

## CHAPTER 4

**LIGHT ARMOR PLATOON**

Although the light armor platoon is an integral part of the light armor company, it is capable of detaching from the company and then operating with a light infantry battalion. It is important for the light armor platoon leader to become familiar with the organization and operations of the light infantry. When the platoon operates with its parent light armor company, its fundamental employment is similar to that of an armor platoon as described in FM 17-15. This chapter describes the employment of the light armor platoon as it would apply to the support of light infantry.

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**Section I. Organization**

**LIGHT ARMOR PLATOON**

The light armor platoon consists of four M8 light tanks and 12 personnel organized into two sections of two M8s each. Figure 4-1 shows platoon organization.

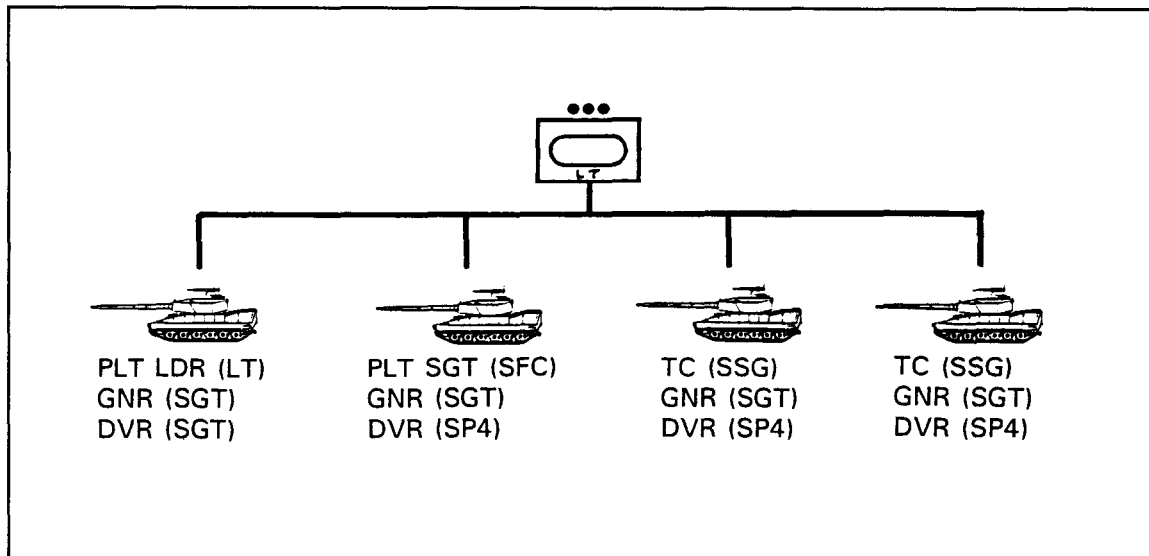


Figure 4-1. Light armor platoon.

## LIGHT BATTALIONS

Characteristics of the battalion vary by the type of light force. Some important generalizations can be made.

**Light Infantry Battalion.** This is the most austere conventional combat battalion; of the three types of battalions described here, its organization differs most from that of the light armor battalion. This battalion has only three rifle companies and a headquarters company. The differences among this battalion and air assault and airborne battalions are greatest in the organization of support and logistics. The battalion has no trucks larger than its 27 cargo high-mobility multipurpose wheeled vehicles (HMMWVs). There is no mess team in the battalion; Class I supply is prepared by brigade. There is only one mechanic in the entire battalion; repairs are conducted at brigade level. The battalion has only 18 long-range radios. The light infantry battalion has limited antiarmor capability: a HMMWV-mounted tube-launched, optically tracked, wire-guided missile (TOW) platoon at battalion level and a Dragon (Javelin) section at company level.

**Air Assault Battalion.** The air assault battalion and the airborne battalion are similarly organized with three rifle companies, an antiarmor company, and a headquarters company. Tactical movement for both usually is a combination of air insertion and foot marches. A major difference, however, is in the number and types of wheeled vehicles in the air assault battalion. The battalion has six 5-ton cargo trucks and 45 HMMWVs. There is a mess section and a 17-person maintenance platoon. Communications are served by 29 long-range radios. Antiarmor capability of the line company is decentralized down to each rifle squad.

