

# The Mounted Close Combat Battalion

## *Operations and organizations to exploit future capabilities*

by Colonel John F. Kalb and Christopher T. Mayer

In October 1973, the effectiveness of antitank guided missiles took the world by surprise. Although the precision and long range of weapons like TOW, the SS-11, and SAGGER were well known before the October War, the way they would change armored combat was not. Today, there is a new generation of long-range weapons. These include the Russian AT-10 and 11, the U.S. Hellfire and the Hellfire-like VIKHR, and international near-brilliant systems like Bussard and Strix. Other systems under development include Enhanced Fiber Optic Guided Munitions (EFOG-M), Line-of-Sight Anti-Tank (LOSAT), Tank Extended Range Munitions (TERM), and similar systems in development by other countries. Combined with battlefield digital interconnectivity, these systems may fundamentally change mounted maneuver combat — engines of a Revolution in Military Affairs (RMA). To anticipate the future, rather than react to events, we must develop operational and organizational concepts to exploit and guide the development of these new systems — and to counter potential enemy capabilities. This article examines one piece of this change: the synergistic effect that TERM-equipped M1A2 SEP tanks, the Future Scout and Cavalry System (FSCS), and the Army Battle Command System (ABCS) may have on armor operations and organizations in the 21st century.

Previously in *ARMOR* (M-A 97), LTC John Woznick described the technical aspects of TERM. I will not repeat that detail. However, some review will help to understand the effect this round will have on battalion and brigade operations. TERM, as its name suggests, fires at much longer ranges than conventional tank rounds — even longer than AT-10/11 tank-fired missiles. Eight or even ten kilometer ranges are possible. The munition will have beyond-

line-of-sight (BLOS) capabilities. TERM-equipped tanks will be able to fire at enemy vehicles that are unseen by the firing tank. Instead, a distant spotter will digitally transmit target data to the firing tank and could laser-designate for terminal guidance. This capability not only outranges current antiarmor threats, it offers the possibility of changing the way we fight. It offers Force XXI brigade and task force commanders entirely new ways to shape battlespace and execute decisive action.

Together with FSCS and battalion-level C2 improvements, TERM will provide the means for brigade and battalion commanders to mass fire effects without massing forces. The practical dispersion of contemporary armor is limited by terrain and the ability of the force to mass overwhelming firepower at any given point or target. Presently, all elements of an armor unit must maneuver to within two or three thousand meters of a point to apply overwhelming firepower to that target. TERM can double or triple the effective dispersion of an armor task force, increasing its effective battlespace. This dispersion increases the task force's flexibility. Instead of focusing on one or two known locations or possible enemy main avenues, the maneuver commander will be able to respond to a wide range of enemy courses of action. Whether moving or stationary, the task force can spread out over 10 or even 20 kilometers. As the task force encounters the enemy, it will be able to focus the TERM fires of many tanks against that foe, across the battalion's battlespace. As the battalion closes with the enemy, more distant task force elements can maneuver against enemy weaknesses, while continuing to launch TERM. These enemy weaknesses will either be opportunities detected by brigade and task force scouts, or those created by

focusing TERM and supporting fires against specific enemy targets. Finally, the task force will complete the enemy's destruction with close combat throughout its depth.

