the international conferences that adopted the additional protocols of 1977 were sympathetic to the insurgent sides in the so-called 'wars of national liberation.' Such insurgents usually did not wear uniforms or carry their arms openly, but concealed themselves among the population at large."[17]

Such practices, while arguably unavoidable for poorly trained and under-financed insurgents confronting powerful regular armies, nonetheless pose a great risk to civilians because they make it difficult or impossible for uniformed soldiers to distinguish between friend and foe. Recognizing this dilemma, the drafters of the 1977 Protocols tried to craft a compromise that would legitimize the insurgent movements they supported while still affording some protection to the innocent civilians caught in the inevitable crossfire. They did this by deemphasizing the Hague Convention requirements that belligerents wear uniforms and distinctive insignia, focusing instead on the requirement that *the combatants bear their arms openly*. The 1977 Protocols state: "In order to protect the civilian population from the effects of hostilities, combatants are obliged to distinguish themselves from the civilian population while they are engaged in an attack or in a military occupation preparatory to an attack. Recognizing, however, that there are situations in armed conflicts where owing to the nature of the hostilities an armed combatant cannot so distinguish himself, he shall retain this status as a combatant, *provided that, in such situations, he carries his arms openly*:

(a) During each military engagement, and
(b) During such time as he is visible to the adversary while he is engaged in a military deployment preceding the launching of an attack in which he is to participate."[18]

Controversy surrounds the 1977 Protocols.[19] Nonetheless, the position they espouse has probably achieved broad enough acceptance to be deemed declarative of customary international law.[20] At bottom, the requirement seems to be that combatants refrain from holding themselves out as something they are not — they cannot pose or pass themselves off as civilians. Even when dressed in civilian garb, fighters must make it clear that they are combatants and not bystanders. Under this standard, the mere act alone of Iraqi fighters attacking from civilian vehicles or while wearing civilian clothes would not automatically violate international law. The law has shifted from a procedural focus on the wear of distinctive clothing and insignia, to a substantive fo-

cus on the conduct of fighters. Those who forthrightly show themselves for what they are (combatants) will generally fall within the bounds of the law, while those who deceptively masquerade as what they are not (civilians) generally do not. Unfortunately, Iraqi conduct falls far short even of this pragmatic standard. In deliberately concealing their identity as combatants, using civilian disguise as a ruse to get close enough to our troops to strike, Iraqi fighters commit a serious breach of international law.

Perfidious acts prohibited under international law are not limited to posing as civilians. Nor, regrettably, is Iraqi misconduct. Iraqi violations include feigning surrender as cover for an attack;[21] using emblems of international organizations, such as the red cross or red crescent, as cover for hostile action;[22] and exploiting the protected status of humanitarian and cultural sites such as mosques, schools, and hospitals, for military advantage.[23] Fortunately, these violations are not attended by tragedies like the checkpoint killings. But the potential for such tragedies is always there, and grows with each succeeding Iraqi violation. As one commentator has said, "the Iraqi regime, by blurring the distinction between combatants and civilians, has caused numerous casualties and *has put thousands of … Iraqi civilians in harm's way.*"[24] This increased risk goes to the heart of why international law prohibits such conduct. When combatants pose as civilians they "break down the distinction between fighters and civilians," and so put all civilians at risk.[25] When combatants deliberately seek out protected sites, such as mosques, churches, and hospitals, for military use they erode the sanctity of these sites by teaching the enemy to view them as likely enemy strongholds, thereby placing all such sites at risk. When fighters feign surrender or attack under a flag of truce, they "destro[y] the basis for reestablishing peace short of the complete annihilation of one belligerent by another"[26] and, by teaching the enemy to view surrendering troops as a threat, endanger all soldiers attempting surrender. Likewise, fighters who feign wounds or injury to lure the enemy within striking range teach their foes to view enemy wounded as a threat, placing all injured soldiers at risk.

If anything redemptive emerges from the tragic checkpoint killings in Iraq, it may be a renewed appreciation for the value of restraint in the conduct of war. The laws of land warfare are not merely a collection of compacts promulgated for the convenience of elites; they are not a legal fig leaf created to paper over the brutality of war with a veneer of gentility; nor are they a relic, well-intentioned but rendered obsolete by the advance of technology and the rise of terrorism and guerrilla warfare. On the contrary, when taken as a solemn obligation, the laws of war remain a bulwark for protecting the innocent. As gruesomely illustrated by recent tragedies in Iraq, deliberate and recurring disregard of established legal and moral standards during combat sets the stage for needless tragedy. While not perfectly effective, the laws of land warfare nonetheless remain our best means of mitigating the awful consequences of war.

Notes

[1]Nadim Ladki, "Check Point Killings," *Reuters* at *www.att.net,* accessed 1 April 2003.

[2]"U.S. Sticks to Iraq Check Point Rules Despite Deaths," *Reuters* at *www.att.net,* accessed 1 April 2003.

Continued on Page 49

"If anything redemptive emerges from the tragic checkpoint killings in Iraq, it may be a renewed appreciation for the value of restraint in the conduct of war. The laws of land warfare are not merely a collection of compacts promulgated for the convenience of elites; they are not a legal fig leaf created to paper over the brutality of war with a veneer of gentility; nor are they a relic, well-intentioned but rendered obsolete by the advance of technology and the rise of terrorism and guerrilla warfare."

Company Operations During the Establish

by Captain Roger Maynulet

"Units may have to conduct operations in environments that do not involve traditional combat. A unit may also be utilized in a stability or support operation at the successful conclusion of a combat mission. While stability and support operations can occur anywhere, they will most likely occur in an urban environment. During a stability operation or support operation, units perform many activities not necessarily contained in its mission essential task list."[1]

In May 2003, 1st Brigade, 1st Armored Division arrived in Baghdad as peace operations began replacing the high-intensity conflict operations of the 3d Infantry Division and U.S. Marines. Until the majority of the units were physically within the city limits, commanders were unsure of the task organization their units would assume and of the sectors in Baghdad they would control. This article outlines some essential tasks and lessons learned from one armor company's assumption of mission in Baghdad, Iraq. These essential tasks include task organization, relief in place, forward operating base recon and establishment, command post operations, and establishing the neighborhood advisory council (NAC).

The 2d Battalion, 37th (2-37) Armor Regiment arrived in Baghdad and began conducting relief in place and simultaneously establishing systems. Leaders at the company level and below began operations by assuming the mission and commander's intent of the force in place, which allowed the battalion staff to get their feet on the ground and become familiar with operations prior to tasking units.

Predeployment

A Company, 2-37 (A/2-37) Armor's train-up at home station consisted of level one gunnery, company and platoon situational training exercise (STX) lanes, and a combat training center live fire. During deployment preparation, the company also conducted focused military operations in urban terrain (MOUT) and stability operations and support operations training, to include checkpoint operations, cordon and search, react to ambush, and many other tasks the company was likely to encounter.

The situation in Iraq continued to develop during the training and deployment process; therefore, leaders could not focus on any particular sector, specific mission, or task organization. Focusing on soldier-level tasks allowed flexibility in the training schedule during a time when conflicting requirements were common.

ment of Stability Operations in Baghdad

The company was deploying from the cool temperate climate of Central Europe to the oppressive heat of the Kuwaiti and Iraqi deserts. Increased water intake prior to deployment, ensuring soldiers are eating three meals a day despite a decreased appetite, and constant supervision by leaders will lower the likelihood of heat casualties.

During the staging period in Camp Udairi Kuwait, the most useful and motivational training for the soldiers was the short-range marksmanship (SRM) training that is operated by contractors. These experts (former special operations noncommissioned officers) led the tankers through the basics of SRM in the wide-expanse of the Kuwaiti firing ranges. The ability to shoot the M4 or M16 accurately while standing, advancing, and side-stepping laterally, as well as inside buildings, is critical during enemy confrontation. Most company firefights were less than 150 meters.

While still in Kuwait, company and battalion commanders benefited from eavesdropping on the division and corps battle update briefs. Listening to the kinds of engagements, hotspots, and other issues concerning operations in Baghdad allowed commanders to become familiar with the operational environment and begin building a broad plan on how to execute missions in that environment.

Task Organization

The task organization for the company (and the battalion) was uncertain until arriving in Baghdad. Once they arrived in Baghdad, 2-37 Armor was cross-attached to the 2d Light Cavalry Regiment (2LCR) to provide heavy armor assets to the high mobility, multipurpose wheeled vehicles (HMMWV) of the LCR. The 2-37 Armor cross-attached one tank company to 1st Squadron, 2LCR while the battalion received one troop from the same squadron. The task force commander attached one scout platoon to A/2-37 Armor from his new cavalry troop and provided the troop with one platoon of tanks.

The tank company commander's effective employment of this scout platoon hinged on several factors and can best be determined using mission, enemy, terrain, troops, and time available (METT-T). The company's mission on arriving in May was to conduct combat operations in a sector of Baghdad and provide security and stability to allow reconstruction efforts to begin (mission statements must change depending on the operational environment just as in high-intensity conflict operations).

The enemy consisted of Baathists, former regime loyalists, and common criminals attempting to undermine coalition forces' authority through guerrilla attacks, using the local population as

its camouflage. The terrain on which the company would be conducting its mission is built-up urban terrain with a mix of residential streets in linear and rectangular pattern, highways, and a limited number of neighborhoods with "rayed" streets.[2] Trafficability depended on location, but also on time of day. Civilian traffic cycles need to be considered (although not exclusively) for determining whether tanks or wheels will roll on a mission. Building size varied from one-floor shack houses, two-story mansions, and multilevel apartment and office buildings. Troops available were one headquarters section, two tank platoons, and one scout platoon with eight M1026s. The medic (red-cross covered) and maintenance M113s were also sliced to the platoons to provide flexibility to transport raid teams or evacuate wounded personnel. Time available for the mission is one year or until mission complete.

To provide each subordinate maneuver element the flexibility to conduct the varied missions required for combat and support operations and stability operations, the scout platoon was broken down by section and cross-attached to each of the remaining two tank platoons and the headquarters tank section (the scout platoon leader and platoon sergeant controlled two remaining scout sections and the headquarters tank crews). This task organization provided each platoon with the ability to conduct the full spectrum of operations, to include zone recons (formerly known as presence patrols), raids, and other activities related to light operations. It also allowed each platoon to conduct missions, such as fixed checkpoints, fixed-site security, zone recons (during hours of light traffic), quick reaction forces (QRF) for raids, cordon missions, and other activities, with the heavy armor of the M1A1 Abrams main battle tank. During the occasional task force-level operations, the task organization was adjusted to give the scouts more consolidated manpower for raids and building clearing, and allow the tankers to concentrate on outer-cordon security.

"Civilian traffic cycles need to be considered (although not exclusively) for determining whether tanks or wheels will roll on a mission. Building size varied from one-floor shack houses, two-story mansions, and multilevel apartment and office buildings."

Cross training 19Ds and 19Ks on each other's respective tasks improved the company's ability to accomplish missions with this unique task organization. HMMWV driver's training was an ongoing event and curfew hours were a perfect time to train new soldiers on driving in realistic terrain. Select scouts could also conduct tank crew gunnery skills training to be qualified on tank weapons systems. Eventually, the line between scout and tanker within the company blurred because everyone executed similar missions. The scout platoon's integration was a welcome event and a pure tank company could not have been as successful without the scout platoon's skills, experience, and leadership. This task organization also allowed for an easier rotation of red, amber, and green cycles during the yearlong mission. Rotating these duties is an excellent way to mitigate complacency by varying the soldiers' mission and tasks.

Relief In Place

Relief in place is an essential task of assuming any long-term mission in the stability operations and support operations environments. The time frame of the relief in place varies depending on mission requirements. The relief in place is a leader-intensive mission that needs to have a clear focus culminating in a commander's assessment. A/2-37 Armor's tasks included:

- Fully immersing into the outgoing company's everyday operations, focusing on getting every soldier into sector with his counterpart.
- Platoon leaders and company commanders meeting with community leaders in sector.
- Assessing the status of all elements of the sector's infrastructure, to include electricity, water, police, schools, hospitals, and demographics.
- Providing the task force commander with a comprehensive commander's assessment and recommended plan of action to meet the higher command's intent.
- To relieve the 3d Infantry Division outgoing company as quickly as possible to allow them to reconsolidate, refit, and prepare for redeployment.

Most leaders are familiar with the basic concept and intent of the relief in place from missions in Bosnia and Kosovo. Leaders must ensure everyone is comfortable with the tasks they will be required to accomplish for the next several months. The earlier the commander can arrange patrols into sector and get soldiers immersed in the operational environment, the more confident they will be when the training wheels come off and transfer of authority is complete. Task force staff and leaders will most likely not supervise the relief in place closely because they will be busy learning their jobs and becoming familiar with the multiple sectors under task force control. Company leaders must provide clear guidance and initiative for a successful relief in place.

Company leaders will be required to meet with community leaders and influential Iraqis in sector to minimize confusion among the populace by identifying the responsible authority in sector and establish close relationships necessary for stability operations and support operations. Visits to all pertinent centers of gravity in the sector will familiarize leaders with these areas and help build the template for future patrols and humanitarian projects. Political party headquarters, community leaders, and tribal leaders all have influence in sector and can serve as force multipliers when conducting operations by spreading information on coalition projects and positive propaganda. Community leaders legitimize their positions and increase their clout by being seen with coalition forces and participating in reconstruction projects.

Properly assessing the state of the infrastructure in sector is obviously key to reconstruction efforts and building the local populace's trust. The residents of the sector will expect miraculous speed in re-establishing electricity, sewage, water treatment, and

"Establishing observation points and direct-fire planning can be conducted exactly as in a high-intensity conflict environment, with particular attention to fighting-position construction, wire communications, wire obstacle emplacement, barriers to protect from drive-by shootings, and lighting. Three observation posts (OPs) were used to cover the portion of the perimeter the company manned."

security. At first glance, the commander will believe that he cannot influence city-level issues such as power and water. In reality, some problems were fixed by replacing common generator parts or wire, or by the coalition simply supervising the station's management at the local site. The residents can provide some insight into the state of basic utilities, although nothing can replace a visit to the actual power substation, sewage department, or water-pumping facility. Producing electricity may be a theater-level problem solved at higher echelons, but local commanders can improve distribution of available electricity, garbage trucks, and clean water. Assessing the competence of city workers and agencies is also vital to improving services since many workers were employed by the former regime based solely on party affiliation and not technical expertise.

Forward Operating Base Establishment and Life Support

Mission requirements may require the company to establish a forward operating base (FOB) away from the task force headquarters. U.S. Army Field Manual 3-06.11, *Combined Arms Operations In Urban Terrain*, provides an excellent list of planning factors and work priorities for establishing a company FOB.[3] When deciding whether to establish an FOB, the following issues were considered:

- The company's sector was located away from the task force headquarters along a main supply route.
- The proposed FOB site was already manned (but not developed) by the outgoing company in charge of the sector and was tied in to the perimeter of another brigade's FOB.
- The proximity to the company's sector allowed informants, community leaders, and police access (after the required security search) to meet with company leaders and discuss issues concerning crime and reconstruction.
- The pre-existing buildings located within the FOB allowed soldiers improved quality of living and a measure of comfort conducive to a long-term mission.

Establishing the FOB and the relief in place should occur simultaneously. The first sergeant and the company commander should do a joint reconnaissance and assessment of the viability of the site. The first sergeant can provide a realistic expectation of the site's potential for improvement and can direct work priorities while the commander concentrates on relief in place and familiarization of the sector. The first sergeant also decides where each platoon will live and how many soldiers can safely occupy each room since not all the room sizes are the same. Separating sleeping areas for noncommissioned officers (NCOs), officers, and soldiers must be considered if space is available. A little privacy and time away from the platoon sergeant and platoon leader is important to a soldier enduring a yearlong deployment and is vital to maintaining a healthy command climate and good morale. This, of course, does not excuse leaders from conducting regular health and welfare inspections and regularly supervising soldiers' living areas.

