

Direct Fire Control

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Direct fire control includes the techniques and control measures used to integrate direct fires into a maneuver plan. A direct fire control plan tells the soldiers the specifics of the targets they are to engage. Direct fire control consists of the terrain and enemy oriented techniques used to *control fire distribution* (where and what to shoot) and *engagement criteria* (who shoots when).

In an operations order, direct fire control measures are included in the operations overlay, the tasks to maneuver units paragraph, the coordinating instructions, and the synchronization matrix, if one is used. These control measures provide subordinates with the detailed instructions to ensure that direct fire is employed effectively and massed on the enemy's formation or positions. In addition, they serve as a foundation for avoiding the mistaken engagement of friendly forces.

Fire Distribution

From the maneuver plan, commanders develop the fire distribution plan, using a combination of techniques oriented on the terrain and the enemy force.

The plan must use all weapon systems efficiently, mass direct fire, avoid the engagement of destroyed vehicles and positions, and prevent fratricide. The fire distribution plan must be well understood at all levels and must take into account engagements during limited visibility. A well understood plan that uses the proper techniques to orient

fires on the enemy will help prevent fratricide as well.

When developing a fire distribution plan, leaders should consider the following principles:

- Destroy the most dangerous targets first.
- Avoid target overkill.
- Attack the enemy throughout the depth of his formation.
- Control fires to achieve the best shots and to expose only the units or weapons needed for an engagement.
- Make the best possible use of each weapon's inherent capabilities.
- Overlap sectors of fire to prevent the enemy from fixing and maneuvering against any one element.

The following are the terrain fire distribution techniques commonly used to synchronize the direct fire plan with the maneuver plan:

Target Reference Point (TRP). A TRP is an easily recognizable point on the ground (either natural or manmade) that is used for identifying enemy targets or controlling fires. TRPs are designated, using the standard target symbol and target numbers assigned by standing operating procedures (SOPs). If a direct fire TRP is nominated and approved as an indirect fire TRP, it is numbered according to the target numbers assigned by the fire support element (Figure 1).

In areas where there are no distinguishable terrain features, TRPs can be constructed from VS-17 panels, battle-field debris, and the like. These expedi-

ent TRPs should be heated so they are visible through thermal sights. To prevent confusion when more than one company or platoon is oriented on the same engagement area, TRPs should be numbered and marked according to well-established SOPs.

Engagement Areas/Sectors of Fire.

An engagement area is an area in which the commander intends to engage an enemy force with the massed fires of all available weapon systems. Engagement areas and sectors of fire are based on the available fields of fire and the capabilities of the weapons employed. A sector of fire is an area that must be covered by the fire of an individual weapon or unit.

TRPs and magnetic azimuths are used to designate the physical confines of an engagement area and sectors of fire as shown in Figure 1. An engagement area may be subdivided and assigned to subordinate units and weapons with sectors of fire. Inherent in assigning sectors of fire, as with unit positioning, is achieving mutual support to keep the enemy from isolating individual units and weapons.

Phase Lines. Normally, a phase line (PL) is a linear control measure used to control movement, but phase lines placed along terrain features can also be used to designate sectors of fire. Phase lines may also be used in engagement criteria.

Near-half, Far-half Technique. When the terrain is so open that there are no specific features to use as refer-