**Airborne Battalion.** Once inserted, the airborne battalion tactically performs much like a light infantry battalion; walking is a principal means of transportation. It does have 10 2-1/2-ton trucks and 36 cargo HMMWVs, and it can move nontactically by truck. It has a mess section and a 16-member maintenance platoon. The airborne battalion has 30 long-range radios. Its rifle squads also have antiarmor capability.

## AUGMENTATION

The light armor platoon requires nearly the same CS and CSS as the light armor company. Because this may not be routinely possible, light armor platoons may have to fight with degraded maintenance, medical evacuation, and Classes III and V support. When task organized to a light battalion, the light armor platoon should be augmented in those areas, based on the type of light battalion and the battalion's augmentation from higher headquarters. Table 4-1 shows sources for augmentation.

Table 4-1. Sources for augmentation.

Possible Augmentation	Provided by
HMMWV for C2	Parent light armor company or battalion
Maintenance team (HMMWV with tools and parts boxes)	Parent light armor company or battalion
Ammunition section (5-ton truck)	Parent light armor battalion
Fuel section (5-ton truck)	Parent light armor battalion
Supply section (5-ton truck with water trailer)	Parent light armor battalion

## Section II. Employment

### PLATOON MISSIONS

The primary missions of the light armor platoon are to move, attack, and defend. It may take on additional tasks related to accomplishing its primary missions. The platoon operates as part of a light armor company or task organized to a light infantry battalion TF. Figure 4-2 shows the light infantry battalion's typical missions and the light armor tasks that may be required. When task organized to light infantry, the light armor platoon generally performs in two ways. First, the platoon may be employed as the primary maneuver element. Second, it may be in a direct FS role when infantry is the primary maneuver element. The decision of which role is used depends on METT-T. The light armor platoon also may be used as a separate special platoon, or it may be attached to one of the light companies in direct support (DS). This chapter will address the concerns of the light armor platoon leader under such conditions.

The platoon is the first level where the light armor unit leader must be trained to interact with a light infantry controlling headquarters staff. Further, the platoon leader must simultaneously act as the light armor force advisor to the battalion commander; he must rely on the staff for immediate CS and CSS. If the light armor platoon's company commander or XO is in the vicinity of the sector or zone, some assistance may be coordinated through that commander; however, this is not a certainty.

### OPERATIONAL PLANNING CONSIDERATIONS

**Intelligence.** Assignment of a light armor platoon gives a light infantry battalion a number of stabilized thermal sight systems. The light armor platoon can assist with screen missions in conjunction with the battalion's scout platoon or antiarmor company/platoon.

The light infantry S2 may not be aware of the IPB needs of the light armor platoon; therefore, the light armor platoon leader should ask the battalion S2 for the following: the

number of enemy forces; the armor protection level and armor-piercing capability of enemy forces; and terrain analysis requirements for mobility corridors. Potential NBC threat targets that may affect the platoon are identified by the battalion chemical officer.

**Maneuver.** The primary uses of the light armor platoon will be as a maneuver element or direct FSE for light infantry. Light infantry/light armor operations normally use one of four methods of maneuver refer to pages 4-41 through 4-44 for further information).

- The light armor force attacks by fire while the infantry infiltrates and assaults the objective.
- Light armor attacks by fire while light infantry advances for the assault. The light armor force then joins in the assault.
- The light armor and light infantry forces approach the objective on different axes.
- Light armor and light infantry forces advance together.

Light Infantry Battalion Mission/Task	Light Armor Platoon Tasks
Movement to Contact	Overwatch Attack by fire Provide mutually supporting fire Screen Provide direct fire suppression Reserve Counterattack
Attack	Maneuver as lead force Provide suppressive fires Counterattack Attack by fire Isolate an objective Security during consolidation Deceive enemy Screen Support or assault during breach Exploitation force
Defend	Deceive enemy Screening force Security force Reserve Counterattack Cover obstacles with long range direct fires
Delay	Overwatch Counterattack by fire Deception Reinforce Reserve Counterattack force

Figure 4-2. Battalion missions and platoon tasks.

