ARMOR

March-April 2005

ARMOR

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Features

Departments

Once More Unto the Breach

There continues to be an intense effort to reduce heavy armor and cavalry from our force despite the fact that the Future Combat System is years away from reality and many high-tech gadgets that are being counted on are far from proven. Decisionmakers fail to realize that heavy armor and cavalry win battles and we cannot solely rely on electronic packages to provide enemy information and thwart enemy attacks. Historical analysis proves that using tanks in urban operations in Western Europe during World War II significantly reduced infantry casualties. Tanks also played an important role in the U.S. Army recapturing Seoul from the North Koreans in 1950, and in clearing North Vietnamese out of Hue in 1968.

More recently, U.S. tanks led in the capture of Baghdad. We witnessed heavy armor rattle the windows of three-story buildings and wreak havoc on the city streets of Sadr City, An Najaf, and Kufa to defeat al-Sadr's militia. If that doesn't seal the deal, talk to soldiers who were on the ground during these battles. They will proudly tell you tanks and Bradleys provided the decisive force in defeating insurgents.

This issue's lead article, "Armor in Urban Terrain: The Critical Enabler," written by Major General Peter W. Chiarelli, Major Patrick Michaelis, and Major Geoffrey Norman, describes the importance of tanks to the 1st Cavalry Division's combat operations in the cities of Najaf and Baghdad in overwhelming and defeating enemy forces — another excellent article from soldiers who have experienced combat firsthand and understand the capabilities and power of tanks in an urban environment.

Captain Michael Nakonieczny provides an extremely insightful piece on "Preparing for the Realities of Killing the Enemy and Taking Ground." Nakonieczny, a U.S. Marine, is blunt and to the point in explaining our mission as Soldiers and Marines. He reminds us that war is real and reality is costly.

In their article, "Tactical Intelligence Shortcomings in Iraq," Major William Benson and CPT Sean Nowlan land a direct hit with their assessment of how military intelligence assets have failed in Iraq in performing their mission of analyzing intelligence and information at the tactical level. They offer a plan to reorganize, retrain, and re-equip military intelligence assets to win in the contemporary operating environment.

Major Jim Dunivan and six of his Reserve Officers Training Corps cadets had the unique experience of participating in the ultimate staff ride — traveling and exploring two of the most important battlefields in the Middle East: the Golan Heights and Megiddo. His article, "Israel's Influence on Mounted Warfare," examines how this tiny country has provided the greatest innovations in mounted warfare.

Operation Iraqi Freedom has showcased the U.S. Army's greatness. Instead of whining, hand wringing, and having a "poor me" attitude, our Army, specifically our great soldiers, have adapted to the war at hand. In their article, "Death Before Dismount: Transformation of an Armor Company," Captain Michael Taylor and First Sergeant Stephen Krivitsky, provide a gripping analysis of how their unit successfully transformed and adapted to the current operating environment.

In his article, "Winning with the People in Iraq," Captain Jason Pape discusses how his armor company adapted to the role of providing stability and support operations in Iraq. So far in this war, sheer force and attrition haven't won over the Iraqis and stopped the insurgency. It will take a combination of force, goodwill, and professionalism on our part, and for the Iraqis themselves to take control of their country before a return to normalcy will occur.

Preparing for war in the past meant deploying to one of the Army's combat training centers to validate home station training; however, today, that might not be necessarily true. Major Bob Molinari's article, "Home Station Observer Controller Training," outlines how your unit can train at home station with properly trained and equipped observer controllers to assist in objectively preparing training exercises, providing meaningful feedback to small unit leaders, and tailoring field exercises.

Living and operating in Iraq is not easy. Captain Jay Blakley is sold on the idea that soldiers will work long hours and days on end if they are taken care of. In his article, "Sustainment Operations and the Forward Operating Base," Captain Blakley asserts that making quality of life a priority lets soldiers know leaders care. It allows soldiers to stay focused while fighting in a dangerous environment, and when they return to the FOB, they can relax and decompress after a day on the streets.

In, "Leadership and Command Philosophy," Brigadier General Philip Hanrahan reinforces the essential elements of excelling as a leader. He identifies five basic, but important, leadership points he developed as a leader over the span of his career.

ARMOR continues to set the stage in promoting warfighting and tackling issues of great importance. We have received excellent articles from soldiers in the field who are doing the yeoman's work for this nation. Continue to support the Armor force by writing your thoughts and sharing your experience.

– DRM

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LETTERS

"Commander's Hatch:"
Call for Debate on Noncombat RSTA

Dear *ARMOR*,

In his column, "Commander's Hatch," in the January-February 2005 issue of *ARMOR*, Major General Terry Tucker asks for comments on the emerging theoretical concepts for noncombatant reconnaissance, surveillance, and target acquisition (RSTA) formations replacing conventional armored cavalry within the UEx.

The quick answer is: we need both cavalry and RSTA units, like we used to have. In this context, RSTA is military intelligence (MI).

In the early 1980s, there was a divisional MI combat electronic warfare and intelligence battalion (CEWI). The CEWI acronym still appeared in the 1997 U.S. Army Field Manual (FM) 101-5-1, *Operational Terms and Graphics*, though without definition. The 1992 FM 71-123, *Tactics and Techniques for Combined Arms Heavy Forces: Armored Brigade, Battalion, Task Force, and Company Team*, also includes the capability, though without the specific CEWI title, on page 2-49:

"The division's task organization may allocate MI units to the brigade to collect signals intelligence in support of the brigade. If GSRs [ground surveillance radar] are part of the MI unit, they are typically suballocated to subordinate maneuver battalions. However, GSRs may sometimes be retained under brigade control."

Once again, folks are "discovering fire" and are then amazed at their self-illumination. C'mon guys, we've been there and done that, only back then, MI never made the absurd claim that it could substitute for ground recon scouts and cavalry. The technology did not exist then, nor does it exist today. But the combat arms types pushing the envelope are straying far beyond their areas of expertise while ignoring the realities of combat support and service support. We need to keep armored cavalry and we also need to reinforce the UEx with RSTA (actually MI) assets as they become technically feasible. The two are not the same.

The deeper problem is that under the guise of "transformation" we are losing all doctrinal clarity. Too much effort is wasted creating new terms, such as UA, UEx, UEy, and RSTA, rather than actually resolving doctrinal issues. I suggest that we no longer have *any* valid doctrine, since everything is in flux. As a specific example, consider the recently disapproved Stryker cavalry regiment. The 2d (Light) Armored Cavalry Regiment (ACR) was to be transformed into a Stryker-equipped organization. At the first blue ribbon panel (BRP) meeting in October 2000, we could have used the 3d (Heavy) ACR and the then current FM 17-95, *Cavalry Operations*, as baselines and simply swapped vehicles, mobile gun system for Abrams, Stryker squad carrier for Bradley, Stryker mortar for M106 mortar, and so on. The first cut would be accomplished in a matter of days, if not perhaps hours, and then the detailed effort could focus on maintenance allocation, ammunition units of supply, fuel consumption, occupational skills revisions, and new equipment training schedules. But, the idea was rejected out of hand, and the effort degenerated into endless revisions of FM 17-95 to accommodate Stryker and incorporate all of the new gee-whiz advanced command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) capabilities. So (ignoring the ultimate disapproval), after three and a half years we got an ad hoc organizational structure, supporting ad hoc doctrine, which was never validated by any authority. In other words, nothing but personal opinions! Wasted effort!

I have previously written letters concerning the flagrant conceptual flaws in brigade recon troops, Stryker recon squadrons, and light/medium armor in general and I will not repeat them here. But it is plain that U.S. Army Training and Doctrine Command centers are continuing along a path of pushing personal opinions and preferences instead of clear doctrinal thinking and analysis. This does not bode well for the future of Armor and the U.S. Army.

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

Respectfully Disagreeing
with MG Valcourt

Dear *ARMOR*,

In his article, "Joint Fires and Effects in the Heavy Brigade Combat Team," in the January-February 2005 issue of *ARMOR*, Major General Valcourt describes the changes to organization and structure that the field artillery community is implementing in support of transformation. While the majority of his article, especially realizing the need for increased joint terminal attack controllers (JTACs) is of great use, there are two points that require additional thought:

First, the issue of where the company fire support teams (FIST) and battalion effects coordinator (ECCORD) are assigned. I respectfully disagree with MG Valcourt's statement that, "Where they 'live' is not the real issue." I would submit that one of the fundamental principles of the heavy brigade combat team (HBCT) *is* where units "live." Armor, infantry, and engineer communities have made commitments to ensure units "live" as they will deploy and fight by breaking one of their fundamental organizations — the pure armor mechanized infantry or engineer combat battalion. *Assigning* field artillery personnel to the combined arms battalion (CAB) or recon squadron, accomplishes the same effect.

In the same way the squadron maintenance officer is responsible for training and certifying the troop maintenance teams assigned to the cavalry troops in a division cavalry squadron, the HBCT ECOORD, battalion/squadron ECOORDs, and company FISTs can all train and certify collectively without breaking the fundamental link to how they will deploy and fight. While it is reasonable to expect the fires battalion commander and command sergeant major (CSM) to maintain a mentor-type relationship with the artillerymen of the brigade, much like a reconnaissance, surveillance, and target acquisition (RSTA) squadron commander and CSM mentor the mobile gun system (MGS) platoons in a Stryker brigade combat team, this mentorship should not effect the physical location of subordinate artillerymen. Permanently organizing, training, and equipping the HBCT the way it is expected to deploy and fight,

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Army Announces Close Combat Badge

In response to requests from field commanders and after careful analysis, the U.S. Army announced a new badge for selected combat arms soldiers in combat arms brigades who engage in active ground combat.

The Close Combat Badge (CCB) will provide special recognition to ground combat arms soldiers who are trained and employed in direct combat missions similar to Infantry and Special Forces, who will continue to be recognized for their ground-combat role with the Combat Infantryman Badge.

The Army will award the CCB to armor, cavalry, combat engineer, and field artillery soldiers in military occupational specialties or corresponding officer branch/specialties recognized as having a high probability to routinely engage in direct combat, and they must be assigned or attached to an Army unit of brigade or below that is purposefully organized to routinely conduct close combat operations and engage in direct combat in accordance with existing rules and policy.

The CCB will be presented only to eligible soldiers who are personally present and under fire while engaged in active ground combat, to close with and destroy the enemy with direct fires.

The Army expects to release in March an administrative message outlining exact rules and regulations. The CCB should be available this fall through unit supply and also for purchase in military clothing sales stores.

(U.S. Army News Release, Army Public Affairs, Washington, D.C., 11 February 2005)

COMMANDER'S HATCH

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

Dynamic Changes in the Armored Force

The Eagles' 1970s hit, "Life in the Fast Lane," has great applicability for the transformation of Army organizations and operational deployments concurrently being sustained by the U.S. Army. The Chief of Staff of the Army (CSA) likened it to "rebuilding an engine with the car still running."

Transformation is in full swing: the 3d Infantry Division has been transformed into a four modular brigade structure and redeployed to the Middle East, and we have added four reconnaissance squadrons in the 101st Air Assault Division. The 4th Infantry and 10th Mountain Divisions are both in the midst of transforming and the 25th Infantry and 1st Cavalry Divisions are waiting in the wings for FY06. Recently, the 2d Infantry Division gained approval to transform its 1st Brigade within current resources beginning March 2005 and the 2d Brigade will redeploy from Iraq to Fort Carson. The 2d Cavalry Regiment has been relocated from Fort Polk to Fort Lewis, and will transform to a Stryker brigade combat team (SBCT) and the 11th Armored Cavalry Regiment (ACR) will be fielded with M1A2SEP (system enhancement program) tanks and converted to a heavy brigade combat team (BCT). Over the next 18 months, we will put armor officers and 19D scouts in reconnaissance squadrons at Fort Drum, Fort Bragg, Fort Benning, and Fort Polk; and we will assign armor Soldiers in a heavy BCT to Fort Bliss. The bottom line is every maneuver brigade in the Army, whether heavy, light or Stryker, will include armor officers, noncommissioned officers, and soldiers.

A final decision on whether the U.S. Army will have 43 or 48 active component brigades has not been made — this will have a significant impact on stationing and will impact the final "tally" of armor Soldiers. It also impacts the organizational structure of the 1st Armored and 1st Infantry Divisions, both potentially slated for FY07 transitions.

Other near-term issues have been decided: the UEx RSTA brigade has been renamed as the battlefield surveillance brigade (BFSB) and will not have a reconnaissance or security capability. Division cavalry squadrons, as we know them, will be eliminated and aviation assets currently assigned to the division cavalry squadron will be consolidated at UEx (division) level.

So what does this all mean to the armor branch's long-term health? While there are significant implications for the branch, the bottom line is that the mission sets that have driven the need for armor and reconnaissance forces will continue to support the need for a strong and viable armor force into the future. We will see a change from a tank-heavy branch (60 percent to 40 percent) to a reconnaissance-heavy force (65 percent to 35 percent). Correspondingly, we will see a significant growth in the number of scouts, based on the addition of squadron-level reconnaissance organizations in all modular brigades and we will grow approximately 3,000 additional scouts from our pre-modular structure. Simultaneously, we will reduce the number of tankers in the force by about 1,000 as we transition to a heavy combined arms battalion force. We will also see a significant increase in the number of company commanders and first sergeants, as well as armor S3/XO positions. The number of armor battalion and brigade commands will also increase, as will the length of some operational command tours from two to three years.

At Fort Knox, we are transforming the Armor Training Center to meet the contemporary operating environment demands. We are replacing the Armor Officer Basic Course with the Basic Officer Leader Course (BOLC). At BOLC II, officers will receive basic combat and "how to be an officer" training. Officers will then attend their branch specific BOLC III training. The Armor BOLC III will be a 15-week, combined armor and reconnaissance course. BOLC II and BOLC III will provide officers 21 weeks of training to prepare young officers for platoon leader positions. This is a good thing!

The CSA's bold decision to transform the U.S. Army, while simultaneously managing ongoing operational deployments, comes with a price. With an organization as large and dynamic as the Army, we can't simply stop in place, reset, then restart; nor can we stop our training programs, reset, and then begin training again. Needless to say, we'll all be busy as we try to get all the right pieces in the right places to meet mission requirements today, while setting the stage for increased predictability in the future.

In the recently updated armor chapters of Department of the Army (DA) Pamphlet (PAM) 600-3, *Officer Development*, and the ongoing update to DA PAM 600-25, *Enlisted Development*, we have eliminated the term "branch qualification," which is a good change. Our professional development goal for future commanders and first sergeants is providing a series of operational and generating force positions, supported by a quality officer and noncommissioned officer education program that develops well-rounded leaders — in other words, our goal is "branch development" (the new term) not branch qualification. However, warfighting remains the core of our craft, and serving in positions that enhance warfighting remains the "critical assignment" for armor leaders at every grade level.

Hang on to your Stetson and keep your spurs firmly planted as we meet the future head on.

FORGE THE THUNDERBOLT!!

DRIVER'S SEAT

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

OIF Highlights Bradley's Versatility and Survivability

Employing critical warfighter systems, such as the M1 Abrams and the Bradley family of combat vehicles, in support of Operation Iraqi Freedom (OIF) clearly illustrates the important role these battle-proven systems play in combat operations.

The Bradley Fighting Vehicle (BFV) has been an essential piece of equipment for the U.S. Army for more than 20 years. During this time, the Bradley has undergone essential modifications; most notably the M2A2 model used in Operation Desert Storm. The M2A2 demonstrated amazing flexibility on desert battlefields. Its lethality and survivability traits at the right time and place — maneuver and speed, combined with tactical surprise — proved its ability "to fight in the fourth dimension."

The newest M3A3 BFV, refined with field enhancement packages and systems upgrades, is currently employed in Iraq, where mortar attacks, roadside bombs, rocket-propelled grenade, and small arms attacks occur daily. The M3A3's new and improved sights allow crews to quickly identify and dispose of threats. Heavy armor plating protects crews; the vehicle's excellent mobility and pure size allow it to go where other vehicles cannot go. The BFV is also an effective casualty transport because it can roll into an unsecured area and pick up wounded. The crew area has space to transport both the injured soldier and attending medic, thus saving valuable time and lives.

The BFV proved to be reliable above and beyond expectations throughout the 3d Infantry Division's historic 800-kilometer advance across the brutal deserts of southern Iraq, with the division maintaining above a 90-percent combat capability due to the Bradley's flexible full-spectrum defense capabilities. The Bradley's performance was hardly a surprise to those who know its capabilities. What was surprising to many outside the Bradley community was the demonstrated success of the Bradley during military operations in urban terrain.

It was initially projected that seizing Baghdad would require weeks of painstaking house-to-house operations conducted by light infantry elements. The reality: this objective was accomplished across two furious April days by an armored strike delivered by combat units armed with the firepower and survivability of heavy armor.

The Bradley provides an excellent support-by-fire vehicle for dismounts conducting door-to-door searches. When needed, the Bradley is an excellent door opener in its own right. The variety and flexibility of its weapons systems have proven invaluable in the tight constraints of urban terrain. Armor is also a great intimidator. When platoons of BFVs and tanks roll down an Iraqi street, it instills fear in the enemy — *he has seen first-hand the firepower and survivability of heavy armor.*

Originally fielded in battalion scout platoons, the M3A3s were subsequently replaced with high-mobility, multipurpose, wheeled vehicles (HMMWVs). This move proved to be somewhat ineffective because scouts faced difficulty protecting themselves, which led to Bradleys being pressed back into scouting, flank security, and convoy escort roles. Because the current enemy has proven to be elusive, resourceful, and unpredictable, the BFV has become the scout's vehicle of choice to conduct a variety of missions.

The Bradley continues to incorporate lessons learned from the field to meet the requirements and needs of Soldiers. Recent combat experiences have served to highlight the Bradley as a critical contributor to ongoing transformation thinking. One of the few certainties in an era of uncertainty is that the Bradley will continue its service to the U.S. Army in significant numbers well into the future.

While organizational structures will continue to evolve over the coming months and years, Bradley systems will retain, and potentially expand, their critical roles and missions —Armor was critical on yesterday's battlefield, has proven effective on today's battlefield, and will be even more so critical on tomorrow's battlefield.

Staff Sergeant Brian Flading, a 19D Operation Iraqi Freedom veteran, remembers an incident when his platoon was mortared one night in Balad. With the new FLIR, the crew was able to see the enemy shooting the mortars. His crew sent rounds downrange within three seconds of the mortar shot! He recalls, "That day, I knew the Bradley was the best vehicle to have in Iraq. The awesome capability of the BFV was unleashed that night!"

Staff Sergeant Michael Garvin, also a 19D Operation Iraqi Freedom veteran, sums up his experiences in Iraq, "The Bradley was a great help during raids and outer cordons. It gave us a bigger weapons system close-by. If we could not get into a house or building, we drove the Bradley through the door. The Bradley is the best vehicle we have today, it has saved my life, as well as the lives of my soldiers. From training to fighting, the Bradley has always been my choice."

SSG Flading and SSG Garvin served with the 1st Squadron, 10th U.S. Cavalry, 4th Infantry Division in Iraq. They have served as BFV drivers, gunners, and squad leaders and are currently Bradley commanders, sections sergeants, and senior scouts. I appreciate the expertise and experiences these fine soldiers are willing to share with the Armor Force.

Iron Discipline and Standards!

From the Boresight Line:

AIMTEST: Bridging the Gap Between Simulators and Live Fire

by Staff Sergeant Richard Smith

Over the past few years, training budgets have been cut substantially while readiness and operational requirements have increased. Units are expected to do more with less, creating serious problems for resource managers and trainers. Nowhere has this been more acutely felt than in armored combat units — Active and Reserve Component armored forces have an urgent need for realistic and efficient subcaliber live-fire tank gunnery training for tank and armored vehicle crews to augment full caliber tank gunnery training and qualification. Trainers must have the ability to assess tank crews' weaknesses and provide viable training courses of action to correct those weaknesses. There is a solution: the advanced inbore marksmanship training enhancement system for tanks (AIMTEST).

The AIMTEST .50-caliber tank inbore subcaliber device was developed in the mid 1980s by a team of tank noncommissioned officers (NCOs) at the National Guard High Technology Center, Fort Dix, New Jersey. Since the introduction of this device, over 600 .50-caliber tank inbore devices have been purchased by the U.S. Army, U.S. Marine Corps, U.S. Army National Guard, NATO, and various allied armies.

There are many computerized gunnery simulators in use by the military today that provide a valuable piece of the training puzzle; however, no one would fly with a pilot or take an armored vehicle crew to war that has trained only with simulators. AIMTEST bridges the gap between live-fire and gunnery simulators. When a tank crew is on the range firing live bullets, this increases the crew's combat mentality and situational awareness. With AIMTEST, there is no compromise in training standards for the crew. All functions performed during normal operational use of the tank must be performed with AIMTEST. This reinforces realistic training standards and does not teach bad habits.

The main gun's normal firing circuit operates the firing mechanism of AIMTEST and all main gun safeties are operational. In addition, the range surface danger zone (SDZ) is reduced to 6,700 meters or less. Noise is reduced to the small-arms level due to the "muffling" effect of the main gun tube. As a result, the crew is subjected to very low sound pressure levels. Both

the range safety fans and noise levels are important in many countries due to restrictions near populated areas.

AIMTEST devices are available for all standard 105mm and 120mm main tank guns. AIMTEST can also be adapted to any vehicle cannon and can duplicate the ballistics of several types of standard cannon ammunition in calibers from 73mm to 120mm through the substitution of easily available .50-caliber ammunition types. The trajectory of .50-caliber M20 armor-piercing incendiary tracer (APIT) is an excellent match for 90 to 120mm cannons out to 1,500 meters (tracer burnout), and is easily sufficient to exercise tank crews with standard half-scale or full-scale targets. A range out to 2,000 meters (tracer burnout) is achieved through using .50-caliber M962 saboted light armor penetrator tracer (SLAPT) ammunition.

AIMTEST is the only U.S. manufactured inbore device that is safety certified by Aberdeen Proving Grounds (APG), Maryland. The U.S. Army has tested the AIMTEST .50-caliber subcaliber gunnery devices on four separate occasions. In 1987, APG issued the first safety release for inbore use to the U.S. Army. In 1997, APG conducted a comprehensive test on the AIMTEST in both the 105mm and the 120mm models. In 2001, APG conducted tests to ensure AIMTEST will fire M962 SLAPT .50-caliber ammunition without causing damage to the AIMTEST device or to the tank cannon. In 2002, the AIMTEST was again tested, this time as a 90-mm MK8 inbore for the Saudi Arabian National Guard. All tests were successful and APG issued safety releases to the armor community. AIMTEST has been tested against inbore devices sold by other countries, and has won every competi-

tion conducted by foreign armies. AIMTEST consistently proves to be more accurate, easier to install, operate, and maintain than any other device.

AIMTEST is ready for live-fire operations in less than 10 minutes. Due to the fact that the AIMTEST does not intrude on the fire control system, it is not likely to damage any systems components. A tank crew removes the device from its case, completes installation in the vehicle, and begins firing; no other vehicle modifications are required. Once the vehicle crew zeroes the AIMTEST and records the zero data, the crew can continuously install and remove the inbore device to fire main gun ammunition then return to inbore firing without re-zeroing the AIMTEST.

Many units today are deploying and redeploying. Even during a deployment, training continues, and AIMTEST should be on every unit's deployment checklist. It can easily be deployed in the unit supply conex. AIMTEST can be used to keep the tank crew's gunnery skills sharp without wasting transport space that can be best used for other equipment. When the unit arrives at the deployment site, AIMTEST can be transported in a high-mobility, multipurpose wheeled vehicle (HMMWV) from the unit's supply location to its training site. Up to eight AIMTEST devices, along with ammo, can be transported in a HMMWV.

Today's deployed forces need every device available to sustain their skills. The AIMTEST allows units to maintain combat proficiency across the training spectrum while deployed in austere environments. AIMTEST does not replace main gun firing, but definitely enhances the training base.

Armor in Urban Terrain: The Critical Enabler

by Major General Peter W. Chiarelli, Major Patrick R. Michaelis, and Major Geoffrey A. Norman

"…tanks and mechanized Infantry face problems in confines of urban areas that place them at a severe disadvantage when operating alone. Only together can these forces accomplish their mission with minimal casualties..."[1]

Task Force (TF) Baghdad's adaptation to fighting in the urban canyons of Al Tharwa (Sadr City) and the cemeteries of An Najaf has been both remarkable and significant. It has proven the reality of urban combat — we can win and we can win decisively.

The new fight brings to light a cautionary message to the force — be wary of eliminating or reducing the option of heavy armor; it has proven decisive and has been the critical enabler that allowed TF Baghdad to win every fight, everyday. The enemy we fight in streets and crypts is not connected by a vast suite of electronics packages; instead, they use proven kinetic techniques, such as the rocket-propelled grenade (RPG), the command-detonated improvised explosive device (IED), the mortar, and the AK47 in an asymmetric fashion, using the concrete valleys of the cityscape to their advantage.

This evolution in warfare is not a side note in history; it is a foreshadowing of operations to come. The mass migration of humanity to cities and the inability of third-world nations to keep abreast of basic city services relative to growth, breeds discontent. It is a harvesting ground for fundamentalist ideologues.

This article should serve as a note of concern to the force. Eliminating or reducing heavy armor systems from inventory will remove valuable assets that prove decisive when moving from a maneuver war to a street war.

Al Tharwa: The Sadr City Box

During the April-June and August-October 2004 Shia uprising of Muqtada Al Sadr's militia in Al Tharwa (Sadr

City) and An Najaf, it became clear that the ultimate task organization of choice depended on the enemy threat. Patterns of employment of the combined arms team that both solidified and challenged existing doctrine were also made clear.

The grid-like pattern of Al Tharwa presented an interesting tactical challenge to the soldiers and leaders of 2d Battalion, 5th (2-5) Cavalry Regiment (TF Lancer), 1st Brigade Combat Team, 1st Cavalry Division, Fort Hood, Texas. As Muqtada's militia began actively attacking coalition forces, TF Lancer worked rapidly to defeat the insurgent uprising while protecting its soldiers.

