

inspectors who checked to see if a unit had done things according to every obscure regulation they could find. This type of inspection clearly caused us to divert many precious resources away from the Big Three tasks and to focus our attention on more mundane things.

With the new command inspection program, the commander who approves the company's priorities and its training plan is also responsible for the inspection. If a company commander

and that inspector jointly decide that certain items are not important and they would rather concentrate on others, then the inspection focuses on those other items. Such an integrated program greatly bolsters unit priorities, and it will undoubtedly have a positive effect on combat readiness.

I have not introduced any new ideas here. I have merely linked some old ones in somewhat different ways. If a commander realizes that universal priorities are critical, and that at some

point he must just say "No," then I have achieved my goal. I hope that by thinking of long range planning as a kind of budget process, he may gain new insight into long range planning.

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Platoon Fire Control

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During gunnery training at the Combat Maneuver Training Center (CMTC) in Germany, it was discovered that there was a general lack of understanding of platoon fire planning and control. Too many of the platoons succeeded because of outstanding individual gunnery performances, not because they had well-rehearsed and well-executed fire plans for all of their weapon systems.

A platoon on the combined arms battlefield must have detailed fire planning and control if it is to achieve the results that are expected. The major problem is the lack of definitive guidance in our "how to" manuals and an incomplete training and evaluation outline (T&EO) in ARTEP 7-8 MTP. (Fire planning should be made a critical task in the outline and the destruction of the enemy in accordance with the fire plan should be a critical task.)

In the absence of definitive guidance from these sources, members of our brigade developed a fire control memorandum of instruction for its mechanized infantry platoon leaders and their squad and section leaders. We

would like to share some of the ideas in that document on how the principles of fire control and distribution can be applied in practical terms in mechanized infantry units. We will outline common terms, offer some illustrations of fire patterns and techniques, and show how an effective fire plan and execution matrix are developed.

We used the following common terms and techniques in planning and executing a fire plan:

Target reference point (TRP). A specific point on the ground that is used to control direct and indirect fires.

Trigger line (TL). An imaginary line drawn across the battlefield that is used to initiate direct and indirect fires.

Engagement criteria. Conditions that must be met before a unit can initiate fires on the enemy (for example, three BTRs crossing TL A).

Disengagement criteria. Conditions that must be met before a unit can disengage.

Fire pattern. The manner in which direct fire systems engage a target area. There are three fire patterns:

- **Frontal**—the standard fire pattern assumed unless otherwise directed. This pattern is used when targets are dispersed laterally to the unit and all friendly elements can engage the targets.

- **Depth**—employed when targets are exposed in depth in a column formation moving directly toward or away from the unit.

- **Cross**—employed when targets are exposed laterally and when obstructions prevent all weapon systems within the unit from firing to the front.

Firing technique. The manner in which all weapon systems are fired. There are three firing techniques:

- **Simultaneous**—used when moving or unprotected, with all weapon systems firing at the same time in the target area.

- **Alternating**—used when one weapon of a section is firing at a target area and as its firing is being completed, the other weapon in the same section begins firing into the target area.

- **Observed**—used for both indirect and direct fires. This technique is used

for long range targets, and adjustments are made after the initial burst.

Fire Command. A format for directing gunners to engage specific targets. The most formal fire command consists of six elements: *alert, weapon or ammunition, description, location, control, and execution.* When chance contact is made with the enemy, an abbreviated format consisting of four elements—*alert, description, location, and execution*—should be used.

Maximum Engagement Line. An imaginary line drawn across the battlefield that represents the farthest point at which a weapon system can effectively engage a target. Terrain, visibility, gunner ability, and weapon capability are all factors.

Engagement Area (EA). A specific area in which the leader has decided he wants to destroy the enemy.

Final Protective Fire (FPF) Line. An imaginary line drawn across the battlefield at which all direct and indirect fire assets are to fire at their maximum rate when approached by the enemy. Final protective fire continues until a cease fire command is issued.

Fire patterns are selected on the basis of the way the leader anticipates destroying the enemy, compared to the manner in which the enemy is exposed to the friendly positions. Standing operating procedures (SOPs) for various firing patterns must be developed and completely understood by all members of a platoon.