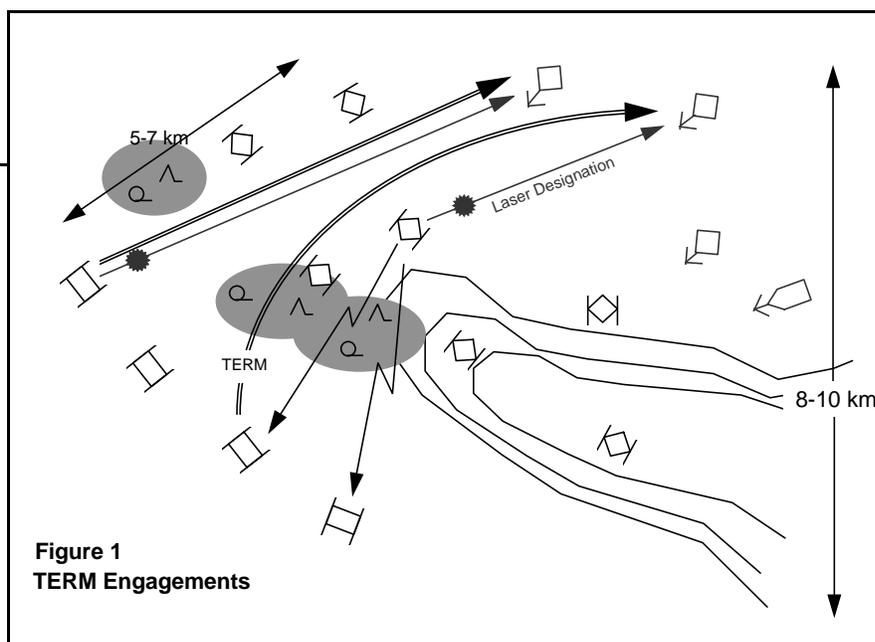
These systems will not change the primary mission of armor: to close with and destroy enemy forces through firepower, mobility, and shock action. The difference between this and the current battalion/task force will be the capability to shape battlespace and engage the enemy beyond the line-of-sight (LOS) of its tanks. As a result, the TERM-equipped battalion task force may have noticeable differences in operations and tactics than the current battalion task force. To reflect this potential for change, I will use the phrase Mounted Close Combat Battalion — or MCCB — to describe this battalion-size organization.

Within the MCCB, TERM-equipped tanks may designate targets for themselves, for other tanks, or may rely on scouts to acquire and designate targets. Of these three methods, the greatest chance to exploit the capabilities of TERM and battlefield dispersion is the last — battalion scouts and tanks working together as hunter/killer teams. Figure 1 depicts how TERM tank-to-scout links may work at the company level. TERM fires will shape the battlespace and set the conditions for decisive action, the maneuver and close combat that will complete the destruction of the enemy, and set conditions for future operations.

MCCB operations capture the Revolution in Military Affairs at the small-unit level. The MCCB will initially deploy its reconnaissance well forward of the main body. This reconnaissance includes MCCB scouts, attached collectors, and reconnaissance planning that exploits the suite of reconnaissance,

surveillance, and target acquisition (RSTA) systems, giving the MCCB commander the situational awareness he needs to dominate the battlefield. When not in contact with the enemy, the scout component of this RSTA suite could operate as much as ten to fifteen kilometers forward of the battalion's tanks. The FSCS will enable the battalion scouts to conduct a swift but stealthy reconnaissance of the terrain and enemy forward of the battalion. Battalion and company commanders will use this reconnaissance to adjust their maneuver to exploit terrain, and to avoid restrictions and obstacles. As scouts approach known or suspected enemy locations, the rate of reconnaissance slows. This will close the distance between scouts and the main body to about seven kilometers — establishing conditions for TERM engagement. The first TERM targeting priority is to eliminate enemy reconnaissance. Next, scouts will look for other high-value targets and weaknesses in enemy disposition. Future Battle Command Brigade and Below (FBCB2) will digitally link the scouts, the high value targets they observe, and the TERM-equipped tanks that will fire on those targets. Other combat vehicles OPCON or attached to the MCCB, such as infantry fighting vehicles, will also transmit TERM targeting data. Scouts, however, will perform this acquisition and targeting as an integral component of force-oriented reconnaissance. The battalion commander will quickly decide where to strike, transmitting maneuver and target data to his companies as they continue to move. Finally, the battalion will begin direct fire and close combat against the enemy in a synchronized strike at the point and time selected by the battalion commander.

The difference between MCCB offensive and defensive operations will be time. In the offense, the commander uses his scouts to find the enemy and then applies fires against a defending enemy — who may be stationary or moving. The tempo of the attack and enemy maneuver (or lack of it) can result in a very fast closure rate, limiting the time between initial TERM engagement and coming into enemy direct-fire range. In the defense, the MCCB commander will still use his scouts (and external RSTA assets) to find the enemy,



**Figure 1**  
**TERM Engagements**

but he will also enjoy the time it takes for the enemy to close into the battalion engagement areas. This time gives the battalion commander the opportunity to move his tanks to the exact positions that will achieve maximum results for his TERM. He can also maneuver to the rear or laterally to maintain the optimum range differential between his tanks and the advancing enemy, choosing to delay close combat until the time of the U.S. commander's choosing.