Establishing observation points and direct-fire planning can be conducted exactly as in a high-intensity conflict environment, with particular attention to fighting-position construction, wire communications, wire obstacle emplacement, barriers to protect from drive-by shootings, and lighting. Observation posts (OPs) were used to cover the portion of the perimeter the company manned. The OPs used wire and FM communications to cross talk and communicate with the command post. The commander of the relief used a Motorola radio to communicate with the OPs and the command post (CP) without having to stay at the CP. An FOB defense plan was also devised, which required increased manning at the OPs, and a wheeled and armored QRF to counterattack enemy forces or provide medical assistance and security to casualties outside the perimeter. Using an M1A1 tank at an OP is not only an advantage for its thermal capabilities, multiple weapons capability, and excellent armor, but also a psychological deterrent to would-be attackers. The Iraqis still respect the capabilities (true and exaggerated) of the Abrams, and placing a tank section on a perimeter or near a soft target greatly reduces the possibility of an attack. Each OP must have the basic equipment required by doctrine to be effective such as maps, sector sketches, fire plans, and binoculars.

"Once battalion commanders had access to discretionary funds to work on projects, the information officer would write proposals for projects in sector nominated by the NAC. The NAC was required to provide three estimates from three different contractors. Detailed receipts and a scope of work were also required. The information officer would then write a proposal, including digital photographs of the site."

Coolers and overhead shade are also required during the summer months.

The company's battle rhythm will also be an important aspect of conducting sustained operations that will last up to a year. The task organization was adjusted to allow for three platoons to rotate red-, amber-, and green-cycle duties. The red platoon was responsible for force protection duties, dining facility/day room cleaning, serving during meals, logistics and commander escort duty, and improvement projects inside the FOB. The amber platoon was in charge of fixed-site security at remote locations, and last minute, directed missions from higher command. The green platoon focused exclusively on patrols and projects in sector. The rotations for these cycles were 1-week intervals. A week is the perfect balance between having a constant state of change and becoming stagnant and risking complacency. Guard duty and other red duties are essential tasks, but unless properly rotated into other duties, soldiers can easily become bored and careless. A weekly change of pace and operational tempo is enough to keep the company mentally alert and proficient in all company operations.

Field sanitation standards must be enforced rigorously to maintain health. The lack of working latrines, limited sources of potable water, and a preponderance of flies and other parasites can render a company combat ineffective if company leaders do not enforce hygiene discipline. One platoon took the initiative and built a burn toilet, shower (nonpotable), and washbasins out of pre-existing materials. All of the platoons cleaned up the area with the help of local hires (using funds provided by the battalion). Each element of the field sanitation kit was used in this environment — mousetraps, bug repellent, flypaper, mesh screening, lime, and bleach was consumed very quickly, so purchase a surplus of these items.

After establishing security, company battle rhythm, and addressing field sanitation issues, leaders prioritized other projects for improving the company FOB:

- Establishing the company command post inside an existing structure.
- Repairing the looted and damaged electrical system.
- Obtaining air conditioning for sleeping areas.
- Furnishing another existing building as the company dining facility/day room.

Repairing the electrical system was a joint effort between locally hired electricians (some with questionable technical skills) and a member of the company who happened to be a former generator mechanic and licensed electrician. Overhauling the wiring and circuit breakers was necessary to manage the load produced by the air conditioners. The battalion's purchase of a 100-kilowatt generator provided the company with enough power to run the air conditioners and power the FOB when the city's power grid was down.

A separate structure for the dining facility and the day room allowed soldiers to eat their meals away from their sleeping areas (minimizing vermin and parasites in the rooms) and provided company leaders a separate place to inspect soldiers and equipment. On entering the dining facility for a meal, an NCO would stand at the door and observe weapons clearing procedures and cleanliness. The communal setting of the dining facility allowed for more interaction among leaders and soldiers and also provided a family dinner time atmosphere that increased in importance during the holidays or special events such as birthdays or promotions.

Other contracts secured for improving the company FOB included overhead shade for the HMMWV line (the heat caused a fail-5 message on the radios), repairing drainage and sewage lines to minimize standing water, and an internet cafe for soldiers. The company FOB did not fall into the division plan for internet kiosks, and the soldiers had limited access to morale phones and e-mail. A local national working as an interpreter had extensive computer and network knowledge and set up a cluster of five computers and a satellite internet connection in the day room. After signing the division's computer-use agreement concerning restrictions and operations security measures, the soldiers used the computers for e-mail and internet calls for a low hourly fee. Adding internet kiosks was the single largest morale event for soldiers. Soldiers could now stay in touch with their families, stay updated on world events, and conduct video teleconferences with their loved ones almost daily.

The division did provide Armed Forces Network decoders and televisions just in time for football season. Commanders should assess what higher headquarters will realistically provide versus what will be resourced at their level. Internet access at the company level was a very simple and inexpensive process whereby the provider fronted the costs for all the equipment, to in-

clude surge protectors and fans to protect the computers. Usage was the only cost to soldiers and they were more than willing to spend a couple of dollars to talk to or e-mail family and friends.

Establishing and improving the company FOB is essential to a successful long-term deployment. Occupying and improving existing buildings is much easier, cheaper, and less resource-intensive than creating buildings from nothing. Soldiers can survive in any environment and will accomplish their mission while enduring a very low standard of living as shown in recent media reports. During a deployment that is going to last several months to a year, commanders will improve the morale and effectiveness of their soldiers if they can give them a comfortable place to rest, conduct maintenance, and train. Existing structures will also improve the effectiveness of a company CP and planning cell by keeping documents, tools, maps, and equipment protected from the elements.

Command Post Operations

Rapidly establishing a working company CP is crucial to stability operations and support operations in Baghdad. The company CP will bear many similarities to a CP used in a high-intensity conflict environment, but the information and tracking requirements will be much greater for a company CP in an FOB. Essential tasks to complete during the establishment of the company CP include FM communications, properly labelling all maps and battle tracking tools, a board for the information officer and civil affairs-related projects, and a method for recording end of mission reports.

The company will need a minimum of three secure nets running at any one time. To include all elements of the CP in one room, we removed the radios from the first sergeant's M113 and placed them in a large ground-floor room in one of the buildings in the FOB. The M113 stayed right outside the CP room to provide power for the radios. This required the CP NCO in charge (NCOIC)/officer in charge (OIC) to start the M113 every two hours to keep the batteries charged. The nets used were the battalion command, company command, and force protection nets used by the entire perimeter, to include adjacent units and gate guards. The force protection net was necessary in the event that a local national visitor (council member, informant, or interpreter) was present at the gate and needed an escort to the company area. The CP also had a Motorola radio as a secondary method of communication. Two OE-254s were placed on the roof of the CP building to maximize the range for communications with battalion and the majority of downtown Baghdad for patrols in or out of sector on the company net. Baghdad has very few buildings over three stories tall and raising the base of the OE-254 to a height of 15 feet provided excellent range, out to 20 kilometers in most instances (with working power amplifiers).

As in any combat environment, proper battle tracking, situational awareness, and command and control are key to any successful military operation. The first and most important element of a successful CP is the capabilities of the soldier behind the radio. During operations in Baghdad, at a minimum, one NCO or officer was always on duty in the CP. Too many units put young privates and specialists on radio watch/CP duty, who do not have the experience, authority, or confidence to make maneuver decisions or answer complex questions to higher units about operations in sector. At any given time, there may be four or five maneuver elements in sector and the commander and first sergeant may be in a council meeting, or unable to communicate with all the elements on the ground. The CP NCOIC/OIC will provide accurate reports to battalion, accurately track all elements in sector (during a crisis event like the UN bombing this will include multiple battalions, civilian agencies, news media, and VIPs), coordinate link-up points, and alert QRF personnel. The company executive officer will take over CP duties during task force operations or mass casualty events to provide accurate assessments to the task force while the commander develops the situation on the ground and often away from the task force net.

The best map product for conducting sector operations in Baghdad is the satellite imagery (1:5,000-scale with gridlines) provided for each sector. This map was mounted in the CP and streets were labelled using white strips of paper taped to the acetate. Churches, mosques, hospitals, political party headquarters, banks, and other key facilities were also labelled. A series of checkpoints were included and a patrol went out into sector to get 10-digit grids for all the checkpoints in sector (easily identifiable intersections and squares). A list of these checkpoints and grids were given to battalion so they could assemble common graphics for the battalion and use the checkpoint system when referring to areas or points in sector. Another map useful for finding important areas across Baghdad was the tourist map the company ordered through Amazon.com. This map labelled many key facilities, hotels, and monuments, and was helpful in navigating the streets of Baghdad, especially when patrols were required to link-up outside of the assigned company sector. Baghdad's neighborhoods are broken down into sections known as "mahallas." A three-digit number similar to an area code identifies these mahallas. The locals use this numbering system often when describing events in certain areas. Because of this, labelling the map with each of the mahallas is very important. The 1st Armored Division's terrain team was also helpful in providing special maps covering specific areas in sector.

The popularity of the satellite imagery cannot be overstated. The imagery provided resolution that allowed leaders to plan raids and cordons for individual houses, and its large size allowed for easy battle tracking. Properly labelling the map also allows for quick identification of key sites and familiarization with the sector.

Several large dry-erase boards are also important for battle tracking in the CP. The company tracks each patrol and every section of troops on fixed-site security. Key information, such as number of troops/vehicles, bumper numbers, route, purpose,

"Large projects, such as soccer fields and road repair, would be given an opening ceremony and advertised throughout the neighborhood as a joint coalition and NAC project."

and OIC/NCOIC, are tracked on the patrol board. This information is forwarded to battalion and updates on the patrol's location are tracked on the satellite imagery board with an adhesive sticker. Another dry-erase board is used for tracking significant events in or out of sector — our "bolo" list that contains suspicious vehicles or people to watch, and significant route closings due to improvised explosive devices (IEDs).

As the number of IED attacks increased in July 2003, the company started tracking IED trends by marking the locations of IED attacks on a 1:50,000 Baghdad special map. This allowed leaders to conduct intelligence preparation of the battlefield (IPB) and route planning prior to executing a mission. Main supply routes were exclusively targeted and therefore avoided whenever possible. Overpasses were also popular with terrorists for IED and grenade attacks.

The company fire support officer served as the information officer or targeting officer. This role was possibly one of the most demanding in the company. He accompanied the commander to all neighborhood council meetings, tracked all reconstruction projects in sector, and wrote proposals for future projects. Some projects proposed by the company may cost more than $60,000 and include nongovernment organizations and government contractors, and require constant supervision of Iraqi subcontractors at work sites. The information officer's position is important because he is the buffer between the commander and the influential (and less-than-influential) personnel in sector. If the company commander met with everyone who wanted help or needed something, that would be his only mission. Therefore, the information officer needs to have a special place in the CP to present his information so patrols can identify key locations and projects in sector.

The information officer should display photographs of influential people in sector with a brief biography. This includes neighborhood action council members, political party leaders, police chiefs, and religious leaders. Having the photographs posted in the CP allows patrols to become familiar with these individuals and meet with them regularly during patrols to form good relationships. A similar collection of pictures can be formed of criminals or suspicious personnel in sector who are known to be trouble. The same system must be used for buildings in sector. Pictures of key facilities and buildings are important for the first few weeks so patrols can easily identify the buildings in sector. Police stations, political party headquarters, hospitals, clinics, and key religious sites should form the majority of these photos. The information officer will also have various psychological operations and civil affairs pamphlets and handouts so patrols can grab a stack and hand them out while on patrol.

A patrol completes its mission with an end of mission report. These reports should include detailed information on the route, mission, significant events, and a small narrative about the patrol. The patrol leader completes the report and the commander reviews it before sending his daily commander's update.

An organized CP with the adequate tools and products will ease the burden on leaders to continuously pull information from stacks of daily staff journals (DA Form 1594) and allow the company to focus on its mission. Good standard operating procedures and leaders engaged in CP operations are crucial when routine patrols become crisis events such as the UN compound bombing and other mass-casualty events.

The Neighborhood Advisory Council

The neighborhood advisory council (NAC) is the primary link between the military and the local population. These NACs are elected officials who work in each mahalla and represent local residents. Although these NACs were elected, the sector commander has every right to dismiss a representative or appoint a new one, depending on performance, attitude, and willingness to serve the community. A company commander in charge of a sector can be supervising up to three NACs, depending on the size of his sector. The first meetings with the NACs could be described as chaotic, unproductive, and frustrating. The confusion stems from both parties (U.S. forces and council members) not really understanding the NAC's purpose. Some thought it was a neighborhood watch program or an informant network; some believed it was a steppingstone to joining the city council. The fact is, the NACs reflected the will of what the commander on the ground believed the neighborhood needed.

A/2-37 Armor was responsible for two NACs. The first few NAC meetings were huge gatherings of people lining up to ask for help from coalition forces and complain about the lack of security, utilities, and jobs. The NACs had to be taught how to run an effective meeting. They were also taught how to present their problems. The best teaching model to use to train the NACs

An Iraqi Civil Defense Course instructor teaches an Iraqi recruit room clearing techniques during urban warfare training.

"The Iraqi police force has become a mobile, professional force with radio communications. The reaction time for the police has increased ten-fold due to effective training and improved patrol techniques. U.S. forces trained the Iraqi Civil Defense Corps and implemented them into daily patrols, which has made enormous positive impacts on Iraqi life."

how to function is the military decisionmaking process (MDMP). The MDMP is just a model based on problemsolving techniques. It teaches people how to approach a problem and decide the best course of action to solve the issue. After a short class on the MDMP, the meetings became much more effective. The meetings went from, "we don't have any electricity, please fix it" to "we don't have any electricity in mahalla 706 due to a circuit box that has been damaged. We need a new circuit box that will cost $200." Addressing the problems in this manner gives the commander a quantifiable problem and the information necessary to solve the problem. It also empowers the council to find civil engineers, electricians, plumbers, and phone technicians needed to diagnose real problems.

It took several weeks for us to determine how to best solve these problems once they were reasonably presented. The chairman of each NAC would present their individual issues. After all the issues and possible solutions were presented, the commander allotted assets to each problem. Many utility issues were solved with a visit to the power substation, water pumping plant, or sewage treatment facility. Many workers in those plants were unwilling to leave their offices to actually repair neglected utilities. A U.S. Army patrol with heavily armed soldiers entering a sewage treatment facility is usually enough motivation to persuade workers to get in a truck and go repair a problem. The patrol leader may have to threaten the foreman with his job if he is unwilling to help, but mostly all they want is an escort to the site. It became common practice to assign patrols to a weekly "utilities recon" and visit all the power substations, water plants, telecommunications sites, and other city functions to ensure good working relationships and update supervisors on problems in the neighborhood that need addressing.

Once battalion commanders had access to discretionary funds to work on projects, the information officer would write proposals for projects in sector nominated by the NAC. The NAC was required to provide three estimates from three different contractors. Detailed receipts and a scope of work were also required. The information officer would then write a proposal, including digital photographs of the site. The battalion commander would approve or disapprove projects, and as soon as the money was available, the information officer would tell the contractor to start work (some more expensive projects were forwarded to nongovernment organizations who occasionally attended NAC meetings). This system worked much faster than expected, and once the NAC understood the process, they had a true purpose: identify where the neighborhood needs reconstruction, provide fair and reasonable estimates from local contractors, and supervise the project. This gave each individual member a pet project, in which they took great pride. Large projects, such as soccer fields and road repair, would be given an opening ceremony and advertised throughout the neighborhood as a joint coalition and NAC project.

Projects completed in sector within a given month included: two road repair projects totalling $90,000; two $7,000 soccer fields; a $4,000 sewage project, with new pipes installed to improve drainage; a new $300 circuit switch at the telephone station; and an $800 generator to provide power to the community swimming pool filter system. Other projects, such as trash bins for the entire neighborhood, a construction project to replace the run-down market stands with permanent kiosks, and more road repairs, have also been completed.