The frontal fire pattern (Figure 1) should be established as the standard for friendly units to use unless unit leaders specifically direct them to do otherwise. When frontal fire patterns are used, friendly elements should engage the enemy to their front. The friendly element at far left engages the enemy element on the far left, and the one at far right engages the enemy element on the far right. The two friendly elements in the middle engage the enemy elements from the center to the flank. All friendly elements engage their targets from near to far, the most dangerous to the least dangerous.

When using a depth pattern (Figure 2), the right section engages enemy

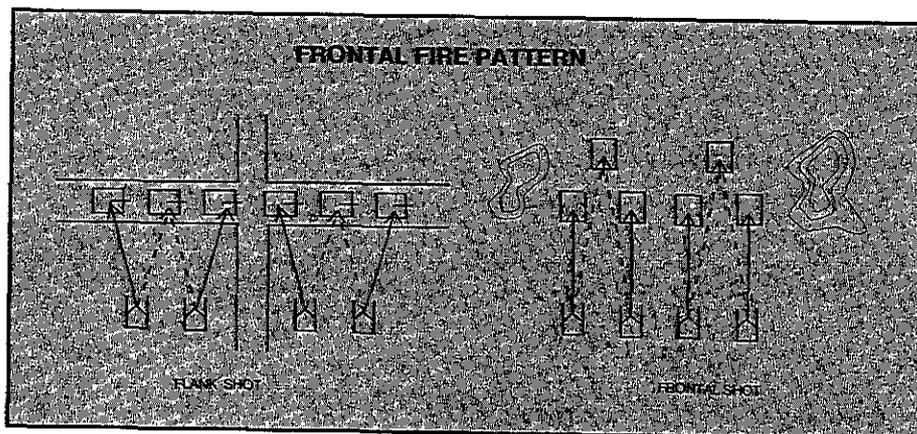


Figure 1

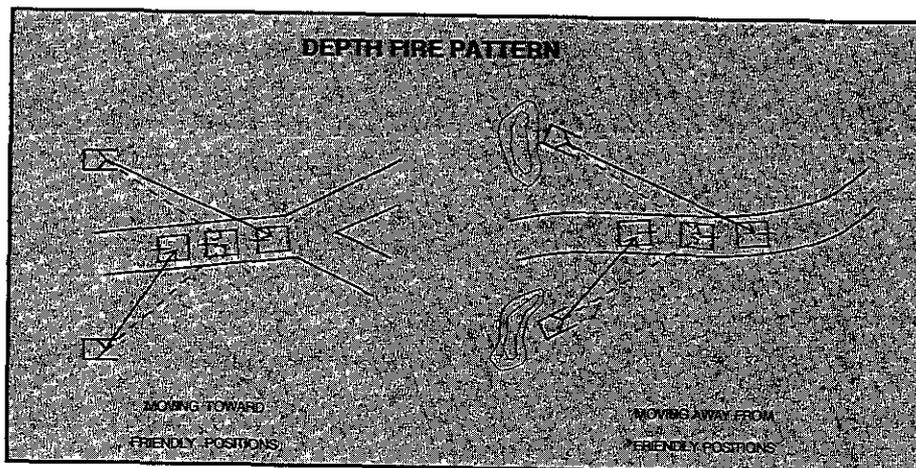


Figure 2

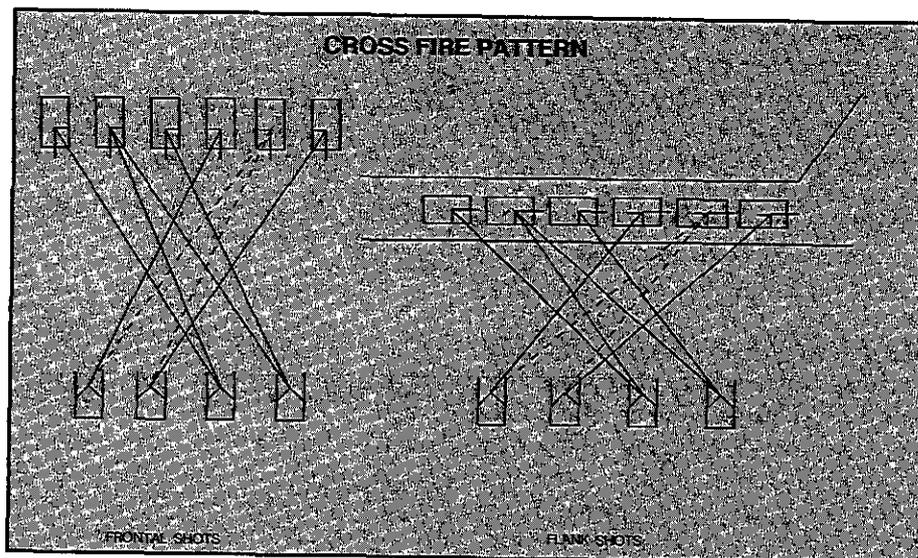


Figure 3

targets from front to center and the left section engages from rear to center.

Cross patterns (Figure 3) are effective because they offer friendly gunners flank or oblique shots. Cross patterns also help friendly elements by creating

a "wall of steel" to the direct front of the friendly positions. Engagements in the cross firing pattern are from flank to center—left side elements engage from right to center, and right side elements engage from left to center. All elements

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engage enemy targets from the most dangerous to the least dangerous.

The importance of making sure all soldiers understand these three basic fire patterns cannot be overemphasized. Gunners must know their assigned targets so that the enemy can be destroyed rapidly. Once they understand the basics, they can expand their collective killing capability—the sections can fire a pattern different from the platoon pattern (for example, the platoon may be firing frontal patterns while each section internally fires cross patterns).

The firing techniques are essential to controlling the rate and distribution of fire in an engagement area. These techniques insure that a unit places enough fire on its target without recklessly expending ammunition.