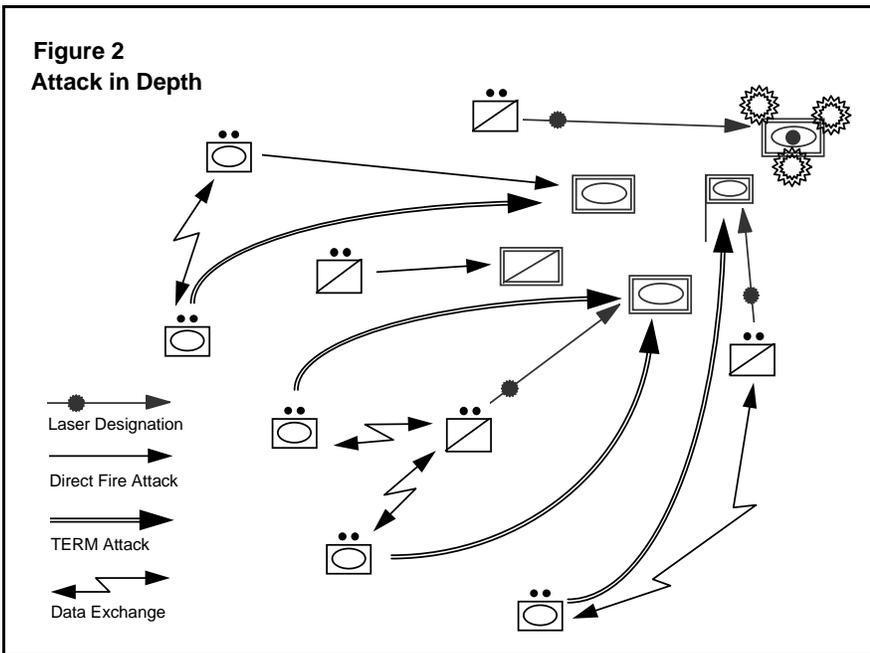
In both offense and defense, the battalion commander may choose to engage the enemy as he comes within TERM range or to delay the engagement until the MCCB can simultaneously strike the enemy throughout his depth.

By opening fire as the enemy comes within TERM range, the battalion commander seeks to disrupt the enemy while he is still well beyond LOS and direct-fire range. Tanks can deploy rearward as the enemy advances, or around him as the U.S. force advances. The goal is to keep the enemy from closing to direct fire range until the battalion establishes favorable conditions for close combat or counterattack. On the defense, the MCCB may be able to delay in front of the enemy — continuing his destruction until the enemy reaches his culminating point. Selective engagement with TERM can also shape enemy maneuver. By focusing fire onto certain areas, the battalion will deny the enemy freedom of action, and force him to move into direct-fire kill zones.

By holding fire until the battalion can engage all lead enemy forces, the battalion commander seeks to destroy the enemy through a single, synchronized, spasm of violence. (See Figure 2.) This technique is suitable against a massed enemy armor formation, as well as against an enemy operating with digitally-enabled dispersion. In this technique, the battalion commander selects an armor company and attached infantry to engage the enemy with direct fires while other armor companies and supporting artillery attack deeper enemy targets. Battalion direct fires will destroy lead enemy armored vehicles at the precise time that TERM and precision artillery will attack enemy C2 vehicles and other high-value targets. Other fire support can land in synchronization with these fires to separate the enemy force in contact with the MCCB from supporting forces.

Battalion scouts operating in the enemy's depth will relay damage assessments and alert the battalion to new threats or opportunities. Concurrently, scouts will conduct terrain reconnaissance, looking for the best routes that friendly tanks and infantry can use to isolate remaining enemy forces and effect destructive fires. The battalion commander will focus his maneuver in response to this information, to include opportunities created through other long-range precision fires. When fighting massed armor, the battalion may have to displace companies rearward or laterally to maintain standoff with following enemy forces. Against a more dispersed or heavily attrited force, the

**Figure 2**  
**Attack in Depth**



battalion could execute company-level attacks to destroy the remaining enemy through close combat and shock action.

The expanded battlespace and capabilities of the MCCB will affect the way it interacts with other units on the battlefield. The expanded range and BLOS capability of TERM will affect the missions and battlefield application of artillery, aviation, and cavalry. TERM may increase the contribution of artillery to decisive operations, enabling it to focus on deeper, high-value targets and counter-battery operations. Aviation may also have new freedom to conduct deep operations. Alternatively, the targeting capabilities of MCCB scouts offer new capabilities for attack helicopters to contribute to the battalion fight. Helicopters may also be able to designate for TERM fires, providing more opportunities for TERM employment.