As its primary avenue of approach, the enemy chose side street alleys, which Bradley Fighting Vehicles (BFVs) and M1A2 sys-

tem enhancement package (SEP) tanks could not negotiate due to sheer width and obstacles such as disabled civilian vehicles and air-conditioning units. As these vehicles progressed throughout the city, the militia would attack their flanks, seeking to disable them with IEDs, RPGs, and AK47s.
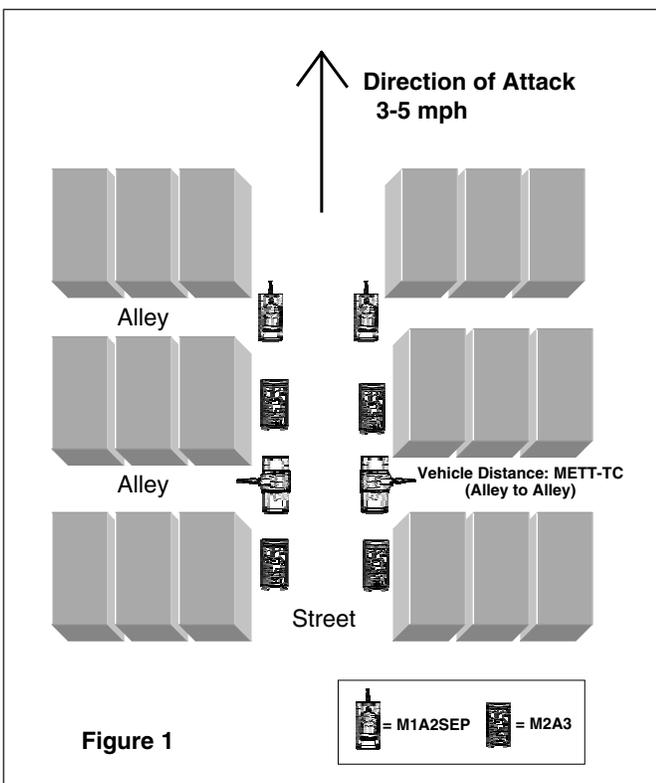
U.S. Army Field Manual (FM) 3-06.11, *Combined Arms Operations In Urban Terrain*, Appendix C, states: "If isolated or unsupported by infantry, armored vehicles are vulnerable to enemy hunter/killer teams firing light and medium antiarmor weapons. Because of the abundance of cover and concealment in urban terrain, armored vehicle gunners may not be able to easily identify enemy targets unless the commander exposes himself to fire by opening his hatch or by infantrymen directing the gunner to the target."[2]

Initially, following standard doctrine, the task force moved throughout the city in column or staggered-column formations, assigning typical 360-degree sectors of fire to cover all enemy avenues of approach. However, with the vertical firing platforms of rooftops and the coordinated attacks on both flanks through use of alleys, the task force had to rapidly adapt to the emerging enemy threat.

The task force quickly learned to move throughout the city in protected mode (buttoned up) and maximize the capability of the dual sights provided by the M1A2SEP, equipped with the gunner's primary sight and the commander's independent thermal viewer (CITV), and the M2/3A3 improved Bradley acquisition subsystem (IBAS) with the commander's independent viewer (CIV). As shown in Figure 1, their refined movement-to-contact formation resulted in a rolling battleship of armored vehicles in a "box" formation, moving in a deliberate, methodical progression through the main streets of Al Tharwa, maximizing the protection of the armor packages.[3] Success relied on the skill of the driver, the armor package of the M1A2 and the latest generation M2/3A3 and the dual sight capability afforded by the vehicle upgrades.

Moving buttoned up in a pure mechanized/armor formation, the combat patrol would reposition at the release point into a rectangular formation of at least six armored vehicles. Moving vehicles parallel to each other created an artificial set of interior lines to protect the exposed flank of the opposite vehicle and allow a full three-dimensional, 360-degree coverage of the constantly shifting battlespace.

The commander's independent sight systems offset the protective measure of vehicles moving through the city with hatches fully closed. The second sight afforded another field of view, al-

Direction of Attack 3-5 mph

Alley

Alley

Vehicle Distance: METT-TC (Alley to Alley)

Street

= M1A2SEP   = M2A3

Figure 1

lowing the gunner to primarily observe enemy alleys. Instead of the commander being relegated to what the gunner was observing, or struggling to gain situational awareness through vision blocks, he became an integral part of the vehicle and patrol team by providing coverage of secondary enemy avenues of approach, oriented forward of the vehicle or toward the opposite flank vehicle's immediate rooftops, providing high-angle coverage. See Figure 2.

Moving block by block, the patrol would travel at extremely slow speeds to allow for acquisition of targets in the alleyways and proper handoff to subsequent vehicle gunners. Although not quite a 'steady platform' for the Bradley, the standard engagement was less than 200 meters — the proximity to targets allowed for successful coax engagements. The CIV and CITV were used to scan opposite rooftops, or forward and to the flanks of the gunner's primary sector to allow immediate target handoff.

Drivers keyed off the front left vehicle for rate of movement and worked as integral members of the team to identify targets, maintain proper dispersion, and move to predetermined locations. At short halts, drivers would establish a point of domination by immediately moving to overwatch the closest alley, which was the most likely enemy avenue of approach.

"Armored forces can deliver devastating fires, are fully protected against antipersonnel mines, fragments, and small arms, and have excellent mobility along unblocked routes."[4]

The success of the box in attriting enemy forces in Al Tharwa was causal to the armor packages of the M1-series tank and latest generation Bradley. This capability allowed absorption of the enemy's primary weapons system (IED), and protected infantry dismounts that spent many hours traveling in the backs of Bradleys, enslaved to the squad leader display to maintain situational awareness. This same technique, used with lighter skinned vehicles, would not have been effective in achieving the task force's objectives during movement to contact due to asymmetric advantages the enemy retains by fighting on their turf.

As always, the enemy has a vote and began adapting to the successful employment of the Sadr City box. They began to move increasingly toward using IEDs to disable vehicles and subsequently cause a catastrophic kill by using RPGs and mortars. This prompted the task force to adopt a heavier stance in the lead elements, stressing the use of the M1A2SEP to lead each combat patrol. The tank, with its armor package, could take the brunt of the effect of IEDs laid throughout the route. In some cases, crews could identify detonation wires running from hidden IEDs through global positioning systems (GPS) and CITV. Once identified, the crews could 'disable' the IED by destroying the detonation wires with direct fire or by directly firing at the IED's point of placement. Stripping all unnecessary equipment from the bustle rack and moving buttoned up allowed follow-on Bradleys to service targets that succeeded in climbing on top of tanks or getting within their deadspace.

Because of the close range of engagements in the city, the primary weapons system on both the tank and Bradley became the coax, normally zeroed at about 200 meters. Recon by fire of suspected IED locations was authorized, but leaders always remained cognizant of collateral damage through positive identification of targets. Because of the desire to minimize collateral damage, a check in the system for using 25mm and 120mm was developed by the task force, which forced company commanders to

Direct Fire Plan

Figure 2
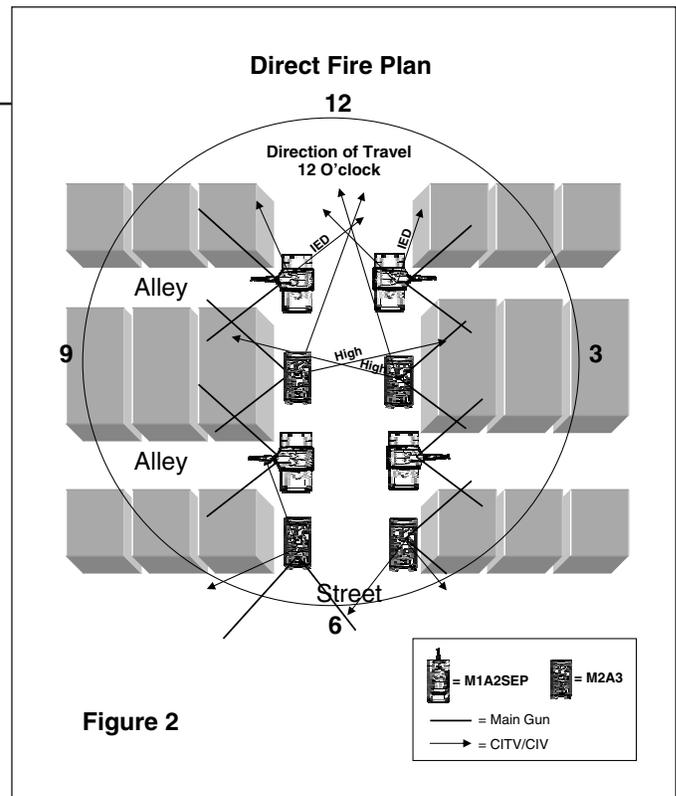
clear fires for 25mm and battalion commanders to clear fires for 120mm.

"Armored vehicles can move mounted infantrymen rapidly to points where, together, they can dominate and isolate the cordoned area."[5]
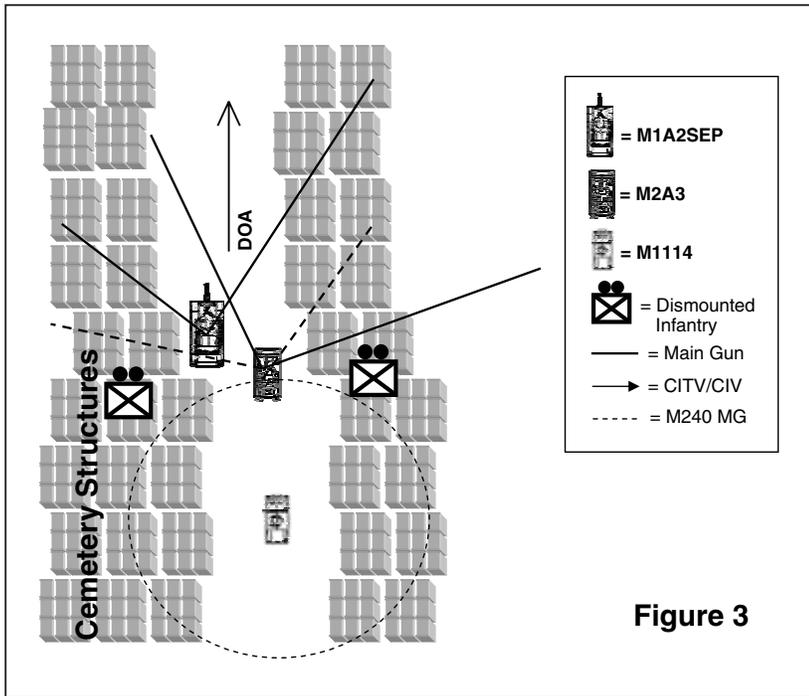

In war, bad things happen. The enemy objective in both Al Tharwa and An Najaf was to disable a vehicle and exploit it for an information operations success. Moving through the streets of Baghdad, it was inevitable that a vehicle would become disabled, leading to specific battle drills within the task force. The remaining vehicles in the box would move to provide a wall of steel around the disabled vehicle; infantrymen would dismount from the backs of the M2s to cover deadspace, either by tying into the adjacent vehicles or occupying by force a strongpoint position. M88s, escorted by a quick reaction force (QRF) patrol, would move rapidly to the disabled vehicle and begin extraction. The screen established by the initial patrol would protect the M88 crew as they extracted the vehicle.

"Decentralized armor support greatly increases a small infantry unit's combat power. However, dispersed vehicles cannot be easily and quickly concentrated."[6]

An Najaf: The Combined Arms Patrol

In An Najaf, the terrain dictated different tactics while fighting the same enemy. What remained constant was the overwhelming domination of the armor/mechanized combination as *the* enabler to support the decisiveness of the mission.

In August, elements from the 2d Brigade Combat Team (Blackjack) and the 3d Brigade Combat Team (Greywolf), 1st Cavalry Division, rapidly moved south of Baghdad to An Najaf and

= M1A2SEP

= M2A3

= M1114

= Dismounted Infantry

= Main Gun

= CITV/CIV

= M240 MG

DOA

Cemetery Structures

Figure 3

IEDs, mines, and RPGs, to mortars and snipers. The Bradleys would protect the flank and elevated shots against the tank, and the M1114 provided local and rear security for lead vehicles using its M240 machine gun. Dismounted soldiers from the Bradley and M1114 would disperse to the flanks of the section to eliminate enemy attempting to get into blind spots of the armored systems. Due to the restrictiveness of the cemetery's tombstones, mausoleums, and support buildings, maintaining visual contact with friendly forces was extremely difficult, requiring crews to maintain voice contact to keep vehicles and dismounted movement synchronized. Situational awareness was also critical in the clearance of fires, as both 120mm mortar and 155mm artillery were employed. See Figure 3.

At times, narrow trails forced the tank to move to a flank, based on traversing limitations, and allow the Bradley to engage and service targets. To mitigate risk to the tank, the infantry would move to the tank's flank to prevent the enemy from mounting from the rear. If infantry were committed or unavailable, a sniper was emplaced to overwatch the tank, providing the same protection and early warning. The final option was to use the M2A3's CIV to cover the tank's position.

fought the Muqtada's militia on different terrain. Task Force 1st Battalion, 5th (1-5) Cavalry Regiment, 2d Brigade Combat Team, 1st Cavalry Division, faced unique challenges as narrow parallel trails through the cemetery and old city of An Najaf forced units to attack with multiple, section-sized elements along adjacent trails, which were often separated from mutual support.

A combined arms section became the preferred maneuver element. The section normally included a tank and Bradley attacking abreast, trailed by an M1114. The tank often advanced slightly ahead of the Bradley to absorb the initial energy of enemy ambushes. These ambushes and enemy engagements ranged from

Like units in Al Tharwa, Task Force 1-5 Cavalry generally fought buttoned up. The propensity for Muqtada's militia to engage through sniper fire or by dropping hand grenades on crews from above, forced this tactic. This tactic also allowed overwatch vehicles to engage targets that moved within the vehicle's deadspace to its immediate front.

Without the armor protection afforded by the tank and latest generation Bradley, Task Force 1-5 Cavalry's ability to achieve
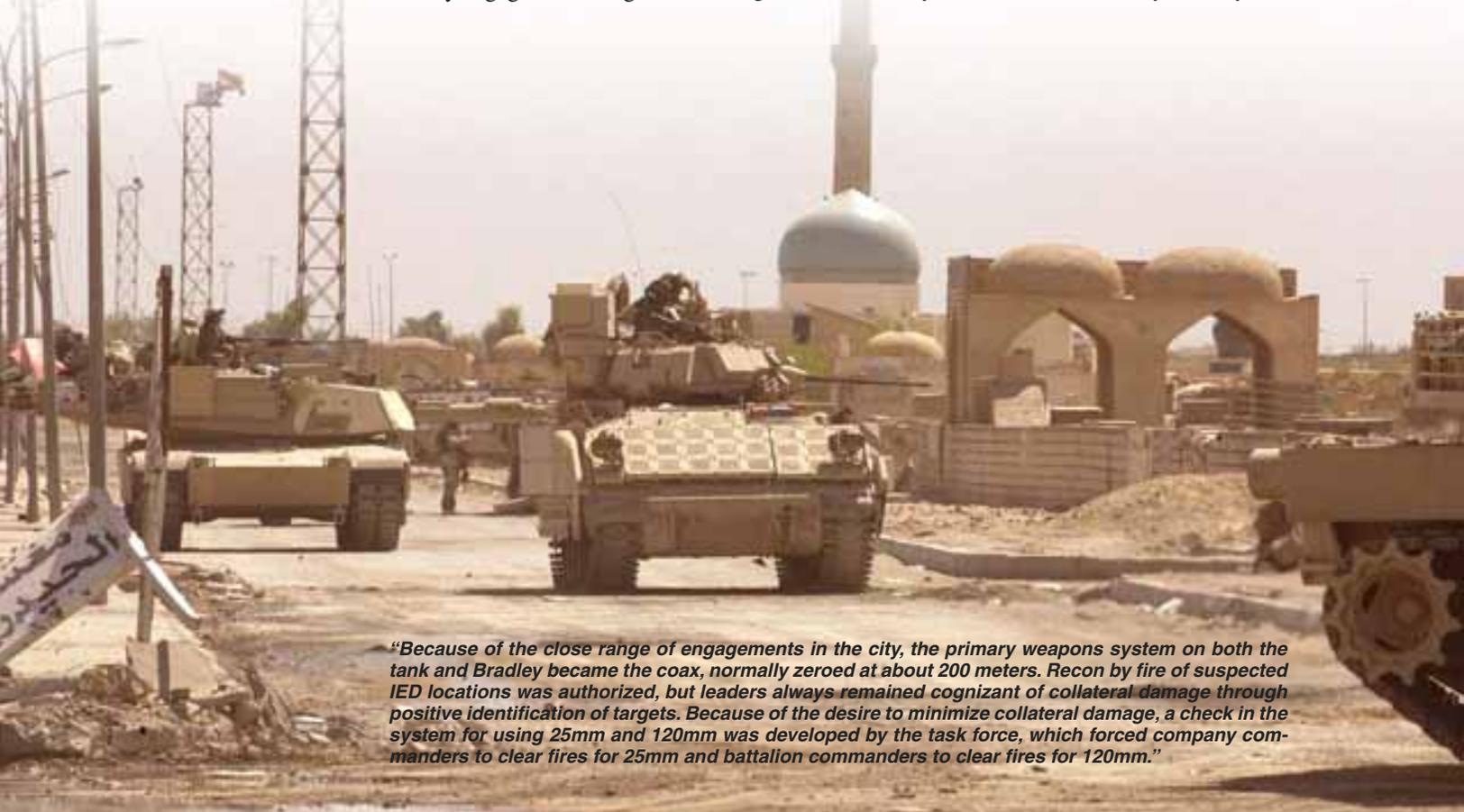
"Because of the close range of engagements in the city, the primary weapons system on both the tank and Bradley became the coax, normally zeroed at about 200 meters. Recon by fire of suspected IED locations was authorized, but leaders always remained cognizant of collateral damage through positive identification of targets. Because of the desire to minimize collateral damage, a check in the system for using 25mm and 120mm was developed by the task force, which forced company commanders to clear fires for 25mm and battalion commanders to clear fires for 120mm."

decisive success in An Najaf would have been characterized by higher casualties and a longer campaign. Used in conjunction with a combined arms dismounted infantry team, the tank and Bradley, having devastating effects on Muqtada militia largely attributed to the protection afforded by their armor packages, forced the enemy's hand and led to capitulation by Muqtada al Sadr.

"Due to the length of the tank main gun, the turret will not rotate if a solid object is encountered."[7]

Southern An Najaf: The Lane Attack

Task Force 2d Battalion, 7th (2-7) Cavalry Regiment, attached to the 39th Brigade Combat Team, 1st Cavalry Division, was assigned to the southern sector of An Najaf, which was characterized by a narrow, residential grid-like road network that, unlike Task Force 2-5 Cavalry in Al Tharwa, prevented full lateral traversing of the M1A2SEP's main gun.

C Company, Task Force 3d Battalion, 8th (3-8) Cavalry Regiment, 3d Brigade Combat Team, 1st Cavalry Division, attached to Task Force 2-7 Cavalry, developed the 'lane attack' approach to application of armor in urban environments that characterized the unit's area of operations. To maximize the capabilities of the armor packages and the independent sights, the unit created section level *lanes* or directions of attack. Vehicles would move to "points of domination" (the intersections) to maximize the ability to traverse the turret and use the CITV. The first tank would orient low, forward, and to an unprotected flank. The second tank would be two blocks back, clearing forward and high over the lead tank. The CITV would cover an unprotected flank and rear. One block over, on a parallel street, would be a second section-level direction of attack that would be occupied by a wing tank section. This lateral dispersion of forces in extremely canalized terrain created a set of interior lines that afforded lateral security. Up to two platoons would be put on line, along four lanes, with infantry (in M1114s) in a reserve role behind the center echelon tank sections. See Figure 4.
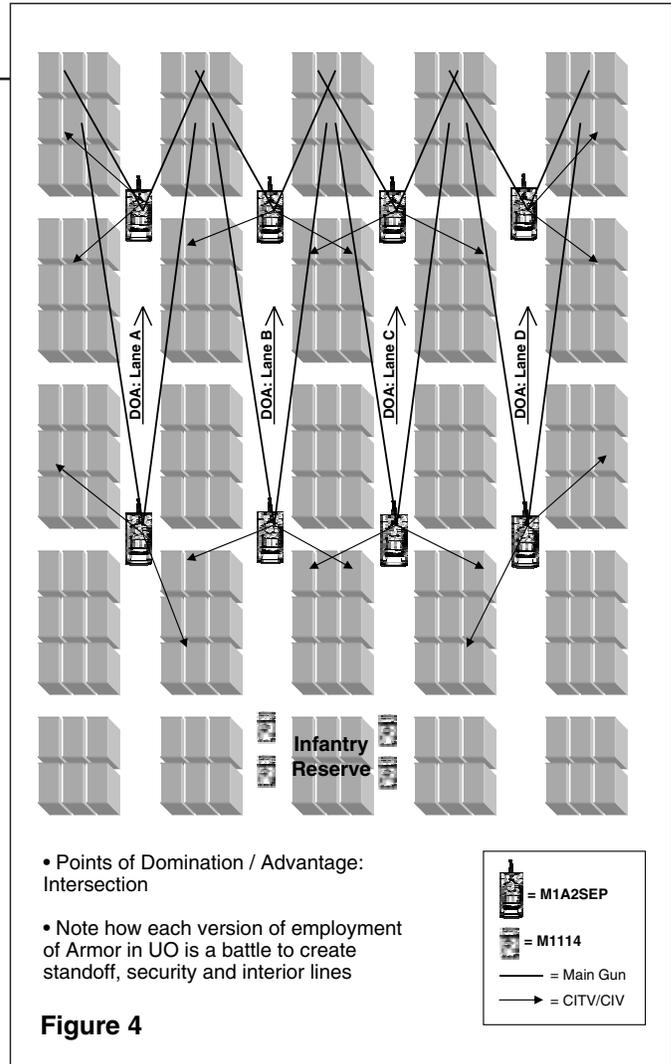

"Because of the complex terrain, defending forces can rapidly occupy and defend from a position of strength."[8]

Observation and Examination

Whether fighting enemy forces on home turf, on a commercial or residential grid pattern such as in Al Tharwa or southern An Najaf, or on irregular patterns of the cemetery or old city of northern An Najaf, leaders can benefit by observing and examining these three separate units and their invaluable successes:

Adaptable leadership. Throughout each experience, our leaders consistently and rapidly adapted to enemy tactics and maintained the initiative. Although there are similar doctrinal threads in the employment of the combined arms team in each instance, it is the development and implementation of an emerging set of tactics and techniques in direct relation to enemy employment that led to its defeat.

Confidence in equipment. Current armor packages, the M1A2 SEP and the latest generation M2/3A3 (with enablers) can take the brunt of enemy weapons systems. They can survive first contact, which is critical to tactical success. However, there is a small risk associated with employment of current armor pack-

• Points of Domination / Advantage: Intersection

• Note how each version of employment of Armor in UO is a battle to create standoff, security and interior lines

Figure 4

ages — enemy forces will exploit what they perceive as weaknesses. Units must take this into consideration when occupying or creating a positional advantage.

Independent sights. We no longer have the standoff envisioned in fighting a war on the plains of Europe. Instead, we fight a dirty, close fight against an asymmetric threat that uses crude weapons. It drives units to move through the urban landscape buttoned up. The CITV and the CIV give back to the vehicle and unit commanders capabilities lost by operating in this posture. Units must train to conduct entire operations with hatches closed.

Points of domination. Vehicles, sections, and units move to and occupy positional points of domination (or advantage), normally an intersection, where they can best take advantage of the capabilities afforded by the M1A2 and latest generation M2/3A3 armor package (with enablers), the dual sights, and weapons systems.

Create standoff. Create reaction time to allow servicing of targets. In some cases, that 'standoff' is a function of location (see points of domination). In other cases, it is a function of speed. Slowing movement allows time for acquisition, drawing out enemy forces, and servicing targets in the close confines of the urban landscape.

Create interior lines. Offensive and defensive box formations create conditions to maximize the capability of the dual sights by eliminating the need to secure a flank, which is protected by

the vehicle to the unobserved flank. This further offsets the enemy's propensity to execute simultaneous attacks from multiple surface and elevated avenues of approach.

We must continue the debate about the relevancy of armor. It would be wise to listen to some of our own doctrine when examining future combat systems. The trend is clear; the hardest place to fight and win — in the city — will dominate future U.S. Army operations. We cannot rely solely on a suite of electronics packages to offset the brunt of an enemy attack, which will be characterized by crude but effective weapons and an inherent terrain advantage due to the complexity of the city fight. The solution is good planning, the resolve of leadership, and the confidence that the equipment they fight in will protect our soldiers. The critical enabler is lethal and survivable M1 and M2/3 armored packages, coupled with increased situational awareness afforded by an independent commander's sight. These systems must remain in our inventory for immediate employment by deployed forces. Our tanks and Bradleys must not diminish in numbers but become more capable through continuous upgrades that protect our soldiers and allow them to dominate the unseen, often unnoticed enemy force that lurks in the shadows of alleys.

Notes

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

[2] Ibid.

[3] The box formation is not new to the first team. In 1993, then Major General Wesley Clark introduced and trained the box formation as the division commander. He contended it offered the same advantages in the open terrain of the National Training Center in fighting an enemy that were used the wadis and IV lines to engage attacking forces from a position of advantage.

[4] FM 3-06.11, Appendix C.

[5] Ibid.

[6] Ibid.

[7] Ibid.

[8] U.S. Army Field Manual (FM) 3-06, *Urban Operations*, U.S. Government Printing Office, Washington, D.C., 1 June 2003, p. 6-5.

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MAJ Geoffrey Norman is currently serving as course manager, Armor Captains Career Course, 3d Squadron, 16th Cavalry Regiment, Fort Knox, KY, and recently returned from service with 2d Brigade Combat Team, 1st Cavalry Division, Baghdad, Iraq. He received a B.S. from the United States Military Academy. His military education includes Combined Arms and Services Staff School, Armor Officer Advanced Course, Armor Officer Basic Course, Cavalry Leaders Course, Airborne School, and Air Assault School. He has served in various command and staff positions, to include small group instructor, Armor Captains Career Course, Fort Knox; observer controller, Cobra Team, National Training Center, Fort Irwin, CA; troop commander, A Troop, 4th Squadron, 7th Cavalry, Camp Garry Owen, Korea; tank platoon leader and battalion S4, 1st Battalion, 12th Cavalry Regiment, Fort Hood, Texas.

"Due to the restrictiveness of the cemetery's tombstones, mausoleums, and support buildings, maintaining visual contact with friendly forces was extremely difficult, requiring crews to maintain voice contact to keep vehicles and dismounted movement synchronized. Situational awareness was also critical in the clearance of fires, as both 120mm mortar and 155mm artillery were employed."

Preparing for the Realities of Killing the Enemy and Taking Ground

by Captain Michael R. Nakonieczny, U.S. Marine Corps

A combat arms officer's duty is to kill and train subordinates to kill. This is a blunt, hard, and honest statement. All combat officers, regardless of service, are expected to lead subordinates in situations where death and mass carnage are rampant.

To assist the officer in accomplishing this mission, doctrine was created to guide him in the employment of military assets. Using this doctrine and through field exercises, officers develop tactics, techniques, and procedures that are used in battle. Through this process and the reinforcement that occurs through training, the "skill to kill" is taught and continually reinforced. Most combat arms officers and their units show a general proficiency in this skill and are prepared to use it when the Nation calls on them to do so. It can therefore be argued that our military training is successful in instilling the skills to kill.