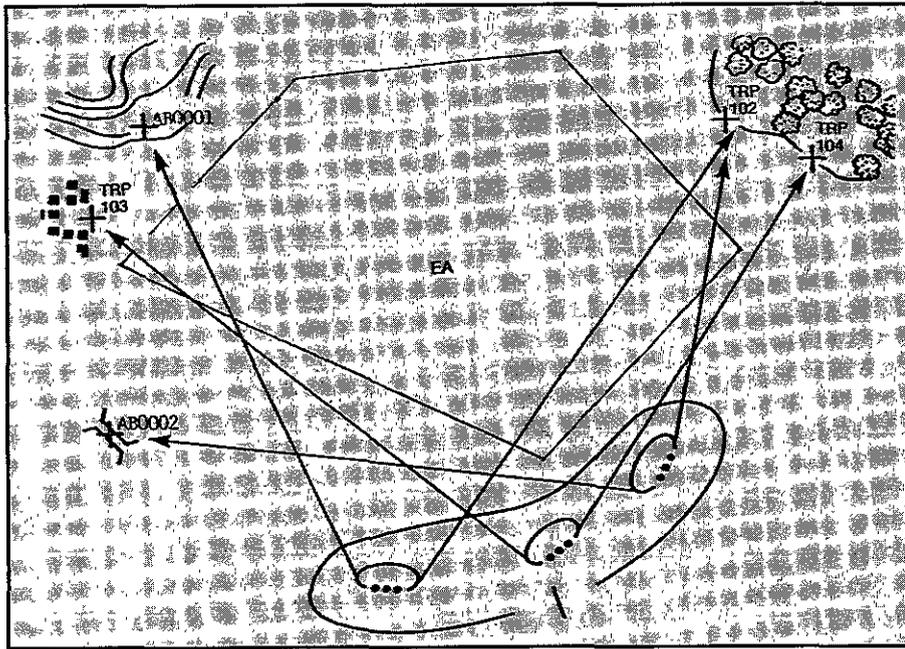


Figure 1

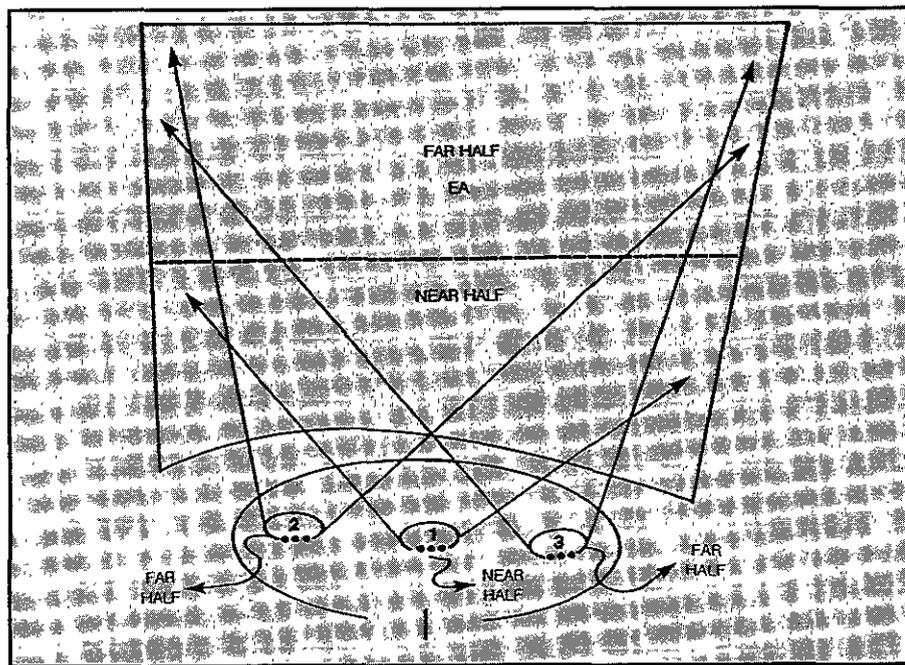


Figure 2

ence points, or when there has not been time to construct reference points as described earlier, units can be assigned specific portions of an engagement area. For instance, in Figure 2, 1st Platoon is responsible for the near half (the area closest to friendly forces), and 2d and 3d Platoons are responsible for the far half (the area farther from the friendly forces).

The common enemy oriented techniques are as follows:

Engagement Priority. Each weapon or element can be assigned a type of vehicle or target to engage first. Tanks, BMP fighting vehicles, BRDM reconnaissance vehicles, and other vehicles may appear in an enemy armor formation. These systems have different capabilities and pose different threats at different ranges. Commanders must determine which targets are the most dangerous and then assign engagement priorities to them. Engagement priori-

ties are assigned according to the mission and the desired effects on the enemy formation. Generally, Bradley fighting vehicles should engage BMPs, ZSUs, and other light armored vehicles. Tanks should engage tanks, and TOW missiles should engage command and control, engineer, and air defense artillery vehicles. This rule should not restrict the assignment of priorities; different engagement priorities may be assigned to different platoons or companies. For example, "Company A engages BMPs, then tanks; Team B engages tanks, then BMPs."

Fire Patterns. Three basic enemy oriented fire patterns can be used to distribute fire when multiple targets appear and no other control measures have been assigned—*frontal fire*, *cross fire*, and *depth fire*:

Frontal fire is used when targets are in front of the unit in a lateral configuration. The left flank element engages the leftmost target; the right flank element engages the rightmost targets, or if necessary they engage targets from near to far, or from most dangerous to least dangerous. As targets are destroyed, fires are shifted toward the center of the enemy formation.

Cross fire is used when targets are positioned laterally and obstructions prevent elements from firing to the front. The leftmost element engages the rightmost target; the rightmost element engages the leftmost target. As targets are destroyed, fires are shifted toward the center of the enemy formation and from near targets to far.

Depth fire is used when targets are in a column formation. The leftmost element engages the target farthest to the rear; the rightmost element engages the closest target. As targets are destroyed, fires are shifted to the center of the enemy formation. (See also "Platoon Fire Control," by Captains Michael H. Shields and Gerald P. Kulp, *INFANTRY*, March-April 1992, pages 38-42.)

