soldiers can sit down and be warm and dry.

The AAR starts from the beginning of the operation with the leader's OPORD and ends with actions on the objective. The training objectives should be listed on a butcher board so all soldiers can see them. The objectives should be addressed in sequence as they occurred and the status of training should be identified (T for trained, P for needs practice, or U for untrained). An additional butcher board should be used for notes on strengths and weaknesses and ways to improve.

Finally, a memorandum on the lessons learned is written in the days following the exercise. This written AAR is used as a reference for future training to prevent repeating the same mistakes and also to share lessons with sister units. The memo should begin with a description of the concept of the exercise and the training objectives. The body of the memo should include all the lessons learned from the exercise. The conclusion should identify how the lessons can be incorporated into future training.

Live fire exercises both develop the skills critical to success on the battlefield and test the unit's ability to close with the enemy. Infantrymen throughout our nation's history have mastered the skills and have been successful in combat; and units that continue to train and practice with live fire exercises will be well prepared for the next conflict.

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Counter-reconnaissance HMMWVs

CAPTAIN MARK N. GRDOVIC

In military operations throughout history, we have seen that when the scouts succeed in their mission, the battalion usually succeeds as well. The opposite also holds true. It therefore seems reasonable that a battalion could improve its chances for success by placing equal emphasis on defeating enemy scouts and on seeing that its own scouts succeed.

Unfortunately, counter-reconnaissance has never received a great deal of emphasis in terms of defined doctrine or tactics. Scout platoons often have counter-reconnaissance as an additional task; but it is at least as difficult and complex as reconnaissance and should receive the attention and planning of a *mission* instead of a task and should be treated accordingly.

Often, units combine elements of an antitank platoon with those of a scout platoon to accomplish this dual mission, which is sometimes referred to as a SCAT (scout/antitank) mission. The SCAT configuration can be broken down further into one of two task organizations:

The first is to combine the scout and TOW elements to form a series of hunter-killer teams. This method is generally used during offensive operations where well-defined engagement areas (EAs) are not likely. It also works better when the team can be augmented by armor whose firepower and shock effect can quickly destroy enemy reconnaissance forces.

The second method is to have a pure counter-reconnaissance platoon working with a pure reconnaissance platoon. Separating the elements enables the commander to separate these related missions from each other, which allows for more detailed planning for each mission and less interdependence between them. If one element attempts to conduct both missions at the same time, it may do neither of them well, and both will fail. This method is generally used during defensive operations in which the TOW elements can use well-established engagement areas.

I want to outline a method we used effectively when I was a battalion antitank platoon leader in the 3d Battalion, 47th Infantry, 2d Armored Cavalry Regiment (ACR)(Light)—formerly the 199th Separate Motorized Brigade—during a National Training Center rotation. Motorized infantry (now referred to as light cavalry), is particularly well suited for such missions because of the unique configuration of the equipment on hand (Figure 1):

The scout platoon consists of ten hard-shell high-mobility multipurpose wheeled vehicles (HMMWVs) (M1025/1026), equipped with five M2 .50 caliber machineguns and five MK-19 40mm grenade launchers.

The antitank platoon consists of four M966 TOW HMMWVs, one M1026 for the platoon leader with a MK-19, and one M998T with an M2 machinegun for the platoon sergeant. (The M998T is a cargo HMMWV modified for troops, with an added roll cage and gun mount.) Another unique feature of the TOW vehicles we had was an M249/M60 machinegun mount on the side of the turret, which greatly improved the platoon's ability to protect itself from a dismounted threat.

Few would argue that a vehicle whose thickest armor is the windshield can do the same mission as a Bradley fighting vehicle (BFV) or an Abrams tank. While the HMMWV cannot match the firepower and armor protection of a BFV or a tank, it does compare better in the areas of air deployability for both fixed and rotary wing aircraft, its ability to remain undetected and its ability to meet its self-sustainment and logistical needs. Most people would agree that the best defense against enemy fire is to remain undetected; this is not to say that the HMMWV is a better vehicle than the Bradley but that both have a place in certain missions. It also illustrates that in a motorized unit the requirement for detailed planning leaves little room for error during execution.