Unfortunately, there are other aspects of combat that are all too often overlooked. These aspects include the "will to kill" and other unpleasant aspects best described through the following quote from Brigadier General Downing's article, "The Dark Side of Command:"

"A combat officer must also expect that some men under his command will be killed. The manuals teach that an officer can expect to lose a certain percentage of men on any particular action. The casualties will be 5 percent, 20 percent, or 50 percent, and military strategies are developed on the basis of men killed. To the small unit commander, however, those will not be percentages but faces and names of men who cannot be forgotten in a lifetime. The young officer must realize that the losses among his men will already have been factored into strategic planning. Even if the officer does his job perfectly, he will lose men. He will make mistakes that will kill men. He will lead his men out to face the enemy knowing full well some will die. That is his job. Some combat officers will not be able to assume such responsibility for very long. Others will handle it well. To increase his chances of success on the battlefield, the young officer must understand that he will lose men, and other aspects of the dark side of combat before the shooting starts."[1]

Even with the Global War on Terrorism, a large portion of the U.S. military's officer corps have not been in combat, nor have they witnessed violent death. These same officers were raised in a society that rightly condemns the killing of another human as barbaric and indecent. Their mission is to take ground and kill the enemy, yet studies show that only two percent of the population is predisposed to kill without hesitation or remorse. These facts are scientifically proven and still most combat arms officers receive very little, if any, type of lecture or class exposing them to these harsh realities. Even military institutions that teach these courses, such as the 10-week-long U.S. Marine Corp's Infantry Officer's Course (IOC) with its classes on killology, are not always successful in overriding 22 years of societal conditioning that killing is wrong. Evidence of this is seen in William Manchester's *Goodbye Darkness*:

"I shot him with a .45 and I felt remorse and shame. I can remember whispering foolishly 'I'm sorry' and then just throwing up … I threw up all over myself. It was a betrayal of what I have been taught since a child."[2]

As Dave Grossman describes in his book, *On Killing*, this is the equivalent of "a world of virgins studying sex, and they got nothing to go on but porno movies."[3]

This leads to the conclusion that combat arms officers, although well indoctrinated with the skills to kill, are not trained to deal with the guilt associated with killing and the guilt associated with watching those you command killed.

The True Burden of Command

Prior to instilling the will to kill in his subordinates, the combat arms officer must first be prepared to deal with the repercussions of leading men into combat. In doing so, he must realize that the burden of killing and watching the men he leads die will weigh heavily on any officer who commands in combat. One only has to look into the eyes of a veteran of past wars to see this truth. Memories of war are heavy burdens for veterans to carry for a lifetime.

The methods a man uses to deal with that burden will be derived from the way in which he was raised, the influences on his life, and the genetic disposition he has prior to going to combat. Although some men will handle this reality better than others, it is a failure of our officer training and indoctrination process that officers are not taught about the emotions they endure when leading men to death. They are not familiarized with successful methods of confronting and ultimately dealing with these emotions.

As part of an officer's entry level training, he must be taught to understand the "essence of the military is that to be a good leader, you must truly love (in a detached fashion) your men, and then you must be willing to kill (or at least give the orders that will result in the deaths of) that of what you love. The paradox of war is that those leaders who are most willing to endanger that which they love can be the ones who are the most liable to win, and therefore most likely to protect their men."[4]

It is also imperative that officers study and become intimately familiar with the complex and often contrasting emotions they will feel when commanding in combat. The best way is to learn from commanders who have gone before us and who have dealt with these feelings. This is done through attending professional military education seminars with former commanders who are willing to discuss such topics or through the diligent reading of military books whose authors speak of such emotions. Furthermore, books such as *On Killing*, *Acts of War*, and *The Face of Battle* should be mandatory reading for newly commissioned officers.[5] Once read, discussions should be conducted with senior officers to reinforce poignant facts. There are military schools that issue the above-listed books to instructors, but

exposing senior and post-command captains to such material truly is coming up a day late and a dollar short. Platoon and company commanders are far more likely to directly order men into harm's way than are senior staff officers. Furthermore, to company grade officers, the men they order into combat are not merely faceless members of a regiment or division, they are men they live and work with everyday. These captains and lieutenants have formed a bond and mutual respect with their men and it is these faces that leaders remember for the rest of their lives. Countless hours are spent teaching new officers basic troop leading procedures, operational risk management, and other processes, while relatively none are spent on familiarizing or preparing for the emotions he must endure when his decisions are paid for by the blood of his men.

Developing Warrior Ethos and the Will to Kill

Ideally, to familiarize a warrior with the sights, sounds, and confusion of combat, you would place him in that environment and force him to experience these factors. Those who prove psychologically predisposed to excel under such rigorous circumstances would be retained in combat arms related military operational specialties (MOS). Until the Global War on Terrorism was launched, this type of trial by

"The young officer must realize that the losses among his men will already have been factored into strategic planning. Even if the officer does his job perfectly, he will lose men. He will make mistakes that will kill men. He will lead his men out to face the enemy knowing full well some will die. That is his job. Some combat officers will not be able to assume such responsibility for very long."

fire was the exception vice the norm. Even with conflicts waging in both Iraq and Afghanistan, the number of U.S. forces who have not experienced combat still outnumbers those who have. Fortunately, combat arms units have means available to replicate and introduce men to the fear, anxiety, and adrenaline associated with closing with and destroying the enemy. Methods of doing this include forcing their men to "fight" an opponent via grappling, boxing, bayonet training, and others, such as the Marine Corps' martial arts program. Scientific studies have proven that humans feel a plethora of emotions prior to engaging in any sort of combat. It has also been proven that the anxiety felt prior to combat greatly exceeds that which is felt during combat. For example, John Dollard studied 300 American veterans of the Abraham Lincoln Brigade, which fought in the Spanish Civil War. Seventy-one percent of them admitted to being afraid before action. Only 15 percent remembered being frightened during battle. These emotions and feelings are a result of the fight or flight instincts, which are common in all animals, to include humans, and are similar to what an athlete feels prior to participating in the "big game."

In no way does this article compare the level of anxiety and pressure associated with controlled competition to that of going to combat and destroying the enemy. It is implied, however, that the emotions a warrior feels prior to engaging in a controlled combative engagement with another warrior are to a much lesser extent to what a warrior will feel prior to engaging in combat. Forcing men to face and deal with these emotions is even more important if one takes into consideration that an increasing number have never been in a fist fight or a situation that has caused them to fear for their lives. They are unaccustomed to dealing with and managing fear. By teaching them the basic fundamentals of hand-to-hand combat and then requiring them to fight an adversary (often times a peer), they are forced to become familiar with their body's nervous reactions. Repetition builds familiarity; familiarity results in force of habit.

Teaching close combat skills has also proven to greatly increase confidence. As a company commander, my Marines engaged in Marine Corps martial arts training three times a week. It was amazing to watch their confidence and fighting abilities increase at a rapid rate. Marines engaging in their first combative exercise were often timid and unsure of themselves. Over a period of time, and after be-

to deal with the repercussions of leading men into combat. In doing so, he must realize that the burden of killing and watching the men he leads die will weigh heavily on any officer who commands in combat. One only has to look into the eyes of a veteran of past wars to see this truth. Memories of war are heavy burdens for veterans to carry for a lifetime."

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ing forced to fight engagement after engagement, two things happened. First, their capabilities increased, greatly enhancing their confidence. This confidence transformed into a warrior spirit that was not only evident in the ring, but in field exercises against other units. They truly looked forward to the next "bout," be it against another Marine or another unit. Second, they learned to mask their fears. Regardless if it is your first boxing match or your one-hundredth, everyone feels anxious and nervous before competing in front of peers and subordinates. However, the Marines learned to mask these fears. As mentioned above, fear and anxiety have been scientifically proven to have a specific effect on humans. Although the levels they will experience in war will be much greater than experienced in peacetime, the familiarization and warrior ethos derived from such training is essential in preparing for that experience.

Understanding the Enabling Factors

To train and motivate men to kill others in combat, it is important to understand factors that enable men to kill despite being socially and, more often than not, psychology adverse to killing. While at IOC, young Marine infantry officers learn of Stanley Milgram's controversial experiment in the 1960s where, under the right conditions, his subjects would induce what they believed to be a lethal shock (actually a placebo) to someone they had never met. This experiment proved the extreme extent to the demands placed on

them by authority, be it the proximity of the authority figure, the respect for the authority figure, or the legitimacy the authority figure plays in a human taking action to severely hurt or kill another. Only through understanding the roles authority plays in enabling a warrior to kill, can a leader train and motivate his men to do so.

In Grossman's *On Killing*, the author explains that combat arms officers must understand other aspects of killing: "men in combat are usually motivated to fight not by ideology, or hate, or fear, but by group pressures and processes involving regard for their comrades, respect for their leaders, concern for their own reputation with both, and an urge to contribute to the success of the group."[6] Men will kill if and when they respect their leaders and have developed a sense of camaraderie through adverse training and other circumstances. It is the commander's job to not only ensure his troops are well trained, but that he serves as a morale compass to his subordinates and fosters in them a sense of team so committed to one another that they will refuse to let one another down.

Guilt Associated With Killing

"The magnitude of the trauma associated with killing became particularly apparent to me in an interview with Paul, a VFW post commander and sergeant of the 101st Airborne in Bastogne in World War II. He talked freely about his experiences and about the comrades who had been killed, but when I asked about

his own kills, he stated that usually you couldn't be sure who it was that did the killing. Then tears welled up in Paul's eyes and after a long pause he said, 'But the one time I was sure,' and then his sentence was stopped by a little sob, and pain racked the face of this old gentleman. 'It still hurts, after all these years?' I asked in wonder. 'Yes,' he said, 'all these years.' And he would not speak of it again."[7]

A combat leader who instills the skill and will to kill then has the morale obligation to ensure his subordinates are prepared to deal with the guilt associated with killing. This can prove to be a dilemma if that combat leader has never had to deal with such feelings. However, just as a leader that has never been in combat must train his unit to shoot, move, and communicate in battle, he must also train them to deal with the repercussions they will feel after closing with and destroying the enemy.

In preparing men to deal with this guilt, an officer must understand the response stages to personally killing in combat, which include the concern about killing, the actual kill, exhilaration, remorse, rationalization, and acceptance. During World War II, only 15 to 20 percent of U.S. infantrymen engaged the enemy with direct fire. Due to changes in conditioning and training, the U.S. military has proven that over 90 percent of the infantrymen engaged in combat during the war in Vietnam returned fire on the enemy. This is testament to the success of instilling the skills to kill. However, the emotions after the engagement has ended and the killing is done must be addressed.

Excitement is the first emotion most often felt after battle — you have successfully accomplished your mission and you are still alive. This excitement can be seen in a statement taken by a CNN reporter of a U.S. Marine in a video clip excerpt after his unit had killed a number of insurgents in Iraq: "The guys are dead now you know? … but it was a good feeling, you're like hell ya, let's do it again."

This exhilaration is often quickly overcome by remorse. This is often caused by the sense of identification or empathy for the humanity of their victims and the fact that you have done what society has deemed wrong. For instance, the following quote was made as a soldier's immediate response to his first combat experience: "My experience was one of revulsion and disgust … I dropped my weapon and cried … There was so much blood … I vomited … and I cried … I can remember whispering foolishly, I'm sorry."[8] The feeling of remorse is compounded when a member of a servicemen's unit has been killed or wounded; yet they lived and are excited and euphoric.

Not all servicemen will feel this averse to killing. Many will deny these emotions and eventually become hardened. However, whether the killer denies this remorse, deals with it, or is overwhelmed by it, it is always present. As combat arms officers, we must realize that our men will feel remorse and offer them a means by which to manage and overcome.

The final emotion felt after a personal kill is one of rationalization and acceptance. This phase is sometimes a lifelong process, which may never be completed. Here, the warrior attempts to overcome his remorse by justifying why he killed the enemy. This may include thoughts, such as "it was him or me," or "I killed the enemy to save the lives of my friends." It is during this phase that a commander needs to understand that he can take actions to ensure his men are prepared to deal with each phase. It is imperative that a warrior knows why he will feel ex-

"Men will kill if and when they respect their leaders and have developed a sense of camaraderie through adverse training and other circumstances. It is the commander's job to not only ensure his troops are well trained, but that he serves as a morale compass to his subordinates and fosters in them a sense of team so committed to one another that they will refuse to let one another down."

hilarated after killing the enemy. It is not because he is blood thirsty, it is because he is still alive, he has affirmed that he can do his job as a warrior and has erased some of the uncertainty he experienced prior to his first battle. Finally, by killing the enemy, he has insured that his friends will not be killed.

The warrior must also know about the immediate and often deep remorse he will feel after he kills and must realize that this is a normal reaction. The need for this understanding is not only for personal well-being, but is instrumental to mission accomplishment. Just as an attacking force can reach its culminating point, so too can the human body. Following the immense "high," associated with surviving a firefight, comes an equally intense "down." Fatigue sets in as the body goes from being extremely tense to relaxed. The euphoria of survival is often overtaken by the remorse and realization of what happened. During this time, the warrior and his unit are most vulnerable to a counterattack. Warriors must be aware of this phenomenon and be prepared to fight through the natural reaction to focus inward. By identifying that this occurs prior to going into battle, you have taken the first step as a commander to protect your men from making the same mistake.

Finally, a leader must never forget the positive effect he can have on his men by ensuring them that they did the right thing after engaging and killing the enemy. The affirmation of what they did, "you did well today, you saved a lot of lives," will serve young men well as they begin to justify their actions. It is this positive reinforcement that just may be what a warrior needs to come to terms with the harsh realities of combat, taking ground, and killing the enemy.

Mission First; Warriors Always

"Killing comes with a price, and society must learn that their soldiers will have to spend the rest of their lives living with what they have done."[9]

Countless dollars are spent and military schools are devoted to engrain the skill to kill. Statistics from Vietnam regarding the number of infantrymen who engaged the enemy while in contact, and the results of our most recent military engagements show the U.S. military is in fact very well indoctrinated with the skills to kill. Regardless of our most recent military successes, we cannot rest on our laurels. There is a higher price to be paid for military victory than dying or being wounded — the effects of combat will change those that waged it forever.

"Ideally, to familiarize a warrior with the sights, sounds, and confusion of combat, you would place him in that environment and force him to experience these factors. Those who prove psychologically predisposed to excel under such rigorous circumstances would be retained in combat arms related military operational specialties (MOS). Until the Global War on Terrorism was launched, this type of trial by fire was the exception vice the norm. Even with conflicts waging in both Iraq and Afghanistan, the number of U.S. forces who have not experienced combat still outnumbers those who have."

It is our job as combat arms officers to accomplish the mission regardless of our losses. Mission undoubtedly comes first. However, a close second is ensuring the welfare of those we lead and the task of making sure they are trained to not only win the battle, but also survive it. Our doctrine, technology, and tactics, techniques, and procedures provide us with superiority over our enemies that is unmatched in warfare's history. This superiority ensures the ultimate in troop welfare leading up to and through the battle — the training and opportunity to survive. In today's environment, the officer corps must understand the human factors involved in killing the enemy and taking ground. We must stiffen our resolve to make tough and bold choices that may cost men their lives, but will ultimately accomplish the mission and ensure the survival of the rest of the unit.

Finally, we must take the time to pass this information to the men who will do the preponderance of killing. Talking about killing is not politically correct. It is a brutal subject that encompasses topics that have been labeled taboo by our society. However, as warriors who defend our society, we must not only talk about these emotions and topics, we must understand them and teach our subordinates to understand them as well. Through this process, we will not only arm and instill the warrior with the skill and will to kill, we will arm him with the support and tools needed to deal with the emotions he will

experience when the battle is over and reflections begin.

Notes

[1]Brigadier General Downing, "The Dark Side of Command," *The Washington Post*, 16 August 1987, pp. D1-D2.

[2]William Manchester, *Goodbye Darkness; A Memoir of the Pacific War*, Back Bay Books, 12 April 2002.

[3]David Grossman, *On Killing: The Psychological Cost of Learning to Kill in War and Society*, Little, Brown and Company, 1 November 1996.

[4]Ibid.

[5]Ibid; Richard Holmes, *Acts of War: Behavior of Men in Battle*, Free Press, 4 August 1989; and John Keegan, *The Face of Battle*, Penguin Books, Reprint Edition, 1 July 1995.

[6]Grossman, *On Killing*.

[7]Ibid.

[8]Ibid.

[9]Ibid.

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Tactical Intelligence Shortcomings in Iraq

by Major Bill Benson and Captain Sean Nowlan

At 0800 hours, three individuals with information about a known terrorist cell approach an access gate at a U.S. controlled base. Four of their relatives had been detained at a traffic control point three days prior and they want to trade information for the release of their relatives. There is no counterintelligence (CI) team at battalion level, so the battalion S2 has to gather information. The S2 will take information from all three individuals separately. The S2 must determine if their stories are legitimate by comparing their stories with the four detainees' stories, attack pattern analysis, and past human intelligence (HUMINT) reporting. The detainees are key because they can validate the information given by the three walk-ups. If the detainees were processed according to division, the battalion could not validate their stories.

The detainees confirm the three walk-up stories after four hours of questioning. The battalion S2 uses attack pattern analysis in questioning to validate their reports — the source should know details of attacks if their information is valid. The battalion S2 now attempts to pinpoint the location of the objective area. He can use the source to take him there or the source can pinpoint the location on a map, imagery, or pictures. Once the location is pinpointed, the battalion S2 plans the operation. He plans and produces products in conjunction with the

battalion S3, who issues a warning order (WARNO) to the maneuver element conducting the raid. Once the order is given, the battalion S2 will accompany the unit to assist with questioning detainees on the objective, identifying critical information/evidence on the objective, and advising the command element on ground. Once the detainees and contraband are secure, they move back to the forward operating base (FOB). It is now 0300 hours; six people are in the battalion holding facility with valuable information — at 0800 hours, there will be others at the gate to give information. The cycle will continue.

Military intelligence assets organized, equipped, and trained to win a conventional, linear war are failing to provide battalions with the analyzed intelligence and information needed to conduct effective combat and stability operations in Iraq. This article discusses the shortcomings of tactical intelligence that one battalion task force encountered during Operation Iraqi Freedom and provides recommendations on organizing, equipping, and training tactical level military intelligence assets.

Task Force 1st Battalion, 68th (1-68) Armor, was operating north of Baghdad as part of 3d Brigade, 4th Infantry Division. On 25 June 2003, the task force first moved south from Tuz, Iraq, into its current area of responsibility (AOR), and was made up of two armor companies, one in-

fantry company, a headquarters company (scout and mortar platoons), a separate infantry platoon, a howitzer battery, an engineer platoon, and a civil affairs team. The task force later lost the howitzer battery, separate infantry platoon, and engineer platoon. The infantry company was detached from December 2003 through February 2004.

The battalion's AOR was approximately 800 square kilometers and was split by Highway 1, the primary north-south main supply route (MSR) in Iraq. The main population center is the Tarmiyah district, an outer, agrarian suburb of the Baghdad governate with an estimated population of 150,000. The AOR also includes an area south of the Balad airfield, which belongs to the Salah Din governate. With the exception of Highway 1 and a few paved roads, irrigation canals and dirt roads, which become nearly impassible during wet weather, dominate the area. The area is host to homes and farms belonging to a large number of high-ranking Ba'athists, including Chemical Ali and others directly related to the former dictator. The population is highly tribal and generally unwilling to work with the coalition, unless coerced by money, force, or shame. During the task force's deployment, not one local leader came forward with relevant information about enemy attackers.

The enemy conducted over 250 attacks in the area of operations from 26 June

through March 2004. These included mortar and rocket attacks on forward operating bases, rocket-propelled grenade (RPG) and small-arms ambushes, and improvised explosive device (IED) attacks. In addition to attacks on coalition forces, attackers have targeted contractors, police, local leaders, and Iraqi Civil Defense Corps (ICDC) soldiers.

The task force's primary tactical missions include raids, cordon and searches, area security, route security, area and route reconnaissance, and mounted/dismounted ambushes. The task force detained over 700 enemy fighters and killed or wounded unknown numbers. The task force also rebuilt schools, completed irrigation projects, reformed the local government (firing a host of city councilmen, mayors, ministry workers, and police), and recruited and trained local police, as well as 180 ICDC soldiers.

The Battalion S2 Shop

The standard modified table of organization and equipment (MTOE) for an armor battalion's intelligence section is one 35D captain, one 35D second lieutenant who serves as the battalion intelligence center coordinator (BICC), one 96B30 senior intelligence analyst, one 96B10 intelligence analyst, and one 19Z50 S2 noncommissioned officer in charge (NCOIC). A total of five specialists, with standard intelligence analyst qualifications, are authorized to do the same exact job as specialists at brigade, division, and corps levels — except the battalion must be more detailed and responsive.

According to the MTOE, 1-68 Armor's S2 shop was 100 percent strength at all times. The S2 shop was also assigned one all-source analysis system (ASAS) computer, which was limited because there was no conduit between battalion and brigade until seven months into operations. Like most conventional battalions, 1-68 Armor's brigade had no analysis and control equipment (ACE), which resulted in extremely limited capability to access or leverage division- and national-level assets. All of these assets were used and maintained elsewhere in theater.

The task force started with relatively little information and what was available was on a macro level and not very helpful. The S2 shop created databases, which would help determine enemy disposition, composition, and strength in the AOR. In the stability and support operations environment, it is very difficult to define criteria, so *everything* is important. Initially, the S2 shop was tracking everything from traffic patterns to electrical blackouts, flares, light usage, and various other factors. The data became overwhelming and unmanageable. Eventually, the requirements were narrowed down to 29 tasks; the seven most important ones are shown in Figure 1. Tasks are listed by duty position and responsibility (POC); however, limited manpower dictated every soldier being capable of performing every task. The military occupational specialty (MOS) on the far right of the chart is appropriate for the task. Six of the seven most important daily tasks were not within any MOS field assigned to the battalion S2 shop; however, we performed these tasks daily.

The S2 shop spent less than 50 percent of its time doing analysis because the specified and implied tasks required of the battalion S2 shop in the current threat environment go far beyond its capabilities and resources. The battalion S2 shop must provide continuous intelligence and mission analysis to support combat and stability operations 24 hours a day, seven days a week for up to a year. It must do this without traditionally available products, such as doctrinal templates and off-

#	TASK	POC	FREQ	REMARKS	MOS
1)	The S2 was on every single raid as the subject matter expert to advise commanders and expedite combat decisions on the ground.	S2 35D	D	Only one DIV directed mission and three BDE missions were executed in the SASO ENV; nearly all actionable intelligence was produced at the BN level	S2 35D
2)	Produce a packet for each detainee, with multiple sworn statements, pictures, evidence, a Coalition Provisional Authority worksheet, inventories of all personal items, and any targeting (linkage) that should accompany the detainee — roughly a minimum two-hour process for each detainee.	S2 35D	D	DIV and BDE intelligence shops do not process detainees. All written work is done at BN and the detainees are handed over to DIV MPs.	97E & 95B
3)	Interrogate or tactically question all detainees and civilians on the battlefields who may have been involved with an attack or have information of value.	S2 35D	D	DIV and BDE S2 shops are not in the middle of the battle and have HUMINT and interrogation teams assigned to deal with these issues.	97E
4)	Run source/contact information for over 50 different contacts ranging from former Iraqi intelligence agents, high-ranking Ba'ath party officials, general officers, sheiks, government officials, and numerous other civilians.	S2 35D	D	BDE and DIV S2 shops rarely talk to sources because they have HUMINT TMs for that. Battalions have no organic HUMINT. YOU CANNOT TURN AWAY INFORMATION IF YOU WANT TO SAVE LIVES. 95% of all HUMINT is lost because no one is there to collect it at the source (BN).	97B
5)	Maintain and update a black/white/grey list and HUMINT database.	BICC 35D	D	Black/white/grey lists are developed from bottom up. 99% of the names at BN level will be derived from HUMINT at BN level and below. BDE and DIV black lists will be derived from the bottom and the top. 99% of your BN targets will come from a BN Blacklist.	97B
6)	Maintain a detainee holding facilitate that could accommodate detainees 24 hours a day, 7 days a week with food, water, shelter, and medical care if necessary.	NCOIC 19Z50	D	BDE and DIV S2 shops do not have to worry about detaining anyone. All of these specified and implied tasks are handled at the BN level.	95B (MP)
7)	Ensure all seized propaganda, paperwork, and any other relevant written information was translated and analyzed in a timely manner.	SNR ANALYST 96B30	D	BDE and DIV S2 sections do not understand the value of seized propaganda or documents nor are they involved in the processing. Valuable information is being thrown away or bypassed because of lack of assets at lower. Only someone with an intimate understanding of their AO could identify what is important.	97L & 97B

Figure 1

"One of the most time-consuming tasks of the S2 shop in Iraq is processing detainees. This task should not be underestimated. Processing detainees in a short time (the standard is 24 hours) is a daunting task under any circumstances."

the-shelf enemy courses of action and tactics, techniques, and procedures (TTP).

There are no tactical pauses for battalions in Iraq and no chance for the S2 shop to get ahead on its tasks. The current threat situation is that dynamic. Compounding this problem is the fact that most/all of the actionable intelligence used to plan operations will come from within the battalion. Expecting to receive useable enemy situation template (SITTEMP) or detailed intelligence from higher headquarters about targets inside a battalion's AOR is futile. Battalion AORs are too diverse and brigade AORs are too large to expect this type of help and detail from higher headquarters. Occasionally, national-level assets will provide some actionable intelligence, but this information is incorrect as often as it is correct. For example, if another government agency sends you intelligence but does not want to be involved in the operation or exploit the detainees, the intelligence is most likely suspect. Cooperation between battalion S2 shops sharing boundaries is not unusual, but again, this is most often done battalion to battalion.

In addition to the traditional role of analyzing information and creating/refining products in support of operations, the battalion S2 shop is also the primary collector for the battalion. This is a change from conventional intelligence gathering, which takes place above the battalion level and filters down. While every soldier and leader who comes in contact with Iraqis is a potential information collector, it is the battalion S2 shop that must collect, sort, analyze, link, and package this information into useable intelligence.

On any given day, it is not unusual for local civilians, Sheiks, police, ICDC sol-diers, contractors, known informants, and other government agency representatives to show up for scheduled and unscheduled appointments, interviews, and briefings. These myriad sources all have different priorities and agendas and all want to talk to the battalion S2, civil affairs representative, battalion S3, or commander. Bottom line, if the person has potential intelligence (and many actually do) the lack of resourcing and mission requirements drives the S2 to become the primary collector for the battalion. The challenges of managing interpreters, separating competing ethnic and religious factions, and deconflicting informers with legitimate security concerns are daunting. It was not unusual for 1-68 Armor to have three to four different informers or sources a day arriving to deliver information. Occasionally, the information collected required immediate action.

Being the de facto proponent for information collection in theater, the battalion S2 shop is also the principal manager of the many intelligence assets employed at the tactical level. Assets that must be managed include attached or operational control (OPCON) tactical HUMINT teams (THT), tactical unmanned aerial vehicles, mobile interrogation teams (MIT), counterintelligence teams, psychological operations, and ground surveillance radar. Each of these collection assets must be integrated into the battalion's collection plan and S2 personnel serve as subject-matter experts for the battalion in terms of synchronizing these assets, ensuring they are properly utilized. Subsequently, the traditional role of analyzing information and creating/refining products in support of operations becomes secondary. The S2 shop will spend 80 percent of its time handling HUMINT sources and detainees.