Engagement Criteria

To create the desired effect on enemy formations and positions, synchronize fire and maneuver, and prevent fratricide

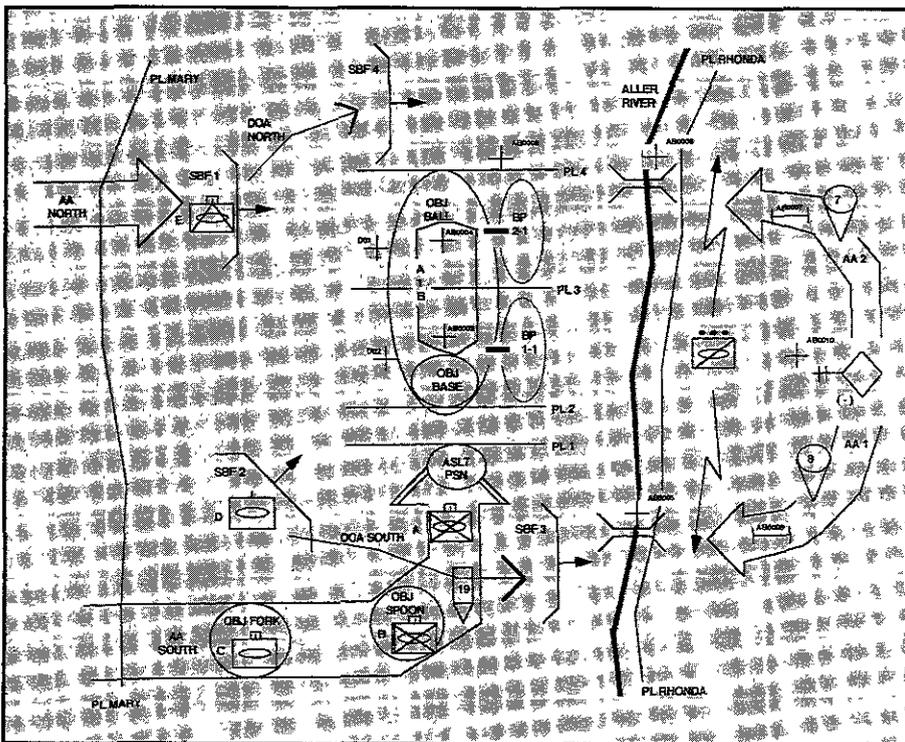


Figure 3

SYNCHRONIZATION MATRIX

EVENT	PL MARY	ASSAULT (OO LEAD TEAM REPORTS PL 1)	PL 2	OBJ BASE SEIZED	PL 3	PL 4	CONSOLIDATION
BOS							
TM A	AA SOUTH OCC ASLT PSN	AA SOUTH BEGIN ASLT OBJ BASE	REPORT PL 2	MARK AND CLEAR 2 VEHICLE LANES	OCCUPY BP 1 - 1 ORIENT AB005 - 006		
TM B (M/E)	AA SOUTH OCC OBJ SPOON	AA SOUTH OCC OBJ SPOON	MOVE TO ASSAULT PSN	PASS THRU TM A ASLT OBJ BALL	REPORT PL 3	REPORT PL 4	OCCUPY BP 2 - 1 AB006
TM C (RES)	AA SOUTH OCCUPY OBJ FORK	PRIORITIES: 1) OCC SBF 3 / BLOCK CATK 2) SEIZE BALL		OCCUPY OBJ SPOON	PRIORITIES: 1) B/P SEIZE BALL 2) BLOCK CATK		OCCUPY SBF 2 ORIENT TRP D01 - CP19
D CO	OCCUPY SBF 2 SUPPRESS PL 2 - PL 3	SUPPRESS PL 2 TO PL 3	SUPPRESS TRP D01 TO D02	DOA SOUTH OCC SBF 3 AB005 BLOCK CATK			
TM E	OCCUPY SBF 1 SUPPRESS PL 3 - PL 4	SUPPRESS PL 3 TO PL 4	SUPPRESS PL 3 TO PL 4		OCCUPY SBF 4 AB006		
FIRE SUPPORT	FA - TM B 4.2 - TM B FIRE A1B	FA - TM B 4.2 - TM B FA - 004 4.2 - 003	FA - TM B 4.2 - TM B FA - 004 4.2 - 004	FA - TM B 4.2 - TM B FA - 004 4.2 - 004	LIFT FA, 4.2 OBSV AB005, 6, 7, 8, 9		
SCOUTS	SCREEN PL RHONDA OBSERVE NA17 AND 8						
GSR	SCAN EN CATK AVE / APP 1 AND 2						
CSS	AA SOUTH HOLD VIC CP 12						MOVE TO CP 19

Figure 4

cide, commanders must issue guidance to their subordinates on when to engage the enemy. As with fire distribution, this information is included in the maneuver paragraph, tasks to maneuver

units paragraph, coordinating instructions, and synchronization matrix, if one is used. The various techniques for controlling and establishing engagement criteria are as follows:

Event Oriented. A commander can control engagement by specifying that a unit will not engage until a certain event occurs. For example, "Team Alpha will engage the enemy when the lead enemy company crosses Phase Line Blue."