Counter-reconnaissance during offensive operations without some sort of shoot-on-the-move capability or air cavalry support is extremely difficult. Although neither of these capabilities currently exists in the 2d ACR, a unit of this type is particularly well-suited for counter-reconnaissance operations during defensive missions. The method used most successfully in our unit was that of the scout platoon establishing a screen of four to eight observation posts (OPs) and the AT platoon covering two or three engagement areas to the rear of the screen. These engagement areas were along suspected enemy avenues of approach for enemy reconnaissance elements (Figure 2). The scout platoon was often augmented with one or two teams using UAS-11 vehicle-mounted TOW sights or a combat observation and lasing (COLT) team, or both. This greatly increased the scouts' observation capability and kept the TOWs off the screen line. No enemy reconnaissance elements were to be engaged from the screen line, which reduced the chance of detection. In this case, the platoon did not attempt to conduct both reconnaissance and counter-reconnaissance missions.

The scout screen could not engage the enemy reconnaissance and still remain in place to observe the enemy combat reconnaissance patrol, the forward support element, or the main body forces. Even with indirect fire, scout elements would have compromised their positions and possibly the position of the mortar or artillery unit while engaging only two or three enemy vehicles. The employment of separate elements, on the other hand, allowed the enemy reconnaissance to be destroyed by the antitank unit after they had passed through the screen line.

If this type of engagement is successful, it gives the enemy a false idea of our forward line of own troops (FLOT), based on where his units were engaged. This will allow the screen to observe the follow-on units in movement formation instead of battle formation, allowing the screen to develop a much better artillery target than the previous handful of enemy reconnaissance vehicles.

This is where the use of Copperhead rounds guided in by the attached COLT teams proved most effective. If enemy artillery is called in, it should be on the now abandoned position of the antitank forces, who are usually two or three kilometers to the rear of the screen line.

This requires the antitank forces to withdraw immediately after the engagement, whether it has succeeded or not. When an engagement does not succeed, the original scout OP can usually main-

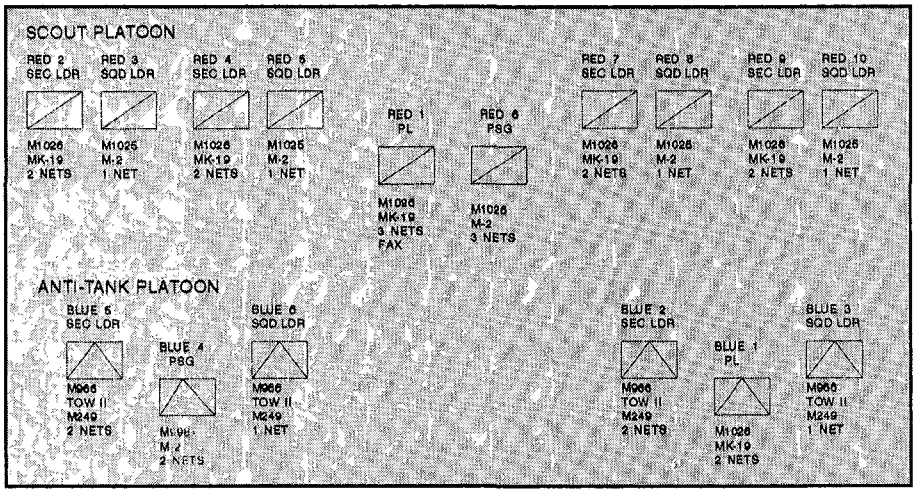

Figure 1

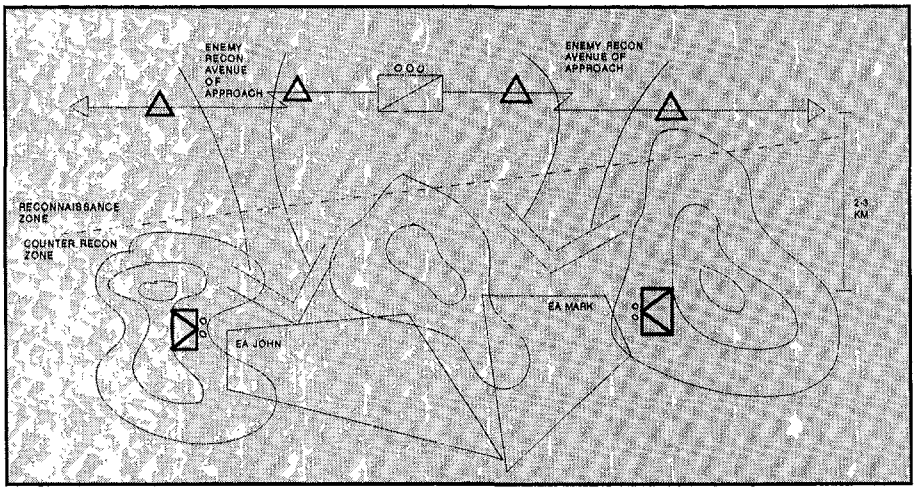

Figure 2

tain contact with the enemy elements and use any direct or indirect fire that may be needed.