In an offensive movement, leaders may need to be reminded that fire superiority must be established immediately. Once contact is made with the enemy, simultaneous fire from all weapon systems should be employed. As the enemy is being suppressed, the leader must decide at what point he must order the transition to alternating fire. This is a critical decision because if fire superiority has not been achieved, changing from simultaneous to alternating fire may result in the loss of friendly soldiers and equipment. If the unit cannot gain fire superiority, the gunners must continue to suppress the enemy while moving to covered and concealed positions.

One technique for controlling the distribution of fire while moving is terrain indexing. In most mechanized infantry platoons, the soldiers, when mounted, understand sectors of fire that resemble those in Figure 4. The leader must terrain index to identify sectors while moving, and he does this by using the natural and man-made terrain features.

The leader indexes the terrain by using TRPs, which can be houses, tree lines, terrain features, or anything else that can be identified easily. In the example shown in Figure 5, the leader might say, "All stations, this is Blue 1, TRP 1 is the red church by the road

exiting the town from the south. TRP 2 is the water tower 800 meters northwest of TRP 1. TRP 3 is the woodline 700 meters northeast of TRP 1. Alpha section, your sector is from TRP 2 to TRP 1. Bravo section, your sector is from TRP 1 to TRP 3."

By identifying these TRPs, the platoon leader accomplishes two things: He identifies points on the ground from which he can adjust fires onto the enemy, and he clarifies and defines specific sectors for his weapon systems.

For example, if the platoon's soldiers hear the fire command "contact, 2 BTRs, 50m right of TRP 1, fire" (Figure 6) they immediately assume the frontal fire pattern, and those in Bravo section simultaneously engage the enemy. If

additional fires are needed, the leader can issue another fire command for Alpha section to fire into its secondary sector (TRP 1 to TRP 3).

Terrain indexing can also be used in the movement to contact and during the dismounted assault from the assault position. The principle is the same: The leader identifies TRPs to control the fires of his element and to control the maneuver of the unit so that it does not mask those fires. A terrain index should be updated continually to avoid confusion if contact should be made with an enemy force.