Detainee Handling

One of the most time-consuming tasks of the S2 shop in Iraq is processing detainees. This task should not be underestimated. Processing detainees in a short time (the standard is 24 hours) is a daunting task under any circumstances. In Iraq, where all information and sources are suspect, familial/tribal ties and loyalties seem ubiquitous and exact locations of targets and identification papers are rarely available — simply determining the accuracy of names is a challenge. Challenges of detainee processing, taken from actual experiences during 1-68 Armor's deployment, include scenarios such as:

• An informant gives the battalion S2 information about an alleged attack cell. The informant provides names and locations of the personnel. A raid is conducted. All named individuals (four) are present on the objective and are detained, along with two additional personnel (adult males), but no weapons or contraband equipment is found.

• Several independent sources identify a leader/supporter of anticoalition forces. A raid is conducted and the target is detained, along with three of the targets sons, two brothers, and several local Sheiks who were meeting at the target's house at the time of the raid. No weapons or contraband were found.

• Three Iraqis are engaged while attempting to set up an RPG ambush, one is wounded. They abandon their weapons and egress the area. The blood trail is followed to a house, which contains the wounded Iraqi and five other individuals. One is an old man. It is unclear who the two companions of the wounded Iraqi are and if the others found in the house are accomplices or simply in the wrong place at the wrong time. No weapons or contraband are found. The wounded individual claims to have been shot mistakenly by coalition forces while he was working in his fields.

• Two men are stopped during a mounted patrol. They are found to be carrying diagrams of an improvised rocket launcher. One is clearly more involved, refuses to speak and is belligerent. The second seems weak, confused, and more likely to talk.

Under current standard operating procedures, these individuals are required to be sent higher within 24 hours. But do the circumstances surrounding each case warrant these individuals serving time in prison, or do some of them have information that could be used by the detaining unit to build link diagrams and develop the intelligence picture in the AOR? Clearly,

each case is different, but none of the individuals in the above scenarios have much potential to provide nationally significant intelligence. That fact, coupled with the existing truth that battalions do not receive intelligence from detainees sent higher, argues for a more robust interrogation/investigation capability at the battalion level. Not only would this alleviate the large number of "innocent" Iraqis being sent to coalition prison, but also allow maneuver battalions with vested interest to develop much-needed intelligence in an effort to reduce attacks and defeat the enemy. It would further serve to increase the power of the local battalion commander in relation to local Sheiks and civic leaders because the decision to detain or set free would lie with the individual (the commander) most connected to the area.

As highlighted by recent revelations from Abu Grahib prison, every detainee has potential strategic relevance based on the perception of their treatment, as well as their guilt or innocence. The detainee-screening scenario outlined below will further highlight the necessity and importance of the battalion S2 shop's ability to make recommendations to the battalion commander regarding who is detained and who is released. The battalion commander should be able to face a detainee's family and feel comfortable about detaining their relative. The reason should not be, "we didn't have time to figure it out so we sent him up." The only way to accomplish this is through interrogating, screening, or tactically questioning detainees.

Screening (tactically questioning) each detainee requires at least two hours per detainee. This is just to get basic screening data and information. A detainee packet is completed if the detainee is found to be of higher intelligence value or involved in terrorist activity, which can take up to three hours, depending on available evidence. An incomplete packet often means a detainee is refused for processing by higher headquarters. If the intelligence is immediate and actionable, the detainee is of much more value to the battalion in their AOR. The detainee can be used to positively identify terrorists, safe houses, weapons caches, and various other areas of interest that could be a value to the battalion. All of this is time-consuming and becomes impossible when detainees are sent to higher headquarters. The Iraqi's ingrained ability to resist routine questioning, coupled with a lack of

understanding and overburdened brigade- and division-level interrogation teams, guarantee information will never be exploited timely.

Obviously, battalions are not prepared to hold detainees for an extended time, nor should they. Empowered battalions with a more robust and experienced intelligence section could certainly help alleviate overcrowded and overburdened detention systems, and conducting interrogation immediately after detention and as close to the alleged incident as possible has been proven more effective.

Tactical HUMINT Team (THT)

As currently configured, THTs canvas Iraq to answer priority intelligence requirements (PIR) and gather information for brigade and higher headquarters. They are required to make units aware of when and where they will be operating within their AORs; however, this occurs with varying degrees of success. In the case of 1-68 Armor, on more than one occasion, a THT operating in the task force's AOR came under direct fire without the task force's tactical operations center having any idea a team was operating in the area. On other occasions, the THT spent hours questioning sources and gathering information that was either already known to the task force S2, was irrelevant, or be-
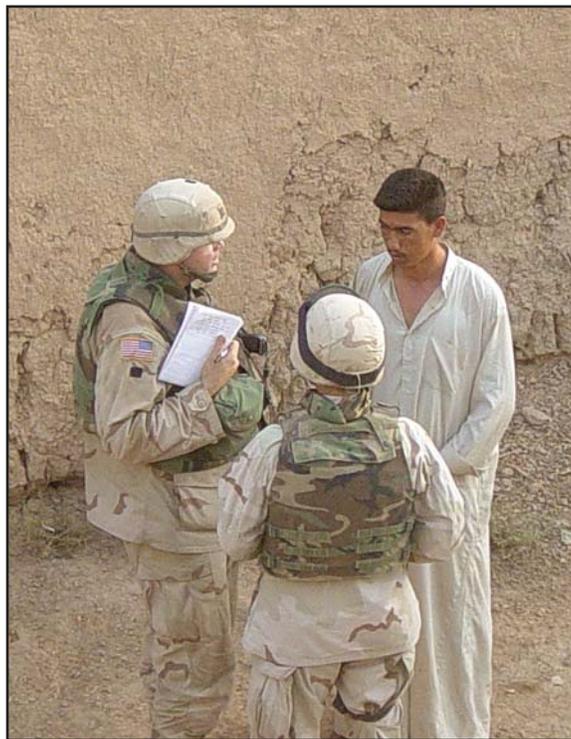
"In addition to the traditional role of analyzing information and creating/refining products in support of operations, the battalion S2 shop is also the primary collector for the battalion, which is a change from conventional intelligence gathering that takes place above the battalion level and filters down."

yond useful significance. Despite attempts to have the THT attached to the task force and/or focus its reconnaissance priorities, it continued to operate on its own timeline and agenda.

Typically, the THT operating in 1-68 Armor's AOR spent three to four hours a day (including travel time), two to three days a week, developing information. For the final four months of the deployment, the THT did not come to the task force's AOR because of maintenance and security concerns. This experience may not be typical, but the capabilities imbedded in a THT are too valuable to not be used more efficiently. Since tactical information and intelligence collection occurs almost exclusively at the task force level, the THT should work for the task force commander. This will allow the THT to be available to develop intelligence when walk-ups arrive, following enemy engagements, or during actions on the objective. Because the team is imbedded in the task force, its security is inherent and it has the opportunity to circulate throughout the battle during normal task force operations, as well as participate in planned operations and detainee questioning. The bottom line is every battalion task force needs the capabilities a THT brings to the battlefield. The amount of HUMINT reporting received at battalion and below is insurmountable compared to the minimum number of HUMINT teams operating in theater. All of this information is lost daily due to the lack of training and assets at battalion level. To fully exploit all HUMINT reports, a 97B must be at battalion level.

Mobile Interrogation Team (MIT)

The MIT is a useful asset that brings a much-needed capability to deployed battalions. Unfortunately, there are too few teams in theater and because of their scarcity, they are rarely found below brigade level. When they are pushed down to battalion, their usefulness is limited because battalion AORs are too diverse for one team to be "read in on." In 1-68 Armor's case, much of the information/intelligence gathered was based on personal relationships built over time, coupled with a reputation of fairness and the demonstrated ability/willingness to go after targets regardless of social status. An interrogation cell (with a mature interrogator) incorporated into the existing battalion S2 section is necessary, if the intelligence picture in Iraq is to improve and much of the burden reduced

from the existing, ineffective interrogation process.

Tactical Unmanned Aerial Vehicles

1-68 Armor used tactical unmanned aerial vehicles (TUAV) extensively during Operation Iraqi Freedom. Unfortunately, for the times it was used, it provided no actionable information or intelligence. During one event, the TUAV transmitted a grid over 1,000 meters away from the actual target it was observing (1,000m is a significant distance in an urban environment), and the operators had a difficult time identifying the transmitted picture. Because of a lack of confidence in the picture being sent, no forces were sent to counter the threat, and the event was over by the time the situation became clear. The bottom line is a UAV is useful in fixed-site surveillance, tied to a specific trigger or decision point. It is less useful in an area reconnaissance role, and practically useless in tracking or following an escaping or evading enemy. Operators, who cannot identify unfamiliar terrain or the operational significance of what they are looking at, cause UAVs to be ineffective. Training UAV teams at the battalion level would increase this effectiveness.

Ground Surveillance Radar (GSR)

The terrain, coupled with the reality of a battlefield with busy civilian traffic, made GSR less than effective. Often, these teams were simply used as static observation posts. One such team operating in the task force's AOR performed this job well until it made contact with the enemy. Once in contact, the team quickly shot its basic load, received a casualty, and evacuated the area, leaving the quick reaction force and arriving aircraft to iden-

tify and kill the attackers. Again, the ad hoc relationship and (apparently) insufficient training of a military intelligence asset resulted in the ineffective employment of this asset. If troop strength trade offs must be made, adding more MITs at the expense of GSR teams would certainly pay immediate dividends. The actual GSR could be given to scout platoons to use when appropriate.

Psychological Operations (PSYOPs)

1-68 Armor had a PSYOPs team attached for the duration of the deployment. From the task force's perspective, this is one military intelligence asset that was used to its fullest capacity. The three-man PSYOPs team regularly performed human and signal collection, information operations production and broadcast, and product translation. The team was represented at all scheduled targeting meetings and was attached to the battalion's main effort company for the majority of the deployment. The PSYOPS team was used so aggressively that its vehicle was repeatedly damaged from accidents and enemy attacks. The PSYOPs team was the most responsive external military intelligence asset the task force employed. The fact that it was attached to the task force for the duration of the deployment was critical to its effectiveness.

Restructuring the Battalion S2 Shop

To maximize the exploitation of intelligence in theater and make the troops-to-tasks more manageable, the battalion S2 shop should have similar capabilities of brigade and division. As shown in Figure 1, soldiers without the proper MOS or training performed six of the seven critical tasks. Figure 2 reflects a recommended table of organization and equipment

(TOE) change to properly man a battalion S2 shop for success, not just in Iraq but anywhere in the contemporary operating environment.

In the contemporary operating environment, tactical-level intelligence has strategic relevance, and tactical-level engagements with strategic importance will continue to be won or lost at the task force level and below. To better support maneuver task force commanders, military intelligence assets must be reorganized, retrained and, in some instances, reequipped. Increasing manpower in the battalion S2 shop under the current unit of action MTOE is a step in the right direction; however, the correct skill identifiers and rank/maturity need to be included. The U.S. Army must recognize that in the current environment, with the proliferation of technology to lower and lower levels, actionable intelligence/information with strategic relevance uses the bottom-up process and is not generated by centralized and stove-piped assets. The intelligence community will continue to be limited and severely challenged until focus is placed where it needs to be — battalion level. The military intelligence community's challenge is to transform quickly or risk a slide toward irrelevance at the tactical level.

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Job Title	Rank	MOS	Duty Description	Number of PER
Intelligence Officer (S2)	CPT	35D	Primary Intelligence Officer	1
NCOIC	MSG	19Z50	NCOIC	1
S2X	1LT	35D	Manages HUMINT database	2 (Day and Night)
BICC	2LT	35D	S2 Assistant	2 (Day and Night)
Human Intelligence Collector (Interrogator)	ENL	97E	BN interrogator	2 (Day and Night)
Translator	ENL/CIV	97L/CIV	Translate	2 (Day and Night)
CI team	SSG/SFC	97B	Collect HUMINT	2 (Day and Night)
Imagery Analyst	SPC	96D	Produce & analyze imagery	2 (Day and Night)
Senior Analyst	SSG/SFC	96B	Senior Enlisted Analyst	1
Analyst	SPC	96B	Asst to Senior Analyst	2 (Day and Night)
Analyst	SPC	96B	Database Manager	2 (Day and Night)
TOTAL				19

Figure 2

Israel's Influence on Mounted Warfare

by Major Jim Dunivan

It is a known fact that the home of mounted warfare is located at Fort Knox, Kentucky. However, if one poses a question about the birthplace of mounted warfare, responses range from silent thought to varied suggestions. Rarely, though, will anyone think to mention Israel, which is arguably both the birthplace of mounted warfare and the great battle lab for modern innovations in mounted warfare.

I recently lead a group of six cadets from the Arkansas State University's Reserve Officers Training Corps program on a staff ride to Israel to visit this great birthplace and battle lab. Commissioning programs across the country regularly use staff rides within their course of instruction to incorporate military history and lessons learned into their curricula. Such exploits are normally conducted at a location in close proximity to the campus due to ease and funding, but a generous grant from the University Middle East Studies Committee allowed us to broaden our focus for an unforgettable staff ride experience.

Our main objectives for the staff ride were Megiddo and the Golan Heights area, which highlight the beginning and evolution of mounted warfare. The countless battles that were fought in these locations were the focus of our prelimi- nary study, which included two days of lecture at Tel Aviv University by distinguished professors of Israeli and military history. The fact that most of these professors had fought in some or all of the Arab-Israeli wars was an added bonus. Their academic and military experience demonstrates that Israel is indeed a crucible of mounted warfare, highlighting the roots of mounted warfare at Megiddo, the Arab-Israeli War of 1973, and the ongoing conflict between Israelis and Palestinians.

Megiddo is the alleged "jewel in the crown" of biblical archaeology. Rising above the most important land route in the ancient Near East, the strategic city

dominated international traffic for over 6,000 years, from ca. 7,000 B.C.E. through to biblical times.[1] The very location of Megiddo within the fertile plain of Jezreel and the surrounding restricted terrain, makes this area a likely battleground. This ground indeed is the site of epic battles that decided the fate of western Asia. It was here in the year 1469 B.C.E. that the Egyptian Pharaoh Thutmose III led 10,000 men in a rapid and unexpected march against rebel Palestinian chieftains. Advancing in a concave formation, Thutmose's army enveloped the rebels and severed their lines of communication with fortress Megiddo. Being the first great battle in recorded history, it is the first battle known to be conducted in accordance with the recognized principles of war. In addition, this battle is arguably the beginning of mounted warfare, as during this battle the Egyptians revolutionized the chariot that enabled mobility, shock action, firepower from its archers, and a degree of force protection.[2]

There would be many more battles at Megiddo after Thutmose's victory in his "golden chariot." On this same plain, the Israelites overcame the supremacy of the Canaanite charioteers and Gideon ambushed the plundering camel-borne nomads from Midian.[3] Fighting on foot against a mounted force, Gideon knew his only chance for victory was to surprise the enemy at night while they were dismounted. In a well-coordinated attack with a small force, Gideon and his chosen 300 men caused so much panic within the Midians that they attacked each other and fled.[4] In 609 B.C.E., Pharoah Necho easily defeated a Jewish army under Josiah in the biblical battle of Armageddon. On 16 April 1799, there was a battle between 1,500 French against 25,000 Turks where the French held their enemy at bay until relieved by a cavalry charge led by Napoleon Bonaparte. In May 1918, British cavalry under Field Marshall Edmund Allenby defeated Turkish forces encamped on the plain as his cavalry attacked through the same pass as Thutmose III.[5] In the First Arab-Israeli War of 1947-1949, this area was again a battlefield as Israeli Defense Forces from the Golani and Carmeli brigades counterattacked to regain the initiative from invading Iraqi forces.[6]

All of these battles highlight the importance of terrain, intelligence, firepower, mobility, shock effect, and lines of communication, which remain unchanged since the beginning of the history of war.[7] Clearly, as in all military history there are lessons to be learned from all of the Megiddo battles that are applicable even to today's armored force. Agility, dislocating the enemy, bringing strength to bear against enemy weaknesses, use of terrain, audacity, and perseverance are just a few of the elements of leadership, training, and tactics that one could derive from these battles and apply to the modern noncontiguous battlefield. As one history professor at Fort Leavenworth, Kansas, stated, "never mistake primitive for unsophisticated."[8] While means and methods may change, the endstate of battlefield victory should be the forethought of every U.S. Army leader, and one should not underestimate what the knowledge of history can contribute to contemporary operations.

While these early battles of mounted warfare in Israel demonstrate their utility for study, it was the study of the Arab-Israeli War of 1973 that truly changed U.S. Army doctrine. Known both as the Yom Kippur War and the Ramadan War, this war had much more significance than what one would normally attribute to a relatively brief and limited regional conflict. This is primarily because opposing forces were equipped by the United States and Soviet Union superpowers, and each side was interested in assessing the effectiveness and limitations of their weapons, technology, and tactics.[9] After World War II, most global conflicts, such as Vietnam, were guerrilla-style wars where the assault rifle was the dominant weapon on the battlefield. Israel's success with their tanks and air force during the 1967 and 1973 wars changed that model and the

tankers of the Israeli Armored Corps became some of the most feared and respected practitioners of armored warfare to be emulated by all.[10]

Following the quagmire of Vietnam and focusing on the Soviet threat in Europe, Americans in particular wanted to see what the 1973 war in the Middle East had to teach about the likely scope of future wars. American armor generals, such as Major General Donn A. Starry, arrived in Israel shortly after the war to walk the battlefields and confer with Israeli colleagues. What they found were tank battles of "unprecedented intensity" caused not only by the high number of tanks involved, but also by the lethality of weapons with extended range and improved accuracy. Of particular note was the combined tank loss of the Arab and Israeli forces in the first week of the war, which exceeded the entire U.S. Army's tank inventory in Europe. This and other observations would play a major role in revising U.S. Army doctrine and reshaping the American armored corps.[11]

According to General Starry, the Arab-Israeli War of 1973 provided "a fortuitous field trial of useful concepts" for strategy, operational concepts, tactics, organizations, equipment, and training.[12] For example, the average engagement range for tanks during World War II was 750 yards; whereas, Israeli tanks were engaging the enemy from 2,000 to 3,000 yards and more in 1973. This war also highlighted the proliferation of anti-tank missiles and rocket-propelled grenades. The effects on U.S. armor training varied from using terrain and sagger drills to new ideas for tank gunnery doctrine such as the desirability of opening fire first and at long range.[13]

The lessons of the 1973 war brought forth another significant change to the

U.S. Army, and a revision of the U.S. Army's operations field manual. The operations manual that appeared in 1976 was largely written by General William E. DePuy and deeply rooted to the lethality and combined arms success demonstrated during the 1973 Arab-Israeli War. Perhaps even overemphasizing the lessons of the war, DePuy would advocate a doctrine of "active defense" as the way to win the first battle against the expected Soviet horde in Europe.[14] While fortunately this doctrine would not be tested on the battlefield, it was emotionally debated within the Army as a new renaissance of military thought prevailed.

In this atmosphere of debate and change, another version of the operations manual appeared in 1982 under the new U.S. Army Training and Doctrine commander, who coincidentally was General Donn Starry. While Starry had assisted DePuy in developing active defense and drew similar lessons from the 1973 Arab-Israeli War, his experience as a corps commander in Germany and the team of military intellectuals he assembled led to the development of AirLand Battle doctrine to emphasize operational maneuver.[15] This doctrine would be validated on the battlefields of Kuwait and Iraq during Operation Desert Storm, and even today, continues to influence military thought and operations during yet another period of intellectual wrangling over transformation.

As we debate and pursue our own vision of the objective force and its capabilities, it is interesting to note the Israeli Defense Force's achievement. Israel's own tank design of the Merkava, which ironically means "chariot" in the Hebrew language, proved

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"Israel's own tank design of the Merkava, which ironically means "chariot" in the Hebrew language, proved to be a first-class fighting vehicle in Lebanon during 1982. Serving as a main battle tank and a platform for carrying infantry within the protection of its armor, while equipped with a 60mm mortar, the Merkava is an excellent demonstration of a combined arms oriented combat vehicle that can effectively perform in various environments."

to be a first-class fighting vehicle in Lebanon during 1982.[16] Serving as a main battle tank and a platform for carrying infantry within the protection of its armor, while equipped with a 60mm mortar, the Merkava is an excellent demonstration of a combined arms oriented combat vehicle that can effectively perform in various environments. Israeli expertise regarding tanks in urban terrain has particular value for our own tactics, techniques, and procedures, as we continue operations in similar environments.

More than the equipment and methodology, though, is the morale of the Israeli soldier and citizen. The people are friendly and very proud of their nation. Everyone, men and women, serves a mandatory period in the armed forces so they do not take their security, freedom, or land for granted. This is evident upon arriving at the airport and is reinforced at every location you visit within Israel. Even many of their television shows, a more substantive version of reality television, highlight the rigorous training and pride of their armed forces.

Masada, a striking symbol of this pride, is a fortress that towers above the Judean Desert. It was here in 73 A.D. that Jewish rebels made their last stand against Roman legions that laid siege to the fortress for approximately seven months. Finally, after building a ramp of sand and rock, the Romans breached the fortress only to find that the rebels had killed

themselves to die as free men rather than suffer enslavement. Today, cadets of the Israeli Armored Corps receive their commissions on Masada as they vow to fight for their country and freedom at any cost. Many, such as the tankers who gave their lives during the 1973 war, have already paid that price.

To think that one has nothing to learn vicariously through the experiences of others, especially when the stakes are as high as human life or national survival, is an attitude that probably deserves some reflection here at home as we continue to fight the Global War on Terrorism. The successes of our operations in Afghanistan and the "shock and awe" demonstrated by the "thunder run" to Baghdad are commendable and noteworthy. However, much remains to be done as our Nation remains at war and redefines the role of its Army and armored force during transformation. Each of us must continue to do our part, and our senior leaders have charged us with answering the call to arms. Colonel Kevin Benson sums things up very well in the May-June 2004 issue of *ARMOR*. "We are living in an age where it is easier to denigrate than offer constructive criticism. We are also an Army at war and must temper our debates for the greater need of the service."[17] As we continue this debate, an eye to the past can clearly be balanced against the pro-

Death Before Dismount: Tran

by Captain Michael Taylor and First Sergeant Stephen Krivitsky

At 0400 hours and under three percent illumination, a platoon of 19 soldiers, accompanied by an interpreter, with the company command and control (C2) and psychological operations team attached, departs base camp to conduct a dismounted raid. The dismounts move using night vision and ground command pointer infrared (IR) lasers to guide their point man. The soldiers communicate using PRC-119 manpack single-channel ground and air radio systems (SINC-GARS) and integrated communications security (ICOM) squad radios with headsets. The company fire support team (FIST), located at an observation post (OP) east of the target house, overwatches the sniper team and objective with a 13-power magnification thermal command launch unit (CLU) sight.

The company sniper team, inserted hours earlier, is set, overwatching the target house with 10-power magnification ther-mal AN/PAS13s and AN/PVS7Bs. The team is concealed in ghillie suits and marked with Budd lights; they report negative contact — no movement on the objective.

The remainder of the company, mounted in high-mobility multipurpose wheeled vehicles (HMMWVs), is staged on the base camp prepared to move. The dismounted platoon pauses just short of the objective and coordinates with the sniper team by radio; negative contact — still no movement. The company HMMWV element is ordered to start point (SP). The dismounted platoon then moves in, establishing a base of fire and setting the inner cordon; negative contact — no movement — surprise is achieved. The HMMWVs quickly move into the objective area and set the outer cordon to protect the search teams.

0500 hours: the company cordon is set; negative contact — no movement on the objective — surprise is maintained. The

sforming An Armor Company

dismounted platoon's first assault team (four-man stack) moves to the entry point. GO! The number four man breaches the door and the assault team quickly enters the house, clearing the first room. The lights are on, night vision is not needed, the soldiers use M68s to scan with both eyes open and quickly identify targets. The team moves to the second room and repeats the process, catching the primary target as he begins moving to a cabinet to secure an AK47. The primary target is detained.

The assault team continues to clear the house, room by room, and secures additional detainees. The platoon's security team quickly follows the assault team into the house and secures each cleared room and the detainees. The detainees are segregated, secured, and questioning begins — identities are confirmed. A simultaneous thorough search of the house and objective area begins with AN/PSS11 metal detectors —

a rocket-propelled grenade (RPG) launcher and warheads are found!

Within seven minutes of conducting actions on the objective, an armor team moves into an adjacent objective area with M1A1 tanks and M2 Bradley Fighting Vehicles to begin their mission. The primary target's home phone rings and the company interpreter answers. The caller quickly identifies himself and warns the primary target by name to "get out now, the Americans are coming!" The interpreter thanks the caller and hangs up. Further questioning of the detainees identifies the caller's location; the dismounted platoon moves in and detains the caller. The house and objective area search continues; security is maintained. The mission nets the primary target and his associates, a small weapons cache, and intel documents — all with zero casualties. Mission accomplished!

This was Cobra Company in the spring of 2004. No longer an outfit full of typical 19Ks, it has been transformed over the past nine months from a tank company of 74 soldiers manning 14 M1A1s, conducting armor-only missions, into a new organization that adapted to its environment. Today's Cobra Company has 85 soldiers in three line platoons manning one M1A1 tank and 15 HMMWVs (a mix of M1114 and M1025). These soldiers conduct armor, cavalry, and infantry missions and fight mounted and dismounted, similar to the dragoons of the 16th century, who fought as light cavalrymen on attack and as dismounted infantrymen in defense.

Cobra Company was alerted in July 2003 to deploy in support of Operation Iraqi Freedom. Cobra Company turned in its 14 M1A1 tanks at Fort Riley, Kansas, and quickly trained on M1025 HMMWVs, along with a company from the Bounty Hunters of 1st Battalion, 34th Armor, and one company from the Iron Rangers of 1st Battalion, 16th Infantry. The company then deployed in early September 2003.

Once on the ground in Kuwait, the soldiers drew their new mounts, the M1025 and M1114 vehicles, and began movement into the task force's area of responsibility, only a short six weeks after notification of the deployment. On the first day outside the base camp, during a right-seat ride in mid-September, Cobra Company made contact with an insurgent complex ambush — improvised explosive devices (IEDs), RPGs, and small-arms fire. The fight began.

The company's training, personnel, equipment, and tactics, techniques and procedures (TTP) continually evolved over the next nine months as missions and the enemy changed. The company served as the task force's light wheeled force, conducting missions, such as quick reaction force (QRF), convoy escort, cordons, and route reconnaissance. As the battlefield changed, additional missions of raids, searches, route clearance, key terrain security, counterreconnaissance/area denial, counter-mortar operations, company forward operating base (FOB), sniper/OP operations, and dismounted patrols were added. The lessons learned throughout these nine months were invaluable.

Training

In an environment with zero defect and no chance to "re-key," we quickly began training soldiers to accomplish new missions — all requiring additional skill sets unfamiliar to armor crewmen. As missions were added, the company turned to subject-matter experts, doctrine, Center for Army Lessons Learned (CALL), fellow infantry companies, and local Special Forces soldiers for TTP and training.