Giving due credit to the NACs for their hard work and ensuring these accomplishments are passed on to the local media is crucial to establishing the trust between the NACs and the neighborhoods. One NAC member should be designated as the media representative who can invite local journalists to attend the opening ceremonies of certain projects.

In time, a good NAC will present their projects at the weekly meeting, brief what they have accomplished on their own, and present any issues that specifically need solving through military or police channels. The commander of the sector should be there to provide guidance, reassurance, and answer any questions NACs might have. The information officer will be there to provide updates on funding for future projects, collect feedback on the projects in sector, and coordinate any further meetings throughout the week.

The Next Step

Since August 2003, the company has placed more emphasis on reconstruction-oriented patrols, as opposed to security patrols. The Iraqi police force has become a mobile, professional force with radio communications. The reaction time for the police has increased ten-fold due to effective training and improved patrol techniques. U.S. forces trained the Iraqi Civil Defense Corps (ICDC) and implemented them into daily patrols, which has made enormous positive impacts on Iraqi life. Dismounted patrols of U.S. forces and ICDC personnel were literally applauded by locals as they patrolled. As ICDC personnel gain confidence and experience, they will take over more patrolling duties in sector and put more of an Iraqi face to reconstruction efforts.

Terrorist attacks remain a threat and targeting former regime loyalists and foreign-based terrorists must continue. However, if reconstruction efforts are ignored, local residents will become more frustrated with coalition forces. Company commanders and platoon leaders will need to conduct more direct coordination with nongovernment organizations and the Coalition Provisional Authority (CPA) to focus on infrastructure projects in every sector of Baghdad. Escorting civil engineers to inspect school reconstruction projects, bringing CPA personnel into sector to evaluate water-pumping and power stations, and supporting the local government in sector through an aggressive information operations campaign are just some examples of the missions that are making the biggest impact. Every sector in Baghdad is different, and commanders need to make judgments based on security, demographics, and available assets. Commanders will not find instructions on how to pacify their sector in a field manual or mission training plan. They need to think creatively, be flexible, and empower their subordinates.

Notes

[1]U.S. Army Field Manual 3-06.11, *Combined Arms Operations in Urban Terrain*, U.S. Government Printing Office, Washington, D.C., 28 February 2002, Chapter 14: Stability Operations and Support Operations, p. 14-1.

[2]Ibid., p. 2-9.

[3]Ibid., p. 14-4.

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The First Afghan National Army T-62 Tank Gunnery

by Captain Jonathan Byrom and Captain Aaron Parker

As the 11 members of the Blackhorse armor embedded trainer team wearily deplaned the C17 in the middle of the early-June night at the blacked-out Kabul airport, they had no clue as to the challenges that waited. Who knew that months earlier, numerous dilapidated T-62 tanks were delivered on heavy equipment transports and then towed to position in the ankle-deep dust of the motor pool. Polycharki, the future home of the Afghan National Army, would be home for the next 5 months.

The team's ultimate mission was to motivate Afghan soldiers to train as a quick-reaction force for the Central Afghanistan Corps. The team, made up of one major, four captains, one lieutenant, one first sergeant, and three sergeants first class, began the arduous task of preparing the foreign soldiers for combat. To prepare the battalion for combat, we identified the top priority of teaching crews to accurately fire tanks as quickly as possible. This abbreviated journey toward the first gunnery for the Afghan National Army was a wild ride and led to many lessons that we want to share with the armor community as other teams prepare to train democratic armies in Iraq and other parts of the world.

Train Up

The first step toward gunnery for Afghan soldiers was the train up on the T-62. The trainer team decided to use the U.S. Army's method of training crews for a tank crew gunnery skills test (TCGST). The first issue that arose in developing this skills test was that the team had no training on the T-62 tank. Our only means to learn the tank was through a Romanian mobile training team. We spent numerous hours climbing around the turret with these Romanians as they explained the operation of the gun system. These Romanian T-62 experts proved helpful both in teaching the Afghan crews and teaching the Americans enough about the tank that we could guide training toward the common goal of firing gunnery.

Another method used in training the Afghan crews was to draw from their internal knowledge of the T-62 tank. The company commander, 1st Company, 3d Battalion, 3d Brigade, Central Afghan Corps, had been fighting in wars for the past 14 years (he was only 28 years old), and had commanded a tank company against the Taliban in the defense of Bagram. He knew the tank intimately and was extremely valuable in teaching his soldiers and evaluating them during training.

Our three master gunners on the team applied these sources of knowledge to create a T-62 TCGST. Although there could be much debate about which tasks to include in this list, our gunnery experts chose the most important tasks to master to conduct a safe and efficient gunnery. The final product consisted of:

- Station 1 – ammunition identification.
- Station 2 – vehicle identification.
- Station 3 – PKT 7.62mm machinegun.
- Station 4 – prepare the T-62 turret for operation.
- Station 5 – boresight the T-62 tank.
- Station 6 – clear and load the 115mm main gun.
- Station 7 – perform misfire procedures for the T-62 main gun.

The first Afghan TCGST took place on a hot and dusty day in late-August 2003. The trainer team for 1st Company spent the morning in the motor pool on the turret tasks, coordinating with the Romanian soldiers, as they tested the leaders of the Afghan National Army. They then supervised the Afghan leaders as they tested their soldiers. This system of train-the-tester was efficient and allowed the entire company to test in one morning. We learned during the testing that the week of classes taught by the Romanian trainers had been very effective in providing the groundwork for basic T-62 operations. The trainer team noticed, though, that the best teachers for the young Afghan privates and sergeants were the experienced Afghan leaders — the platoon leaders and company commander. Unlike the U.S. Army, which takes prides in the expertise of its senior noncommissioned officers, the new Afghan Army relies heavily on their officers because they were chosen for these leader positions due to their combat experience and education level.

We finished the day by focusing on the vehicle identification testing. Afghan soldiers were especially interested in the vehicles of their neighboring countries. We briefed the normal slides that all U.S. tank battalions use, focusing on Soviet, American, and European vehicles; however, the soldiers asked many questions about neighboring countries' vehicles, such as Iran, Pakistan, India, and China. For those teams preparing to train Iraq's emerging army, we recommend perusing *Jane's* vehicle identification books prior to these types of classes. Another problem during the vehicle identification testing was that over 50 percent of the company was illiterate. We solved this problem by testing these soldiers verbally.

The other obstacle encountered during the TCGST testing was acquiring the PKT coaxial machine gun. We discovered that the Afghan National Army does not own any PKTs. Therefore, we focused on the loader's 12.7mm DShK machine gun, which the Afghanistan ministry of defense provided days earlier. Because of the absence of the coaxial machine gun, we were unable to conduct a traditional Table V during this first gunnery, or incorporate coaxial machine gun engagements into the tables. We did conduct a familiarization fire with the 12.7-mm loader's machine gun to give the crews some machine gun capability with their tanks. The trainer team's mission of preparing the Afghan National Army for combat and security missions forced us to modify our vision of the perfect T-62 gunnery. We trained the Afghan National Army on the weapons they already had in their possession, in case they received urgent missions to conduct checkpoint and presence patrol operations in the tumultuous world of Afghan politics.

Range Set Up and Support

After verifying the basic tank gunnery skills of 1st Company, the trainer team began the arduous task of training 3d Company on how to set-up and support a tank gunnery range. Members of the trainer team received this assignment and set to work on this task. In the beginning, there were many coordination areas to cover. To identify logistics requirements for gunnery support, 3d Company trainers set-up a coordination meeting with the battalion staff and headquarters company elements. Once all parties involved in the gunnery execution understood what they where expected to do, 3d Company trainers conducted a reconnaissance of the gunnery range, with the supporting company commander, and developed a range plan for support assets. The focus of this recon was the organization of the gunnery administration area, ammunition point, the security guard force positions, and the medical area. As we completed the diagram for the range set-up, all of the resupply factors were identified.

The embedded trainers' goal was to ensure that the gunnery support would set the standard for future gunneries, and reinforce the availability of resupply through contractors until the battalion could become logistically self-sufficient. Our trainer team established guidelines in the following weeks, and Afghan leaders and the trainer team executed all control measures for range operations and support execution on 6 September 2003. The battalion completed a final planning/support recon and coordination meeting prior to day 1 of the tank gunnery. This coordination meeting settled any unresolved issues or supply shortfalls and ensured efficient execution of the range.

Trainer team members used the planning process to assist the support company commander and battalion S3 in developing a battalion T-62 tank gunnery standard operating procedure (SOP). This SOP clarified for the battalion the process of how to identify, establish, assess, develop, and coordinate all executions of a standard T-62 tank gunnery range. It also provided guidance for company-level small arms ranges and live-fire exercises. This enabled the battalion to execute a 2-week gunnery using the tools and information described within the SOP for future gunneries. Focusing on support prior to execution yielded huge benefits during the gunnery and set the standard for future tank gunneries.

Range Execution

The first day of gunnery fell on a Saturday in early September following a week of mechanical and electrical remote tank firing. The Afghans found this foreign idea of firing the tank while outside ludicrous, but nonetheless conducted the mandatory test-fire of the 40-year-old vintage tanks. To our surprise, every tank fired, no turrets were sent into the air, nor were any breeches blown out of battery. Gunnery began on schedule. We found it interesting that the armor battalion commander, a former general in the fight against the Taliban, cancelled weekend duty for the Afghan tankers because he did not want them to lose focus prior to this historic day.

The first safety briefing to the firing crews was conducted early in the morning; then the company commander was provided a translated copy of the briefing for the following days on the range. The trainer team used this method of teaching — show them once, then have

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"The first day of gunnery fell on a Saturday in early September following a week of mechanical and electrical remote tank firing. The Afghans found this foreign idea of firing the tank while outside ludicrous, but nonetheless, conducted the mandatory test-fire of the 40-year-old vintage tanks. To our surprise, every tank fired, no turrets were sent into the air, nor were any breeches blown out of battery."

them execute — because we found it to be very successful. The Afghan soldier's paradigm of army operations and systems differs greatly from the U.S. Army's methods. This difference in range execution created problems when we did not use both a rehearsal and an embedded trainer to augment the explanation of our systems to show the Afghans what we thought right looked like.

The gunnery tables put together by our outstanding team of master gunners consisted of three tables. The first table was the typical Tank Table IV, consisting of the tank crew proficiency course. We then designed a Tank Table V, the machine gun table, followed by a culminating Tank Table VI or qualification table. The toughest obstacle was the range. The only targets we could use were hard targets between the ranges of 400 and 1900 meters. Also, we could only fire from four concrete pads, eliminating the option of firing on the move. Range control dictated that we only fire from these pads because dismounted infantry uses the multipurpose range complex for live fires, precluding the use of dud-producing ammunition. As the only available ammunition was dud producing, high-explosive rounds, we were limited to firing stationary main gun scenarios from one firing line. These limitations were welcomed, only because they allowed us to focus on target acquisition and crew drills before bounding and firing-on-the-move.

We began the first day of gunnery by zeroing/confirming boresights of the T-62 tanks. For the confirmation firing, each crew received three rounds. As soon as a tank hit a target at 1500 meters, we moved that tank from the range and allowed the next vehicle to fire. If the tank had problems with the first two rounds, we would send the contracted Afghan turret mechanics or the Romanian experts to the tank to confirm that the crew had boresighted properly. Most of the problems with first-round hits were due to improper boresight or a mechanical problem with the tank. After a full day of confirming boresights, over 80 percent of the available tanks verified their boresights with hits on a 1500-meter tank hull.

The biggest issue during this first day was controlling the range. As embedded trainers, we wanted the Afghan armor companies to learn to run their own ranges without the embedded trainers completely taking over the range. This goal proved unattainable during the first day because the Afghans did not have proper radio control between the tower and the tanks. We found ourselves chasing tanks whose crews decided to move from the staging area, past the ammunition point, and directly to the firing line without talking to the tower. (The tower was a folding table with multiple radios). We held an in-depth after-action review following the completion of day 1 firing. After moving tanks around the range for the afternoon following the loss of control by the Afghan tower, the trainer team advisors explained range operations again to Afghan leaders to prevent repeating the first day's growing pains. After analyzing these problems, our team concluded we could have avoided these problems by conducting a mounted rehearsal of range operations with the Afghan leaders.

On day 2 of gunnery, focus shifted from zeroing the main gun to 12.7mm DShK familiarization. The Romanians and Afghans had helped teach classes on this weapon, but we found during the initial firing that the weapons were not functioning efficiently and needed some work by the Romanian weapons experts. We also determined that the Afghans were not as well versed in this machine gun as with their coaxial. For example, after close inspection of the ammunition belts, we determined that the Afghans had made a minor error in loading the ammunition belts, which was causing the weapons to fire single shot. One lesson learned for future trainers in various countries is to insist on receiving training on various weapons and vehicles in the country's inventory prior to arriving in country.

Our trainer team received familiarization classes on the weapons when we arrived in country, but we were not experts and relied heavily on the Romanian trainers.

In the afternoon on day 2, we began Tank Table IV, tank crew proficiency course (TCPC). The in-depth rehearsals for the tank tables we would fire on day 3 proved highly effective as a rehearsal for the qualification table. The trainer team walked the platoon leaders through the TCPC scenarios (the same scenarios we were using for actual firing) by sitting on the tanks and pointing out exactly at which targets to fire. After they trained a number of key leaders, these key leaders trained the other crews. This method forced the key Afghan leaders to master the Table VI scenarios. After completing the leader training, the TCPC lanes moved very quickly and the rest of the 16 crews completed their proficiency course.

The highlight of this second day of training was the improved control of the range by the Afghan leaders. Our after-action review achieved its purpose as the range support company established a radio plan for controlling movement on the range. They emplaced one radio at the tank parking line, one radio at the ammunition point, one radio at a control point, one radio at the firing line, and multiple radios at the tower. A tank received orders to move from the support area to the ammunition point, then to the control point, and finally on to the firing line. The Afghans insisted on moving four tanks on-line, after passing the control point, and parking four tanks on the concrete pads simultaneously. We were very pleased with the control of the range after these minor adjustments by the Afghan supporting and firing companies.

On day 3, the qualification run began with high hopes for firing the entire company in one day. The qualification day, though, began later than desired due to the recurring problem of timely boresighting. The Afghan leaders decided to boresight on the four "level" concrete pads to ensure accuracy. Hence, the tanks had to move through the various control points in groups of four to the concrete pads, which took longer than desired. Therefore, the company did not start firing until mid-morning.

Second, a large herd of sheep wandered onto the range just as the range prepared to go hot. This herd allowed the trainer team to receive job-training experience in herding sheep. Accompanied by a couple of Afghan soldiers, the trainer team members raced onto the range in their SUV to ask the shepherd to move his large flock off the range. The shepherd took one look at the American and Afghan soldiers with their weapons and took off running. Thus, we had to move the herd off the range, which may be a future calling for some members on our team. I expect that other teams throughout Afghanistan or Iraq may encounter similar difficulties with local wildlife.

After clearing the range, we began the qualification run with a live-fire rehearsal for the entire company. Because the idea of gunnery was so new for the Afghan tankers, the trainer team embedded advisors decided to have the company commander fire the entire scenario for his soldiers as a makeshift rehearsal. We gathered the entire company just behind the firing line and explained each scenario to the tankers as the commander fired. This rehearsal process proved very effective in focusing crews on which targets they should shoot in each scenario and gave us a chance to discuss points of improvement directly with the crews before they fired. The soldiers asked many questions that saved time later in the day. After the rehearsal, we moved the first tanks up to the firing line and began Table VI.

Table VI went fairly smooth, although we had a number of problems with crews trying to figure out why we were shooting a set scenario. The trainer team advisors had envisioned the four tanks firing in succession down the line, but the tower still did not understand the necessity of pushing tanks through the firing order. The Afghan commander did not have tanks waiting to occupy the firing pads when the others finished. He also did not have a comfortable tracking system for the scenarios, which would allow him to control the tanks on different scenarios. Thus, whenever a tank had a problem on the firing line, the tower waited for the crew to fix the problem before continuing. The Americans fixed this problem by taking over the range operation for a few hours and pushing tanks through the scenario to show Afghan leaders how the range could run when managed efficiently. Once again, a mounted rehearsal with four tanks would have prevented the trainer team from running the range and helped accomplish the higher goal of advising, rather than running the tank range.