In a defensive engagement, the platoon must decimate the attacking enemy force as quickly as it can, suggesting again the use of simul-

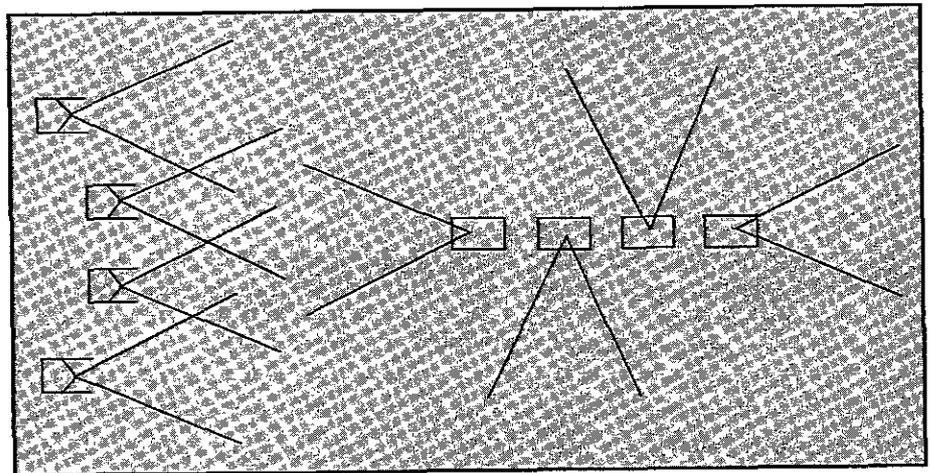


Figure 4

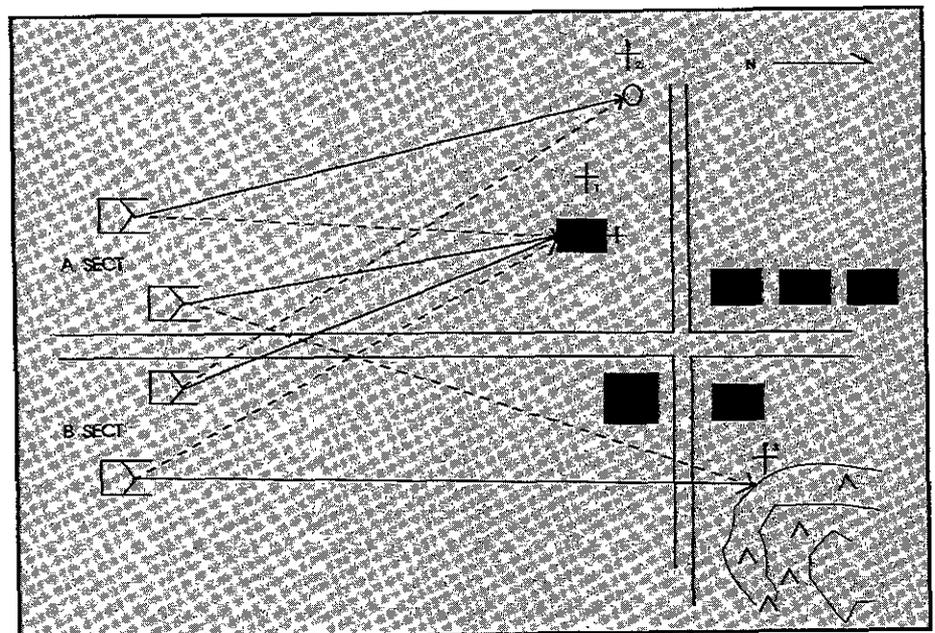


Figure 5

taneous fire. Once the enemy force has been halted and the platoon has gained fire superiority, the leader may call for alternating fires in a specific sector.

A detailed fire plan is essential to the execution of a defense. A platoon and its sections must be able to analyze the terrain rapidly, issue a detailed order, and synchronize direct and indirect fires. The fire plan depicts the way the leader envisions the decimation of an enemy force in a specific engagement area.

The elements of a fire plan vary with the amount of time the leader has to prepare (considering factors of METT-T—mission, enemy, terrain, troops, and time). As a minimum requirement, a fire plan should include engagement area, TRPs, sectors, trigger lines, dead space, and FPF. A more detailed fire plan will include the maximum

effective engagement line; observation posts (OPs); obstacles; fire support plan; vehicle positions; primary, alternate and supplementary positions; primary and secondary sectors of fire; all weapon symbols; principal direction of fire (PDF); final protective lines; terrain features; and adjacent units.