We immediately identified the need for all soldiers to operate on the ground as part of a dismounted element. Combined arms is key, and creating and developing this dismounted element and ensuring all soldiers were trained to fill this role, were critical to the company's success. During this transformation, we identified that most 19Ks needed additional basic infantry training to operate with confidence as a dismount in a fire team and squad. The requirement for additional individual soldier training was evident when we began to train platoons to conduct dismounted operations.

Every soldier receives limited basic infantry training during initial entry training, the amount of training must be increased to ensure soldiers are confident riflemen. This training deficiency is an Armywide issue and the effects are seen and felt in Iraq, where every soldier is a potential dismount. Soldiers must be provided the basic skills to operate as riflemen during initial entry training, with focus on rifle marksmanship and fire and maneuver at team and squad levels. Leaders are obligated to ensure soldiers build these basic skills during home station and institutional training to ensure they are always ready to fight.

The company focused on dismounted infantry operations, room-clearing procedures, and sniper operations. We began repetitive training to create confidence in weapons, tactics, fellow soldiers, and leaders. Training lanes were created on the FOB by platoons to execute dismounted formations, movement techniques, and battle drills, along with dismounted cordon, room-clearing (tape house) procedures, and search techniques. Leaders conducted classes, developed standard operating procedures (SOPs), war-gamed, rehearsed, rehearsed, and rehearsed. Four-man stack room-clearing rehearsals were conducted several times prior to raids and searches. Training continued as we added additional equipment and soldiers. We developed TTP and SOPs for new tools, such as manpack radios, squad radios with headsets, small-arms optics, and metal detectors. Soldiers also focused on individual weapons training to include day and night fire, using new optics to gain and maintain confidence.

Personnel

Unit manning was the second challenge the company had to manage. Three weaknesses were identified in the typical tank, now truck, platoon: no medic, no forward observer, and no dedicated dismounted element.

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"The minimum crew requirement to maneuver four gun trucks is 12 soldiers, eight if the trucks are stationary, maintaining security, and only move during an emergency. This allows for one dedicated four-man dismounted team if the platoon is maneuvering. Using only one team assumed too much risk, so the goal became to create one squad-sized organic element per platoon."

Medic. We addressed the medic issue first. Separate platoon-level operations increased and each platoon was widely dispersed within the task force's area of operations. This fact drove the need to attach a medic to each line platoon to provide immediate medical support. The company medic team was task organized. One medic was attached to each line platoon to provide on-site medical support and create a team by working closely with their platoon. The medics also provided a readily available subject-matter expert to maintain soldier proficiency. Integrating medics into each platoon ultimately saved lives over the past nine months.

Forward observers. We task organized the fire support team as forward observers (FOs) within the three line platoons. This improved fire support at the platoon level by allowing the platoon leader and platoon sergeant to focus solely on C2 and maneuver while FOs executed the call for fire. The attached FOs worked closely with their platoons, integrating fire support into the platoon leaders' maneuver, and providing a ready subject-matter expert to maintain soldier proficiency. If fires were needed, FOs could switch the truck's second radio to the task force fires net, leaving platoon leaders free to maneuver platoons.

Dismounts: Finally, each platoon required a dismounted element not organic to a tank platoon. An armor platoon consists of 16 soldiers. The minimum crew requirement to maneuver four gun trucks is 12 soldiers, eight if the trucks are stationary, maintaining security, and only move during an emergency. This allows for one dedicated four-man dismounted team if the platoon is maneuvering. Using only one team assumed too much risk, so the goal became to create one squad-sized organic element per platoon. We built this squad by adding one more soldier to each platoon, in addition to the medic and forward observer. Our goal remains to add an additional soldier per platoon to increase the line platoon's strength to a total of 20 soldiers. Each platoon then identified a truck commander to lead the squad. The platoon leader typically led the squad on all planned patrols and raids. This squad enabled each platoon to conduct patrols, OPs, room clearing, and then maneuver with both mounted and dismounted elements if contact was made.

Additional challenges became apparent while conducting company-level missions when the medics and fire support team were task organized and we began using snipers from the headquarters platoon. The medics remained with the platoons to provide immediate aid. If only two platoons were needed during a company mission, the third platoon medic accompanied the first sergeant to conduct aid and casualty evacuation (CASEVAC). If three platoons were required, a fourth medic from the medical platoon was added under the operational control (OPCON) of the company first sergeant.

The fire support officer (FSO) was added to the commander's vehicle to integrate fires. The FSO used the task force net to call for fire while the commander fought on the company net. When missions required the maneuver of the entire company and close air support (CAS) was likely, the FIST was consolidated to man its gun truck and accompany the commander.

Sniper operations were conducted by using headquarters personnel to create two teams. Simultaneous company-level and sniper operations were accomplished by using mechanics to fill in for the command crews (drivers and loaders) and company trains.

To alleviate all three manpower shortages in the future, the headquarters platoon should include seven additional soldiers — four to serve as dedicated sniper teams, one to serve as a headquarters medic to assist the first sergeant, and two additional soldiers to man the FIST truck with the fire support officer, allowing FOs to remain with their platoons.

Equipment

Equipment was the third challenge. Most of the tools required and provided by a typical infantry or cavalry modified table of organization and equipment (MTOE) were not readily available in the tank company's MTOE. These infantry/cavalry tools include M68 close combat optics (red dot sights), backup iron sights, M4/M16 rail systems, IR lasers and spotlights (PAQ4Cs and PEQ2As), additional night vision goggles (NVGs), SureFire spotlights, M203s, and M16 rifles. All of these tools provide precision fire during both day and night.

Prior to deployment, the company was issued additional M16A2 rifles, shotguns, M240B machine guns, .50-caliber machine guns, and PAS13s. Upon arrival in Kuwait, the company was issued 12 M1114 trucks prior to movement into Iraq. Through months of hard work and persistence, the company, task force, and brigade filled most equipment requirements such as additional radios, gun shields, HMMWV kevlar blankets, M203s, rail systems, and personal weapons optics.

Vehicles: Currently, the company is equipped with 15 gun trucks (M1025/1114) and now only one M1A1 tank. The three line platoons use the M1114 uparmored HMMWVs, which have proven to be more survivable than the typical M998/1025 trucks due to their improved armor package. Each line platoon has four gun trucks and the headquarters has three trucks (commander, XO, and FIST). The FIST truck is used only on company missions due to FOs being task organized with line platoons. The tank sees occasional use at the company FOB or on security missions.

The company trains consist of three M113A2s, two M998 HMMWVs, and three M923 trucks. The M113s transport the first sergeant, maintenance team, and medics when armor is needed. Through experience, we have identified that M113s have limited use due to their reduced top speed, weight (pontoon bridges), and our current task organization of personnel. The three 5-ton trucks are used by supply and maintenance. During a typical company mission, the trains will consist of one M998 cargo HMMWV prepared to carry casualties or enemy prisoners of war (EPWs) and may include an M923 to carry additional class I and V, seized weapons, equipment, and EPWs. The maintenance team is prepared to move with the first sergeant in the second M998 HMMWV.

Weapons: Line platoon crew served weapons consist of M2HB .50-caliber flexes and M240B machine guns. Each platoon is equipped with four .50-caliber machine guns mounted on MK93 heavy machine gun mounting systems and four M240Bs that are used mainly by the dismounts. The headquarters carries two .50-calibers and two M240Bs, with one mounted on an M6 pintle mount in the first sergeant's M998 truck. The first sergeant and maintenance M113s also carry a .50-caliber, along with the supply and maintenance M923 five-ton trucks.

The optimal organization would have each line platoon mounting two M240Bs, one .50-caliber, and one MK19 machine gun on the four gun trucks. The MK19 40mm grenade launcher is very effective in open terrain, as well as behind berms or on rooftops, as we have seen with the task force scouts and fellow motorized infantry company. The M249 squad automatic weapon (SAW) would also fit well in place of the dismount M240B machine guns.

Personal weapons consist of M4 carbines and M16A2 rifles. Prior to deployment, the company fielded 14 M16A2s (including headquarters and headquarters company weapons) and 33 M4 carbines for a total of 47 weapons spread over 81 MTOE soldiers. In this environment, every soldier must be equipped to fight dismounted and must have a rifle or carbine to be effective. Currently, the company has 76 weapons for 85 soldiers with the goal of every soldier carrying a rifle or carbine. Each M4 is equipped with the M4 rail adapter system, which allows soldiers to mount IR lasers and spotlights. We currently have one for each of the 32 M4s. There are no rail systems available for the M16A2. In the future, every M4 and M16 should have a rail system to mount equipment.

Additional personal weapons include the M500 shotgun, M9 pistol, M203 grenade launcher, and the M14 sniper rifle. The M500 shotgun is carried on dismounted patrols and each platoon is equipped with one or two. The M9 pistol has seen little

"Currently the company is equipped with 15 gun trucks (M1025/1114) and now only one M1A1 tank. The three line platoons use the M1114 uparmored HMMWVs, which have proven to be more survivable than the typical M998/1025 trucks due to their improved armor package."

use, but is carried by all gunners and truck commanders. Two M203 40mm grenade launchers have been added to the company to equip each platoon with one system. An additional M203 per platoon and per sniper team is the goal. The M14 sniper rifle is used by the two sniper teams in conjunction with a 10-power daylight Leopold scope or a heavy thermal PAS13, and is paired with a 32-power spotting scope.

In the future, the M249 SAW should replace the two dismount M240Bs. The M249 SAW provides a lightweight automatic weapon with small-arms capability, rather than the medium caliber M240B, and is best used in the military operations in urban terrain (MOUT) environment to mitigate effects of larger caliber machine gun fires. The SAW is easy to carry and can also be mounted on the weapons station of the gun trucks.

Optics for rifles, carbines, and machine guns make soldiers lethal during both day and night. Almost every soldier in the company who carries a rifle or carbine is equipped with either the PAQ4C or PEQ2A IR laser, which is mounted on the M4 rail system or to the top of the M16A2 rifle. These IR lasers allow soldiers to target, illuminate, and accurately hit a target while using night vision goggles. The PEQ2A also has an IR spotlight, which can assist in illuminating rooms and areas during low illumination. The PEQ2A should also be mounted on all dismount M240Bs (at least two per platoon).

All M4 carbines mount the M68 close combat optic (CCO), a backup iron sight, and a SureFire spotlight. The M68 allows soldiers to scan with both eyes open and then accurately fire during close combat by placing the red dot on the target. When the CCO fails, the backup iron sight is available for use. The M68 can also be mounted in place of the handle on the M16A4 or on the rail system of an M16A2. SureFire spotlights have proven to be effective during house and vehicle searches. Every line platoon soldier should be equipped with one. SureFires can also be mounted on the M16 with tape or straps if a rail system is not available.

Additional daylight optics that have proven useful include the AN/PVS6 mini eye-safe laser infrared observation set (MELIOS) for the fire support team. The company has one MELIOS, which is currently rotated by the three platoon FOs, depending on who is more likely to call for fire during a platoon mission. All three line platoon FOs must be provided with one AN/PVS6 MELIOS to assist with fire support. Also, in the future, each M240B or M249SAW should be equipped with a 3-power machine gun optic (MGO), which provides more accurate fire during daylight.

Night vision: Night vision is critical to mission success and each soldier and platoon must be properly equipped to operate in limited visibility. The company currently fields 51 sets of PVS7B/D for 85 soldiers. Each platoon fields up to 14 sets of PVS7s for 19 soldiers, with the goal of one set per line soldier. AN/PVS14s are every soldier's choice because they provide monocular vision and an increased depth perception. In the future, each truck commander, driver, and gunner should be provided with PVS14s and every line platoon soldier must have a set of NVGs.

Thermal sights combined with NVGs have proven extremely effective during limited visibility. Each truck mounts one AN/PAS13 heavy sight on its M2HB or M240B, which provides a 3.3-power and 10-power narrow field of view (NFOV) thermal image. Line platoons also have two medium thermal sights, which are a wider field of view at 2-power and 3.3-power. They can be mounted on the dismount M240Bs, used in OPs, or carried during dismounted patrol missions. Gunners wear PVS7s and switch to thermals during operations. This allows gunners to identify friendly forces marked by IR Budd lights, chemlights, or strobes. Each platoon is also equipped with a 1-power

handheld thermal viewer. This small thermal viewer is useful during dismounted patrols only. It provides a thermal capability of 75 to 100 meters on the move. When stationary, the patrol switches to the PAS13 to increase thermal range and magnification. Currently, the company sniper teams use a daylight scope with a PAS13 during the night. The PAS13 can be mounted on the M14 rifle, but the rail system initially provided with the M14 did not support the weight properly. The preferred sight for the M14 is the 8.5-power AN/PVS10. This sight is a must for any sniper team and is critical to ensure the sniper can place accurate fires during limited visibility.

Communications: Building the communications architecture for the company created its own challenges. The company deployed with the radios and systems required to operate the MTOE-assigned vehicles. The dismounted requirements were not taken into account until later. Currently, each platoon is equipped with two AN/PRC-119 manpack systems with one dedicated 1523E model all-source imagery processor (ASIP) radio for each dismounted squad. The ASIP radios are perfect for dismounted patrols due to their small size and weight. One 1523D radio can be pulled from a truck as needed to create a second manpack system for multiple OPs or elements. The line platoons also carry five ICOM squad radios with two boom microphone headsets and three locally purchased walkman-type earpieces. The ICOM is the primary radio used during patrols and the headsets allow for noise discipline during OPs or raids. The commander and executive officer each carry one to monitor dismounts during raids, route clearance, patrols, and contact. Nine ICOMs with headsets is the goal for a platoon, allocating one per truck (four), team leader (two), patrol leader, point man, and trail man.

Miscellaneous equipment: Additional useful equipment includes PAS13 and ICOM battery recharging stations, HMMWV towbars, HMMWV towropes, AN/PSS11 metal detectors, 12-ton hydraulic jacks, tire ramps, and picket pounders. HMMWV towbars and towropes are carried by all platoons to conduct self-recovery and the ropes are used when time is critical or when under fire. The metal detector is used to locate caches during raids, cordons, and searches. The 12-ton hydraulic jack was used in place of heavy scissor jacks until they began to arrive through the supply system. The jacks are used in combination with the tire ramp, which was made to elevate the truck. The crew drives the flat tire onto the ramp, which lifts the truck just high enough to place the jack and jack plate beneath.

Picket pounders are used to breach during raids and bolt cutters assist with entry. All trucks carry a litter to facilitate platoon extraction of wounded personnel. Every soldier carries Budd lights to mark their positions during limited visibility. The IR strobe is also used to mark OP positions for friendly ground and air units.

If possible, obtain the SINCGARS ear bud system, which facilitates gunner and truck commanders monitoring the C2 nets during offensive operations. The ear bud system also allows the dismounted radio operator to move hands free. Each platoon should be provided with two per truck and two for the dismounted radio operator for a total of 40 for the company. Creating an intercom system for the M1025/1114 truck may be a solution to this communications challenge.

Platoon and company leaders should be equipped with the blue force tracker (BFT) to increase situational awareness with real time operational information. Typically, a platoon operates as an independent task force asset, rather than under company control, so the BFT better facilitates C2 at the task-force level for clearing fires, deconflicting direct fire, and rapid response of the QRF. Each platoon should be permanently outfitted with one

countermeasures system as a force protection measure. This device is used for route clearance and convoy escort, protecting dismounted as well as mounted soldiers.

Tactics, Techniques, and Procedures

TTP also evolved as the fight continued. Every mission was a learning experience as we continued to develop TTP.

Intelligence: Enemy pattern analysis and dissemination at the company level is based on products provided by the battalion S2. The battalion S2 disseminates recent enemy actions down to the company level, weekly and monthly, through the event matrix and a map, diagramming the locations of enemy events. By using these two documents, company leaders develop intelligence preparation of the battlefield (IPB) at the company level. Having a complete picture of enemy activities along main supply routes (MSRs) and in the areas of operation (AO) enables company leaders to identify or template areas that the enemy is using for ambushes and IED emplacement. Leaders can then plan movement techniques or formations to defeat the templated enemy. Producing both documents monthly allows company leaders to better see trends and identify where and when enemy activity has occurred.

Satellite imagery has improved our ability to visualize the battlefield and plan operations. Conducting IPB and executing missions using imagery has made C2 and maneuver easier for every leader who has a copy. Using satellite imagery for maneuver does assume some risk, depending on the age of the data. Buildings may have been constructed or canals built that block routes to an objective. Unmanned aerial vehicle (UAV) imagery can counter the risks of using outdated imagery.

Knowing the people, the enemy, and terrain is a must. A typical battalion's AO is so large that it necessitates breaking up the task force AO into company AOs. If executed, this allows each company to become more effective by gaining knowledge of the area and becoming familiar with specific areas, the terrain, people, leaders, police, public facilities, businesses, and culture. Over the course of three months, the company conducted a counterreconnaissance mission to secure a highway. The soldiers met with local families, highway police, and vendors in the area the road passed through, which improved the soldiers' ability to identify who did not belong and facilitate information flow. The company used countless dismounted patrols to gain intimate knowledge of the area, which was passed on to the task force. This familiarity enabled soldiers to pick up on details that an unfamiliar unit might overlook. Our regular presence also encouraged people to talk and provide information.

Aviation: Using aviation during ground operations creates a combination that the enemy is not well prepared to counter. FM communications and marking techniques are a must for air-ground operations. Dropping aviation to the company frequency during contact or operations allows the company commander to directly communicate and coordinate efforts. Aviation, in conjunction with a mounted reconnaissance, adds a new dimension that the enemy must face and increases the task force's ability to detect possible ambushes and IEDs. Aviation can also be used as an air reconnaissance and QRF element to escort convoys. Combined-arms operations work — air and ground forces are a powerful combination. In the future, a task force should have a close relationship with an aviation unit to provide dedicated air support.

Signals: Each platoon requires a set of pyrotechnics and visual signals. We have developed a company SOP for signals to use in the event FM and squad radios fail. Soldiers are marked with an IR chemlight, Budd light, or glint tape to mitigate fratricide during limited visibility.

Vehicle missions and load plans: Each truck platoon must always be prepared to execute any mission while in sector including traffic control points (TCPs), cache searches, house searches, EPW processing, limited visibility operations, and medical evacuation (MEDEVAC). Each vehicle in the platoon is assigned specific missions and carries required equipment.

Equipment and supplies that a truck platoon carries include slave cables; spare tires on frames, mounted at the rear of the truck commander's side of the truck; batteries; petroleum, oil, and lubricant (POL) products; ice chests; a fifth VS17 panel for marking landing zones; a digital camera for capturing images of EPWs, IEDs, and caches; two lensatic compasses per truck; a class V basic load; and a class VIII medical load.

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"When a platoon makes contact with an IED, the section outside the kill sack stops and sets security. If the platoon identifies the triggerman, they engage. All trucks scan for additional IEDs before moving through the area. A section maneuvers to a flank and dismounts a team to search for trigger devices, wires, and residue from the IED. The platoon is prepared to search houses for the triggerman, gain intelligence on enemy activity, or use metal detectors to search for nearby caches."

React to contact: Actions on contact have evolved to meet enemy TTPs for IEDs, direct fire, or a complex ambush, which includes an IED and a direct-fire attack. During direct fire contact, the platoon returns fire, moves out of the kill sack, sets a base of fire, and maneuvers on a flank to destroy the enemy. The FOs are prepared to call for fire or CAS. Each section is prepared to dismount and maneuver in restricted terrain.

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Complex ambushes force a platoon to fight in two directions. A typical ambush includes IEDs and small-arms and RPG fire from one or both sides of the road. The enemy also places a second IED further down the road in the direction of travel where a convoy may stop, following the ambush in an effort to hit a stationary target. The platoon reacts to contact with fire, maneuvers to flank, and destroys the enemy. The enemy prefers to hit and run and rarely stands and fights, so the platoon has to quickly react, fix the enemy, then complete their destruction.

Route clearance: IED detection and route clearance are best conducted off route and looking in from a flank to avoid an ambush or kill zone. Route clearance can be conducted with dismounted elements or a combination of dismounted and mounted elements, based on mission, enemy, terrain, troops, time, and civilians to increase security and the likelihood of IED detection. Both techniques use vehicle or handheld optics to observe from a distance, while searching for signs of an IED.

Dismounts have the ability to detect telltale signs of a camouflaged IED better than mounted elements. Mounted elements may bypass a dug-in IED on a route multiple times due to the enemy's ability to camouflage the position and speed of mounted elements. Dismounts can also maneuver in restricted terrain along the flanks of a route, ensuring standoff and concealment from enemy observation to minimize an IED ambush. Dismounts in open terrain require additional security on the flanks to prevent detonating an IED. Using binoculars and an overwatch element increases the ability of the reconnaissance patrol to detect potential IEDs and/or triggermen. Employing snipers, M1s or M2s with optics, or a truck-mounted element with binoculars, are options to overwatch a patrol and mitigate the use of a triggerman.

Employing HMMWV gun trucks as overwatch and flank security, in concert with the dismounted reconnaissance element, is a technique that has been very effective. Using a vee-platoon or company formation to clear an entire route has proven extremely successful. The platoon uses two trucks at the base of the vee, providing overwatch for dismounted teams, and two trucks forward on the flanks, searching for triggermen. The dismounted teams move off road on the flanks, clearing the danger areas. Maneuvering the reconnaissance off road is highly recommended to create standoff from the actual IED. Another technique is to conduct route clearance only along routes or danger zones where IEDs are most likely, such as culverts, bridges, canals, guard rails, road signs, and soft sand or dirt in the median or along the roadside. The route clearance unit must continu-

ously change time and composition of the force, such as mounted, fire teams, snipers, and armor, to prevent creating a pattern. Adding a countermeasures system (one per line platoon) to the reconnaissance may mitigate the use of remote-detonated IEDs. Once an IED is discovered, the platoon executes the IED contact SOP.

Cordon and search: Due to our unique organization, we have developed a battle drill to conduct a company cordon and search. One line platoon of 19 personnel with an interpreter (with or without M1114s) moves to the objective, establishes the inner cordon, and then conducts the house search. A second truck platoon sets the external cordon to protect the search platoon. The goal is to simultaneously set the outer and inner cordons to prevent the target from escaping. The headquarters element supports the mission and consists of the commander's truck, FIST truck (optional), the XO's truck, and the first sergeant's M998 truck, which is used for EPW and CASEVAC. Speed and surprise is of the essence — more vehicles are not necessarily better. Platoons rehearse these drills to ensure every soldier knows his task and purpose.

IPB for this type of mission must identify routes and enemy dismounted avenues of approach out of the target area. The key to success is to set the cordon and deny the targets an escape route. Use HMMWVs to provide speed and ease of maneuver in city streets. Limit the number of vehicles to minimize congestion at the objective area. Only take transport for inner cordon teams and gun trucks for the external cordon and headquarters. For each raid or search, assign an interrogation team to assist the company. Designate an EPW collection and interrogation point. This allows the search platoon to focus on security and search.

The inner cordon and search platoon moves, mounted or dismounted, to the objective, sets at an objective rally point, dismounts, and moves the platoon to cordon the house. One three- to four-man team sets the inner cordon, a second four-man team serves as an assault team, and a third three- to four-man team, accompanied by an interpreter, serves as the security element. The assault team executes the four-man stack once the house is isolated and the outer cordon is set. Once the first room is cleared, the security team, with the interpreter, follows the assault team into the house to secure EPWs and rooms and begin questioning. The platoon's trucks move as necessary to improve security.

The outer cordon platoon establishes positions to block movement in and out of the search area and protects the search platoon — nothing moves in or out without approval. Weapons orientation, control status, observation, and discipline are critical. The commander is in the vicinity with the search platoon and the XO and first sergeant are near the cordon platoon. The commander can dismount and use a manpack with his loader as security and a radio operator. The first sergeant is prepared to move to conduct CASEVAC or set at the EPW collection point to load detainees and weapons from any caches. Once the search is complete, the company collapses with the search platoon moving first, followed by the cordon platoon.

Traffic control points: All platoons are prepared to establish a TCP during day or night. The preferred method is to create the TCP with wire and spike strips. The platoon TCP kit contains four spotlights, two small TCP signs, four rolls of wire, four reflective triangles or orange cones, and a minimum of one spike strip. Spike strips provide the ability to slow vehicles if they cross the wire barrier. The platoon establishes an overwatch element to chase down vehicles and provide additional security, and remaining trucks establish the search area. Personnel are dispersed to minimize damage from vehicle-borne IEDs. The TCP is marked with signs, reflective triangles, and strobe lights or chemlights; wire or spike strips protect the soldiers. Six soldiers conduct vehicle and personnel searches with the section leader commanding and controlling the TCP. Two soldiers man the crew served weapons and provide security, while the final soldier guides traffic.

The soldiers of Cobra Company have completed transformation during the crucible of combat and can fight and win in any situation. Throughout this deployment, the company's training, personnel, equipment, and TTP have continued to evolve. The soldiers have continued to learn under combat conditions and have become proficient in the skills required to accomplish their missions. The transformation of Cobra from a tank company to a light and highly mobile motorized armor company would have been impossible without the unwavering courage of its soldiers and their refusal to let down their comrades in the face of the enemy. A soldier's courage to fight day after day in the face of mounting casualties is the essence of the American soldier and the stuff of legends. The American soldier will accomplish any mission, no matter the challenges, and will always find a way to win.

We, as leaders, have the privilege to be entrusted with the most precious resource America has to offer — its young men and women. Army leaders at all levels must ensure every soldier is properly equipped and trained to become lethal on the battlefield. This lethality will potentially reduce casualties and increase unit effectiveness. This lethality may make the enemy think twice about attacking a convoy.

The Army is focused on improving technology, combined with the necessity of accomplishing more with less. The soldier will employ that technology and accomplish the mission with less. To do this, every soldier must be equipped with a rifle or carbine, along with assorted day and night sights complete with a set of night vision goggles. Soldiers must be trained to use this equipment beginning with initial entry training and reinforced at all levels of military education, to include home station and repetitive training. Finally, the soldier must also be trained on basic small-unit tactics.

On the current battlefield, every soldier is a potential dismount — they must be equipped and prepared to kill the enemy at all times. They must have the reflexes, developed through years of training, to survive and win. It is our obligation as leaders to ensure soldiers are prepared to fight and win in any situation and in any war.

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1SG Stephen Krivitsky is currently assigned to the 2d Region Reserve Officer Training Corps, Penn State University, Pennsylvania. His military education includes Advanced Noncommissioned Officers Course; M1A1 Master Gunner Course, and Basic Noncommissioned Officers Course. He has served in various positions, to include first sergeant, C Company, 1st Battalion, 34th Armor, 1st Brigade Combat Team, 1st Infantry Division (Mechanized), Fort Riley, KS; master gunner, U.S. Army Europe, 7th Army Training Command, Grafenwoehr, Germany; and platoon sergeant, D Company, 1st Battalion, 68th Armor, Fort Carson, CO.

Winning with the People in Iraq

by Captain Jason M. Pape

While there are no generalizations that work everywhere in Iraq, no tactics, techniques, and procedures (TTPs) that will ensure success in all situations, we must agree that winning over the people in Iraq will ultimately determine success or failure. Given the brutal history of Iraq, the nature of its religious and political insurgency, and the significant rifts between cultures, this war cannot be won through attrition.