The MCCB may have reconnaissance and security capabilities well above the current battalion task force, approaching or exceeding those of today's cavalry squadrons. This may change the structure, roles, and missions of division and regimental cavalry. Janus simulation shows that UAVs also improve the ability to focus MCCB maneuver and scout employment. This, in turn, may affect military intelligence organization and operations. Together, these last two considerations may lead us to reexamine the way we perform reconnaissance. The FSCS is, in reality, a system of systems that make up a greater RSTA capability.

This concept also has applications in military operations other than war, particularly in peace enforcement. The MCCB will be able to provide beyond-line-of-sight support to scouts on OPs, checkpoints, and patrols, and between tank-occupied positions. In many MOOTW situations, the mere presence of tanks has defused a rapidly deteriorating situation. Even two tanks can make a difference. Some situations, however, require more than simply some armor. TERM fires will enable a single tank section or platoon to receive immediate support from many tanks. In turn, the MCCB will be able to provide effective stability for a broad area, with a relatively small number of tanks. (This will also result in reduced collateral damage from tank movement in a fragile infrastructure.) The sensitive political nature of peacekeeping — combined with the desire to avoid civilian casualties and limit collateral damage — often restricts or prohibits the use of indirect-fire weapons. TERM will give the MCCB commander the capability to respond to enemy aggression originating beyond the normal direct-fire range of his other direct-fire systems. Operating within established rules of engagement (ROE), the MCCB can swiftly attack armored vehicles, artillery, and weapons emplacements without having to maneuver units into direct-fire range.

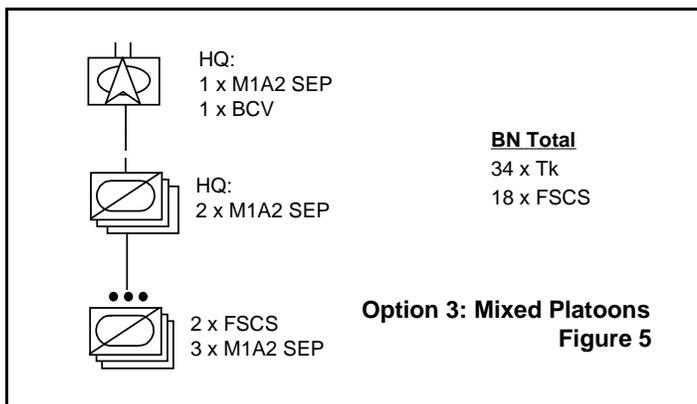
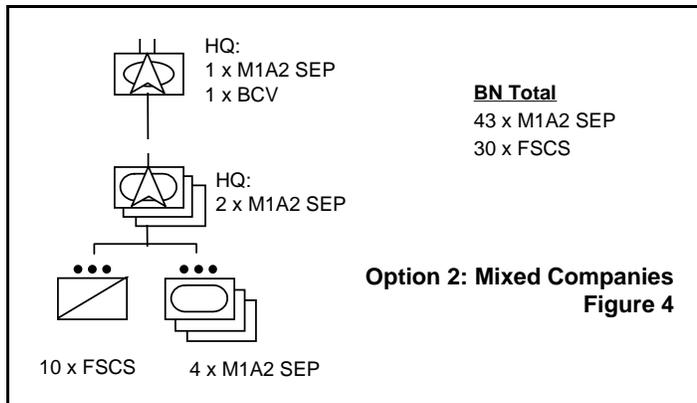
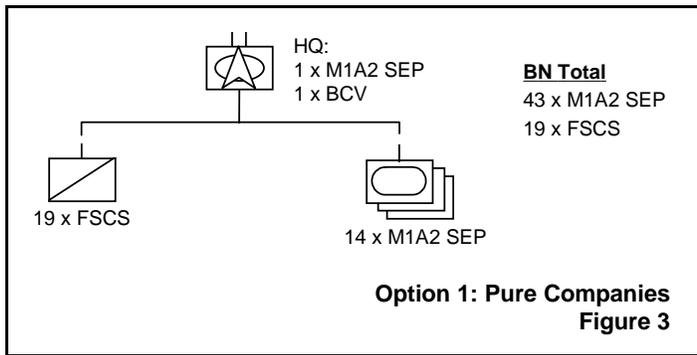
The previous operational sketch shows the changes in interaction between tanks, scouts, and battalion-level C2. The MCCB will be capable of dominating a larger battlespace than

present battalions, with improved capabilities to operate on a non-linear battlefield. These new operations and capabilities generate a need to reevaluate the organization of the current armored battalion and explore alternative designs. The remainder of this article describes three possible designs under study this year in a TRADOC concept experimentation program (CEP).