The fire plan should also include the engagement criteria, total number of systems available, and priorities of engagement. The personnel and systems should be arrayed on the battlefield so as to mass fires, not systems. Whenever possible, the fire plan should depict mutually supporting fires and the massing of direct and indirect fire in the engagement area.

Although there is no schoolbook solution to developing a fire plan, the following examples illustrate the thought processes a leader must go

through to write a detailed, comprehensive fire plan.

- Draw a terrain sketch, including any dead space.
- Analyze OCOKA (observation and fields of fire, cover and concealment, obstacles and movement, key terrain, and avenues of approach) and the engagement area.
- Emplace weapon systems, depicting weapon symbols, vehicle positions, and primary, alternate, and supplemental positions.
- Identify TRPs, primary and secondary sectors of fire, and trigger lines. (Multiple trigger lines may be used for different weapon systems.) Identify maximum engagement lines.
- Identify FPF, and depict the location of OPs and obstacles.
- Identify engagement criteria, priority of engagement, and number of weapon systems.

The execution matrix is another excellent tool to use in developing the operations order and for rehearsing the defensive plan, because it gives specific guidance to all weapon systems on the basis of several possible enemy courses of action. For example, the matrix might show Sections A and B and the forward observer in boxes down the left side, and trigger lines A, B, C, and D across the top. The specific actions for the sections at each trigger line would then be entered in the appropriate boxes.

During limited visibility operations, a leader uses these same fire planning techniques, but controlling fires becomes more difficult. For this reason, a leader should always prepare to operate on a non-illuminated battlefield. Being prepared means maintaining the night observation devices (NODs) and training the soldiers so they will be confident in using the equipment and in their own ability to acquire and destroy targets.

All of a platoon's organic weapon systems have night observation devices associated with them. The way the leaders elect to use these devices is a matter of technique and experience.