Time Oriented. During offensive operations, a specific time may initiate engagement. For example, "Team Bravo suppresses the enemy on Objective Tiger at 120600 May (H-Hour) to prevent the enemy from concentrating fires on Team Delta, the main effort."

Sequential Engagement. To confuse the enemy as to the dispositions of defending forces, a commander may order engagements at different times for different units and weapons. For example, "A tank team may engage members of an enemy force first to cause them to orient on the tanks. Then a mechanized team and Team Echo engage the enemy's exposed flanks."

Visual and Radio Signals. To provide positive control of direct fires, a visual or radio signal may be used to initiate fire. For example, "Company A will begin its assault of Objective Stone when illumination rounds hit the objective, signaling the conclusion of the artillery preparation." Another example, "On order, Company E initiates suppression of Objective Dog; Codeword Apple via command net." A properly planned and rehearsed direct fire control plan, synchronized with the maneuver plan and indirect fires, will ensure that combat power is concentrated at the decisive point.

Using terrain and enemy oriented fire distribution techniques and engagement criteria will facilitate this synchronization of combat power.

Fire Control Plan

Figures 3 shows the operational graphics for Task Force 1-92 Infantry. Figure 4 is a synchronization matrix. This figure illustrates a direct fire control plan integrated into the maneuver plan.

Team Echo's mission is to suppress the enemy on Objective Ball to prevent the enemy from fixing the main effort to the south. To control Team Echo's

fires, the coordinating instructions and the synchronization matrix specify that Team Echo will initiate suppressive fire when the lead team (Alpha) crosses PL 1. Team Echo's sector of fire is between PL 3 and PL 4. After Objective Base is seized, Team Echo moves to and establishes support-by-fire (SBF) position 4 with its fires oriented toward TRP AB0006 (a TRP for both direct and indirect fire).

Delta Company's mission is to suppress the enemy on Objective Base to prevent him from fixing the main effort with direct fire. To control Delta Company's fires (Figure 4), the coordinating instructions and the synchronization matrix specify that Delta Company

will initiate suppressive fire when the lead team (Alpha) crosses PL 1. Delta Company's sector of fire is between PL 2 and PL 3. After Team Alpha reports PL2, Delta Company shifts its fires to between TRP D01 and TRP D02 (both of which are direct fire TRPs.) Upon seizure of Objective Base, Delta Company moves along direction of attack (DOA) South to occupy SBF position 3 to block an enemy counterattack. The orientation of the company is toward TRP AB006.

A detailed direct fire control plan enables a unit to employ and mass direct fire on the enemy's formations or positions. In addition, it serves as the foundation for avoiding fratricide.

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Team and Squad Movement

Firepower versus Speed

CAPTAIN MARK E. GREEN

There are numerous techniques for assaulting across an objective. Some units use individual movement techniques (IMTs) in crossing the objective as a fixed part of their standing operating procedures (SOPs), while others always rush across. But any time we tell leaders and soldiers to use the same technique all the time, we rob them of opportunities to exercise initiative and develop their leadership skills. We also violate the intent of mission-type orders. If junior leaders understand why different methods are used, they will learn to assess the current situation and then choose an appropriate technique.

When conducting an assault, a leader must determine how much effective fire he is taking so he can determine the amount of firepower he needs to sup-

press the enemy fire. Once effective suppression is achieved, the maneuver elements sweep across the objective with the maximum speed the current situation allows.

In some cases, if four men are shooting, five men can maneuver: the firepower provided by the four shooters is all that is required to suppress the enemy fire, and the five-man maneuver element can move in three-to-five-second rushes. This, of course, is the *ideal* way of moving at maximum speed.

It is difficult, however, to control odd-sized units or mismatched elements in a combat situation. Breaking up teams to increase speed may cause more trouble than it is worth. One means of providing control and increasing speed is a set group of maneuver techniques.

The table below shows examples of set techniques and the leader who is responsible for assessing the situation and choosing the best technique.

The progression is from more movers

TECHNIQUE	DECISION MADE BY
Squads Bound	Platoon Leader
Teams Bound	Squad Leader
Teams Move by Buddy Team	Squad or Team Leader
IMT, One Man per Team	Squad or Team Leader
IMT, One Man per Squad	Squad or Team Leader