The second day of qualification, day 4, was a huge improvement over the first day of Table VI. During our after-action review the day before, we challenged Afghan leaders to begin boresighting much earlier and have the first round downrange by 0900 hours. Much to our surprise, they fired their first round the next morning by 0855 hours. Another point of discussion during the after-action review was pushing crews through the scenarios with efficient and safe throughput. After seeing the trainer team coordinate tank movement on the range the day before,

"The biggest issue during this first day was controlling the range. As embedded trainers, we wanted the Afghan armor companies to learn to run their own ranges without the embedded trainers completely taking over the range. This goal proved unattainable during the first day because the Afghans did not have proper radio control between the tower and the tanks. We found ourselves chasing tanks whose crews decided to move from the staging area, past the ammunition point, and directly to the firing line without talking to the tower. (The tower was a folding table with multiple radios)."

the Afghan leaders responded with an amazing change of pace the second day. The armor embedded trainers made numerous changes to the range that proved highly beneficial during the next day of qualification gunnery. First, we moved the tower close to the firing line so that the range officer in charge (OIC) could influence the firing line if a problem occurred. Moving leaders forward greatly increased safe tank throughput.

On day 1 of qualification, seven Afghan crews fired. On day 2, the Afghan company fired 16 crews including re-fires, and was completed with the range by 1500 hours. Rather than break for chow, the leaders rotated crews through lunch. Overall, the tank company fired 16 tanks during this first gunnery and qualified 13 of these tanks with four tanks having to refire.

Tank Table Scenarios and Scoring

Included are the gunnery tables we used for this first gunnery.

Table IV (rehearsal)/VI:

A1: Stationary flank tank @ 1300-1500 meters. Ammo allocation 2 rounds HE.

A2: Stationary frontal tank @ 800-1000 meters. Ammo allocation 2 rounds HE.

A3: Stationary frontal tank @ 1600-1800 meters. Ammo allocation 2 rounds HE.

A4: Stationary flank tank @ 900-1100 meters, stationary flank BMP @ 900-1100 meters. Ammo allocation 4 rounds HE.

Table V (coax machine gun):

A1: 1 set troops @ 400-600 meters. Ammo allocation 100 x 7.62mm.

A2: 2 set troops @ 400-600 meters. Ammo allocation 200 x 7.62mm.

A3: Moving, 2 set troops @ 400-600 meters. Ammo allocation 200 x 7.62mm.

A4: 1 set troops @ 400-600 meters. Ammo allocation 100 x 7.62mm.

A5: Moving, 2 sets troops @ 400-600 meters. Ammo allocation 200 x 7.62mm.

The constraints for this first gunnery were primarily due to logistics and range control issues. The Afghan soldiers fired Tables IV and VI, but not Table V because they did not have PKT coaxial machine guns. We did not feel the crews were properly trained to fire a complex scenario with the 12.7mm weapons system, and we also had to fight through issues with both machine gun and 12.7mm mounts. Therefore, we only conducted the 12.7mm familiarization due to safety concerns with the weapons. The team's master gunners prepared Table V scenario for future gunneries when we have the necessary coaxial machine guns. We had initially planned for moving engagements on Tables IV and VI to verify the working stabilization systems on the tanks, but sharing the range with dismounted infantry prevented us from using dud-producing ammunition.

To evaluate the crews on these tables, the trainer team decided to use a "T" (trained), "P" (proficient), and "U" (untrained) scoring system for the gunnery, rather than a numerical score. We also did not have the capability of using "jump" plugs on the radios to monitor the crew fire commands because the crews were using Russian radios. We had initially planned to time the crews but discarded the idea to focus on crew drills and safety. Therefore, we either scored the crew with a hit or miss on the target. If the crew hit the targets on the first round, we gave them a "T" for that engagement. If they hit the target with the second round, we gave them a "P" for the engagement. If they completely missed the target with both rounds, then they received a "U" for the engagement. For a crew to qualify, they needed to receive a "T" or "P" in three out of four scenarios. If they did not qualify, then the crew re-fired. Overall, 16 crews fired during the first gunnery. Thirteen of the crews qualified on a total of 23 runs. Some crews had to fire multiple times to qualify, but the majority performed well. We found that platoon leader and platoon sergeant tanks fired very well and qualified their first time down range. The younger crews had issues due to lack of experience or lack of focus on training for gunnery and had to re-fire in some cases.

During this first Afghan National Army T-62 gunnery, the Blackhorse armor embedded training team learned a great deal about how to train an army of experienced warriors who have been fighting for over a decade against both the Russians and the Taliban. Afghan army leaders did not always understand our methods of conducting a safe and efficient gunnery but with many hours of persistent training, coordination meetings, and after-action reviews, we saw them grasp and understand a new method of training soldiers for combat. It was extremely satisfying for the trainers to see the birth of an organized tank battalion over a 120-day period, from tanks that were pushed off trucks in the motor pool to organized firing crews on a gunnery range hitting targets at 1700 meters. During the actual gunnery, we saw them progress in four days from having no idea of tank range operations to having four tanks fire an engagement successively with mere seconds between shots. The Afghan soldiers gained confidence that their weapons system can fire and destroy targets, which is a necessity as they prepare to conduct real-world checkpoints and presence patrols within weeks.

Our armor embedded trainers experienced many frustrations as we prepared for this first gunnery. This gunnery, though, was not even close to our vision for what the Afghan National Army armor battalion can accomplish in the near future. We plan to continue to improve the gunnery train-up and execution and eventually reach the goal of firing at moving targets from a moving T-62 using thermals. As we gather the logistics resources and the Afghan crews become more confident on their tanks, we foresee this advanced gunnery becoming a reality. For those teams coming to Afghanistan or going to Iraq or other countries to help with nation-building, we encourage you to push through the frustrations and logistics/maintenance challenges because these armies have the potential to defend their newfound democracy with the weapons systems they possess.

We hope this short glimpse into our adventure allows you to avoid the mistakes we made and develop a plan far better than our own!

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Back to the Basics: The Noncommissioned Officers' Corps

by First Sergeant Keith J. Santos

Looking back over the past 20 years, there have been many changes in our Army. We have grown smaller, not an idle or mistaken choice of words, as reducing the size of a force is a simple matter of cutting troops. The Army has built down, shifting in basing, force structure, missions, and culture. Transformation is, therefore, not a new thing for us. The Stryker Brigade Combat Team (SBCT) and the Objective Force were mere concepts not long ago. The SBCT certification exercise is being completed here at the Joint Readiness Training Center (JRTC) as I write this article.

Overall, the changes that have taken place in the Army have been positive. Increased mobility and flexibility, digitized command and control, and the lethality of joint combined arms effects recently demonstrated their significance in Afghanistan and Iraq. But as our Army moves forward, we need to be certain that we preserve what is important, and correct those areas that need fixing. For the noncommissioned officer (NCO) corps, we need to revalidate our basic values.

Our society has become much more individually centric — our Army refers to itself as an "Army of One." In that transformation, NCOs have slipped in their roles as leaders of soldiers. It is perfectly evident here at the JRTC and in garrison. Using an after-action review (AAR) approach, we need to stop and ask where and when did we lose focus on what it means to be a noncommissioned officer — a leader of soldiers.

As observer controllers (OCs), we are not above the rest of the Army. We have years of experience as troop leaders, and as such, this AAR applies to us as well. We speak from that experience and our expertise as OCs in saying that junior NCO ranks of E-5 and E-6 are due for a renaissance of leader values — team leaders and squad leaders need to get back to basics. This not only means understanding responsibilities and duties, it requires identifying shortcomings in meeting challenges and correcting those failings. If the NCO corps will take these steps now, we will become better and stronger than ever as the backbone of the Army.

Remain Tactically and Technically Proficient

During one of my most memorable rotations, I was talking to a dismounted squad that was pulling security along the flanks of an assembly area. What initially caught my eye about the squad's deployment was their use of terrain: they were in a low area and could not possibly see their area of responsibility. But they were on the flank. The squad leader did not have the experience to adjust the position based on the local terrain. Yet, as I talked with one of the soldiers about how they were set up, I noticed another soldier, a specialist, who had a compass on his load carrying equipment (LCE). I asked him if he knew the proper way to use and hold the compass. He responded that he knew how to use it. But when I asked if he knew the proper way to hold and use the compass, he admitted that he did not. His sergeant then looked at me and remarked, "that is a board question," as if I had somehow tricked his young troop. I told both of them, the sergeant and his soldier, that knowing how to hold and use a compass is not a question reserved for boards to trip up the unwary. But it is a common 10-level soldier skill. What really stuck with me in this exchange was how did an infantry squad leader come to believe that? Who, if anyone, told him that a compass was something only to remember when studying for promotion? Who, if anyone, showed him what right looks like when it comes

to using a compass? Sad to say, he probably got that very question on a board and he probably answered it correctly, without having to demonstrate that he actually knew what he was talking about. Is this what NCOs refer to as "remaining tactically and technically proficient?"

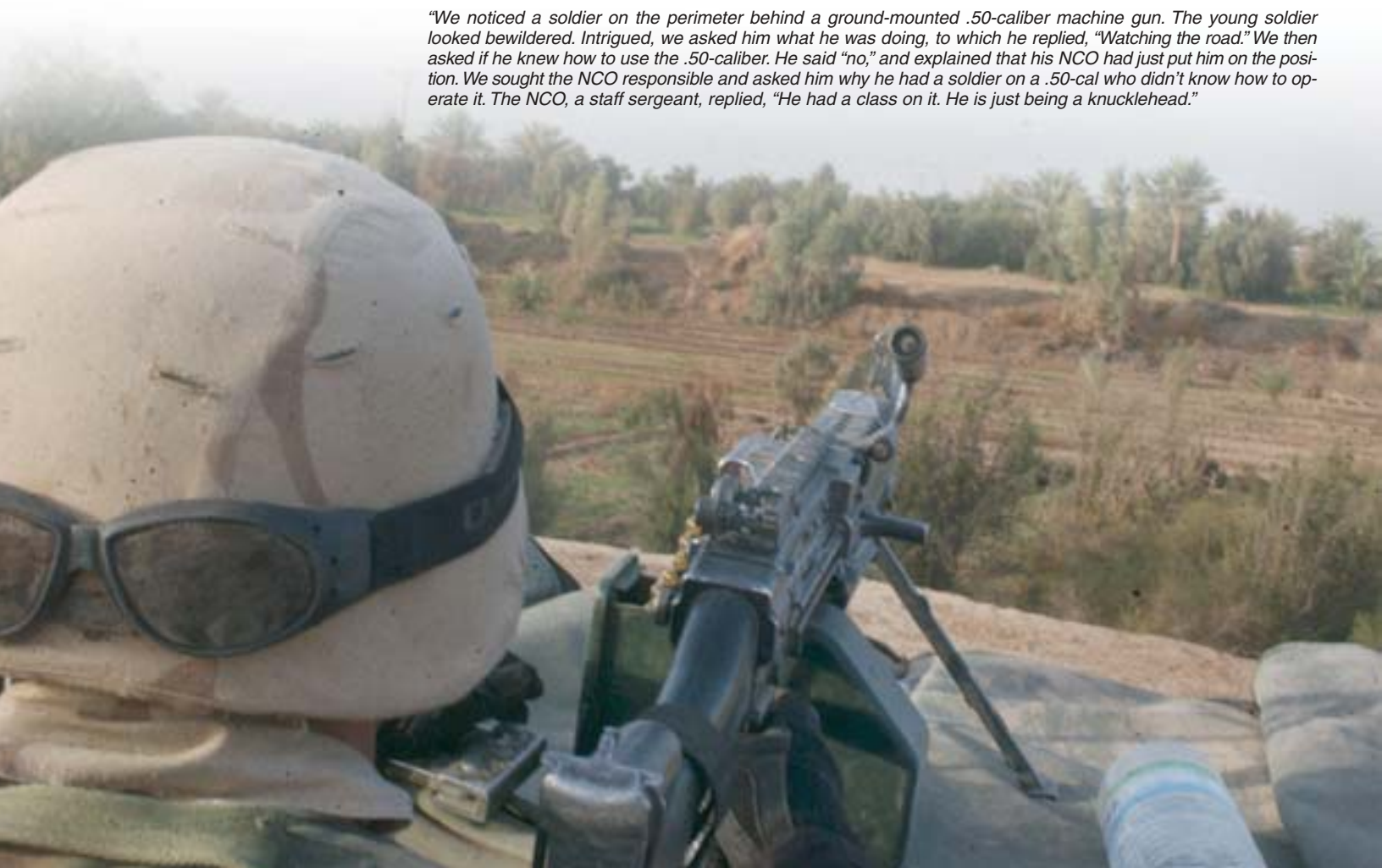
Over the years, we have seen a great many and many great noncommissioned officers at the JRTC. Of the latter, there have been those who understand and aspire to lead, those who have already perfected the art. Of the former, there have been many who could be great leaders, given the proper guidance, mentoring, and most importantly, experience to develop as NCOs. And then there are those who should have never put on NCO stripes. They are, gratefully, in the minority. But there are still too many junior NCOs who need assistance in developing as leaders.

In examining soldiers who lack leadership, we have to ask if an NCO failed them along the way. Most failures at the JRTC stem from lack of guidance, experience, and subsequently knowing what right looks like. Any soldier can go to a promotion board and pass. All you have to do is memorize a study guide. But can you apply what you have memorized for the board? That is the fundamental measure of tactical and technical proficiency.

Soldiers Are Entitled to Outstanding Leadership

One cold winter morning, one of my fellow OCs and I walked around and talked to soldiers who were gathered in an assembly area. We noticed a soldier on the perimeter behind a ground-mounted .50-caliber machine gun. The young soldier looked bewildered. Intrigued, we asked him what he was doing, to which he replied, "Watching the road." We then asked if he knew how to use the .50-caliber. He said "no," and explained that his NCO had just put him on the position. We sought the NCO responsible and asked him why he had a soldier on a .50-cal who didn't know how to operate it. The NCO, a staff sergeant, replied, "He had a class on it. He is just being a knucklehead." Then we asked the harder questions: "Did you really teach the soldier or just go through the motions? Did the soldier practice with it? Did you test him on it? Did you supervise while he was doing it and make corrections to ensure he meets the standard?" To all, he answered, "No!" The staff sergeant had forgotten the NCO promise that "soldiers are entitled to outstanding leadership — I will provide that leadership."

Leaders ensure that basic soldier skills remain the norm. Basic soldiering means returning to the basics. There is nothing fancy or secret about basics — precombat inspections (PCIs) and precombat checks (PCCs) are basics. At best, they are boring and often painful tasks. It is for that reason that they are one of the most missed and overlooked tasks. Leaders do not allow PCIs and PCCs to slip. This starts at the lowest level as soon as a mission is received. All soldiers should be moving and checking equipment. And NCOs should be right behind them double-checking, giving guidance and ensuring that all tasks are done to standard with no short cuts. Performing PCIs and PCCs early means mistakes are corrected early — before they cost lives. When in combat, we must be able to use all as-



"We noticed a soldier on the perimeter behind a ground-mounted .50-caliber machine gun. The young soldier looked bewildered. Intrigued, we asked him what he was doing, to which he replied, "Watching the road." We then asked if he knew how to use the .50-caliber. He said "no," and explained that his NCO had just put him on the position. We sought the NCO responsible and asked him why he had a soldier on a .50-cal who didn't know how to operate it. The NCO, a staff sergeant, replied, "He had a class on it. He is just being a knucklehead."

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signed weapons. This means having all needed equipment and the knowledge necessary to use it effectively.