The first design focuses on the increased roles and responsibilities of the battalion scouts. In this organization, battalion reconnaissance capabilities increase from a single scout platoon to a reconnaissance troop of 20 FSCS (see Figure 3). The reconnaissance troop will conduct reconnaissance and security tasks across the entire MCCB battlespace, guiding battalion maneuver through terrain reconnaissance and obstacle avoidance. Upon enemy contact, some platoons and sections will perform target designation against that enemy. Meanwhile, the balance of the troop continues reconnaissance — attempting to gain contact with the balance of the enemy force.

A second approach incorporates scouts directly into the tank companies (see Figure 4). In this design, each tank company has three tank platoons and a scout platoon. This establishes a close team relationship between tanks and scouts within a single company. Although the information collected by the scouts will be available throughout the battalion, scouts will focus their effort on supporting the maneuver and fires of their company. This is particularly important if battalions operate much more dispersed than they do now, with companies operating over the geographical area of current battalions, and the MCCB dominating the battlespace of an AirLand Battle brigade.

The third option goes one step further in the scout/tank integration process — mixing scouts and tanks in the same platoons (see Figure 5). This organizes the battalion into precise hunter-killer teams. Each scout focuses on providing targets for a single tank — although all target data will be available to each of the platoon's tanks. This arrangement offers the greatest potential for dispersion. Individual hunter-killer teams could operate at extended distance from one another. These small teams can disrupt enemy forces as the balance



of the company and battalion maneuvers.

These organizations — and the operational concept itself — are the subject of ongoing analysis at the Armor Center. Up to now, Janus has been the primary analysis tool. Although Janus analysis is not complete, there have been some important observations about TERM capabilities and limitations. The most obvious result to date is the apparent improvement in combat power of the MCCB over current armor-heavy task forces. This is the case for any of the alternatives described above. There have also been some tactical insights that were not immediately apparent before simulation. These include the importance of maintaining standoff, establishing targeting geome-

try between sensor and shooter, and the effects of intervening terrain. Some of these insights may be unique to the particular TERM system modeled.

The MCCB CEP is the next step and will be conducted in the Mounted Warfare Test Bed (MWTB) at Fort Knox. Organizational issues will focus on command over a non-linear — and sometimes non-contiguous — battlefield, sensor-to-shooter links, organizational mixes of scouts and tanks, and the optimal tank strength of the battalion. This experiment may also answer questions about fire distribution, raise other questions or difficulties inherent in BLOS fires, and provide a clearer insight about applying decisive operations concepts at the battalion level. Finally, the CEP will provide data neces-

sary to develop tactics and techniques to exploit the TERM/FSCS/ABCS synergy. Subsequent analysis will move beyond MCCB systems and organization to include leader development issues and the impact on organizations and operations of other units.

In October 1973, the combination of ATGM's, modern armor, and combat helicopters ushered in a revolution in military affairs that surprised the world. Concept development and current experimentation indicate that TERM/M1A2 SEP, FSCS, and digital battle command will bring about a similar revolution. The synergy of these systems — or similar systems in development by other countries — can lead to a leap-ahead capability for the battalion-level commander to dominate the close battle. Unlike the years leading up to the October War, current techniques in concept development, simulation, experimentation, and analysis enable us to evaluate systems and develop organizations before the first TERM round is a reality. We can and should be ready for the next military revolution before the first round is fired.

Colonel John F. Kalb currently serves as the Director of the Directorate of Force Development at the Armor Center at Ft. Knox. He has served in a wide range of troop and staff assignments, including battalion commander, 4-32 Armor, 3AD, Germany; Inspector General, DA Inspector General Agency and Chief, Spec Tech Opns Branch, J-3, JCS, in Washington, D.C.; and TRADOC System Manager-Abrams/Tank at the Armor Center. He holds an MA degree in political science from Webster University and an MMAS from CGSC.

Christopher Mayer was commissioned in Armor in 1980. Since leaving active duty in 1992, he has worked for the Armor Center's Directorate of Force Development as a concepts writer and force design analyst.