Withdrawal	Screening force Deceive the enemy Fix enemy attack Detachment left in contact (DLIC) Rear guard Reserve
Raid	Deception Attack by fire Secure exit routes Fix enemy force
Passage of Lines	Overwatch Reserve

Figure 4-2. Battalion missions and platoon tasks (cont).

**Fire Support.** FS internal to the battalion consists of an 81-mm mortar platoon and 60-mm mortar sections in each rifle company. Calls for FS are by voice only. Light infantry battalions are usually supported by a towed 105-mm howitzer battalion. The light armor platoon may receive priority of fires during any phase of the operation.

Calls for fire within the company boundary may be cleared by the company FIST. Consideration must be made for friendly dismounted infantry operating in the same area. The light armor platoon must observe all identified targets and fires to avoid fratricide.

Smoke can be used effectively in the environment that light armor platoons will most likely operate in. Light armor crews can maintain target detection capability through smoke by using their thermal sights. Dismounted enemy forces will probably not have this capability.

**Air Defense.** Light armor platoons, which may not have dedicated Stingers or Avengers, conduct passive air defense techniques continuously. When moving in a light infantry battalion's AO, the light armor platoon will generate the largest signature from the air. Unlike armored maneuver battalions, the light armor platoon may be the only mechanized vehicles in the area and therefore becomes a lucrative target for enemy aircraft. Coordination should be made by the battalion staff to increase the ADA alert posture when the light armor platoon moves.

**Mobility and Survivability.** Engineer battalions possess a variety of earthmoving equipment, including armored combat earthmovers (ACE), lightweight, high-speed bulldozers, small emplacement excavators (SEE), dozers, and scoop loaders. The battalion commander assigns a priority of engineer effort. Light armor platoons may be given priority of effort, particularly in the defense. Two-tier fighting positions will normally require corps engineer support.

The obstacle plan must be deconflicted with any counterattack or withdrawal plan that the light armor platoon may execute. This must be done early in the planning stages by the battalion staff or through face-to-face coordination between the engineer platoon leader and the light armor platoon leader.

**Combat Service Support.** The light armor platoon must sustain itself under austere logistical conditions. The light armor platoon leader and platoon sergeant will do much of the logistical coordination directly through the battalion staff during the early stages of

contingency operations. Chapter 8 of this manual describes these unique logistical support processes in detail.

In most cases, Class III will be the most critical logistical concern for the light armor platoon during the initial stages of a contingency operation. Movement should be carefully planned to conserve fuel. Fuel distribution may be prioritized by the battalion commander to provide fuel for combat systems such as the M8.

**Command and Control.** In many cases, the light armor platoon leader acts as the battalion commander's principal advisor on the employment of the light armor platoon. He must accurately convey the capabilities and limitations of the platoon to the commander to maximize the effectiveness of the platoon. The platoon leader acts as a key staff member during the planning process at battalion level until the commander, XO, or LO from the light armor battalion staff becomes available to assist. Likewise, platoon sergeants and vehicle commanders will become advisors to light infantry company commanders if the platoon is task organized accordingly.

The platoon leader will normally communicate on the battalion command net unless attached to a light infantry company. The maneuverability of the light armor platoon can make the platoon the most lethal and effective ground reaction force for the commander. Therefore, leaders must stay abreast of the tactical situation of the battalion at all times to provide timely response if called upon to react to a threat in any part of the AO.

### Section III. Command, Control, and Communications

The platoon is organized in two sections. The platoon leader (M8 #1) and platoon sergeant (M8 #4) are the section leaders. M8 #2 is in the platoon leader's section, and M8 #3 is in the platoon sergeant's section. There may be instances, such as during convoy security or operations in a BUA, where the sections will operate independent of each other to support the light infantry commander.

The wingman concept facilitates C2 of the platoon. It requires that one M8 orient on another M8, on either the left or the right (see Figure 4-3). M8 #2 orients on the platoon leader's vehicle, M8 #3 on the platoon sergeant's, vehicle and the platoon sergeant's M8 on the platoon leader's vehicle. In the absence of specific instructions, wingmen move, stop, and shoot when their leaders do. Distances between vehicles should not be less than 50 meters or more than 100 meters as a basic guideline. This is dependent on METT-T and may be difficult in very close (jungle) or very open (desert) terrain.