Set the Standard; Set the example

Early one morning, I noticed a soldier walking across an open field during logistics operations. He had no LCE, no personal weapon, and the chinstrap of his Kevlar was swinging in the breeze. I stopped him, intending to ask what he was doing. To my surprise, the soldier was a staff sergeant. When I mentioned his chinstrap swinging, he grew irritated, abruptly grabbed his strap, and snapped it. I told the sergeant he didn't have to snap it; I was just making an observation. I saw him about 15 minutes later. He again had the chinstrap undone and still was without LCE or personal weapon. He did not adhere to the NCO dictum, "no one is more professional than I."

"Set the example," "lead by example," "set the standard," and "enforce the standard," are phrases we use daily. But do we mean them? Do we adhere to what they mean? Do we measure ourselves against those same standards? And if we do, how do we hold up? Soldiers will do as we do, if we do as we say. If we are not setting standards and adhering to them, then our soldiers will do the same no matter how severely we enforce them. NCOs who serve as the standard, teach soldiers what looks right. Good soldiers, and most are, will follow that correct model. They will be happier in doing so because positive behavior generates pride. That is why we have standards in the first place. They help maintain good order and discipline — if they are enforced. Failing to set standards, or failing to enforce standards, means losing order, discipline, and worst of all, control. We all learn this early in our careers, which is why we decide to stay and become professional leaders. If you allow yourself to slip, you are failing yourself and every soldier who sees you. If you allow your soldiers to slip, you are no less guilty.

Accomplishing the Mission and Taking Care of Soldiers

It would be unfair if I failed to tell you about the positive efforts of NCOs. It was

afternoon, and I was in the assembly area talking with the first sergeant and XO, when a soldier came running down the hill, breathing heavily, and fell almost at my feet. I looked closer and noticed that it was the motor sergeant. All he could muster was, " I'm alive, but wounded. We were ambushed near Youngstown!" After being treated, he had run 1,200 meters cross-country to warn his leaders about the situation near the town. His warning saved further loss, because other units were prohibited from going through the town until it was secure. Later, all soldiers inside the town evacuated. Vehicles and supplies were recovered. The motor sergeant had remembered, "my two basic responsibilities will always be uppermost in my mind; accomplishment of my mission and the welfare of my soldiers."

Regardless of changes in the Army, the NCO remains the link between the conceptual and the physical. NCOs make things happen and that remains the bedrock purpose for the NCO corps. Implicit in that fundamental are some of the things I have mentioned in this article. As NCOs, we need to step up to the plate and lead by example. This means setting and enforcing the standards. It means choosing the hard right and not the easy wrong. We are teachers, coaches, and mentors for our own successors. We learned what right looks like from our predecessors — we are bound to do the same for our young NCOs and soldiers. If we use the basics to guide us, we will get it right.

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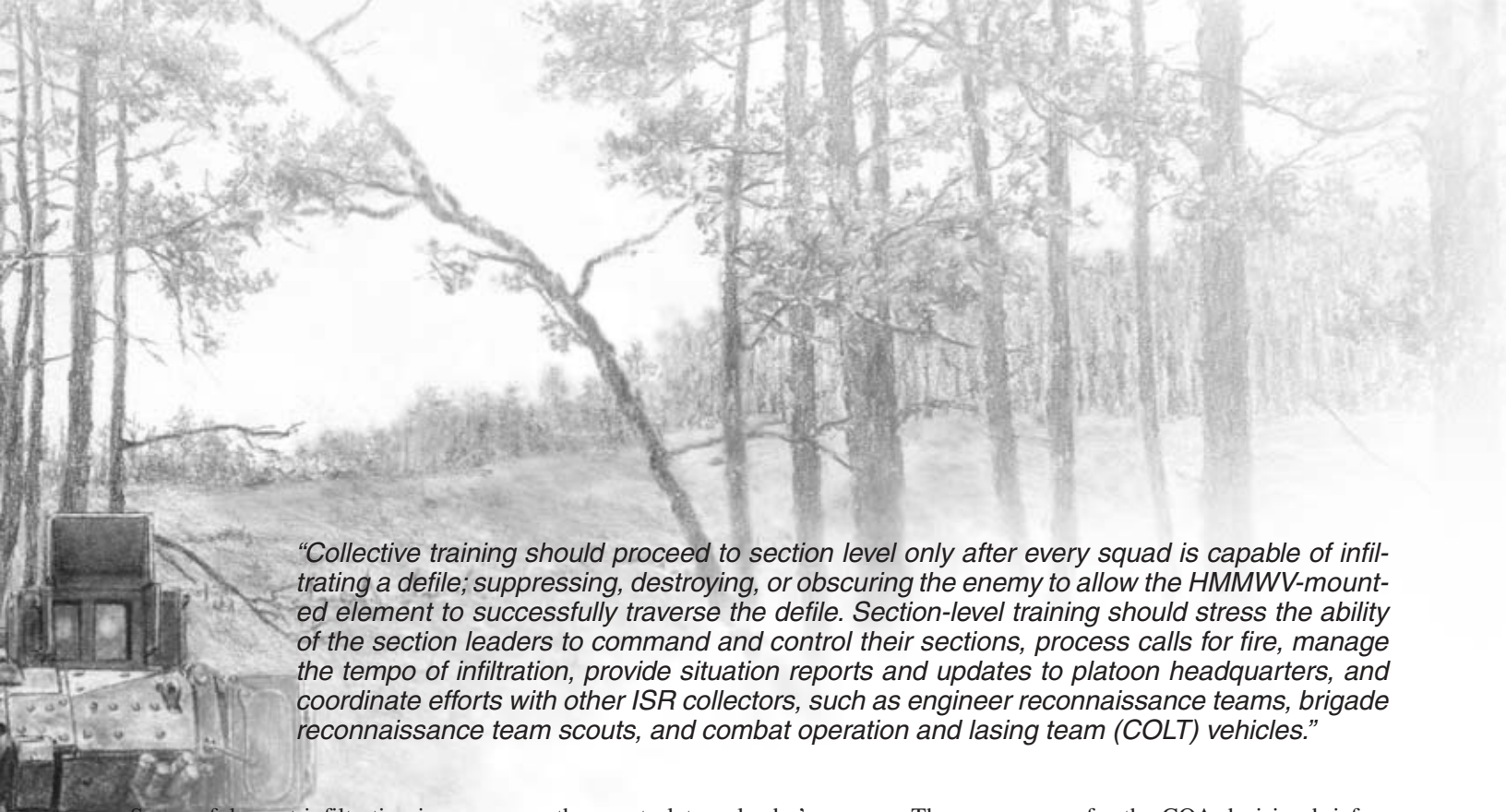
Successful Scout Mounted Infiltration

by Major O. Kent Strader



"Collective training should proceed to section level only after every squad is capable of infiltrating a defile; suppressing, destroying, or obscuring the enemy to allow the HMMWV-mounted element to successfully traverse the defile. Section-level training should stress the ability of the section leaders to command and control their sections, process calls for fire, manage the tempo of infiltration, provide situation reports and updates to platoon headquarters, and coordinate efforts with other ISR collectors, such as engineer reconnaissance teams, brigade reconnaissance team scouts, and combat operation and lasing team (COLT) vehicles."

Successful scout infiltration is a combined-arms operation**.** Defining infiltration is much easier than accomplishing it. Current trends at combat training centers show scouts attempting to penetrate a counterreconnaissance screen or defensive position without applying combined arms or reacting to contact, as prescribed in the mission training plan. Additionally, they conduct poor battle handover between elements and fail to template probable lines of contact or probable lines of deployment, resulting in unnecessary casualties. They also have poor crew coordination, which exacerbates their reaction to contact deficiencies.

Complicating the issues even further, battalion staffs typically expend very little energy on preparing the scout platoon for infiltration — intelligence officers usually do not plan redundancy or repositioning contingencies into their intelligence, surveillance, and reconnaissance (ISR) operations. Furthermore, scouts habitually underutilize dismounts to clear terrain ahead of their trucks.

This article is intended to get all responsible parties involved in planning infiltration training and preparing the scout platoon for infiltration under combat conditions. This article addresses how the staff should prepare scouts for mission and combined-arms infiltration training techniques.

Planning and Preparing

We begin with the battalion staff's responsibilities in preparing the scout platoon leader for the mission. Every staff member has something to contribute to the scout platoon leader's success. The battalion S3 is the scout platoon leader's trainer, and in most cases, his rater, and as such, he must take primary responsibility for the scout during the military decisionmaking (MDMP) process to ensure he is properly briefed and prepared for the mission, as well as properly trained. Nevertheless, the battalion executive officer (XO) synchronizes the staff's actions during scout mission preparation.

Before continuing the discussion on the battalion staff's responsibilities, it is essential that we first understand what scout platoon leaders need to prepare for the mission. Following the mission analysis, scouts should receive a warning order from the S3. The S2, with the aid of the task force engineer should prepare a detailed terrain analysis, an enemy situation template, and the most likely courses of action (MLCOA) and most dangerous enemy courses of action (MDCOA). Once the S2 has conducted terrain analysis to standard with line-of-sight analysis, terrain analysis, enemy situation template down to squad level, air avenues of approach (AAOA) with the aid of the air defense officer (ADO), and the MLCOA and MDCOA with the approved named areas of interest (NAI), he can begin troop leading procedures. Additionally, any known or suspected enemy locations that the brigade reconnaissance troop has identified must be annotated on the scout platoon leader's map board.

After the mission analysis brief is conducted and the reconnaissance warning order has been given to the scout platoon leader, he begins planning while the staff prepares for the COA decision brief or confirmation brief, as appropriate. Following COA approval, the battalion staff should prepare a reconnaissance and surveillance operations order (OPORD) under the supervision of the battalion XO, with each staff section contributing to the final product. Beginning with the staff principles, the S1 or S4, depending on who attends the MDMP, is responsible for advising the battalion commander of the scout personnel strength, as well as briefing the scout platoon leader on the status of casualties and replacements for the mission. The S2 should brief any updates to the ISR plan, NAI changes, and priority intelligence requirement (PIR) refinement. The S3 should brief the approved battalion mission statement, commander's intent, acceptable risk and concept of the operation. The S4 should probably brief refuel, refit, and rearm times and locations. The signal officer (SIGO) should brief the retransmission plan and line-of-sight (LOS) analysis to maintain uninterrupted communications, the redundant communications plan, and the no-communications contingency. The engineer officer should brief the enemy obstacle set, the anticipated reconnaissance objectives of the engineer reconnaissance teams (ERT), requirements for obstacle reports from scouts, and where the battalion's point of penetration is templated. The chemical officer (CHEMO) should brief the scouts on the enemy chemical capabilities, templated targets, down-wind hazard areas, and mission-oriented protective posture (MOPP).

The fire support officer (FSO) provides the most important elements of the re-

Scout Mission Preparation Checklist

- ❒ Commander personally gives the scout his intent, commander's critical information requirements (CCIR), and acceptable risk
- ❒ S3 provides a detailed ISR Warning Order or OPORD to include concept of the operation and PIR
- ❒ S2 provides enemy MLCOA/MDCOA, enemy situation template, friendly ISR locations and T/P
- ❒ S4/BMO provides maintenance priority, status, recovery plan, and resupply plan
- ❒ FSO provides target list and assets available
- ❒ ENG provides terrain analysis, obstacle template, and ERT locations and T/P
- ❒ ADO provides likely enemy AAOA, enemy most likely COA and counter COLT activity
- ❒ Medical officer provides battalion and brigade CASEVAC plan for scouts
- ❒ SIGO provides LOS analysis and lost and redundant communications plan
- ❒ CHEMO provides enemy chem/bio weapons capabilities, most likely COA, and templated targets
- ❒ Battalion XO synchronizes the efforts of the staff to prepare the scout platoon for the mission

Figure 1

connaissance and surveillance OPORD — the approved essential fire support tasks (EFSTs), the method to suppress, neutralize, destroy, and the requested delivery assets and volume of fire. Scouts must understand how EFSTs are refined, and which NAIs are associated with what targets and EFSTs and how. Beware — if the scout platoon is not involved in confirming or denying a COA, you are wasting your time sending him into sector. EFSTs are oriented on enemy formations and functions. But, until the scout can give the fire support element (FSE) a location, we must rely on the S2 situational template. The fact that battalions and brigades execute planned targets that have not been adjusted since the MDMP is a disturbing trend at the National Training Center.

Battalion staff officers must exercise preparedness, precision, and thoroughness while preparing the ISR OPORD. If the scout does not receive a synchronized and standardized OPORD, he will be ill prepared and die needlessly for want of information.[1]

Successful Infiltration

Planning is the cornerstone in any successful synchronized mission; however, the foundation is combined-arms infiltration training. My experience with infiltration training was learned by trial and error during 16 months of command at the Combat Maneuver Training Center, Hohenfels, Germany, as the chief of reconnaissance and regimental reconnaissance company commander, 4th Guards Motorized Rifle Regiment, and as a scout observer controller at the National Training Center, Fort Irwin, California.

The first building block in night infiltration training is to conduct mounted terrain familiarization and identify all primary, secondary, and lateral routes throughout the training area. Combat crews that cannot be afforded this opportunity can benefit from new technological advantages, such as live unmanned aerial vehicle feeds to surmount this obstacle. Nonetheless, at home station our crews worked on crew coordination, terrain driving, occupying hull-down positions, and selecting hide sights. It is important to note, all our high mobility, multipurpose wheeled vehicle (HMMWV) scouts had crew vehicle communications (CVC) helmets and 1790s (vehicle intercom systems), which enhanced crew coordination, produced a faster response to contact, and made orders between the driver, gunner, and vehicle commander clearer. It is my belief that the absence of the 1790 will be a significant detriment to scouts during infiltration. If our modified table of organization and equipment (MTOE) were to support a 1790 for each scout HMMWV, the effectiveness of crews would double.

Infiltration training began with multiple integrated laser engagement system (MILES) gunnery. A game called "catch the cone" was developed in the regiment. This game accomplished several things; it developed crew coordination, it taught drivers to maximize cover and concealment, and it emphasized observation and gunnery skills. The objective of the game is to capture an orange traffic cone with a chemlite attached for night identification. Four or more vehicles would start at points one kilometer from the cone at 12:00, 3:00, 6:00, and 9:00; or at 12:00, 2:00, 4:00, 6:00, and so on, with a terrain feature of separation. The objective was to maneuver the vehicle without being detected using short halts, crew coordination, terrain driving, and superior gunnery to destroy other vehicles, or out maneuver them and get to the cone without being killed. This game enhanced crew pride and esprit and fostered friendly competition within the platoon.

The next step in the train up was night infiltration of a defile blocked by two BMPs or two tanks. The standard was a HMMWV scout squad, consisting of two dismounts and a two-man crew, who must identify the enemy and use lethal and nonlethal indirect fires to infiltrate through the defile without loss. Habitually, the dismounted scouts would be let off the vehicle at least four kilometers from the defile, out of sight and sound of the enemy's suspected screen line. They would then attempt to move undetected into the screen line and identify the overwatching vehicles, call for fire, adjust smoke or illumination, and identify any enemy dismounted observation posts. It goes without saying that the coordination between the crew and the dismount team was essential to the survival of the vehicle; however, the MTOE in most scout platoons supports six scout HMMWVs, plus two-man dismount teams. After the platoon leader receives the warning order from the staff, he must conduct a mission analysis and, if need be, tailor his task organization to support dismounted teams or obtain infantrymen from a line company as augmentation. Augmenting scouts with infantry must be a conscious decision undertaken by the chain of command, and should only be mission specific to avoid reducing the combat power of the rifle companies. Detachment of combat power must be weighed against scout survival and the commander's acceptable risk.

Collective training should proceed to section level only after every squad is capable of infiltrating a defile; suppressing, destroying, or obscuring the enemy to allow the HMMWV-mounted element to successfully traverse the defile. Section-level training should stress the ability of the section leaders to command and control their sections, process calls for fire, manage the tempo of infiltration, provide situation reports and updates to platoon

headquarters, and coordinate efforts with other ISR collectors, such as engineer reconnaissance teams, brigade reconnaissance team scouts, and combat operation and lasing team (COLT) vehicles. The juggling act of managing all this information is a fine art and requires a substantial amount of practice before a degree of expertise is achieved. Therefore, the training time allocated must be requisite to the level of expertise to be achieved.