A leader's decision to remove the NOD from a weapon system, for

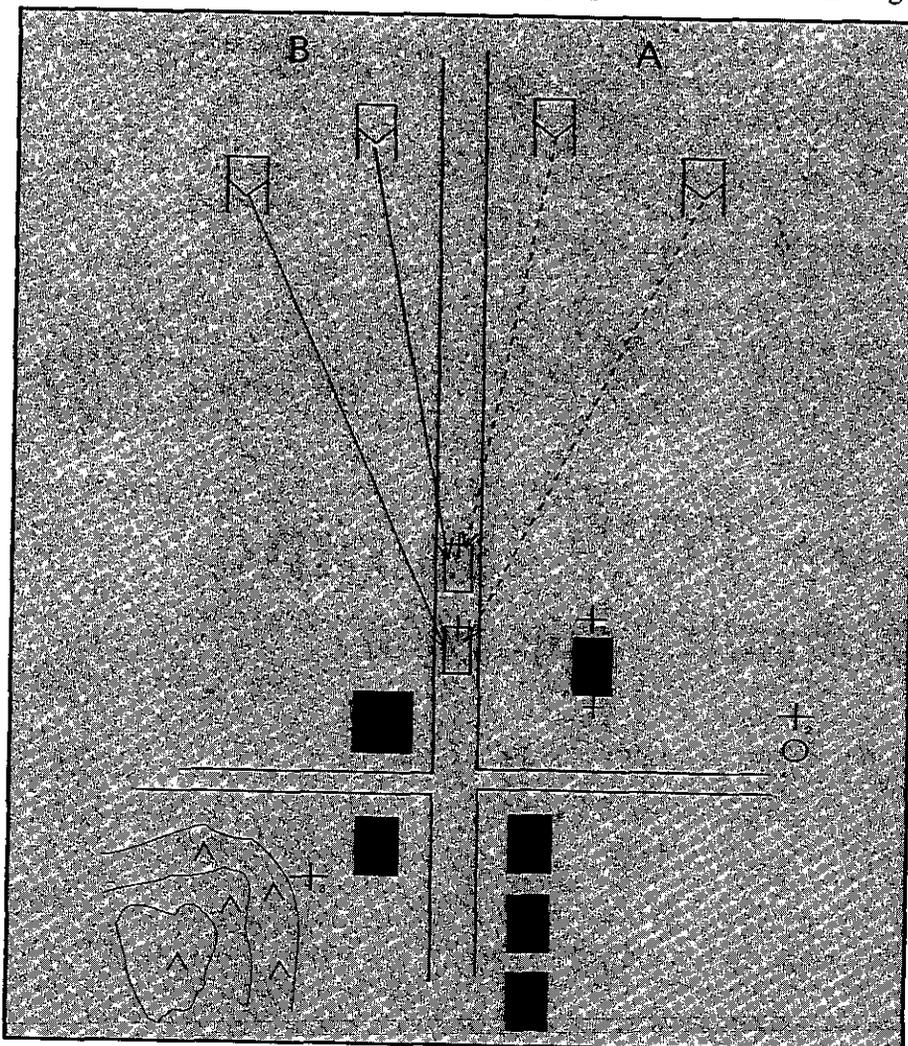


Figure 6

example, should be based on a tactical advantage to be gained by doing so, not on a problem such as an inability to boresight and zero with it. Too, the issues associated with the "whiting out" of these devices are real and must be dealt with. A crew that elects to remove the NOD from their weapon should always have a well rehearsed range card and a means of target acquisition and fire adjustment.

On the other hand, a decision to fire with NODs presents a fire control challenge. Such fire control measures as trigger lines, TRPs, FPLs, PDFs, and FPFs must be marked so that they can be identified.

TRPs should be both thermal and visual so that all systems can use them. Trigger lines should be marked according to a color scheme for different distances and different systems. *Final protective lines* can be marked with chemical lights to the front of the position, or with some chemical liquid from a light on the horizontal and vertical bars of the weapons' traversing and elevating mechanisms. PDFs and the trigger line for the FPF can also be marked using chemical lights.

There are many other techniques for fire control during limited visibility operations, but a leader must always use discretion in placing these lights. His plan must be simple and usable, and

whenever possible, he should get a look at the engagement area from the enemy's vantage point. Rehearsal is the key to understanding the limited visibility fire plan, including shifting fires between marked TRPs and repositioning forces as necessary.

In fact, rehearsals are absolutely necessary to the successful execution of any fire plan, but time is often the adversary. When possible, rehearsals should be conducted with all personnel involved. Various levels of rehearsal can be conducted, depending upon the factors of METT-T.

- A full rehearsal is conducted with all soldiers in a secure area going over specific tasks. Actions on the objective should be rehearsed first (based on reconnaissance) then specific company, team, and platoon drills.

- A key leader rehearsal is a walk-through version of full rehearsal by key leaders.

- A terrain model rehearsal reconstructs key events on a terrain model.

- A fire plan rehearsal uses a fire plan board and terrain model on which key leaders rehearse actions to be taken as *the enemy crosses specific trigger lines*.

- A range card rehearsal is one in which the squad leaders go over the range card with their gunners and assistant gunners (a transition exercise, for example).

- A backbrief is used by leaders to explain their actions using maps or fire plan boards to the soldiers.

To summarize, leaders must be able to analyze OCOKA in relation to METT-T and design a fire plan that considers the weapon systems available and the enemy's order of battle. Gunners must understand how to control the rate and distribution of fires (fire patterns and firing techniques). Since everyone must understand the fire commands, *they must be brief and simple*. And, if leaders and gunners are to initiate direct fires according to the proper trigger line, they absolutely must rehearse the fire plan.

But units will continue to have problems defining the "how to" until ARTEP 7-8 MTP includes a check list that leaders can use to guide them through the process.

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Offensive TOW Training

An Innovative Approach

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The Echo Company in a mechanized infantry battalion is the support arm of a battalion task force. It enables the maneuver infantry battalion commander to make the most of his combat power. By fixing enemy forces at long ranges,

the Echo Company increases the concentration of assault forces directed at an enemy's center of gravity. Why, then, do after action reviews (AARs) at the combat training centers so often mention that, "the TOWs never

influenced the battle"?

It is easy to visualize the TOW in the defense, but what can an Echo Company really do as part of an attacking force? Offensively, the company *fixes* or *suppresses* an enemy