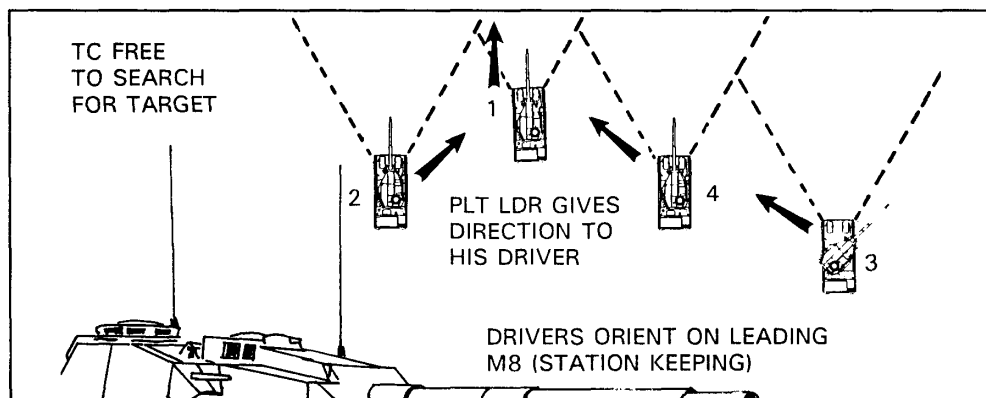


Figure 4-3. Wingman concept.

## TACTICAL COMMUNICATIONS

The platoon leader is responsible for the planning, maintenance, training, and use of communications systems within the platoon. He is also responsible for operating within the company or battalion communications network.

The platoon leader can choose from several different communications means: messenger, wire, visual, sound, or radio. These means should complement each other so the platoon does not depend on only one. Dependence on one means endangers C2, while reliance on several strengthens that control.

**Messenger.** TMs is the most secure means available and is the best means for transmitting lengthy messages. A messenger should be used to deliver platoon fire plans and status reports. During movement halts, all messages delivered by messenger should be written.

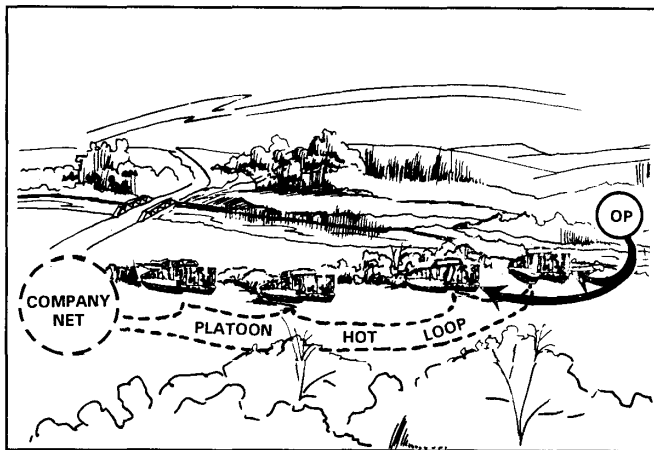


Figure 4-4. The platoon hot loop.

**Wire.** The platoon hot loop allows each vehicle to communicate with the platoon leader by wire. OPs and company CPs may also be connected to the hot loop (see Figure 4-4). It can be used in initial defensive positions, assembly areas, or other static situations. The hot loop is formed by connecting wire between the line terminals on the AM-1780 of each vehicle. The main power switch on the AM-1780 is then placed in the INTERCOM ONLY position, and all CVC helmet control switches are placed in the center position. The control box at each crew member's position should be placed in the ALL position.

Field telephones can then be connected at any point in the line to communicate within the hot loop. The M8 can be connected to the hot loop at the external phone when the driver's control box is in the EXT position. Field telephones can also be connected directly to the AM-1780 by using a length of WD-1 wire. This allows the platoon leader to communicate with an OP, an infantry company, or platoon CP without establishing a hot loop.