Platoon training across a doctrinal front should be planned, resourced, observed, and controlled by the battalion S3 in conjunction with the Headquarters Company commander. The opposing force (OPFOR) should consist of a scout screen and a counterreconnaissance company minus. An adequate OPFOR for this mission might consist of a sister scout platoon with dismount teams; a tank platoon; a Bradley platoon, with an associated company headquarters; two to three point minefields; and two fire markers and observer controllers. The standard is the scout platoon leader systematically infiltrates his platoon, synchronizing lethal and nonlethal fires across a doctrinal distance, without being 65 percent below combat effectiveness. Tempo is imperative. Infiltrating all the vehicles at the same time is suicidal. Nonetheless, the trend is a broad-front simultaneous infiltration without effective command and control by the scout platoon leader, resulting in a maximum of one to two vehicles infiltrating successfully.

It is imperative that the scout platoon crosstalk, with the brigade reconnaissance troop platoon leader to his front, and establish an information handover line for command and control of the reconnaissance zone. A collective exercise at brigade level is highly recommended before a combat training center rotation or combat deployment.

I attended a very productive meeting for regimental and motorized rifle battalion scouts. It was a luncheon, which I coined a scout symposium, where we discussed issues relevant to scouts and shared and exchanged tactics, techniques, and procedures. My scout platoons and I were also invited to a symposium hosted by the Cavalry Branch, where U.S. Army Europe's brigade reconnaissance team commanders or first sergeants met via video telephone conference. This meeting, though a first, was a productive discussion and left me with the impression that divisions and brigades should consider the value of idea sharing with the scout community to enhance their effectiveness.

Reconnaissance sets the conditions for battlefield success. The key to winning the information battle is the scout platoon's ability to successfully infiltrate enemy defensive positions.

[1]U.S. Army Field Manual 17-98, Battalion Scout Platoon, U.S. Government Printing Office, Washington, D.C., 10 April 1999, p. 2-2.

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Photo by SPC Mason Lowery

Photo by Dudley Harris

Musings of An Armor Officer

by Major Mark Salas

I have spent some time in armor battalions and more than my fair share of time at combat training centers. I have talked to a lot of armor leaders and seen a lot of units in action at our training centers. These experiences have led me to support some of our techniques and question others. This article is a compilation of thoughts and ideas for improvement. Some of them smack of heresy/out-of-the-box thinking, but they all should be good food for thought. As professionals, we should look at the way we do things to improve. Not "rocking the boat" or suggesting room for improvement leads to turgid, moribund organizations that fail under duress (French army 1919–1940).

The Training Center Experience

The training centers are the best things for the armored force. There is no substitute for getting out on the ground and maneuvering large forces. However, training concepts needs to be relooked to get the most bang for the buck.

There are several potential fixes to improve the quality/endstate of training. The following proposals can be used as standalone or combined solutions.

Do away with permanent opposing forces (OPFOR). Sound pretty radical? Think about it — three mechanized, permanent OPFOR battalions that will never deploy waste training time and dollars. The intent of a world-class OPFOR is to make training at training centers as rigorous as possible. Often times, this rigorous training takes the form of a baby seal hunt as hopelessly overmatched blue forces (BLUFOR) units stumble from clubbing to clubbing. Many crews do not cross line of departure (LD) because they fall victim to artillery, air strikes, chemicals, partisans, and family of scatterable mines (FASCAM). Sound familiar?

Why not design rotations in which a brigade deploys with all three battalions and then "round robin" OPFOR duties? For the National Training Center (NTC), there would be a requirement for another task force equipment set. For the Combat Maneuver Training Center (CMTC), there would be no change. There would be no requirement for an OPFOR surrogate vehicle, as the designated OPFOR battalion would strap on visual modifications such as 55-gallon drums, camouflage nets, and red stars.

My best training was as an OPFOR platoon leader in the nonpermanent OPFOR at the CMTC in the late '80s, early '90s. We had minimal observer controller (OC) coverage and our chain of command took the opportunity to conduct real training. Another idea might be allowing National Guard units to rotate in as OPFOR when active duty units arrive. This would require some cadre at the operations group level to handle command and control and base support. There would be a need for contract maintenance support. The net result is that the total (deployable) force would conduct all CTC training. There is a dollar cost; however, there would be 2,000 plus soldiers available for the force if the heavy OPFOR were eliminated.

Gradually ramp up the OPFOR. Most units that currently deploy to our training centers are not prepared for the training event. They need time to get out on the ground and refresh/reinforce their tactical skills. Why not make the first task force attack against a reinforced platoon? Why not make the first task force meeting engagement against a reinforced company? This allows units to survive long enough to move, shoot, and communicate. You don't learn to box by stepping in the ring with Mike Tyson. What is the utility of conducting an attack that gets destroyed in the OPFOR security zone? Ask yourself if the level of training for actions on the objective increased or decreased since the implementation of the CTC system. I can state unequivocally that the overwhelming majority of our units do not make it to the objective during an entire rotation. Why not design attacks to get onto the objective after a breach and then defend against a counterattack? Most units do not live long enough to see what right looks like. They start out behind the power curve with their entry-level training and never recover.

An interesting study would be to see how long individual vehicles stay alive across the LD during a 2-week rotation. We may be surprised to find that the average crew spends five to six hours alive across the LD or defending during their entire capstone training event. I am convinced that the repeated beatings we suffer at our training centers make us more risk averse and cause us to overestimate our enemies. On the other hand, we do know how to take a beating.

Reduce OPFOR artillery and increase BLUFOR artillery. I would submit there

is minimal training value in being killed by artillery at or near the LD or immediately on defend-no-later-than time. Conversely, we are underwhelmed with the amount of BLUFOR artillery available. Look at historical experiences. American artillery gets us onto the objective; where we are defeated is in actions on the objective when the enemy hugs our belt buckle. In addition, commanders and staffs are not forced to manage the amount of firepower/artillery that we traditionally take to the fight. Destroying BLUFOR units repeatedly with notional artillery in the security zone is not effective training.

Spend less time prepping and more time executing. Lethal platoons are the key to winning engagements and therefore battles. We spend an inordinate amount of time talking about it. Why not give a unit their mission set before the deployment and let them knock out their orders process at home station? Once the unit arrives, they can be given a fragmentary order (FRAGO) that forces them to refine their order and complete an abbreviated MDMP. Sound like combat? Also, the movement-to-contact mission should have a fixed LD, recock, and second LD time briefed. For example, units would LD at 0630 hours, fight without casualty evacuation until 0900 hours, recock/rekey, and LD again at 1100 hours. Everyone would know that a recock is a given, and there would be no hesitation as units wait on decisions by senior trainers to recock. Precombat inspections and rehearsals are good training, and can be accomplished at home station. When you deploy to a combat training center, you should spend most of your time in the turret on the radio and not in an after-action review or orders process. Training the MDMP and maneuver should not be mutually exclusive events; the reality of the situation is that they are.

The "Tactical Decisionmaking Process"

"A good plan now is better than a perfect plan too late."

— General George S. Patton

How many times have you received a tactical order that was an uncoordinated, cut-and-paste paperweight? How many times have you gone to a rehearsal and a wargame developed? How many times have you heard a commander say, "That's not what I want," during an orders brief?

The MDMP is broke. It does not work in tactical units. There, I said it — it is counterintuitive, has too many steps and normally does not result in a coherent product. Consider these questions:

- Does the MDMP get more or less effective when you are tired?
- Does the MDMP get more or less effective with new personnel?
- Does the MDMP get more or less effective with a chaotic situation?

Sound like combat? If no plan survives first contact then why do we exhaust ourselves as slaves to a process that is only going to result in a less effective product when we go to war? Fine, if I have 6 months to plan the invasion of Normandy, then I would use the MDMP. If I have 24 hours to plan a brigade attack, then I am going to time constrain the hell out of the MDMP.

Brigades and below should adopt a process that results in a more coherent product, provides more time to supervise preparation, and does not exhaust staffs — for lack of a better term, the "tactical decisionmaking process" (TDMP). TDMP is a formalization of a process that is already occurring in units; namely, doing the MDMP faster. The TDMP has five steps:

- Commander and staff read order and write down essential tasks = 1½ hours. The commander and staff conduct mission analysis. There is no brief to follow. The commander already read the order. Issue warning order (WARNO) one.
- Commander develops scheme of maneuver and mission = 30 minutes. The commander develops a rough scheme of maneuver using a map and alcohol pens. No need for two courses of action — use the commander's course of action. The commander develops the scheme of maneuver, no need to brief anyone about it. While the commander is developing a scheme of maneuver, the staff preps the wargame board.
- Commander, staff, and subordinate commanders conduct wargame/rehearsal and issue orders = 3 hours. Start with a 10-minute overview brief of the area of operation and mission. There is only a brief overview of enemy forces — only hard data. Save the doctrinal templates for home station officer professional developments. The commander, staff, and subordinate commanders then conduct a wargame/rehearsal. During this wargame/rehearsal, the commander issues intent and guidance and takes feedback from subordinate commanders. The commander concludes step three with direct verbal orders to his subordinates on what he wants them to do. Subordinate commanders ask questions. The result of this is the decision support matrix, reconnaissance

Photo by SPC Mason Lowery

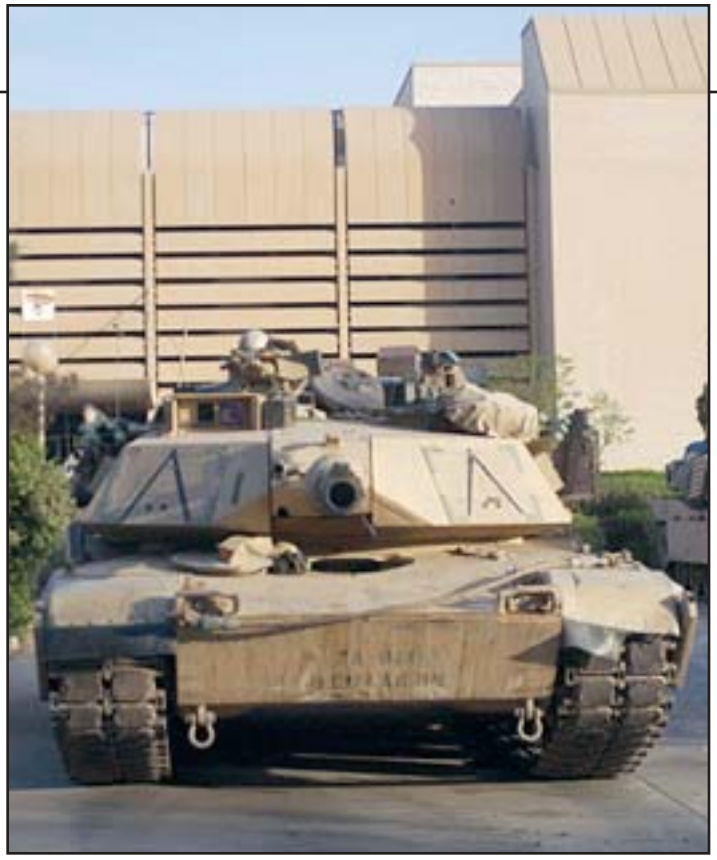
"Most units that currently deploy to our training centers are not prepared for the training event. They need time to get out on the ground and refresh/reinforce their tactical skills. Why not make the first task force attack against a reinforced platoon? Why not make the first task force meeting engagement against a reinforced company? This allows units to survive long enough to move, shoot, and communicate."

and surveillance matrix, and the combat service support matrix. Issue WARNO two.

- Staffs produce supporting matrices and graphics = 2 hours. Staffs clean up their products and reproduce them.

- Supporting matrices sent to subordinate units. Products issued to subordinate units. Commander supervises subordinate units.

The advantages of TDMP are clear. Less time is spent preparing an order that will have marginal benefit and the staff can spend more time coordinating and assisting subordinate units. There is only one brief. The commander is the key player in TDMP. If the plan is one man's idea, it will be more coherent and coordinated. All players will be better rested and prepared for execution. Savage execution is the key to success in the chaos of war. During the 3-hour period with the commander during the wargame/rehearsal, subordinate commanders will have ample time to get guidance, ask questions, and recommend solutions to tactical problems. Subordinate commanders will partially own the plan. Staffs can be smaller. Parts of MDMP are used in TDMP, which brings institutional knowledge on procedure.



An M1A1 Abrams tank stands guard in front of the Baghdad Conventon Center.

Armor Branch vs. Military Intelligence

What is the second largest branch in the Army? Field artillery? Quartermaster? If you said military intelligence (MI), you are correct. Forty years ago MI was not a branch — now they rank second in numbers only to infantry. Isn't this a problem? When was the last time a MI unit killed anything? Combat arms should take tactical intelligence from MI and give it back to the tactical intelligence professionals.

Tactical intelligence officers should become a career track. This can be accomplished by training the battalion intelligence coordinator (BIC), the battalion S2, and brigade S2 during a 2-week school on available intelligence systems and briefing formats for each job. Career progression would be: platoon leader; XO/scout platoon leader; BIC; battalion S2; company commander; brigade S2; and battalion S3/XO. Another option might be sharp, combat arms staff sergeants, advanced noncommissioned officers course honor graduates, warrant officer (WO) course graduates, platoon leader/WO1, BIC/WO2; battalion S2/WO3; and brigade S2/WO4. Either way, the net result would be intelligence officers in maneuver battalions who have on-the-ground experience in tactical operations. This would allow the MI branch to focus on higher-level intelligence and provide more combat arms officers in tactical units.

Digital and Military Operations in Urban Terrain (MOUT)

As a military profession, we are confused about the next war. On one hand, we read that the world is becoming increasingly urbanized and more wars will take place in urban settings. On the other hand, we see the Army's fascination with digitization. The Marines are preaching that the next war will be fought and won in urban centers. The Army's heavy forces are spending a lot of money preparing to win a war that will look like an NTC rotation. The common operating environment is changing the complexion of a rotation, but not the substance. Does digital technology work in large urban areas? Is anyone experimenting?

Because we are preparing for a massed armored war, we do limit training with infantry dismounts in urban terrain. For instance, the M1A2 — I would have loved to have this tank back in the days of the Fulda Gap, but the 8th Guards Tank Army is not coming. This multi-million-dollar tank can download more information than the average tank commander can handle but does not even have an external radio/telephone. Your average armor officer would be at a loss on how to use dismounts effectively in a MOUT situation. We need to be prepared to fight a people of character in a close, urban fight. Our Army has done a lot of MOUT in the past century, and we need to have the experience, training and mental dexterity to do it again.

Training

We have made training too difficult. Here is an example list of assets needed to conduct a to-standard platoon simulated training exercise lane:

1. OPFOR.
2. Sandtable.
3. OCs.
4. After-action review tent with generator, light set, stove, and warm/cool beverages.
5. Firemarkers with pyrotechnics.
6. MILES with blanks.
7. Scenario and 30-page task force OPORD with annexes and overlays.
8. Hot chow.
9. Doctrinal minefields, fighting positions, and wire.
10. Task force tactical operations center deployed.
11. A headquarters and headquarters company support element deployed.

Our training doctrine has been combined with the 8-step training method to create a mini combat training center every time we roll out the back gate. Instead of training, we are attempting to "teach the test." Training is so excruciatingly painful and expensive to conduct to standard, most units miss or avoid opportunities to conduct training at all.