Success in Iraq

What does an armor company, equipped according to its standard modified table of organization and equipment (MTOE), do when deployed under alert conditions to Iraq, immediately following a traditional maneuver train-up and a National Training Center (NTC) rotation, with the mission of relieving part of 3d Infantry Division to begin combat, stability, and support operations in Baghdad, Iraq? Adapt and overcome.

Company B, 1st Battalion, 13th Armor, "Wolfpack," of the 3d Brigade Combat Team, 1st Armored Division, deployed from Fort Riley, Kansas, separate from its brigade and division, prepared to fight the ground offensive. And we were ready! Our sister battalion, 2d Battalion, 70th Armor, was already in theater supporting the 101st Airborne Division from Fort Campbell, Kentucky, and we were eager to catch up to them. During reception, staging, onward movement, and integration (RSOI) in Kuwait, as the coalition swept toward Baghdad, we realized our likely role was changing from combat to urban operations and stability and support operations. But we had not prepared for stability and support operations!

We took every opportunity to train soldiers in the unfamiliar tasks associated with military operations in urban terrain (MOUT) and stability and support operations. We relied heavily on the experience of noncommissioned officers (NCOs) who served in Kosovo and Bosnia. We also had to change our mindset. Soldiers, who were trained, rehearsed and mentally prepared to defeat the enemy through overwhelming firepower and mounted maneuver, do not readily accept the role of peacemakers. No longer judged on the attrition we cause against the enemy, the ground we gain, or the objectives we secure, we must learn the language of stability and support operations. What defines success? Before we could think about that too much, we were in Kadimiyah, on the northern edge of Baghdad, relieving 2d Battalion, 69th Armor, 3d Brigade, 3d Infantry Division, of responsibility for the area.

By all accounts, we were successful in Kadimiyah. We maintained the third most important holy site in Iraq, the religious epicenter for Shia in Baghdad, the most significant avenue in and out of northern Baghdad as one of the safest areas in Iraq. We had not trained for this mission. We prepared almost exclusively for combat operations. We were not equipped with much in the way of emerging technology. We left home with little more than our standard MTOE equipment and none of the essential supplies now required for operations in Iraq.

Ultimately, strong NCO leadership, basic soldier discipline, training the basics, and enduring American resolve kept us alive and brought us all home. Most units can cite these same qualities; did we do something different to determine our success or was Kadimiyah simply a different place, destined to be stable and safe? I dare not venture a guess on this. None of us should accept an inevitable end in our mission in Iraq. Never rest on your laurels, relishing your assignment in a safe part of Iraq, for nothing is certain here. At the same time, never give up on peace in an area, submitting to a battle of attrition with no hope of pacifism.

Winning Hearts and Minds

When we relieved 2d Battalion, 69th Armor, we realized they had set us up for success in Kadimiyah. We inherited many strong relationships and programs from them. We learned quickly that our most difficult task would be tempering Iraqis' new sense of freedom with good order and discipline while avoiding the same

cruelty and violence they knew from Saddam. Iraqis regularly told us that a heavy hand could only govern their people. They encouraged us to use violence and power to manage the people. We knew this was a shortsighted answer. Much like abused and neglected children, they needed to grow to respect authority, not for fear, but because that authority represents freedoms and provisions. But like abused children, they viewed our threats with disdain, knowing we would never resort to the same tactics they were conditioned to by Saddam.

We knew that we must learn how to present different faces, depending on the audience and situation. We must be capable of quickly escalating force to overwhelm the enemy, prepared to avoid or counter an attack without sustaining casualties, while doing something as peaceful as handing out candy to children outside a school. We must exude power, survivability, and readily lethal capability while inviting supporters, fans, and people who would cooperate with us to defeat our enemies. By no means was this easy.

British forces and U.S. Marines were right about perceptions. The British noted that when you carry loaded weapons at the ready, you have eliminated much of your escalation of force; your choices for escalation quickly narrow to lethal force. The Marines noted the U.S. Army's defensive, possibly antagonistic appearance in wearing full protective gear. Rather than argue if they were right and we were wrong, it is possible to wear full individual body armor (IBA) and Kevlar, patrol with weapons in red status, and maintain an offensive stance to protect the force, while presenting approachable, benevolent, and liberating images to the Iraqis.

How do you strike fear in the hearts of your enemies and kindle respect in the people you are trying to protect? The key is to quickly adapt your presence to your situation. We concentrated heavily on ramping down following any significant action, such as a direct fire engagement, an apprehension, or a public confrontation. Something as simple as a smile, a wave, and a piece of candy to a nearby child can break the Iraqis' perceived image of you as a conqueror and oppressor.

Word Gets Around

Our first efforts were directed toward those injured during the war. While Kadimiyah is primarily Shia and urban, it is bordered by Sha'at a Taji, a rural Sunni suburb to the north. The Iraqi army used the area to hide artillery during the war and several high-ranking regime leaders lived there; thus, it saw heavy aerial bombardment. As we patrolled the area, we routinely stopped to treat people who were accidentally injured by coalition attacks. Our medics treated a small girl, seriously burned by air strikes that hit her house; a man and his son who lost their legs to cluster bombs that landed on their farm; and an old man who was shot through his Achilles tendon. We tried to avoid becoming a visiting clinic, reinforcing the fact that local medical facilities were fully functional, getting involved only when we felt responsible.

Early on, we decided children were critical to our success in winning over the people. First, they provided a good gauge to the local sentiment. If children did not wave or smile, chances were their parents held contempt for us. If they waved and smiled, it meant we were headed in the right direction — if we could win their favor, it would be that much more difficult for their parents to resent or resist us.

Most important was the impression our soldiers gave during operations. Iraqis watched everything we did! Some watched to observe our methods and establish patterns that they would use against us. Most watched to learn who we are on a personal level, which forced us to be aware of:

• *Soldier discipline.* Soldiers who were attacked directly in our area were generally doing something wrong. A lapse in uniform standard, relaxed security, or inappropriate activity preempted many attacks. Soldiers, who appeared disciplined, prepared, and vigilant often dissuaded an attack, prompting the enemy to find a softer target.

• *Soldier professionalism.* Not all Iraqis know English but most know our profanity. Iraqis also have a strong sense of pride. Soldiers conducting themselves professionally, treating Iraqis with dignity and respect, doing their duty rather than showing personal aggression will earn points with Iraqis. Once they realize you are after criminals or insurgents, good Iraqis will support you, assist you, and even detain the suspect for you. If they perceive abuse of power, you will encounter resistance. Our brigade motto was, "Be polite, be professional, and be prepared to kill!"

• *Animosity.* Iraqis watch the way we conduct business. Do we take pleasure in roughing up people? Do we target indiscriminately, as if all Iraqis are the enemy? We must target specifically, to defeat current insurgents without creating new ones.

Word does get around. My most trusted translator, a Sunni, told me about a friend of his from Aadamiyah. Aadamiyah was one of Saddam's most favored neighborhoods with some of the strongest opposition to coalition forces. His friend came across a U.S. soldier, intimidating and unfriendly in his words. Because of the language barrier and some misunderstood glances, the Iraqi mistook him for an enemy. Then the Iraqi saw this same soldier

buy some candy from a store and hand it out to nearby children. The Iraq thought, "maybe these guys are not all that bad."

Trust Somebody

Trust in Iraq is difficult. As our brigade commander often told us: "The story of the turtle and the scorpion presents a good example of trust in Iraq. The scorpion needs to cross the river, but cannot swim. He asks a turtle preparing to swim if he can ride across the river on his back. The turtle agrees, if the scorpion promises he will not sting him halfway across the river. The scorpion insists he will not, because if he does, they will both drown. The turtle agrees to help the scorpion cross the river. Halfway across the river, the scorpion stings the turtle. With its last breath, the turtle asks 'why?' The scorpion responds simply, 'welcome to the Middle East.'"

Before you jump to conclusions about Iraqis' values, ask yourself if you would trust us if you were an Iraqi. Many soldiers stumble into thinking Iraqis are inherently fallible, more so than us, responsible for everything that has befallen them. This comes from the frustration of seeing a country looted, destroyed, and polluted from within, and working to repair infrastructure faster than "they" can tear down. It comes from deceit, deception, and friendly pretenses followed by deadly attacks, followed by local ignorance of the attackers. But again, try to see things from their perspective. You do not have to affirm their beliefs, just understand their situations and circumstances so you may effectively counter the issues. Consider this:

• Iraq was one of the wealthiest, most modern and westernized Arab countries in the 1980s. Twelve years of embargo later, they are a third-world nation in most respects.

• We have waged war twice in their country, recently. Whether you call it invasion or liberation, we killed a lot of their people.

• Iraqis are convinced we are in bed with Israel, the war on terrorism is a veiled attack on Islam, and we really came for their oil.

Understanding these obstacles to Iraqi trust is the first step. Now, ask yourself if you trust the Iraqis. How can we expect them to trust us if we do not trust them? In most cases, they do not even trust themselves or each other. Bottom line: trust somebody, not everybody! Accept risk and trust somebody. It is the only way you will know what is really going on in your area.

Leading the Leaders

Will the real Sheikh please step forward? In the power vacuum that followed the dissolution of the Ba'ath party, religious, tribal, and political leaders scrambled to secure their parts of community influence. Coalition forces, naïve about the potential power of tribes and religion in Iraq, were caught off guard by this fact in many instances. Some were duped into alliances with frauds. Others dismissed the legitimacy of these groups altogether and went it alone. While U.S. forces struggled to grasp the situation, Imams, Sheikhs, and Hawasem (looters) grabbed property, money, and influence wherever the fallen regime left it accessible.

Coalition forces responded by recovering as much as they could, but was then left holding the reins on Iraq. From the very beginning, our goal was to make Iraqis responsible for Iraq. So how do we give Iraq back to the Iraqis? Without writing a book on this, here are some tips on identifying leaders, cultivating relationships with them, and guiding them down the right path:

• Find out who the real community leaders are and win their support. Religious leaders, tribal leaders, businessmen, and government officials will determine your success. Type-A personalities (you and I) cannot win Iraq with brute force.

• Real Sheikhs and Imams will not come to you directly. If they show up at your forward operating base, they are middle management, *maybe*. Real Sheikhs and Imams already have enough power that they need not come begging and borrowing. You must go and find them.

• Tribes are like mafia. While friendship and loyalty play a part in dealings, Sheikhs ultimately respect power and authority. Deal with them on the basis of authority, yours and theirs.

• Regardless of what we think of religious and tribal influence in Iraq, it matters to Iraqis.

"We knew that we must learn how to present different faces, depending on the audience and situation. We must be capable of quickly escalating force to overwhelm the enemy, prepared to avoid or counter an attack without sustaining casualties, while doing something as peaceful as handing out candy to children outside a school. We must exude power, survivability, and readily lethal capability while inviting supporters, fans, and people who would cooperate with us to defeat our enemies."

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pairs. Use psychological operations to hear what people are saying and get your message (explanation) out.

• Not promising anything! Do not allow room for Iraqis to infer a promise.

• Targeting precisely. You will develop targets at the company level based on human intelligence (HUMINT) you receive directly. You cannot affect targets assigned by higher; you must simply execute them. Know that your target can be off. Receiving targets with incorrect addresses and ten-digit grids is not uncommon and requires reorganizing and shifting to the correct target at a moment's notice. When you hit the wrong target, you must decide if you will use immediate HUMINT to find the right target. If you put information on the street and cannot immediately exploit the target, you have shown your hand. We traditionally accepted this risk, immediately working the area to correct our target information.

• Learning how to tactically question. Learn how to differentiate between single-source HUMINT, source reliability, source motivation, and time sensitivity. Understand that 90 percent of the reports you receive are dated and lost their value, falsified to watch your reaction or set you up, rumor, or simply fabricated to bring harm to a rival Iraqi. Beware the urgent report from an unknown person; it could be a trap or a trick. Keep the source with you.

Training to Do It Again

The following training ideas can help you prepare for deployment to Iraq. Some are contingent on support from higher-level commands, but worth fighting for:

• Determine as early as possible if your unit is going to Iraq. When you know you are, fight to tailor your training to Iraq. The traditional NTC train-up does not do it.

• Train tactical questioning. You are not allowed to interrogate; do not ever say you did. Tactical questioning skills will enable you to develop your own HUMINT.

• Do not ever cross the line between hospitality and bribery. Even when intentions seem harmless, if you accept large gratuities, you will be indebted, possibly leveraged. During the regime, everything in Iraq could be bought; Americans lead by example in their personal integrity and sense of righteousness.

• If you are a leader of an area, find *the* most influential person in that area and make him your partner. Remain neutral and weary; avoid taking sides and losing your objectivity. But you need someone you can trust to bounce issues and ideas against, someone who will candidly tell you what public perception is, and someone who will support you with their people.

• Work with Iraqi security and police forces. Do not do their job for them; but do not separate them completely from your mission. Your presence lends power and authority to their activities; their presence adds legitimacy to yours.

• Be prepared to dissolve relationships and/or fire people who fail to hold up their end of the bargain.

Decentralized Operations

The more you can empower subordinate leaders to build rapport within the community, the better. This requires face-to-face interaction with people from all walks of life, in as many parts of your area as the threat permits. Platoon leaders and platoon sergeants play an integral role in expanding your unit's influence to the people on the street. They provide exposure to local community leaders and neighborhoods, while administrators and high-level leaders keep company leaders occupied. As much as possible, integrate rapport building into your daily operations by:

• Assigning areas to individuals, much like additional duty areas. Make people responsible for facilities such as schools, hospitals, electricity, sewage, and sanitation.

• Encouraging subordinate leaders to adopt a neighborhood, learn as much as they can about the area, and build ties with the local people.

• Assigning an information (recon) objective in every mission. Require leaders to record routes they took, significant events, personal contacts made, and information gathered. It may be something as simple as "find out what they use that building for," or "who is shooting at night in that area."

• Allowing your soldiers to become part of an Iraqi family. They will appreciate their role in Iraq much more if they can get to know the people they are tasked to protect.

When Things Go Bad

Mistakes will be made. You will arrest the wrong guy, an innocent guy, or break down the door of someone harmless. You will experience collateral damage, vehicle accidents, perhaps even accidental engagements that result in innocent Iraqi deaths. Your ability to handle these situations will be just as critical as avoiding them. Manage these issues separately by:

• Determining what system is in place to compensate people, if you make a mistake. The claims system is clogged with vehicle damages, fraudulent attempts to recover money, and frivolous suits for war damages. Prioritize and track claims that are important to community relations.

• Integrating civil affairs personnel and the unit's claims officer to expedite re-

Sustainment Operations and the Forward Operating Base

by Captain Jay Blakley

Most battalions in Iraq regard the forward operating base (FOB) as home, refuge, and safe haven. More importantly, FOBs allow maneuver commanders to sustain and protect forces while remaining within zones of operation. The FOB has four distinct functions and activities — security, facility maintenance and construction, quality of life, and traditional combat service support (CSS) operations.

By mid-April 2003, "major ground combat operations" were coming to a close in Iraq. Units, such as 2d Battalion, 69th (2-69) Armor, 3d Infantry Division, established FOBs as they transitioned from maneuver to urban operations. At the end of April, 1st Battalion, 13th (1-13) Armor (Dakota), 3d Brigade Combat Team, 1st Armored Division, conducted a relief in place with 2-69 Armor. The relief in place included assuming responsibility of FOB operations. The new Dakota FOB was nestled between the Baghdad city of Kadhamyia and the Tigris River. Later in the year, it was named "Camp Hunte" after the late Specialist Simeon Hunte, a Da-

kota soldier killed during Operation Iraqi Freedom.

Prior to being liberated by coalition forces, the FOB was one of Iraq's many military compounds serving Saddam's regime as a defense and military intelligence headquarters. With ample space, an existing infrastructure, and an ideal location, it was the logical choice for a battalion FOB. Before handing over reigns to Dakota, 2-69 Armor spent approximately a month on the FOB. 1-13 Armor began the process of making Camp Hunte home for the next year, and its headquarters and headquarters company (HHC) assumed control of Camp Hunte with a specific mission to provide continuous security and maintenance of Camp Hunte (Dakota's FOB) and provide the battalion a safe and secure area to conduct combat, stability, and support operations.

Security

The first order of business was security. Camp Hunte was well protected with the Tigris River providing natural barriers covering over half of the camp's bound-

ary. Two 10-foot concrete walls protected the remainder of the FOB with barbed wire and concertina wire reinforcing vulnerable areas.

Threat assessments analyzed individuals and groups that continued to fight coalition forces. Local and national groups, such as former regime loyalists (FRL), religious extremists, al-Qaeda fighters, whabi, criminals, and various other opportunists posed the greatest threat. Identifying the enemy and understanding how he might attack the FOB proved to be challenging. In addition, the asymmetrical environment forced us to consider every possible threat and conceivable course of action. Significant attention was given to analyzing weapons and methods of attack the enemy might use, regardless of whom the enemy was. The most likely threats were: rocket-propelled grenade (RPG) attacks; coordinated mounted attack; improvised explosive devices (IEDs) or vehicle-borne explosive devices; dismounted attacks; mortar/indirect fires; unauthorized access; surveillance; and drive-by shootings.

Vignettes were developed and used as enemy templates to create a security and guard force to defeat specific threats. A security force usually included 30 soldiers, two interpreters, five vehicles (including one M1A1), and four crew-served weapons. The majority of security forces were arrayed at the four gates covering access points to Camp Hunte. Additionally, roving patrols and a quick reaction force (QRF) allowed for complete coverage and flexibility in repositioning combat power. To establish and sustain a secure camp, we trained ready and alert soldiers to participate in security missions; created depth in gate construction and layout to deny enemy access; provided continuous assessments and improvements to overall security; aggressively patrolled areas of responsibility; identified threats early to defeat enemy forces prior to attacks; maintained significant combat power forward to defend FOB; and modified and changed force protection measures to break predictable patterns in operations.

Eleven months of combat operations proved that initial assessments were accurate. Camp Hunte was attacked with mortars on 87 occasions, small-arms attacks on 148 occasions, RPG attacks on 60 occasions, and IEDs emplaced in the vicinity of the FOB on five occasions. However, the enemy neither gained entry to the FOB nor penetrated security. Despite constant attacks, we did not lose any soldiers and just a few were wounded while on the FOB. In assessing these attacks individually, we learned several valuable lessons:

- NCO leadership is critical to the disciplined conduct of guard force operations.

- Daily guard mount, training, and inspections make effective security operations possible.

- Tactical vignettes used at the squad level to rehearse individual soldier actions provide an understanding of the threat, rules of engagement (ROE), and actions on contact. (Soldiers must understand ROE in detail, and more often than not, the decision to engage a target rests with the individual soldier and not the leader, and soldiers must understand when ROE "allows" them to engage and when they "should" engage.)

- Continuous improvement of security positions and varying guard routines help defeat enemy surveillance efforts. (Do not become predictable to enemy surveillance, never be satisfied, and continue to improve force protection measures.)

- Retain enough combat power to respond to specific threats in the vicinity of the FOB.

- Create depth to security through emplacing physical barriers, patrolling forward positions, and positioning security forces.

- Non-modified table of organization and equipment (MTOE), such as inspection mirrors, convex security mirrors, metal-detecting wands, and handheld radios, are required.

- If concrete buildings are available, use them to house soldiers. (Mortar rounds do little damage to reinforced concrete as opposed to sheet-metal buildings.)

"Medical support was provided by our medical platoon. Each line company was task organized with three medics and an M113 for internal medical support. The forward aid station (FAS) and main aid station (MAS) were collocated in a troop medical clinic (TMC). Normal sick call hours were established to deal with routine care."

Facility Maintenance and Construction

Site selection for a unit's FOB may be the most important decision a commander will make as the unit transitions from combat to stability and support operations. Consideration must be given to force protection, facility conditions, available resources for repair, distance from zone of operation, and the need to maintain a presence in zone. Each consideration must be analyzed and weighed against opposing considerations. For example, a commander must examine both the potential costs and benefits for each course of action to make decisions such as whether to establish an FOB 40 to 50 kilometers away in an existing facility that needs little repair and is relatively secure or select an FOB within the zone that needs repairs while sacrificing security.

For the Dakotas, the decision was already made. Camp Hunte was in zone, considerably secure, and already possessed repairable facilities. Camp Hunte contained more than 100 buildings, which ranged from completely gutted or destroyed to relatively intact and inhabitable. Before the United States occupied the area, looters had stripped all the buildings of doors, windows, electrical fixtures, wiring, and plumbing. As 2-69 Armor occupied the FOB, looters were seen running away carrying toilets on their heads.

Regardless, it was time to dig in and make the FOB home. Responsibility to provide basic services, such as running water, electricity, garbage, sewer, air conditioning, and heating, fell to HHC. The first sergeant took on the awesome responsibility of building an FOB out of the ashes and rubble of destroyed Iraqi facilities. Work priorities were established and resources identified. The first sergeant selected and supervised teams of skilled civilian electricians, plumbers, and engineers to create an FOB public works (FPW) department. Selecting and hiring local civilian technicians and workers proved invaluable for sustainment operations. We salvaged fourteen 12-ton central air conditioner units and purchased 53 window units, which provided air conditioning to the entire task force. In addition, we acquired electricity by tapping into the Baghdad electric grid and repairing a large turbine generator, "big blue," for backup power.

Running water was provided to all 800 soldiers of the task force by rebuilding a looted and destroyed pump station capable of providing 100,000 gallons of water per day. The existing pump house was flooded, looted, and initially believed to be beyond repair. With a little engineering experience and resilient Iraqi help, we bypassed the chlorine gas filtration system, rebuilt circuit boards, replaced four large pumps, and repaired miles of pipe. Nearly every day for two months we rewired electrical panels, replaced pumps and test pipes, and pieced the pump station together. Only then did we tackle the task of repairing hundreds of broken water lines.

Along the way, we learned that one senior NCO should be identified as FOB noncommissioned officer in charge (NCO-IC) or "mayor." In our case, the HHC first sergeant fit the bill. The position requires some advanced mechanical and electrical engineering skills. The selected "mayor" must have the unit's support in allocating resources and setting work priorities. Early identification of skilled and trustworthy civilians will save time and money. Creating a small team of skilled salary paid civilian workers is less expensive and more productive than contracting small projects. Hiring local laborers adds to the credibility of U.S. forces within the local population. Do your best to build redundancy in all systems.

Quality of Life

When a soldier has his mind on things, such as laundry, showers, sleeping, eating, and calling home, is he ready fight? Is he ready to patrol a dangerous street in Huryia if he hasn't talked to his wife in 30 days and is only thinking about home? Quality of life has as much an impact on sustainment operations as does maintenance and security.

With some creative ideas and hard work, we took care of our soldiers and provided a relatively high standard of living. The availability of running water greatly improved each soldier's quality of life. Showers were installed in the majority of buildings, and if running water was not possible in a building, then a shower trailer was positioned directly outside the building. Every soldier had the opportunity to shower daily and had several options for laundry. With running water available, they could wash clothes by hand and air dry on the clothesline. As an alternative, soldiers could drop off laundry through a quartermaster-type laundry service monitored by the supply sergeant. We also allowed a local business to set up a laundry service on the camp. Several local vendors were allowed to set up small shops to sell items such as pack-

aged foods, souvenirs, sodas, and movies. One specific vendor repaired, filled, and maintained a swimming pool at no expense to the unit in exchange for allowing him to set up a small shop.

The dining facility (DFAC) building became the center for morale, welfare, and recreational (MWR) activities. Funds were used to buy free weights, televisions, and a stereo system to build a large gym. The battalion chapel and a game room with billiards and ping-pong tables were also located in the DFAC building. Eventually, soldiers had access to internet and telephones in three separate buildings. Two local vendors were allowed to set up "internet cafes" at modest prices, as well as the U.S. Army-contracted internet service. Outside, numerous volleyball courts and basketball courts were constructed. Twice a month, the battalion adjutant coordinated a visit from the finance company to provide soldiers with casual pay. A large civilian bus was turned into a mobile post exchange (PX) that made daily rounds to each unit on the FOB.

The ration cycle for the entire 12 months was A-M-A. While the majority of units received contracted class I support from Kellogg, Brown, and Root (KBR), we cooked hot meals and fed our soldiers. A renovated Iraqi mess served our needs. In addition to normal rations, we supplemented meals by requesting support from our division logistics resupply point (LRP).

Soldiers will work long hours and days on end if they are taken care of. Making quality of life a priority lets our soldiers know we care. It allows soldiers to stay focused while fighting in a dangerous environment, and when they return to the FOB, they can relax and decompress after a day on the streets.

Traditional Combat Service Support

While securing and repairing the FOB and improving the quality of life for soldiers, HHC still had its doctrinal mission to support the task force. As a "legacy force" unit, we had a robust organic support structure. Our deployed strength was 302 soldiers. This included 15 cooks, 54 support platoon soldiers, 27 medics, 15 -30 level mechanics as a maintenance support team, and all MTOE property. Unlike the new Force XXI units using "supply point distribution," we were self-supported. HHC remained on the FOB with all the combat trains. Every day, for 350 days, we organized the trains and convoyed to the brigade support area (BSA) as a logistics package (LOGPAC). Class I, II, III, IV, VIII, and IX, as well as mail, was pulled forward from the BSA.

In a traditional style, the daily LOGPAC was the bread and butter of HHC. Traveling with large convoys 30 kilometers to the BSA through the streets and highways of Baghdad could prove difficult at times. It was extremely important to ensure the LOGPAC was armed and ready to respond to contact. We task organized the support platoon with four additional up-armored high-mobility, multipurpose wheeled vehicles (HMMWVs) armed with .50-caliber machine guns and trained and qualified gunners in the platoon. Every supply truck in the LOGPAC rolled with a .50 caliber in a ring mount. Our LOGPAC looked more like a combat patrol and less like a logistics element. Daily threat briefings, detailed convoy briefings, and good leadership enabled safe and effective LOGPAC operations.

Medical support was provided by our medical platoon. Each line company was task organized with three medics and an M113 for internal medical support. The forward aid station (FAS) and main aid station (MAS) were collocated in a troop medical clinic (TMC). Normal sick call hours were established to deal with routine care. The medics maintained a medical QRF to respond to any serious injury in zone or medical evacuation needed. A concrete helipad capable of hosting four UH60s was constructed to support aerial evacuation. The medical platoon leader resourced an additional front-line ambulance (FLA) that served as the primary medical transport and QRF.

No matter how much you plan, each day will present new challenges for HHC leaders. Daily review of priorities and threat assessments will assist in preparing for the inevitable fragmentary order, so remain focused on the number one priority of force protection and allow your leaders to excel in an extremely demanding environment. The Dakotas never failed to support soldiers and always accomplished their mission.

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Winning from Page 38

These skills also assist in normal encounters, which helps determine the validity of what people tell you and why.

• Train with media!

• Learn Arabic. Iraqis admire soldiers who take the time to learn a little Arabic.

• Train more at lower levels. Most operations in Iraq occur at the section level. Platoon leaders or platoon sergeants led their sections daily, while company leaders conducted their own coordination.