Another advantage of the scout/antitank team is that if the scout screen is compromised, the antitank element can usually render assistance quickly. If an OP is destroyed, the antitank element can also act as a back-up or replacement. Often a rifle platoon can be attached to this element, but this proved useful to us only when the area of operations could not be covered by TOW fires—such as on a dismounted infiltration route, for example. The rifle platoon should not be used to provide additional firepower or security for the scout or antitank platoons. If it is, it will usually compromise the position and cause the mission to fail. If too many vehicles are clustered in the forward area, an operation of this type can easily turn into a weak defense.

In an infantry battalion, the scout platoon leader needs to be the commander of the forward area for the operation. Both the antitank and the scout platoons work for the battalion commander and report directly to him or the S-2. Having a separate commander for this element would only add an unnecessary link in the chain of command and lead to confusion and delay.

In a cavalry troop, the troop commander serves as the link between the platoons and the squadron commander. But in a light ACR squadron, there are three troops with two scout platoons and two antitank platoons each. When the scouts have activity, they have priority. When the enemy reaches the counter-reconnaissance belt, the AT platoon leader has priority.

During an actual engagement, the OPs talk to the scout platoon leader or platoon sergeant and the section-sized engagement areas talk to the AT platoon leader and platoon sergeant. The two platoon leaders and platoon sergeants all talk to each other. Some methods have the OPs talking directly to the engagement area or the scout platoon leader controlling half the screen and the corresponding engagement areas, and the AT platoon leader doing the same with half the scout platoon. This may be convenient, but it is wrong. The forward area should not be divided vertically into left and right corridors, but horizontally into two belts (reconnaissance and counter-reconnaissance). Engagement areas should not be the responsibility of the scout platoon leader, nor should surveillance OPs be that of the AT platoon leader, although on occasion those responsibilities may overlap.

An engagement area is often confused with a defense. In a defense you hold terrain; in an engagement area you destroy the enemy. Although a defense may have an engagement area (usually a deliberate engagement area), you never defend an engagement area. In this mission, we would prepare hasty engagement areas. The terms *hasty* and *deliberate* in this case imply intent rather than time available. We do not plan to stay in our positions after the initial engagement, and the forward area usually does not allow for digging-in a vehicle. This requires maximum use of the terrain for hide positions.

In planning, the set-up is always according to standing operating procedure (SOP). The order of OPs and the antitank section is always the same. The AT platoon leader stays to the rear of the scout platoon sergeant for half of the screen, and the AT platoon sergeant stays to the rear of the scout platoon leader for half of the screen (Figure 2). Once the platoon leaders receive an enemy situation, including avenues of approach, graphics, fire support plan, and a commander's intent/mission, they should be able to make their combined plan, brief their subordinates, and be moving within 30 minutes. These forces need to be in position 48 to 72 hours before the expected arrival of the enemy's main body. The information required for planning could be sent by radio or by facsimile machine, if needed. Normally, the scout platoon leader and I would agree on a plan within minutes after analyzing the terrain. He would tell me where he thought his OPs would be, and I would tell him where the engagement area would be. We would agree on any additional graphics or terrain index reference system (TIRS) and brief our men.

The section leaders would then spend a few minutes planning the specifics of their section engagement areas and prepare to move out. As the antitank platoon leader, I would inform the section leaders on the enemy situation and where their section engagement areas would be. On the basis of this information, they would examine the flanks of the engagement area, looking for a withdrawal route. Further planning would be done by following the checklist shown here. Once in position, they would confirm or alter their plan

M996 TOW II with M249 machinegun alongside on turret.