Somewhere after creating the combat training centers, we lost the ability/men-

tal dexterity to conduct training exercises without troops (TEWT). One of my best training experiences was during a TEWT, traveling in a high mobility, multipurpose wheeled vehicle (HMMWV), and maneuvering through our general defense plan. The company commander briefed an operations order and handed out an overlay that included designated roads as minefields. The commander was in his HMMWV with the fire support team, the XO was in the first sergeant's HMMWV, and all the platoon tank commanders were in borrowed four-door HMMWVs. We then maneuvered across the German countryside, calling in checkpoints, occupying battle positions, and breaching minefields. We learned how to navigate, use terrain, talk on the radio, and maneuver as part of a company. Every time we reached an objective, we would occupy an assembly area that was identified on the move and have an informal after-action review. Required support included a tank of gas, a box of meals ready to eat per truck, and water. The event was not "leveraged" into a combat service support training event or some sort of brigade tactical exercise. It focused on platoons moving and communicating. It was an outstanding training event. Our Army could use more of these events.

Company TEWTs could be expanded into task force TEWTs by placing platoon leaders and first sergeants in M113s and maneuvering full up with scout platoons and mortar platoons, while XOs and above are in HMMWVs. The platoon tracks could occasionally kick out four sandbags tied together as casualties that the first sergeant could take back to the battalion aid station. A task force could roll to the field and maneuver all day for the operational tempo cost of 10 HMMWVs, 14 M113s and 5 M577s. What about the OPFOR? You don't need them.

Get systems in place and let people learn their jobs before they get killed at LD. Our current training technique of the mini combat training center allows crews to be killed repeatedly without ever reaching the objective. We have to train people how to think, use terrain, and communicate before we put them to a real test, if we expect them to be successful.

What about OCs? Don't need them either. The chain of command are smart guys with a breadth of experience and are more than capable of OCing their subordinates. Units should not have to fight through an entangled bureaucracy of overhead and requirements to train. TEWTs allow units to "crawl" cheaply, with an opportunity for multiple iterations. Wars are won with savage execution by tactical units. The chain of command should keep in mind that the higher the level of training, the less focus will go to platoons. Simplify events and focus on the killers.

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[3]It should be noted, however, that in some cases, Iraqis killed or injured at checkpoints did behave in ways that may have appeared threatening to our troops, such as failing to stop at or speeding through checkpoints. Nonetheless, our forces may have been able to deal with such behavior in a less lethal manner, but for the very real threat of suicide bombings.

[4]"Who is the Enemy?" *CBSNews.com* at *www.cbsnews.com/stories/2003/03/27/iraq/main546378.shtml,* accessed 27 March 2003.

[5]"Suicide Bomber Kills Four U.S. Troops at Iraq Checkpoint," *Pittsburgh Tribune-Review* at *www.pittsburghlive.com/x/tribune-review/specialreports/iraq/s_126421.html,* accessed 29 March 2003.

[6]"Car Blast Kills 5 Near Iraq Check Point," *Milwaukie Journal-Sentinal* at *www.jsonline.com/news/intl/ap/apr03/ap_war_car_exploi040503.asp,* accessed 5 April 2003.

[7]"Who is the Enemy?" *CBSNews.com*.

[8]William T. Sherman, *Memoirs of General William T. Sherman*, Volume 2, Da Capo Press, New York, NY, 1984, p. 126.

[9]U.S. Army Field Manual (FM) 27-10, *The Law of Land Warfare*, U.S. Government Printing Office, Washington, D.C., 18 July 1956, takes the analogy to domestic law farther, comparing these treaties to laws passed by legislatures within the United States, but the analogy is a poor one. International treaties and domestic legislation are not analogous. Laws enacted by Congress or state legislatures bind everyone. Treaties, however, are not created by some overarching international legislative authority, but are entered into voluntarily by the individual signatory states and bind those signatories only, except to the extent that the treaty provisions coincide with or become incorporated into customary international law.

[10]Ibid., pp. 4-5.

[11]In this article, I am not concerned with the matter of what international conventions Iraq has or has not joined. I assume that any pertinent provisions have become incorporated into customary international law, thus binding Iraq whether it is a signatory to any particular treaty or not.

[12]FM 27-10, p. 3.

[13]Customary international law encompasses all of these issues. Treaty law addresses them as well. Uniforms, insignia, and bearing arms openly are addressed under the Hague Convention (IV) of 1907, Annex to the Convention, Article I; and Protocol I (1977) Additional to the Geneva Conventions of 1949, Article 44, paragraph 3. Flags of truce and the Red Cross/Red Crescent are addressed under Article 23, paragraph f of the Annex to the Convention, Hague Convention (IV) of 1907. The status of cultural and humanitarian sites is addressed in the Hague Convention (IV) of 1907, Annex to the Convention, Article 27; Hague Convention (IX) Concerning Bombardment by Naval Forces in Time of War, 1907; Convention for the Protection of Cultural Property in the Event of Armed Conflict, the Hague 1954; and Protocol I (1977) Additional to the Geneva Conventions of 1949, Article 53 (also of interest is General Eisenhower's Memorandum of 26 May 1944, outlining allied policy toward historical monuments and cultural centers during the invasion of Europe). All of the above are set forth in Michael Reisman and Chris T. Anoniou, *The Laws of War: A Comprehensive Collection of Primary Documents on International Laws Governing Armed Conflict,* Vintage Books, New York, NY, 1994, pp. 47, 94, 96-104, and 105.

[14]Reisman and Anoniou, p. 41.

[15]Ibid., 41.

[16]Ibid., 43.

[17]Ibid.

[18]Ibid.

[19]Despite U.S. reservations, our own words and deeds seem to indicate, implicitly at least, that we are moving closer toward the position of the 1977 Protocols. In Afghanistan and other places, we have actively supported or fought side-by-side with non-uniformed combatants. In Afghanistan, our special operations forces have sometimes operated in a "modified uniform," consisting of a mixture of civilian clothes with military items. In distinguishing this last practice from the conduct of the Iraqi *Fedayeen Saddam*, the Department of Defense cited the wear of at least some uniform items by these forces, but primarily relied on an argument consistent with the standard set out in the 1977 Protocols: our special operations soldiers in Afghanistan always bear their arms openly, while Saddam's fighters don't. See Bryan Whitman, W. Hays Parks, and Pierre-Richard Prosper, "Briefing on Geneva Convention, EPWs and War Crimes," *DefenseLink* at *www.defenselink.mil/news/apr2003/t04072003_t407genv.html,* p. 4.

[20]This position is bolstered by the fact that the Hague Conventions of 1907 embraced the underlying concept of the 1977 Protocols as: "The inhabitants of a territory which has not been occupied, who, on the approach of the enemy, spontaneously take up arms to resist the invading troops without having had time to organize themselves … shall be regarded as belligerents *if they carry their arms openly* and if they respect the laws and customs of war." See Reisman and Antoniou, p. 41.

[21]Whitman, Parks, and Prosper.

[22]Ibid., p. 5.

[23]Ibid.

[24]Ibid.

[25]Reisman and Antoniou, p. 41.

[26]FM 27-10, p. 22. This statement is admittedly hyperbolic, but the point still holds. Such actions certainly make it harder to restore peace and cause more casualties than would have occurred otherwise.

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REVIEWS

Civilian in Peace, Soldier in War: The Army National Guard, 1636-2000 by Michael D. Doubler, University Press of Kansas, 2003, 460 pp., $17.95 (paperback).

Michael D. Doubler's book *Civilian in Peace, Soldier in War: The Army National Guard, 1636-2000* provides the reader with a comprehensive history of the National Guard from its earliest inception. While the book gives the reader deep insight into the origins, roles, and development of the National Guard, it does not make for light reading. However, Doubler's book and its extensive list of sources will prove an excellent resource for anyone conducting in-depth research concerning the Army National Guard or American History, as both are inextricably intertwined. I recommend this book to personnel who are going to or currently in an assignment where they work with the National Guard, as the book broadens the reader's perspective on the duality of our Active and National Guard forces and how the historical catalysts of our Nation's history developed this relationship.

The very foundations of American military tradition lie in the deeply rooted militia tradition that early European colonists brought with them to the New World. A tradition which can be traced to ancient Greece, where the survival of Hellenic culture and society hinged on the service, training, and employment of citizen soldiers who could rapidly turn their hand from the toil of daily work necessary to preserve their society to face down threats that sought to destroy it.

While many often believe that the earliest militias in the New World were those of the English, there were even earlier militia organizations, which were established by the French and the Spanish, before the arrival of English colonists in the early 1600s. Just as the Greek city-states, and many other Western institutions and nations, had relied on militia forces for continued existence, so did the early European colonies rely heavily on the militia to guarantee their safety in a hostile New World. In these foreign surroundings, the very environment provided a significant challenge whose only solution was hard labor, not to mention the difficulties presented by marauding Indians and competing colonizing powers, which necessitated the employment of citizen soldiers.

The book is full of interesting, and little known, facts, for instance the origins of the term "National Guard." During the Civil War, as southern militia units were taking over and dismantling federal military institutions in the south, northern militia units were being called on to augment hard-pressed regular Union forces. For the Union leadership, one of the top priorities was to secure the Capital against attack by Confederate forces. In the opening days of the conflict, militia units were rushed to Washington to perform this function to free up regular forces for operations elsewhere. In this capacity, Militiamen of the 7th New York Infantry became the first militia units to begin to refer to themselves as "National Guard" and marked their equipment as such with the insignia "NG."

The modern National Guard really came into being at the dawn of the 20th century due to greater involvement by the United States in world affairs. As the foreign policy of the United States began to expand outside of its borders, there was an increased requirement to use military forces as an instrument of foreign policy. This necessity resulted in laws and policies that made the National Guard more standardized and in-line with Regular Army forces.

Due to the unrest in Europe and the challenges of a new technological war, combined with the German policy of unrestricted U-Boat warfare, the United States entered the European conflict. This tremendous undertaking required the transformation of our National Guard into organizations that could operate better with Regular Army forces. This integration was achieved during the conflict in Europe, however with the cessation of hostilities, the focus on the National Guard diminished and there was no centralized plan for rebuilding units upon redeployment to the United States.

The National Guard's involvement in National Military Strategy rose to the forefront again in the late 1930s due to events that were unfolding in Germany and Asia. At the beginning of World War II, the U.S. Army was only the 17th largest army in the world and initially was not technologically on-line with the powers involved in the conflict. Just as in WWI, guard divisions filled the gap, augmenting the standing regular Army until the draft system could provide the necessary soldiers for victory.

With victory achieved in Europe and Asia, a new conflict of ideologies arose between the Western Powers and the Soviet Union. Due to the looming communist threat, the role of the National Guard in American military policy as a means of checking Soviet aggression was assured. Lessons were learned from demobilizing the Guard following WWI, and after WWII measures were employed for the National Guard to initially establish major commands, followed by their subordinate commands, to create viable units that could be rapidly mobilized, trained, and deployed to Western Europe.

The Korean War was the first real Cold War test for using the Army National Guard. The Guard was significant not only in its involvement in the Korean theater of operations, but also in the role of freeing-up active forces in Germany for use in Korea. Combat operations in Korea, coupled with the threat of a Soviet attack in Europe, resulted in fielding much heavier units within the National Guard to meet the growing communist threat. Another development that resulted was the implementation of a standardized basic training system that freed the Guard from not having to focus as heavily on training individual skills, thus enabling them to focus more on unit-level training, reducing the post-mobilization training time for National Guard units.

As the Cold War began to evolve in the early 1950s, Soviet nuclear developments changed the nature of the threat that existed in Europe. Now there was a viable threat to the Continental United States. The result was the integration of the National Guard in an extensive air defense network to protect the United States from a Soviet long-range bomber threat. In the true spirit of the 18th-century minuteman, National Guard units in a state status were now charged with the full-time mission of protecting critical sites in the United States against Soviet nuclear aggression.

Initially, National Guard units manned the conventional air defense guns and artillery of the day. But this all changed with the advent of anti-aircraft missile technology and produced an air defense program that, at its peak in 1962, saw 48 of the 112 Nike-Hercules sites defending the Continental United States manned by National Guardsmen. By the early 1970s, the air defense missile technology was rendered obsolete due to developments by both sides in intercontinental ballistic missiles and the resulting policy of mutually assured destruction. However, the National Guard's involvement in providing CONUS air defense firmly established the Guard's role by demonstrating their ability to master technological developments in warfare to complement the Active Army.

Not only does Doubler's book deal with the role of the National Guard in our country's wars and the nation building of America, but also discusses integration of the Active Army, Reserve, and National Guard, the Civil Rights Movement, and incorporating women into the military. It also deals with the role of the National Guard both in Vietnam and here at home, along with the "total force policy" that began in the early 1970s and placed heavy reliance on the combat readiness of the National Guard. This policy contributed significantly to ending the Cold War and helped set the stage for victory during the Persian Gulf conflict in the early 1990s.

While the preface of Doubler's book touches on the Army National Guard and its role in a post-September 11 world, the actual book ends with the National Guard in transition as it develops its role in the new world order of a post-Cold War world on the doorstep of the 21st century. The book is an extensive historical record, and a tremendous academic undertaking. As such, it should be treated as a living document, expanded, updated, and subsequently published to document the tremendous accomplishments of National Guardsmen and National Guard units in diverse operations currently taking place both at home and abroad.

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The New Face of War: How War Will Be Fought in the 21st Century by Bruce Berkowitz, The Free Press, New York, NY, 2003, 224 pp., $26.00 (hardback).

If there is one attitude more dangerous than to assume that a future war will be just like the last one, it is to imagine that it will be so utterly different that we can ignore all the lessons of the last one.

— Sir John Slessor, RAF

One of the oldest criticisms of military commanders is they are constantly trying to fight the last war. Bruce Berkowitz's *The New Face of War* puts a new spin on this axiom by showing military thinkers of all services that there really is nothing new under the sun. Berkowitz shows reader that the future of 21st-century warfare can be found in informational transformations of the past.

Berkowitz's intent is to give military and civilian leaders a better understanding of the new face of war and how the United States will be impacted especially with regard to the information revolution, which has always been a part of combat. *The New Face of War* asserts that information, not technology, has always provided the edge to any successful military operation. Berkowitz uses history to show that the commander who can use relevant information to get inside an opponent's decision cycle will triumph in combat. If this concept sounds like Air Force Colonel John R. Boyd's observe-orient-decide-act (OODA) loop, it should. Berkowitz cites Boyd's theory numerous times throughout the book.

What is insightful about *The New Face of War* are the links between previous military revolutions and our own transformations. Two that standout are the Internet and asymmetrical warfare. The Internet, Berkowitz shows, is not new. The development of spin off technologies, such as the telegraph and semaphore flags, linked Civil War commanders on the first information net. Second, Berkowtiz shows that asymmetrical warfare has existed for centuries. The most striking example is the comparison between the 1993 attack on the U.S.S. *Cole* by al-Qaeda terrorists and the 1864 attack on the U.S.S. *Housatonic* by the submarine Hunley. Both attacks used small watercraft ladened with explosives to attack larger and better-armed vessels.

Berkowitz is a research fellow at the Hoover Institution at Stanford University and a senior analyst at RAND. He is the author of *American Security, Calculated Risks, and Best Truth: Intelligence in the Information Age.* He is also a frequent contributor to the *Wall Street Journal*. *The New Face of War* is an easy read. He uses a number of historical examples to support his thesis. In addition, the notes and sources are of a quality expected of a RAND scholar. The only criticism is the book's lack of solutions for the reader. Unlike *Breaking the Phalanx* or *Fighting for the Future,* Berkowitz's book merely cautions the reader to not lose the information edge.

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The War of Atonement: The Inside Story of the Yom-Kippur War by Chaim Herzog, Introduction by Brigadier General Michael Herzog, Stackpole Books, Mechanicsburg, PA, 2003, 328 pp., $19.95 (paperback).

When studying the Arab-Israeli Wars, this book and *The Arab-Israeli Wars: War and Peace in the Middle East, From the War of Independence Through Lebanon*, Knopf Paperback, New York, 1983, by the late Chaim Herzog, are required classics on the subject. The *War of Atonement* was originally published in 1975, the author conducted numerous interviews from Israeli defense ministry officials down to the unit tank commander offering the clearest details of the tactics employed during the 1973 Yom-Kippur War, known to the Arabs as the Ramadan War. Herzog, who died in 1997, was a member of British forces in World War II before joining the Israeli Defense Forces, rising to become director of military intelligence and then President of Israel.