• Train soldiers to integrate other forces. Psychological operations, military working dogs, civil affairs, aviation, and Iraqi security forces became habitual attachments in Iraq.

• Train combative. Restraints and submission holds leave options in escalation of force, prior to using deadly force.

Many times, Iraqis told us that we were the real Muslims. They were amazed by our generosity, righteousness, integrity, and discipline. They only saw this if they let down their guard enough to see through the foreign invader. Iraqis are both proud and ashamed of their nation, their people, and their history. They contradicted themselves constantly with stories of Iraqi betrayal, Muslim pride and virtue, wishes for Saddam's return to restore order, praise for newfound freedoms and amenities, hatred for other religious groups, and relationships that have upended every bit of bigotry they knew. The people can be won over. Former Fedayeen soldiers have come to our side to fight against their former friends simply because they saw firsthand how readily the Americans help Iraqis. The cynic might say this demonstrates just how the Iraqis sway in their loyalties, that you cannot ever trust them. Only time will tell.

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Home Station Observer Controller Training

by Major Bob Molinari

The U.S. Army, while in the midst of fighting a war, is simultaneously conducting a substantial transformation process. As such, not all units preparing to deploy into areas of responsibility (AORs) will have the time or opportunity to rely on combat training center (CTC) rotations to validate home station training prior to mission readiness exercises. As a result, home-station training has become a matter of great importance for deployment preparations.

Home station training must include properly trained and equipped observer controllers (OCs). As an essential training resource and asset, OCs assist units in objectively approaching training exercises, provide meaningful feedback to small-unit leaders, and tailor field exercises to focus on mission critical collective tasks. Commanders and staffs must plan in advance to train and equip OCs to successfully prepare units for combat.

OCs are not limited to force-on-force lane training or field training exercises; they can provide vital feedback in live-fire as well as command post exercises. The OC team must be tailored and focused on the needs of the unit training. The appropriate environment of open and honest communications is essential to maximizing every moment of the training event.

OCs have four primary purposes: replicate battlefield effects and limit the amount of artificiality during training; enforce rules of engagement (ROE); provide feedback to the unit through participative and professional after action reviews (AARs); and act as an additional set of safety eyes during training. These are the baseline requirements; many more responsibilities exist on the path to becoming an effective OC.

A prepared and motivated team of OCs at all command and key staff levels is as vital a training resource as land, ammunition, multiple integrated laser engagement systems (MILES), and opposing forces (OPFOR).

Training Successful OCs

The first step in preparing the OC team is a certification process to ensure OC teams formally understand their exact duties and do not rely strictly on individual CTC experiences. OC teams must be provided with appropriate doctrinal manuals to ensure their comments are not solely based on personal tactics, techniques, and procedures (TTP). A doctrinal review will not make them experts, but added to their personal experiences at the squad, platoon, company, and battle staff levels, will make them a value-added training resource. Internet resources are excellent tools to assist OC preparation. The U.S. Army's Center for Army Lessons Learned (CALL) provides an exceptional website for lessons learned, as well as updates on the latest in-theater TTP. *Companycommand.com* also has excellent lessons learned from recent combat experiences.

OC certification must include collective training on standards for the AAR process, ROE to be enforced, and key events specific OCs must attend, such as platoon/company operations orders (OPORDs), rehearsals, and various meetings. The OC team should be provided with all appropriate unit tactical standing operating procedures (TACSOPS), and understand unit standards for routine operations such as MILES boresighting and pre-live fire checks. Care must be made in selecting individual OCs based on their skill sets and experiences, as well as knowledge of training equipment employment. As a relevant side note, if MILES is to be used, brigade and battalion S3s should schedule daily MILES contact teams to exchange information and troubleshoot deficiencies with MILES equipment.

An initial meeting to gather data and set some ground rules between the unit and the OC team is required. This meeting facilitates mutual understanding of the training exercise and takes the form of a training schedule review, to include location of the training area, mission essential task lists (METL) to be executed, and areas in which the training unit requires OC attention. Counterpart interviews provide an opportunity for OCs and unit counterparts to become acquainted; establish a mutual understanding of the ROE, equipment, personnel issues, and unit strength and weaknesses; and further refine areas for OC focus. Most importantly, the unit establishes areas to which they expect OCs to focus AAR comments. These initial meetings better prepare OC teams to identify cause and effect in unit successes and challenges. These steps are intended to

"The OC team should be provided with all appropriate unit tactical standing operating procedures (TACSOPS), and understand unit standards for routine operations such as MILES boresighting and pre-live fire checks. Care must be made in selecting individual OCs based on their skill sets and experiences, as well as knowledge of training equipment employment."

provide the minimal information an OC needs for success. However, nothing replaces the relationship the individual OC establishes with his assigned unit.

Essential Skills: Interpersonal and Timing

One of the most critical issues that must be addressed is the relationship between OCs and their training counterparts. This relationship must always, obviously, remain professional — a coach, teacher, and mentor — but an effective OC must become a temporary part of the unit. Units that perceive the OC has an ally in preparing for war (versus a doctrinal microscope intended to criticize unit shortcomings) will be more receptive to training comments and more honest with feedback and information. The unit will default to hiding less and keeping OCs informed more.

The OC can only be successful by maintaining a positive, here-for-you attitude, which highlights areas that need greater attention but always focuses on the unit's achievements. The training unit should not feel as if it is being evaluated or graded. The OC must be aware of his role as a training resource and remind the unit that he is there to assist it in becoming better at a few essential METL tasks. Good OCs ask the right questions at the right time and demonstrate their need to assist the unit in performance improvement. Better OCs subtly direct the unit to ask the right questions then discover their own answers. The best OCs accomplish both these tasks while being transparent to the training process. Instead of constantly conducting unit interrogations to find necessary data, they observe the unit from a distance, relying on instinct to validate analysis.

The OC possesses important training advantages. He can observe while not under the pressures of training, such as time constraints and personnel and equipment challenges. As already mentioned, he should have readily available appropriate doctrinal references, as well as a wealth of TTPs to provide feedback. The OC will have situational awareness of the OPFOR plan to develop an early estimate of cause-and-effect observations in the post-mission AAR. Subordinate OCs at squad, platoon, and company levels must provide critical observations and trends for consolidated feedback.

The single most important point that OCs must portray to assigned units is the primary goal of collective improvement. All too often, OCs fall victim to frustration and lose perspective due to hostile or negative relationships with the training unit. False perceptions on the unit's behalf or, worse yet, super egos portrayed by the OC serve only to impede training.

The OC's proficiency to react and interact with training units is more apparent during AARs. The AAR facilitator must strike a balance and remain flexible during AARs by adapting the AAR to individual comments, while maintaining focus and keeping the discussion on track. Though the OC has a set of issues that he feels are most substantive to the unit's performance, he must be willing to amend those issues to what collective unit leaders feel is most important. The best units readily admit challenges and misunderstandings, versus denying training shortcomings and seeing the event as a test. The OC is responsible for gauging the climate of the AAR and using intuition and interpersonal skills to determine how to approach what may be sensitive, personal, or contested observed issues.

In addition to relationships with the unit, timing is important to home station OCs. OCs quickly become unwelcome by demanding answers on arrival or at the wrong time, or by remaining with the unit continuously. Units require time alone to develop plans and struggle through internal challenges. The OC will also need breaks to remain effective. The OC must not supplant the chain of command and become an adjunct higher headquarters available to approve requests, or be viewed as an extension of the inspector general to ensure standards are met. However, the OC must know how to balance times that he needs to be available to provide advice or counsel to the unit.

Events, such as OPORDs, rehearsals, and planning sessions, will almost always require OC presence; however, making oneself available at less-than-frantic times to offer suggestions will benefit the OC-unit relationship. With his knowledge of both the blue forces (BLUFOR) and OPFOR plans, the OC develops his own timeline to attend events. The OC tracks the unit's timeline for the next 24 to 48 hours to provide a template for his timeline. Finally, a closeout meeting toward the end of the training period for any last-minute or potential changes to the plan, as well as establishing a plan for the unit to contact the OC if necessary, is recommended.

Equipping the OC Team

Fundamental planning of OC equipment should center on providing the same capabilities the training unit has, without the combat power. Thus, consideration must be made for command and control (C2), logistics, transportation, training equipment, and individual items.

OC teams must have the ability to monitor the unit's primary FM frequencies. Also, OC teams must have a dedicated internal net to share observations and data exchanges. OCs at task-force level must have communications with OPFOR commanders or representatives. As most units execute battle update briefs prior to mission start, the OC team should have a pre-battle update with company and specialty attachments proving observations, changes to combat power, and significant issues and predictive analysis on where the

unit will succeed and be challenged during execution. The pre-battle brief needs to be in a predetermined, fixed format for efficiency, and should be a two-way exchange of information, rather than a data dump up the OC chain. The pre-battle brief should include OPFOR changes, key battlefield operating systems (BOS) issues, and any necessary guidance from senior OCs. OC teams also need a fixed format to execute post-mission summaries, which include sustains and improves for trend analysis from company and staff observers. Nested AAR timelines for all levels (platoon through brigade), temporary suspension of battlefield effects for AARs, and status of remaining obstacles in sector, as well as casualty evacuation (CASEVAC) and nuclear, biological, and chemical (NBC) training continuation through the AAR process must also be directed to OCs at the post-battle brief. To minimize OC friction, OPFOR, BLUFOR, and OC information must have a nexus at an established OC C2 node.

Training leaders need to allocate resources to establish an OC white cell, or facility, for C2 of the training event. This C2 node captures OC observations, tracks events for the training scenario, collects data from various BOS elements to be documented for future AARs, and serves as a fixed meeting site for OCs, as well as a facility for formal unit AARs. This facility should be well separated from unit C2 nodes to maintain fidelity of the battlefield.

Individual OCs must be equipped with items such as dry erase whiteboards with markers, terrain model kits that replicate unit vehicles and/or personnel, and communications equipment for both mounted and dismounted OCs. Though varying techniques exist, high-mobility, multipurpose wheeled vehicles (HMMWVs) provide OCs an increased battlefield mobility to observe unit activities. In addition to AAR tools and transportation, logistics support of the OC team must not be overlooked or assumed. OC sustainment packages must not be a distracter to unit training and should be executed out of sight and sound from BLUFOR and OPFOR tactical operations.

While addressing the issue of OC tactical posture, OC teams must exercise the same tactical level as the training unit. This minimizes chances for OCs to compromise the unit due to lack of camouflage, noise, or light discipline. Considerations by brigade and battalion S3s must be made for OC driver certification under various conditions, which include no illumination, rough terrain, and maneuvering safely and tactically around train-ing units. Safety risk is made when assuming all officers or noncommissioned officers can safely operate vehicles under less-than-optimal conditions. Exposing BLUFOR positions must be avoided by parking HMMWVs on prominent terrain. The OC must also plan ahead when dismounting to keep a secure tactical posture.

AARs: Applying the Past Directly to the Future

Effective AAR execution is the hallmark of an OC's duties and responsibilities. For formal AARs, one technique is to conduct an immediate "hotwash" AAR when completing a training lane or at mission change. This hotwash establishes the basis for the two or three issues that will be the focus of the AAR. The formal AAR cannot cover everything concerning the mission; there is simply not enough time.

There are several types of AARs executed at CTCs, which can be used at home station training. Counterpart AARs are a post-mission, free-flow conversation between OC and counterpart, which attempt to capture the critical elements that effected mission preparation and execution. OCs must develop a running, informal plan of the agenda for this type of AAR to maintain focus on the two or three issues that need to be sustained or improved for the next mission.

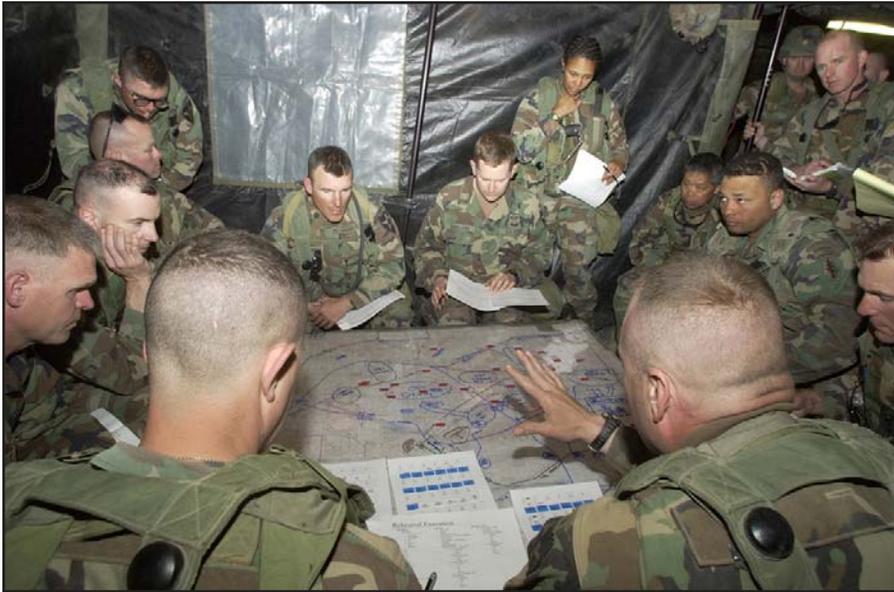"Hummer-top" AARs are next in formality on the scale of AAR types. They include: a posted agenda, AAR rules, and written comments to capture unit key leader observations. A technique for this type of AAR is to inject a doctrinal leader-teach to remind the unit of applicable U.S. Army doctrine that was directly relevant to the mission's outcome.

Another type of AAR is for the OC to prepare the AAR and then turn it over to the unit leader. This AAR process pays great training observation dividends, as the commander or leader knows his unit's strengths and weaknesses. However, caution must be taken for using this type of AAR because the commander must be properly prepared to cover all necessary events. The OC remains the best AAR facilitator as he maintains an unbiased and neutral position.

The final and most formal AAR is the instrumented type, which involves audio-visual equipment and products that better portray time-space relative to the unit, and is the best technique used to focus group thought, as well as review close-to-actual execution details and status. At home station, this could be in a GP medium tent with generator, expando-van, or any fixed site with power sources. Data and observations from OC teams must be provided further out to prepare this particular AAR — the high standard is achieved only through substantial resource and time investment. This does not mean that instrumented AARs are solely reserved for battalion and brigade levels. Platoons and companies benefit just as much from instrumented AARs, but need to be scheduled as mid- or final-training

"One of the most critical issues that must address is the relationship between OCs and their training counterparts. This relationship must always, obviously, remain professional — a coach, teacher, and mentor — but an effective OC must become a temporary part of the unit. Units that perceive the OC has an ally in preparing for war (versus a doctrinal microscope intended to criticize unit shortcomings) will be more receptive to training comments and more honest with feedback and information. The unit will default to hiding less and keeping OCs informed more."

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event summaries. As a closing consideration, OCs make training more meaningful to the unit by capturing photographs of soldiers in action. This allows the unit to better reflect, visualize, and take pride in the training conducted.

While effective AARs ensure all lessons learned are recognized and addressed by the unit, they must not be exceedingly long. Part of the art of being an OC is facilitating and controlling the AAR discussion. A good gauge for how much a unit derives from the AAR is realizing the unit-to-OC talking ratio. The best AARs find the OC facilitating conversations through leading questions, controlling time, and encouraging participation. The goal should be for the OC to talk only about 25 percent of the time, while the unit uses the majority of time for comment. OCs should not use an AAR as a monologue because they retain an almost perfect situational awareness of the training event that just occurred. OCs guide the discussion based on observations in collaboration with the commander's post-AAR hotwash and an added emphasis on recent relevant combat lessons learned from sources such as the CALL website. Simultaneously, the OC must curtail or redirect irrelevant conversations or discussions that do not directly impact the training topic at hand. Do not allow units to blame higher headquarters for training shortcomings. The unit must focus on what it can fix at its level.

The AAR should focus on two or three major issues that contribute to the cause and effect of mission accomplishment of shortcomings. Recommended issues may include: precombat checks/precombat inspections, such as boresighting, packing lists, or soldier load; graphics as part of planning/execution; rehearsals; OPORD; logistics; time management; knowledge/employment of ROE; actions on contact; actions on the objective; integration of mounted/dismounted forces; echeloning fires; and transition from movement to maneuver.

An awesome way to start a great AAR is for the OC team to recognize soldiers who distinguished themselves during the mission and set an example for others. The AAR starts off with an agenda and rules. The rules establish an environment where all members state what went wrong or right, while remaining worry free of making personal attacks. The rules should also stipulate that the AAR belongs to the unit and the unit will be rewarded for their contributions. Finally, emphasis in the rules should be made to individual participants taking notes, lest hard earned training lessons be lost. Next, the OC AAR facilitator should review the training event briefly from beginning to end to refresh recent memories.

The OPFOR mission and execution is important in allowing units to realize what they did or did not know about their adversary. An effective technique is to have the enemy commander available to brief his version of the battle. The OC then moves to discuss the two or three major areas on which the AAR will focus. Major AAR issues must allocate time for AAR participants to comment and debate collective solutions. The OC must focus participants on what exactly happened, why it happened, and what can be done to sustain or fix it for the next mission (whether training or combat). The standard must be to avoid differentiating between how the unit performs the mission during training versus how the unit will execute the mission during combat. Both must be the same or the training is artificial. Each AAR participant should identify one task he is going to fix and how he will fix it at his level. The AAR concludes with knowledge of the next mission or training event, discussing safety observations/trends/considerations, and finally, the unit leader provides final comments on the training event.

The OC team should consolidate overall training observations for the unit at the completion of training. This should include unit successes and challenges at all levels and doctrinal references with OC TTPs for the unit to review and consider in adjusting TACSOPS or preparing for future training. Final AARs at all levels focus on improving existing SOPs or creating new ones to ensure soldiers understand their part in tactical operations.

Serving as an OC can be one of the most rewarding experiences a soldier can have. It affords the OC an opportunity to watch and learn from mistakes and accomplishments and puts more tools in his professional kit bag. Simultaneously, the training unit benefits from a neutral set of eyes and a better understanding of collective planning and execution. Brigade and battalion S3s that plan to properly prepare and equip OCs take home station training to a higher level in preparing for combat operations.

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Leadership and Command Philosophy

by Brigadier General Philip L. Hanrahan

A leader must develop a leadership philosophy. Such a philosophy applies to both noncommissioned officers (NCOs) and officers. In theory, this philosophy should apply to all our actions as leaders whether or not we are in a command position. A leader is privileged to lead and command and his philosophy guides his actions and conduct and provides a philosophy and guidance for the entire organization and its soldiers.

Individual leader philosophies tend to evolve over time as leaders move through their military careers and serve at different command levels. A leader should also realize that over time the Army evolves as society evolves. However, the core of our philosophy should remain the same and be "refined" as time passes.

As a young second lieutenant leading a tank platoon, my philosophy was simple. It consisted of three points: lead by example; accomplish the mission; and take care of soldiers. Today my philosophy of leadership and command has evolved to five points: lead by example; accomplish the mission by training and maintaining to standards; take care of soldiers and their families; conserve resources; and have fun.

A quarter-century ago, having fun was not a specific consideration. A tank platoon leader's assignment, by its very nature, was a fun job, while at the same time frustrating and challenging. Twenty-five years ago, the focus on families was not as serious as it is today. If any attention was paid to families, it was lip service. As a second lieutenant, resources were not a great concern. We operated under the naive assumption that "the Army will not let us run out of money." Today, we know this is not the case and training opportunities are often driven or limited by resource availability.

Each leadership philosophy applies to all leaders, regardless if they are Active Duty, Army Reserve, or National Guard. In today's Army, many of us will serve in two or more of these components during the course of our military careers.

Lead by Example

Leading by example appears to be a simple concept, but is more complex than realized. Leading by example involves every aspect of a leader's actions, whether officer or NCO, and begins with a leader's physical appearance such as a standard haircut, proper uniform wear, and military courtesies. When a soldier is not meeting standards regarding military courtesies or proper uniform wear, leaders have the obligation to make on-the-spot corrections.

Leaders should participate in physical fitness training and test with their soldiers. Leaders should always try to "max" the Army Physical Fitness Test (APFT) — if that's just not realistic any more, be out there with your soldiers doing physical training (PT) and leading from the front. For leaders, the standard is not the minimum; the standard should be to strive for a "max" on each event of the APFT. On a related note — you can meet the standard for height and weight if you can pass the tape test; however, the goal for leaders should be to make the table weight and not the tape weight. Training with your soldiers should not be limited to PT; leaders should strive to be technical and tactical experts in their chosen fields, whether administrative or artillery.

"Expert" qualification with individual weapons or as a member of a tank or Bradley crew should be the standard for leaders. As leaders advance in rank and experience, their technical- and tactical-expert areas evolve as the nature of assignments change and leader's role evolves. However, the critical point remains that leaders should master the elements of each assignment in which they serve — sometimes this expertise comes from attending an institutional school and other times through self-study and the "school of hard knocks."

Leaders set the standard of dedication to the job, to the unit, and to the soldiers with whom they serve and work. Leaders put in the time to get the job done and done to standard. For example, when a National Guard or Army Reserve soldier assumes a leader position, they do the
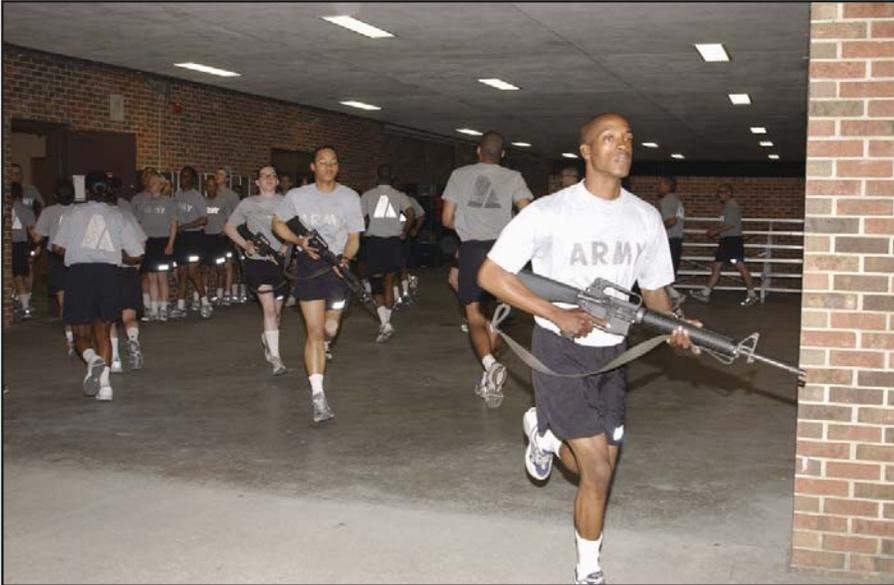
"Leaders should participate in physical fitness training and test with their soldiers. Leaders should always try to "max" the Army Physical Fitness Test (APFT) — if that's just not realistic any more, be out there with your soldiers doing physical training (PT) and leading from the front. For leaders, the standard is not the minimum; the standard should be to strive for a "max" on each event of the APFT."

"No one is born knowing how to operate a Bradley Fighting Vehicle or how to zero an M16A2 rifle. These are learned skills, and the training begins during basic training, participation in the Reserve Officers Training Corps, or on enrollment in a military academy. The Army bases its training on tasks, conditions, and standards."

job regardless of whether or not there is money to pay them for the duty. In other words, it is not just a two-day-a-month, two-weeks-in-the-summer assignment.

In an ideal world, leaders are the first to arrive at work in the morning (or on drill weekend) and the last to leave in the evening. Leaders set the standard in conduct while on and off duty. Leaders must not do improper things and should avoid the appearance of impropriety. Even if something is technically "legal" or "correct," soldiers may perceive it as wrong. Sometimes, these things are easier said than done, but our real moral fiber is tested by what we do when no one is watching.

Accomplish the Mission by Training and Maintaining to Standard

The next component of the leadership and command philosophy is to accom-

plish the mission by training and maintaining to standard. Mission accomplishment depends on how well soldiers know their "craft." No one is born knowing how to operate a Bradley Fighting Vehicle or how to zero an M16A2 rifle. These are learned skills, and the training begins during basic training, participation in the Reserve Officers Training Corps, or on enrollment in a military academy. The Army bases its training on tasks, conditions, and standards.

Once we complete our basic military training, too often we cut corners during training and "bend" the standard. How many times have we not had the correct type or amount of training aids, the correct student-instructor ratio, or enough time? Everyone wants to get through daily training, so we cut corners and save time in the short run, but cost lives in the long run.

The biggest problem in the training area is that we do not assign classes far enough in advance for the instructor and alternate instructor (yes, we should always have an alternate instructor) to prepare for class, and often lack resources for instructors to properly prepare the class or block of instruction. These missing resources range from a shortage of manuals to a lack of training areas or ammunition.

The Army has done a great job in preparing programs of instruction (POIs) and lesson plans that outline the task, conditions, and standards for training; required

resources; and curriculum. The Army has established schools and courses to teach soldiers how to present effective instruction; however, it a leader's responsibility to identify instructors and students well in advance of training and provide resources (time and materials) to ensure classes are taught to standard. Training is too important not to train to standard. Leaders need to attend training, both to learn what is being taught and to ensure it is taught correctly, "by the book," and to standard.

Following training, an after action report (AAR) is critical. An AAR review reveals what went right, what went wrong, and determines areas in which the unit could improve. Writing down AAR results, placing them in a file, and reviewing them immediately before the next training cycle will help units avoid making the same mistakes.

The same applies to maintenance training — we either fail to train or do not train to standard. Technical manuals outline how to safely operate and maintain all types of equipment ranging from protective masks to Blackhawk helicopters. Not only do leaders have to make time on the training schedule to perform maintenance, they need to be involved with the training, whether it's at the motor pool, arms room, or nuclear, biological, or chemical (NBC) cage. Leaders have to get their hands dirty as well — equipment must be maintained or the unit cannot train.

Accidents will happen during training — we train skills that involve risk and danger. For example, if we are going to fight at night, we have to train at night; if we are going to fight in an NBC environment, we have to train in an NBC environment. Leaders have an obligation to conduct a risk assessment before and during training to identify risks associated with training and take necessary measures to minimize risk, while simultaneously maintaining realistic and valuable training. These measures could range from conducting safety briefings and increasing leader supervision to adding safety officers and assistant instructors.

Take Care of Soldiers and Families

The Army spends a lot of time and money recruiting soldiers. Taking care of soldiers begins before they report to their first duty assignment. It begins with sponsoring the soldier and his family. New soldiers should get sponsorship letters signed by the company commander and first sergeant as soon as they are identified as being assigned to the unit. If possible, selected sponsors should live close

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"When we talk about conserving resources, we are not just talk-ing about money. Time, soldiers, ammunition, and training areas are all resources that we should conserve. Good detailed ad-vanced planning and following the Army's training system and procedures help us plan and execute good training and save time. Properly managing time, training areas, and soldiers will con-serve these resources and improve unit readiness and morale."

to the new soldier and be of similar age and marital status. The sponsor should contact the new soldier before drill or be-fore the soldier reports to the unit and make sure the soldier knows where to go and what time to report to the unit. The sponsor should make sure the soldier com-pletes inprocessing during the first drill. Each member of the company chain of command should meet and talk with the new soldier. During the new soldier's first formation, he should be introduced to the unit — it is during this first day that the soldier will draw his first impression of the unit.

