

maneuver to an attack-by-fire position well within their range for a stationary target. The purpose of having both a support-by-fire with Dragons and an attack-by-fire with AT4s is to ensure that the unit has redundant means of destroying the vehicle.

Once both elements are in position, the platoon leader initiates the engagement, with the Dragons using the pair-fire method: One gunner fires while the other observes; if the first gunner misses, the second immediately engages the target. At this time, indirect fires are called. The engagement may be initiated with mortars to button up the enemy vehicle, but only if the unit does not have Dragons; if it has Dragons, the mortar fragments may cut the missile's wire. If both gunners miss, the attack-by-fire element initiates, using sequenced, pair, or volley fire.

During hours of limited visibility, the platoon leader should plan to use mortar or 40mm illumination or parachute

flares to illuminate targets for the AT4s. If the platoon does not have Dragons available—with their nightsights—illumination is critical for successful AT4 engagements. Ideally, the illumination should be fired from the support position instead of the attack-by-fire position to avoid compromising the engaging element.

The enemy vehicle identifies the friendly unit first. Although the most obvious reaction to being compromised by an armored vehicle is to break contact, this may not be the wisest choice. Unless cover is immediately available, it is unlikely that a dismounted platoon can successfully run away from a tank's main gun or coaxial machinegun.

The response to this situation must be immediate. The Dragon gunners, if within range of the enemy vehicle, immediately employ their weapons. Smoke is used and the remaining personnel maneuver to the flank or a blind side of the vehicle. If possible, the AT4

teams attempt to close with the vehicle, and the forward observer immediately calls for fire.

The actions described here are a starting point for platoons in developing standing operating procedures for reaction to an armored threat. These actions, at a minimum, should be addressed in the coordinating instructions of operations orders and should be rehearsed generically when the unit is fighting an enemy with armor capability. This training will help ensure that soldiers and leaders alike will be able to react with the required speed and precision when they unexpectedly encounter an armored vehicle.

Captain Fred W. Johnson is an observer-controller at the Joint Readiness Training Center. He previously served as a rifle platoon leader in the 2d battalion, 22d Infantry, 10th Mountain Division, and has commanded a rifle company in the 3d Battalion, 187th Infantry, 101st Airborne Division. He is a 1985 ROTC graduate of Wofford College.

Rehearsals

The Key to Mission Success

CAPTAIN ANDREW M. HERBST

A junior officer serving as an assistant operations officer in a light infantry battalion is often given the additional duty of battalion rehearsal officer. In this role, he must be aware of the resources for a rehearsal kit and also of set-up procedures and execution methodology.

Gathering Resources. A rehearsal kit must contain all the required items, must be durable, and must be configured for transport by air, land, or sea. Its size depends upon the specificity and the variety of the battalion's rehearsals. The unit's mission essential task list (METL) and battle drills are good in-

dicators of the types of rehearsals likely to be conducted.

Waterproof, compartmented containers best protect and organize kit materials. A kit can weigh more than 50 pounds, and handles make the container easier to carry. Suggested containers include footlockers, empty ammunition cans, and filing cabinets.

Today's light infantry battalion task force is assigned missions within a wide range of military operations, and the versatility of the battalion's rehearsal kit must match the diversity of the unit's possible missions.

Materials must be gathered and

models built that represent operational symbols in accordance with Field Manual 101-5-1, *Operational Terms and Symbols*. In addition to the manual itself, the following materials are needed:

- Engineer tape for phase lines and unit boundaries.
- Candy-stripe tape for area of operation boundaries.
- Colored tape for routes, roads, areas.
- String for unit boundaries, group targets.
- Colored markers for friendly and enemy symbols.

- Sticky labels for edits to friendly and enemy symbols.
- Nails to secure tape and markers.
- Cardboard for symbols.
- Clear lamination paper for water proofing cardboard.
- Rubber bands for organizing materials.
- Chalk for marking hard surfaces.
- Chem-lites for illumination during limited visibility rehearsals.
- Model buildings, airplanes, helicopters.
- Pointer.

Set-up Procedures. The kit must be constructed to scale, and the graphics must be accurately transferred to the terrain model. The systematic transfer of graphics from the general to the specific can eliminate the chance of overlooking or distorting the representation. The area of operation should be depicted first, then the phase lines, unit boundaries, objectives, units' axes, friendly and enemy locations, target reference points, and key terrain. Constructing the terrain model to scale reduces graphic distortion. A terrain board that closely represents the opera-

tional graphics also increases the rehearsal's clarity and validity. There may be occasions, however, when a particular area should be enlarged for greater emphasis.

Rehearsal Methodology. A clear rehearsal methodology improves synchronization, initiative, and agility at all levels. The battalion commander's intent and mission execution determine the methodology of a rehearsal. During the rehearsal, the commander communicates his intent and shares his vision of the mission's outcome. The sand table provides the commander with a key leaders' briefback that reinforces his orders and requires the leaders to describe their actions throughout an operation. A well-executed rehearsal gives unit members a better understanding of the commander's intent and mission requirements.

A rehearsal is conducted chronologically, the same way the mission is to be executed. Each leader moves from phase to phase within the sand table's boundaries, representing his unit during the mission. Leaders also familiarize themselves with the leaders of adjacent

units. This method reinforces the scheme of maneuver by providing a vivid picture of the operation in relation to the other units involved.

To prepare a good battalion rehearsal kit, junior officers must be aware of the commander's intent for rehearsals. A self-contained rehearsal kit, configured for deployment with the battalion task force, provides the materials necessary to execute walk-throughs and briefbacks. Well-resourced and executed sand-table rehearsals represent the operational graphics, convey the commander's intent, and familiarize leaders with mission requirements. Finally, a battalion is more likely to succeed if it uses sound methodology in conducting rehearsals.

Captain Andrew M. Herbst served as chemical officer/assistant S-3 in the 6th Battalion, 502d Infantry, Berlin Brigade. He recently completed an assignment to the 82d Airborne Division Artillery and took command of the 101st Chemical Company, at Fort Bragg. He was commissioned in 1990 from the Officer Candidate School at Fort Benning and holds a degree from Florida Atlantic University.

Night CAS On the Conventional Battlefield

CAPTAIN PHILLIP P. TABER, U.S. AIR FORCE

Certainly, nighttime conditions complicate all aspects of combat operations. Before the Gulf War, night close air support (CAS) had not been actively pursued within the U.S. Air Force. Night CAS and air interdiction had been dedicated almost exclusively to contingency operations for special operations forces. During Operation DESERT SHIELD, however, the need for night CAS on the conventional battlefield became very apparent.

As a result, the U.S. Air Force implemented aggressive night CAS training programs for both pilots and tactical air control party (TACP) personnel. This training raised serious questions concerning such issues as target acquisition, identification and fire control measures for friendly positions, and terminal control by ground forward air controllers (GFACs). Myriad field expedient techniques were developed to support the night CAS mission. Unfor-

tunately, little information on the subject has found its way into the training publications that have appeared since the Gulf war.

Night CAS is inherently more difficult for both the pilot and the GFAC, but there are some techniques that overcome these difficulties.

During night operations, fighter and attack aircraft enjoy the advantage of being less vulnerable to optically sighted surface-to-air threats. At the