President Nixon is quoted as saying that the 1973 War was Israel's Pearl Harbor and war colleges throughout the world devote hours to the study of this war. This 2003 paperback edition is published on the eve of the 30th anniversary of this war and should be rediscovered by a variety of military readers. Readers of *ARMOR* magazine will enjoy the detailed descriptions of tank battles in the Sinai and Golan Heights, as well as the methods used by Arab forces to counter Israel's advantage in rapid mobile armor. Intelligence specialists will find this a valuable lesson in indications and warnings, understanding the elaborate deception plan concocted by the Egyptians and Syrians prior to the start of hostilities.

Herzog begins by arguing that the roots of the 1973 Yom-Kippur War can be found in the lightning success of the 1967 Six-Day War. The Israelis, overcome with the success of the Six-Day War, settled into the belief that Arab forces could not take the initiative. For the first time, Israel began to discuss the options of strategic depth that the capture of the Sinai provided, the West Bank offered 40 miles of depth through the Judean Desert and the Golan Heights offered limited depth, less than 10 miles. The author points out that Israel began to have a more defensive posture building the massive Bar-Lev Line along the Suez Canal with objections raised by General Israel Tal, arguing that the series of towers and logistical fortifications had become sitting targets for Egyptian air and artillery forces. The book details how the Israeli general staff argued about the Bar-Lev Line being a warning or defensive system. This lack of clarity, the book explains, is why Israel's defense leaders would be surprised.

The Egyptians and Syrians began studying the 1967 Six-Day War in detail; the Arabs began their first serious assessment of every Arab-Israeli War and engagement. They understood the speed with which IDF reserves could mobilize to answer Egyptian and Syrian attacks; they designed a plan to give the Israelis little of the 72 hours required for effective mobilization. The Israelis would have less than a 24-hour notice of a planned attack, which began on two fronts (Syrian and Egyptian) on 6 October at 1400 hours local time. The Arab plan also capitalized on the amount of their infantry and equipped them with SAGGER antitank missiles and rocket-propelled grenades to counter Israel's reliance on mobile armor with little to no infantry.

Herzog takes readers first to the critical Syrian Front; due to the proximity of the Syrian border to northern Israeli cities there was no margin for error. The 5th, 7th, and 9th Syrian infantry divisions hugged the entire length of the Golan Heights and were reinforced by the 1st and 3rd Syrian armored divisions. The Israelis focused their defense around Kuneitra and paid no attention to Brigadier General Raful Eytan's warning of the potential for Syria to concentrate its efforts on Kuneitra and the Rafid openings simultaneously. In the opening hours of the war, 60 Israeli tanks faced murderous artillery fire and 600 Syrian main battle tanks. Herzog describes how the Syrian armor order of battle consisted of tank dozers and bridging tanks leading their armored column in formation. The Israeli brigade picked off Syrian armor, yet they still came in formation. The book also discusses stories of individual Israeli tank commanders and gives a firsthand account of several of their personal experiences.

The author admires the methods Egypt and Syria used to find solutions to Israeli military proficiency. Initial Israeli air strikes into Egypt and Syria were met with a forest of surface-to-air missiles. Israel's 7th Brigade realized they had to get out of range from Syrian artillery, regroup, and maneuver around the Syrian 7th Infantry, which was reinforced by the Syrian 3rd Armored Infantry. Maps take readers from the initial Syrian breakout on 6 October to the Israeli counterstrike on 10 October.

On the Egyptian front, soldiers exercised along the Suez so that Israelis became desensitized as to when the real war would break out. Six October looked like a regular day along the Suez Canal, with Egyptian troops swimming and fishing along the canal. The difference came at 1400 hours, when 2,000 cannons, 240 planes, and 3,000 tons of ordnance landed on the 14 Israeli fortifications along the Bar-Lev Line. Herzog estimates 175 shells per second. What seemed like the Egyptians driving their pontoon bridge on the water's edge looked like what they did on a regular basis, except this time the bridges opened and rubber boats were placed in the water. Within hours, over 8,000 Egyptian troops overwhelmed more than 500 Israeli troops manning the Bar-Lev Line.

Eventually, IDF units cornered the Egyptian 3rd Army and were able to push back Syrian tank divisions, opening the road to Damascus. Herzog describes the relationship of Israeli field commanders under the pressures of war. In addition, the book goes into the superpower politics of the United States and the Soviet Union.

The final chapter describes lessons learned by the Israelis, with a focus on the intelligence

failure. After the end of the war, the government of Prime Minister Golda Meir collapsed and the Israelis appointed Supreme Court Justice Shmuel Araganat to a commission. Herzog book's on the 1973 Arab-Israeli War is a timeless classic and will be read by many generations trying to understand the tactics and strategy of this war.

Editor's Note: LCDR Aboul-Enein is a Middle East Foreign Area Officer assigned to the Pentagon.

YOUSSEF ABOUL-ENEIN
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Mexican and Central American Armor by Julio Montes, Darlington Productions, Darlington, MD, illustrated throughout with black and white photographs plus color section, 175 pp., $19.95.

Although close to home for many *ARMOR* readers, most will not know much of what Central America has in the way of armored forces. What is there and where it is located is usually little known outside each nation's own borders, apart from official military intelligence communities or reading basic details in heavyweight and expensive specialist publications. Some countries possess large numbers of modern armor, while others have more modest levels of equipment, which is not always new. Most of these nations do not actively publicize details of their armed forces, which means a lot of research is needed to discover their vehicle holdings.

Julio Montes has made an in-depth study in this area and equally, if not more, importantly made the results available in this book. It covers eight countries, in alphabetical order Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, and Panama. In recent times, this region has seen several major and minor conflicts, as well as tensions within and amongst its nations, one of which resulted in building and maintaining various armored vehicles. Usually, these come from the major producing nations, typically the United States, Great Britain, France, and the former Soviet Union, reflecting various allegiances and recent sales and disposal efforts, though several countries have designed and built their own equipment.

The countries covered vary greatly, some have very few vehicles and the entries on them are understandably short, but the author does provide a complete picture. Others have a wide range of vehicles, tracked and wheeled, in service and this account includes short histories of each country's armored heritage. In some cases, this goes back to even before the 1920s and 1930s, though most received their first armor during or just after World War II. Some of these vehicles remained in service for many years and some even survived into a new century in various degrees of modernization. Most of the modern vehicles are stock items, such as Commandos, Scorpions, and T-55s, differing only in color and markings from those in larger armies. Others are second hand, so you can find out where old Belgian AMX-13s and AMX-VCIs or German Saladins ended up. But where else can you see WWII-era halftracks and M8 armored cars still in service today?

Alongside these, this book includes descriptions and photos of the various locally designed and manufactured armored vehicles. In most cases, these are unique, as well as unusual such as rebuilt M114 APCs and a range of designs of patrol and personnel carriers built on commercial chassis. There are over 240 black and white photos, plus eight color pages that illustrate current and older equipment with specifications of those designs unique to this region and orders of battle for each nation, including what vehicles they have in current service. Also included are vehicle mounted antitank weapons and details of other equipment, making this a comprehensive survey, shedding much new light on a neglected subject.

PETER BROWN

Phantom Soldiers: The Enemy's Answer to U.S. Firepower by H. John Poole, Posterity Press, *www.posteritypress.org,* 2001, $16.95.

John Poole continues to do our nation and the military great service. *Phantom Soldier* is the third in an evolution of books — *Last Hundred Yards* and *One More Bridge to Cross* — that gets it right on future battlefield tactics.

This book must be read and implemented as part of Transformation. Poole's book provides the blue print for reforming U.S. ground forces for the 21st century. We will pay with lives if we do not reform our military from a second-generation warfare force to one that can deal with threats in third- and fourth-generation warfare.

This is a truly influential book, written by a former Marine who has tested and experienced small-unit tactics, unlike today's experts we see today talking about the war in Afghanistan. It shows the oriental equivalent to the Jager or Sturm infantry concept of maneuver warfare. It contrasts with the U.S. Army's attrition based air-land battle doctrine. It covers topics like mission orders, recon pull, decision cycles and tempo, use of the reserves, commander's intent, and other key concepts that teach a junior military leader how (versus what) to think.

Based on the oriental approach to warfare, which when combined with the German approach to warfare, evolved into revolutionary OODA-cycle theories, Poole shows how a quick acting, agile force can constantly beat larger, heavier-equipped foes. After reading this book you will understand exactly why the oriental forces, while occasionally losing tactically, overall are so effective operationally against the larger and better-equipped U.S. forces.

The book is divided into three parts: "The Eastern Way of War," "The Differences in Tactical Technique," and "The Next Disappearing Act." The critical part is the first part, which explains in clear, understandable terms how maneuver warfare works from the infantry prospective. The other two parts offer practical examples, using extensive historical quotes, to teach junior leaders these concepts.

The Marines attempted these ideas for their land-war doctrine in the late 1980s, but because they failed to evolve the culture (or people aspect) with the ideas, the Marines have gone back to attrition. Even so, doctrine involving infiltration was so effective in combat against the Iraqis in 1990 that the U.S. VII Corps had to move up its attack by approximately 48 hours to prevent the Iraqis from completely escaping before the Marines pushed them out of Kuwait.

This book will serve for years as an unofficial "bible" (alongside William Lind's *Maneuver Warfare Handbook*) for maneuver warfare officers looking for a resource to help train junior leaders critical maneuver warfare concepts. While many look for technological answers to fourth-generation warfare, this book gives ideas that apply instead to people and tactics. It leaves the reader with a solid understanding how men make decisions in combat, as well as how to translate that knowledge to a military advantage. It is a must-have book for combat arms officers and junior leaders.

This book suggests recorded history can sometimes change as one comes to better know his highly deceptive opponent. It talks about what goes on at the nitty-gritty level of infantry combat: the squads, platoons, companies, and battalions. It shows how various systems succeed or fail at tasks, such as flexibility, maneuver, combat cohesion, and morale, and why the German army was generally qualitatively superior to both Western and Eastern rivals in both world wars.

Because of the depth of his subject, Poole necessarily has to stick to a discussion of the light infantry aspect of what is admittedly a much bigger area of knowledge.

On the whole, this is an excellent book. The concepts and techniques that Poole is trying to get across are not new or original, as he implicitly states, but the genius he shows is in explaining it all so clearly and then applying it to modern situations. The style of writing is very easy to follow, and the book was a joy to read. The more I read, the more lights came on in my head.

While I couldn't say that I am now an expert on this approach to war (or even competent at it), understanding the principles behind it means I can begin to apply and practice them. This book is ideal reading for anyone in the senior lieutenant level, as a primer for junior staff courses (although instructors tend to preach maneuver and then practice attrition, it will still help you). It should be required reading for all officers who take their calling seriously. If nothing else, it will encourage debate, and that is always healthy and desirable.

DONALD E. VANDERGRIFF
MAJ, U.S. Army

Feedback from the Force Improves Training and Supports Change in 1st Armor Training Brigade

Commander
COL James K. Greer

Command Sergeant Major
CSM James L. Green

In this issue, we focus on updating and improving training based on feedback we receive from invaluable sources in the field. If we are not responsive to the needs of the force, then we have failed the mission, and this is even more critical to an Army at war. Even though most of our cadre will contribute indirectly to the war by training soldiers, many of our soldiers will contribute directly to the fight and it is our mission to train them to this standard. Our premise is that our soldiers will deploy into a combat zone within 30 days of graduation, and it is our moral imperative to train them to survive and contribute to their unit.

Feedback Sources

Cadre and redeployed units. As professional soldiers and warriors, it is our duty to keep track of ongoing operations and assess how the contemporary operating environment (COE) impacts training. As part of this effort, we recently sent a team to Fort Stewart, Georgia, to gather information from the 3d Infantry Division. We also invited leaders from 3d Squadron, 7th Cavalry Regiment to Fort Knox to talk to our leaders and visit our training.

Cadre recently assigned from combat training units to the 1st Armored Training Brigade are a tremendous source of information and ideas on how to shape initial entry training (IET) to prepare soldiers for the COE. It is also of enormous benefit that the 1ATB brigade commander was on the ground for several months doing research to write the history of the war in Iraq.

Annual field survey. We conduct an annual field survey to gain empirical data and conduct trend analysis on training effectiveness. This year's survey is out, so please take some time to give us accurate feedback. Rest assured that we closely scrutinize the results and analyze how to best adjust training in accordance with your feedback. Another valuable source of information for this data set is the surveys we send to the basic noncommissioned officers course and the advanced noncommissioned officers course here at Fort Knox.

***ARMOR* Magazine.** Of course, our most recent initiative to gather feedback is through this feature. Please continue to send comments to :

jose.pena@knox.army.mil

Responding to Feedback

Once we get feedback and assess necessary changes, there are several levels of coordination that must be completed before implementing changes:

• If the change involves basic training or a basic training core task in one station unit training (OSUT), we must have approval from Fort Benning, Georgia, before making any significant changes to the program of instruction (POI). For example, based on feedback from the force, we will add .50-caliber M2 heavy MG and Mk-19 to basic training and 63A/M OSUT, since most of these soldiers will use these crew served weapons in their first unit. The good news is that TRADOC is undergoing a fundamental analysis of basic training and we hope to report on some needed changes that will be resourced in the next issue.

• Changes to the 19D or 19K POI go through the Chief of Armor for approval. We brief the Chief on recommended changes, and those approved go forward to the Institutional Training Management Board (ITMB) for review on the impact on installation resources and tenant units. For example, in our upcoming ITMB, we are recommending adding combat pistol tasks to 19K OSUT, increased field time during OSUT, and adding more field and military operations in urban terrain (MOUT) training for tankers and scouts. If the Chief of Armor approves these concepts, the installation staff will determine the impact on resources and the ITMB will make a recommendation, but the Chief makes the final decision on whether to change the POI.

• POI changes to tactics, techniques, and procedures/conditions, or the order of training events are approved by brigade and battalion commanders. Some examples of recent innovations in the brigade to improve training include: discussing Warrior Ethos as well as Army Values training; less emphasis on drill and ceremony and more on tactical formations, culminating in a tactical exercise we call Warrior Challenge; consolidating the eight individual tactical training lessons into one integrated operation in a mission setting to drive the training; more training on improvised explosive devices and unexploded ordnance during our mine warfare classes; and transforming our entire training methodology toward more hands-on performance oriented competition and very little lecture-style instruction. We are also adding training on tactical questioning to develop and train the concept that every soldier is a warrior and a collector.

• According to the Armor School model, once a major POI change is approved by the Chief of Armor, or new courses will be taught, the Directorate of Training, Doctrine, and Combat Development (D/TDCD) develops the training plan for us to execute. D/TDCD is currently developing our POI for the Stryker and Mobile Gun System so we can train soldiers when the equipment and instructors are available.

Please continue to provide feedback so we can channel your ideas into the training development systems at TRADOC and Fort Knox. General Schoomaker's intent for the Army is to prepare every soldier to be a warrior. To address General Schoomaker' intent, TRADOC is currently reviewing many changes to the brigade combat team, which will impact OSUT, including a rapid fielding initiative (RFI) to provide initial entry soldiers with the same equipment they will use in their first unit. By next issue, we hope to report on some of these changes and look forward to responding to your feedback.

ARMOR SURVEY

ARMOR **continually endeavors to meet the needs of the armor force by providing a forum that focuses on concepts, doctrine, and warfighting at the tactical and operational levels of war; and supports the education, training, doctrinal development, and integrated missions of the U.S. Army Armor School. To fill this tall order, we have developed a survey that provides us the opportunity to improve *ARMOR* based on reader opinion. It is imperative that readers take a moment to complete the survey, which is available on page 6 of this issue and at our website: *www.knox.army.mil/survey/armormagazinesurvey.* The data you provide allows us to shape the future of *ARMOR.* Thank you for your contributions.**

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