ENGAGEMENT AREA CHECKLIST

HASTY (YOU WILL NOT HOLD THIS GROUND FROM THE ENEMY):

- **Establish section or squad rally point before moving into position.**
- **Stop vehicle before occupying the position so the TC can dismount, recon, and guide it into position. The vehicle should back into the position if rapid escape is needed.**
- **Plan a withdrawal route with enemy observation in mind.**
- **Identify dead space and avenues of approach.**
- **Identify trigger line to engage and disengage.**
- **Plan alternate position.**
- **Confirm location (using GPS if available) and left and right limits with a compass and laser range finder.**
- **Convert the data to the map, then convert it to TIRS and send by radio to platoon leader. (Each section leader sends data for his section's limits and all vehicle positions.)**
- **Note the grids you may want fire support on.**
- **Put passive air defense measures in effect.**
- **Maintain surveillance of EA. During the day, pull the vehicle into a hide position, and maintain an OP with binoculars. At night, use night vision goggles and thermal imaging.**
- **Institute rest plan, one man down and two men up at all times while in a forward area.**

DELIBERATE (YOU WILL DEFEND THIS GROUND FROM THE ENEMY):

- **Set in obstacles.**
- **Lay communication wire.**
- **Develop a range card if a relief in place is required.**
- **Dig-in vehicles and personal fighting positions (the vehicle is insufficient cover against artillery). Do not dismount the TOW missile system unless the vehicle has been destroyed.**
- **Dig-in alternate and supplementary positions when time and assets permit.**
- **Cache ammunition at position (use TOW missiles from cache first to keep the vehicle rack loaded).**
- **Use the laser range finder to determine whether targets are in range rather than a man-made target reference point (TRP). If no GVS-5s are available, use existing features for TRPs; for example, an intersection rather than a VS-17 panel, which will draw attention and enemy artillery.**

accordingly. The final site layout would be sent by TIRS.

Each section leader would send his position and its left and right limits, and the TIRS would indicate the range of that limit at the same time. I would plot range fans for both sections on my map. Once all the data had been sent to me, I could adjust limits over the radio just by looking at my map. This method is accurate if a global positioning system (GPS) is used in conjunction with a compass for limits. During this time, the scout platoon leader was doing the same with his OP positions. As soon as possible, we would exchange our platoon positions through TIRS. Usually within one hour, each leader would have eight OPs and two engagement areas plotted on his map, and it was all done in secure code using TIRS.

Often, the topic of weapons' range comes up when planning engagement areas. Range is a great advantage if you have it, but your plan should not be based on it. A 2,000-meter flank shot with a TOW is always better than a 3,500-meter frontal shot, especially since many enemy vehicles (such as T-64Bs and T-80s) can out-range a TOW II with an AT-8 SONGSTER missile. This is the kind of specialized knowledge a counter-reconnaissance or antitank leader needs.

In terms of command and control during an operation, the section leaders control any engagements. The platoon leader or platoon sergeant may be located near their position, but it is still a section engagement area. The platoon leader and platoon sergeant primarily act as a communication link between the sections and platoons and company and higher echelons. They would also provide emergency cover with their MK-19 or M2 machinegun, cover the section's withdrawal, and provide resupply. The scout OPs to our front normally notified their platoon leader and platoon sergeant, who would notify me or the AT platoon sergeant, but could notify the AT section to their rear if communication with higher or adjacent units failed.

A final benefit to separating the forces into reconnaissance and counter-reconnaissance groups is the flexibility it allows the commander during the battle. Once the enemy reconnaissance element has been destroyed or disrupted, the antitank platoon has completed its part of the mission. The scouts could now remain in place to observe the enemy's main forces, or withdraw. This would not have been the case if the scouts had become decisively engaged with enemy reconnaissance forces. The antitank platoon can conduct a rearward passage of lines and become a reserve or counterattack force for the unit or, depending on the battlefield or the disposition of forces, can go into a hide position and link up with main forces later.

The ability to slingload the platoon further enhances the commander's options and the platoons' capabilities. Either way, the antitank platoon needs to be moved after the counter-reconnaissance portion of the battle. Leaving these forces in place contributes little to the battle at this point and nothing to their survivability. The reconnaissance portion of the battle continues long after the counter-reconnaissance action is over.

Anyone who has ever conducted mounted reconnaissance operations knows how difficult they can be, and counter-reconnaissance operations are no less complex. Counter-reconnaissance should not be treated like an additional task but as the important separate mission that it is. The only simple part of counter-reconnaissance is the understanding that if it causes the enemy's scouts to fail, his main forces will likely fail as well.

Captain Mark N. Grdovic served in the 3d Battalion, 47th Infantry as a rifle platoon leader, antitank platoon leader, and rifle company executive officer. He recently completed the Infantry Officer Advanced Course. He is a 1989 ROTC graduate of State University of New York College at Cortland.