One of the most central ways to take care of soldiers is through formal and infor-mal counseling and mentoring. This pro-cess begins with the commander and first sergeant interviewing the soldier during inprocessing and should continue period-ically during the soldier's career. In most cases, this is one area in which leaders can and must improve. All too often, we only counsel soldiers when they do some-thing wrong or fail to do something they should have done. Soldiers need to know what is expected of them and leaders have an obligation to keep them informed on how they are doing — *before* they are given a formal evaluation report. Lead-ers have a tendency to overlook the ne-cessity to both positively and negatively counsel soldiers.

Taking care of soldiers continues every-day thereafter until the soldier retires from the Army. Feeding soldiers and making sure they have billets is but a small piece of the puzzle. Getting the soldier paid timely is another critical element of this process. Recognizing the soldier for pos-itive accomplishments through a fair and active awards program is another aspect of this process. Timely promotions for

deserving soldiers are an-other way that we as lead-ers take care of soldiers. Leaders also have an obli-gation to provide soldiers meaningful and challeng-ing training so they have the skills and confidence to sur-vive on the battlefield and win America's wars and conflicts. Providing soldiers with necessary resources to train, including ammo, ve-hicles, and training areas, goes a long way in taking care of soldiers.

Leaders are responsible for taking care of families, which begins with the com-mander and first sergeant interviewing the soldier during inprocessing. Leaders need to learn about the soldier's family during this interview, not just the family mem-bers' names and ages, but also their hob-bies, interests, and special needs. Ensure family members have identification cards and access to military medical care. Brief-ings and access to the judge advocate gen-eral for wills and powers of attorney are a part of taking care of families and sol-diers. Family members need to be made aware of their privileges and benefits, as well as unit activities. A unit newsletter can accomplish this, provided it actually gets delivered to the spouse and not just to the soldier. Family day activities are another way to get this information to families. Holiday meals and dining-ins are other ways to get families involved. An active family readiness group can be a real "force multiplier" in this area.

The old saying is true, "we enlist soldiers and we reenlist families." Leaders have to take care of soldiers and their families, if we are to establish and maintain suc-cessful units.
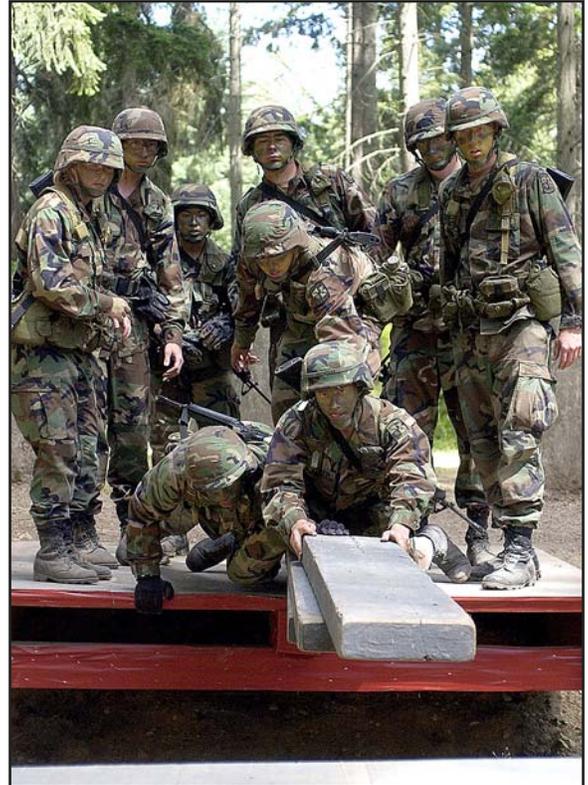
Conserve Resources

As leaders, the idea of resource conser-vation does not enter into our thought pro-cess. For too long, soldiers and leaders have assumed that we can spend all the money we have and go back to higher headquarters for more because "the Army will not let us run out of money." Year af-ter year, especially during the end of the fiscal year, there is suddenly more mon-ey than we can spend. We schedule work-shops, meetings, conferences, buy sup-plies, computers, and other equipment just to use up the money. "Use it or loose it" is the implied message. In large measure, this situation comes about because we have been "good stewards" of our money for the first three quarters of the year. Spending 50 percent of our financial re-sources during the fourth quarter is not the best way to run an organization.

When we talk about conserving resourc-es, we are not just talking about money. Time, soldiers, ammunition, and training areas are all resources that we should con-serve. Good detailed advanced planning and following the Army's training sys-tem and procedures help us plan and ex-ecute good training and save time. Prop-erly managing time, training areas, and

soldiers will conserve these resources and improve unit readiness and morale.

Supply accountability and discipline are also a part of conserving resources. If we do not maintain good equipment records (and maintain that equipment), we may not have equipment with which to train and, in some instances, be forced to purchase replacement equipment. We have to protect our training environment and training areas. For example, oil spills have to be avoided; however, when they do occur, they must be promptly cleaned up and reported. Streams in training areas cannot be polluted, and we cannot take home cactuses from desert training sites. If training areas are not cared for, there is always the possibility of losing the privilege to train in some areas. Keep in mind that violating environmental statutes can result in fines and penalties.

Resource management is the responsibility of leaders at all levels. As soldiers, we are also taxpayers and should be concerned that the military is using its resources wisely. During the planning process, consider resources to ensure training is conducted to standard in the most effective and cost-efficient fashion.

Have Fun

All work and no play is not the way to run a unit. This is certainly not to say that being a soldier is a game or a joke. What soldiers do is deadly serious. They do not "play war" or "play army" on the weekends, or "go to summer camp." Soldiers are trained to do America's business. It is a tough, demanding, and deadly business. However, it is important to work hard and play hard — soldiers are volunteers, they joined the Army for various reasons, and have their own reasons for staying. If assignments are not "fun," soldiers will not stay in the Army. "Fun" does not mean the assignment is not tough or demanding. In fact, tough training is fun. When soldiers train to do the job they enlisted for and the training is done well, that training is fun. Soldiers may complain how cold, wet, and miserable they are, but when the training is done, these shared "war stories" build moral and esprit de corps.

Training can be fun by incorporating individual, squad, or crew competition, such as disassembling and reassembling weapons the quickest, which cook can prepare the best dessert, or which company has the highest average APFT score. These are easy competitions to set up and easy ways to build morale. Award trophies, gift certificates, or maybe even a savings bond to the winners. Sometimes a certif-

icate of commendation printed on a laptop computer is enough to award a job well done. Having a plaque in the company or battalion headquarters building for the top junior enlisted soldier, NCO, and company grade officer. Establish a "top gun" program for your best Bradley or tank crew. Making training fun is one area where leaders are limited only by their creativity. A variety of physical training activities will have a positive impact on morale, such as a company running in uniform, in formation, with the American flag and unit colors out front as part of a local 10K race will make you, your unit, and spectators hold their heads a little higher, not to mention the fact that such activities also have recruiting potential and help increase community awareness of the Army.

All of us need to keep our sense of humor (or to develop one). When things are not going so well, sometimes a joke will break the stress and tension, which allows us to refocus in the right direction. Remember, when it stops being fun, soldiers will stop being soldiers. It is not just money that motivates soldiers; it is camaraderie, meaningful training, and a positive, caring environment that motivates soldiers to do their best for their unit, their country, and themselves. It is our job as leaders to establish and maintain such an environment, and humor and fun are vital components of such an environment.

Many, if not most, leaders already have developed their own leadership and command philosophies, and many of the above elements are implicit, if not explicit, parts of such philosophies. For leaders who do not have a philosophy of leadership, I hope this article provides a framework to help you develop a philosophy. For those leaders who have leadership philosophies, perhaps this article will help you refine your philosophy.

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verbial fear of preparing to fight the last war. We can and should look to past examples and recent trends in mounted warfare, such as those provided by Israel, as we continue to become the Army of tomorrow.

Notes

[1]Information at *http://www.tau.ac.il/humanities/archaeology/megiddo/introduction.html,* accessed January 2004.

[2]Christopher Bellamy, *The Evolution of Modern Land Warfare*, New York, Routledge, 1990, p. 7.

[3]Werner Keller, *The Bible as History*, New York, Bantam Books, 1982, pp. 187 and 215.

[4]Chaim Herzog and Mordechai Gichon, *Battles of the Bible*, New York, Random House, 1978, pp. 55-56.

[5]Keller, p. 215.

[6]Trevor N. Dupuy, *Elusive Victory: The Arab-Israeli Wars 1947-1974*, Garden City, NJ, Military Book Club, 1978, p. 51.

[7]Bellamy, p. 8.

[8]Dr. Christopher Gabel, lecture at the Military History Instructor Course, Fort Leavenworth, KS, January 2004.

[9]Dupuy, p. 584.

[10]Tom Donnelly and Sean Naylor, *Clash of Chariots: The Great Tank Battles*, New York, Berkley Books, 1996, p. 210.

[11]Abraham Rabinovich, *The Yom Kippur War: The Epic Encounter That Transformed the Middle East*, New York, Schocken Books, 2004, pp. 508-509.

[12]General Donn A. Starry, "To Change an Army," *Military Review*, U.S. Army Command and General Staff College, Fort Leavenworth, KS, March 1983, p. 6.

[13]Rabinovich, p. 509.

[14]Robert M. Citino, *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare*, Lawrence, KS, University of Kansas Press, 2004, pp. 255-262.

[15]Ibid.

[16]Citino, p. 185.

[17]Colonel Kevin C.M. Benson, "Thoughts on Restructuring Army Brigades," *ARMOR*, May-June 2004, p. 23.

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is among the greatest strengths of our transformation.

The second issue is the brigade mortar platoons being consolidated with the fires battalion. While the fires battalion could easily accommodate the span of command, control, and resupply requirements associated with a consolidation, this seems to directly contradict what the HBCT was designed to do. The CAB is organized to train, deploy, and fight with minimal task organization or additional assets required. The mortars are a critical part of that equation. MG Valcourt is correct in his view of the mortars as "sacred." They are an integral part of the battalion and are personally connected to those they support. It is this personal connection and sense of responsibility that drives mortar crews to place effective fires just a little faster. Again, creating conditions where we train and "live" in our fighting formations is the most preferred option.

MG Valcourt's article highlights some of the great changes his branch is making to support transformation. While there may be room for discussion, his opening and closing statements could not be truer: Armor, Infantry, and Artillery are a team.

DAVID A. MEYER
MAJ, U.S. Army

Train As You Fight, Fight As You Train!

Dear *ARMOR*,

On 10 January 2005, while patrolling in Samarra, my M1114 was struck by an improvised explosive device (IED). The IED was a command-detonated 155mm artillery round lying beside the road. The round detonated between my up-armored high-mobility, multipurpose wheeled vehicle (HMMWV) and a Nissan pickup truck carrying Iraqi army soldiers. Both vehicles were within ten meters either side of the blast origin. Two Iraqi army soldiers were killed and one wounded. A fragment, weighing approximately two pounds, struck the windshield directly in front of my face. The impact knocked my hands off of the steering wheel and stuck glass frags in my face. The gunner was riding low between his side shields and had his helmet gouged.

Because of the up-armored HMMWV, I am able to write this letter. Because of eye protection, I am able to see the keyboard. Because of proper training, I was able to function after the blast and exit the kill zone, positioning the vehicle to cover recovery operations. The other soldiers in the vehicle and behind us rendered first aid, returned small arms fire, and evacuated the casualties and damaged equipment.

It is our responsibility as officers and senior noncommissioned officers to ensure we have done everything in our power to properly train, equip, and lead subordinates. No detail is too minor. No training is unimportant. That same day, a major used combat lifesaver skills to keep a wounded soldier alive. A staff sergeant coordinated a quick reaction force over the radio. A captain operated a .50-caliber machine gun. You never know what job you will have to perform when the time comes. Stress this to all your soldiers. Be prepared to do everything you have been trained to do competently, immediately, and without hesitation. Your own or someone else's life may depend on it.

Soldiers must be mentally prepared to overcome fear and anxiety, to face adversity day after day. Two days earlier, I was in the same M1114 when two 155mm rounds were detonated a few feet from the passenger side door that I was sitting on the other side of. The blast went straight up. Proper training and preparation allowed us to react to the ambush, exit the kill zone, and effectively return fire against the enemy. Your soldiers must be mentally prepared to face adversity day after day and to overcome fear and anxiety. TRAIN AS YOU FIGHT, FIGHT AS YOU TRAIN! If you are not, start right now.

PETE MUCCIARONE
MAJ, U.S. Army

Commander's Perspective on Stryker Is Off the Mark

Dear *ARMOR*,

My compliments on much of LTC Jeffrey Sanderson's article, "Transformation: A Commander's Perspective," from the January-February 2005 issue of *ARMOR*, concerning his observations on warfighting focus, training safety, and development of flexible and adaptive leaders. However, his suggestions on collapsing the branches and specialization by type of unit are widely off the mark, especially his perspective on Stryker.

There may very well be three unit of action (UA) organizations — heavy, Stryker and light infantry — but there are only two *types* of maneuver forces, "heavy" and "light," formerly known as "armor/mechanized" and "light infantry," respectively. Conceptually, doctrinally, operationally, and tactically, Stryker is simply another platform for mechanized infantry, just like the Bradley Infantry Fighting Vehicle, the M113 armored personnel carrier, and the armored halftrack.

Stryker UA's claim to being an interim version of Future Combat System (FCS) applies only so far as its communications architecture is concerned. All legacy systems, such as the Abrams, Bradley, and M113, will operate side by side with the Stryker. As advanced digital capabilities migrate into these legacy units, Stryker's uniqueness is already vanishing.

The supposed complexity of the Stryker company organizationally and conceptually differs little from its World War II counterpart, the halftrack-equipped armored infantry rifle company. The 1943 company had three infantry platoons, each with three rifle squads, a light machine gun squad, and a 60mm mortar squad. The company also had an antitank platoon of three gun squads, as well as a headquarters section, maintenance section, and admin/mess/supply section. That gave the company commander nine rifle squads, three machine gun squads, three mortar squads, and three antitank gun squads divvied up among 20 armored carriers (halftrack), two cargo trucks with trailers, three Jeeps, while fully prepared to accept attached platoons of tanks and tank destroyers if available.

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

Former Commander Believes Aviation Should Be Left to the Air Force

Dear *ARMOR*,

I read, "Transformation: A Commander's Perspective," by LTC Jeffrey Sanderson, in your January-February 2005 issue, with approval, moving enthusiastically from topic to topic: Focus on Warfighting, Not Housekeeping; Training Safety to a Higher Live-Fire Standard; Developing Flexible and Adaptive Leaders; and Transforming Institutions. And, the last topic, Transforming Institutions, caused me to pause. His solution of collapsing the branches so he can select "Captain Jones to command an infantry company, a tank company, or even a field artillery battery" sounds like a cavalry troop commander serving in the Army of the 1960s in three cavalry units: airborne, 2/17th Cavalry, 101st Airborne Division, Fort Campbell (1965-1966); air, A Troop, 7/17th Air Cavalry, Vietnam (1967-1968); and 1/2d Armored Cavalry Regiment, Germany (1968-1970). This type of multiple-skill-set leader was in the cavalry that I remember in the 1960s. The solution is simple: more cavalry troops with a mix of tanks; Bradleys for scouts and infantry squads; organize mortars and engineers; and extend the training time for lieutenants and captains who lead cavalry troops in future fights.

I was troubled by LTC Sanderson's cursory view of aviation. One sentence, "The critical component of Army aviation somehow fits into this model, and with some mental energy, we can figure it out." From my perspective, and having served as a ground commander and aviation commander as aero-scout platoon commander (OH-6A), as an armored cavalry troop commander, a heavy lift (CH-54) platoon commander, an air ambulance medevac commander (UH-1H), a combat aviation battalion commander, and a brigade commander with aviation, engineer, maintenance, combat support, and supply and service battalions, the ground commander just doesn't understand the critical component of Army aviation. It requires too much mental energy. My simple solution is to transfer all U.S. Army aviators and their magnificent flying machines to the U.S. Air Force. Rucker Air Force Base sounds good to me. I like simple solutions, which is why I am a country lawyer in a three-lawyer county in Kansas.

CHARLES R. RAYL
COL, U.S. Army, Retired

New Equipment Is Definitely a Combat Multiplier

Dear *ARMOR*,

This is in response to CPT Francis Park's article, "Advanced Infantry Optics and Their Future in Armor," in the January-February 2005

issue of *ARMOR*. CPT Park hits the nail right on the head regarding cavalry and armor units using this new equipment. Based on my own experiences, one major issue with fielding and using this equipment has been leaders in the armor community. The "I'm-not-infantry" mentality has run amok in this community for a long time. Many times in the past, I was told I did not need such equipment because it was too expensive or because I wasn't infantry. I spent the majority of my time in light and airborne units, so I understood the importance of marksmanship, especially when dismounted.

I was an armor task force scout platoon sergeant when my battalion deployed to Iraq. Prior to my platoon's deployment, I went online and got information so that I could get a few advanced combat optical gun sights (ACOGS), AN/PAS-13 thermal weapons sights, backup iron sights (BIS), and some other equipment that would increase our chances of success. I was told that the ACOGS and PAS-13s were too expensive and as far as the BIS, my request was "lost." Later, my platoon was offered the opportunity to do some military operations in urban terrain (MOUT) training with a team from the 10th Special Forces Group. My commander told me that MOUT was not on my mission essential task list (METL) and that he saw no real need for my platoon to do this training. The battalion commander told me that I would never clear a building for him; that is why the infantry is attached to our task force. I trained my platoon on close-quarters marksmanship reflexive fire and any other tasks that were not historically organic to scouts. All the

training we did, we used during our year in Iraq.

I later discovered that my platoon had M145 machine gun optics (MGO), M68 reflective sights (aimpoint) — a.k.a., close combat optics. My noncommissioned officers were unfamiliar with the optics; apparently, the former platoon sergeant had no interest in using the new equipment. He assumed the main gun optics would be broken or damaged by the soldiers, so they were not used. The armorer was told not to let anyone know the optics were even in the armsroom. When I discovered them, I immediately scheduled a range and took the platoon out to train. I worked with the platoon on M68s. Many soldiers were uncomfortable and did not completely grasp the concept of how they were to be used. U.S. Army Field Manual (FM) 3-22.9, *Rifle Marksmanship M16A1, M16A2/3, M16A4, and M4 Carbine*, was not yet available, so it took the platoon members time to get up to speed. The M68s that were not used by my platoon members began popping up on other weapons in the battalion. If my platoon was not thoroughly trained on them, then I knew others were not — they just thought the M68s looked cool on the M4.

A week before we deployed, my platoon received six PEQ-2A laser-aiming devices. Great equipment, but there were no manuals included and the infantry companies had already sent their equipment, so it was difficult to neutral zero or obtain a true zero with the M68s, as well as the PEQ-2As. Near the end of our

tour in Iraq, we finally received PAS-13s, more PEQ-2As, surefire tactical lights, and a much-needed borelight laser. We were finally able to properly neutral zero the PEQ-2As and the M68s. The borelight provides a neutral zero and removes shooter error, and even with dot sights, eye relief, both the distance and angle at which you look through the sight, is a factor. There are no "zero ranges" in combat, and simply put, if you use it properly, you will always hit the lethal zone. Once all weapons were neutral zeroed, they were night tested at the small arms range on our forward operating base — my platoon loved the new equipment.

While deployed, I was able to obtain and print chapters of FM 3-22.9. That, along with a good friend who was a first sergeant observer controller at the Joint Readiness Training Center, enabled me to design a marksmanship training program, based on the one used by the 75th Ranger Regiment, to improve marksmanship skills. FM 3-22.9 is excellent; it gives detailed info on all the new equipment currently in use. Leaders need to get smart on new equipment and do a little homework before introducing it to platoons.

The "death-before-dismount" mentality is a thing of the past and soldiers in our community, whether scout or tanker, need to understand that the battlefield of today and tomorrow may not be linear, as they were historically. The new equipment is definitely a combat multiplier. So the sooner we get more senior leaders to realize soldiers need these new items, they can begin to work the issue of obtaining more ammunition, to include more firing tables in small arms programs. One way to elevate the ammo issue is to rely heavily on dry firing to build muscle memory, which can be done anytime, anywhere. Solid muscle memory is key to becoming proficient shooters. Great article Captain Park; hopefully, it will ignite a spark and get leaders in our community to focus on other aspects of warfighting.

JEROME DINGLE
SFC, U.S. Army

**USMC Vietnam Tankers Association
To Hold 2005 Reunion in August**

The U.S. Marine Corps Vietnam Tankers Association will hold its 2005 reunion from 17 August to 21 August 2005 at the Doubletree Hotel Philadelphia, 237 South Broad Street. For room reservations, call (215) 893-1600. Points of contact for the reunion are Dick Carey (508) 477-5957, e-mail: *usmcvta@comcast.net* or John Wear (215) 794-9052, e-mail: *johnwear@comcast.net*

**4th Infantry Division Association
To Hold National Reunion in July**

The National 4th Infantry (IVY) Division Association will hold its national reunion from 17-23 July 2005. For more information, please contact Gregory Rollinger, 8891 Aviary Path R-66, Inver Grove Heights, MN 55077; or visit *www.4thinfantry.org*.

The New Cavalry Leaders Course

The challenges of the U.S. Army's force modular redesign are upon us and we are addressing necessary changes with the grim, professional determination of an Army at war. Our Army's efforts to make units of action (UA) a reality have demanded fundamental shifts in our thinking about how brigade combat teams (BCT) are organized and how they are expected to fight. The role of Cavalry has not been spared this reexamination. One of the latest efforts to ensure the officer education system at Fort Knox remains current and relevant is the Armor School's recent redesign of the Cavalry Leaders Course (CLC).

As we change our force structure, we must also reconfigure assumptions about who should attend the CLC. The combined arms philosophy that underpins the logic behind creating these units of action demands that all officers, regardless of branch, assigned to BCT (UA) planning staffs or reconnaissance squadrons within these brigades, should understand reconnaissance and security operations. Leaders who attend CLC are

provided with the in-depth knowledge of reconnaissance and security, as applied to the new reconnaissance squadrons found in the heavy BCT, Infantry BCT, and Stryker BCT. The CLC accomplishes its learning objectives through challenging practical exercises that test and hone students' understanding of the latest doctrine; tactics, techniques, and procedures; organizations; missions; capabilities; and limitations of reconnaissance, surveillance, and target acquisition (RSTA) and reconnaissance squadrons.

The Armor School at Fort Knox encourages CLC enrollment for all officers serving in armor, infantry, field artillery, engineer, aviation, military intelligence, and signal corps branches. Officers in these branches should attend CLC to prepare for assignments in support of RSTA and cavalry organizations. Attendance at CLC is currently open to any graduate of any officer career course ranking in the grades of first lieutenant (promotable) through major. Enrollment is available through the Army Training Requirements and Resources System.

Survey Feedback from the Force Drives the Evolution of Initial Entry Training in 1st ATB

Commander
COL James K. Greer

Command Sergeant Major
CSM David L. Morris

Soldiers of Steel

As professional soldiers and warriors, it is our duty to keep track of ongoing operations and assess how the contemporary operational environment (COE) impacts training. In the past year, we have worked hard to develop new and relevant programs of instruction (POIs) for 19D and 19K one-station unit training (OSUT). Feedback from commanders in the field and incoming cadre continue to be our most vital resource for training development. Incorporating Warrior Tasks and Drills into basic combat training and OSUT guide our efforts as we continue to shape initial entry training (IET) in support of our Army at war.

Annual Field Surveys. The 1st Armor Training Brigade (ATB) conducts annual field surveys to gain empirical data and conduct trend analysis on its training effectiveness. This year, for the first time, the annual field surveys on the performance of new 19D and 19K soldiers are available online only. These surveys provide the Armor School and the 1st ATB with vital feedback from commanders in the field so that we can enhance training realism and relevancy to the COE. Our mission is to provide the force with highly trained, intelligent, and combat-ready soldiers. The critical surveys can be found at the links below. Please take the time to provide us with thoughtful and accurate feedback. We need your help to better train the soldiers you will receive.

Training initiatives over the past 12 months. Over the past 12 months, 1st ATB has redesigned 19D and 19K OSUT with new training tasks to maintain relevancy, incorporated urban operations training, and transitioned from hand-to-hand combat to Army combatives. Through the use of unused buildings, the brigade has created an urban operations site to train all soldiers on dismounted operations. We have added wrecked civilian vehicles to the Advanced Driving Course to enhance driver proficiency in restrictive terrain.

The most significant change to the 19D OSUT POI eliminates the Scout Skills Tests (SSTs) and replaces them with Field Training Exercises (FTXs), which include tactical driving for both the Bradley and high-mobility, multipurpose wheeled vehicle (HMMWV), and increased call for fire and land navigation training. We also adapted the 19K OSUT POI to include firing the M4 carbine and M9 pistol from the hatches of the Abrams, increased combat patrolling during two additional FTXs, and added additional engagements with the loader's M240.

We are focusing on redesigning the conditions of each training task to reflect the COE. Gone are the days of the sterile testing station — today's troopers and tankers are tested while they conduct multiple tasks in a field environment. Sol-diers now deal with media, civilians on the battlefield, and improvised explosive devices (IEDs). They live in a forward operating base and wear body armor during training. Many of these initiatives have come directly from armor and cavalry leaders who want to help better prepare new soldiers for battle.

The road ahead. Over the next twelve months, we will fully incorporate the Warrior Tasks and Drills into 19D and 19K OSUT, which will increase weapons proficiency by allowing all IET soldiers to fire the M240B, M249, M2 .50-caliber, and MK19 using the AN/PVS-4, AN/TVS-5, AN/PAS-13, AN/PEQ-2, and AN/PAG-4, as the equipment becomes available for training. In February 2005, all OSUT units began executing a convoy live fire exercise. The 19D OSUT executes the convoy live fire exercise with M1025s, M998s, and M923s (five tons).

Implementing the weapons immersion program, issuing Soldiers In Training personal weapons for weeks at a time, will give new scouts and tankers greater weapons familiarity and confidence. Newly improved first aid training allows soldiers to arrive at units already trained in chest decompression. Unexploded ordnance and IED training will continue to be trained during dismounted IED lanes, and incorporated into mounted operations, drivers training, and FTXs.

Please send any additional comments to Mr. Jeffrey Cathcart, Training Technician, S3, 1st Armor Training Brigade at *jeffrey.cathcart@knox.army.mil*.

SOLDIERS OF STEEL!

Leader Field Survey Links

19D10 OSUT
https://secure.armyqualityjobsurveys.com/copies/index.asp?survey=ENL_19D_OSUT_Feb05

19K10 OSUT
https://secure.armyqualityjobsurveys.com/copies/index.asp?survey=ENL_19K_OSUT_Feb05

**You can also visit the 1st Armor Training Brigade website at the link below
and select "19D OSUT" or "19K OSUT" under the "Field Surveys" section**

http://www.knox.army.mil/school/1atb/

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