**Visual.** Visual communication is used to transmit messages and to identify friendly forces. Visual signals are of little use when visibility is poor or when a sufficient line of sight is not available. When working with infantry, leaders use hand-and-arm signals to control vehicle and platoon movements. The discussion of formations later in this chapter illustrates hand-and-arm signals.

Messages can be sent with flags by using prearranged signals. Each vehicle has three flags: red, green, and yellow. They can be used to—

- Control movement. Flags serve as an extension of hand-and-arm signals when the distance between vehicles becomes too great.
- Mark vehicle positions. For example, a quartermaster party member may use flags in an assembly area to mark vehicle positions.



- Identify disabled vehicles.
- Warn friendly elements of an advancing enemy. For example, an OP uses a flag to signal a platoon to move to its fighting position.
- Signal the supporting light armor element to shift or cease fires on an objective.

Based on signals established in the unit SOI or by the commander, flashlights and other lights may be used to transmit brief prearranged messages (for example, to identify friendly units).

Pyrotechnic ammunition can be used to illuminate an area at night or as a signal. It is available in several types and colors. These signals are generally used for friendly unit identification, maneuver element control, target marking, and location reports. They can also be used for ground-to-air communication. Their main advantage is the speed information can be transmitted to a large number of troops and isolated units. Meanings for these signals should be brief, simple, and based on SOP. Colors used in combinations or series increase the chance of error; observers may be unable to distinguish different colors or may miss part of a series. Pyrotechnic messages should be confirmed quickly by another communications means so the originator can be sure they were seen and understood. Pyrotechnic signals are easily imitated by the enemy and cannot be fully trusted unless the signaler can be identified. Since these signals can also be seen by the enemy, security must be considered to avoid exposing friendly unit locations or intentions.

Panels are used for communicating with aircraft to mark landing areas, DZs, and positions and to identify units as friendly. Identification displays are described in the SOI, SOP, or OPORD.

**Sound.** Whistles, horns, sirens, bells, voice amplifiers, and explosive devices can be used for audible (sound) communications. They are used to attract attention, transmit prearranged messages, and spread alarms. The range and clarity of sound signals are greatly reduced by battle noise. Since they are open to enemy interception, sound signals may be restricted for security reasons. They must also be kept simple to avoid misunderstandings.

**Radio.** The radio is the platoon's most flexible, but least secure, means of communication. It can quickly transmit information over long distances with great accuracy. Without secure equipment, however, radio signals are vulnerable to enemy interception. The platoon uses the radio only when other means of communication cannot be used. Each vehicle is equipped with a voice radio, and all vehicle commanders of the platoon monitor the platoon net. The platoon leader and platoon sergeant also monitor the company net. Each platoon vehicle has a single channel ground and airborne subsystem (SINCGARS) radio with either an internal secure voice system or VINSON security system.

The use of standardized call signs can reduce confusion in emergency conditions, such as when enemy contact has been made or when SOI procedures would adversely affect C2. An example of standardized call signs is the use of RED, WHITE, and BLUE to signify 1st, 2d, and 3d platoons.

## FORMATIONS

Formations are used to establish M8 positions and sectors of responsibility during operations. Formations facilitate control; increase protection, speed, and fire effectiveness; and alleviate confusion. Formations are not intended to be rigid; vehicles are not expected to be a specific distance apart. Position of each M8 in the formation depends on the terrain and the wingman driver's ability to see the lead vehicle.

Individual vehicles should move in the same relative position within the formation. This will ensure that each crew knows where to move, who is behind them, and where to observe and direct fires. Gun tube orientation for rear and flank vehicles should be modified to ensure 360-degree security based on the position of the platoon within the parent unit formation. The seven basic formations for the platoon are—

- Wedge.
- Vee.
- Echelon.
- Line.
- Column.
- Coil.
- Herringbone.

**Wedge.** The wedge is employed when a platoon is provided overwatch by another element and terrain is open or rolling (see Figure 4-5). It is normally used when the enemy situation is vague and contact is imminent.

The wedge has these advantages:

- It permits excellent fire to the front and good fire to each flank when leading infantry formations.
- It allows platoon leaders excellent observation up front while being covered by their wingmen.
- It enhances control since leaders are in close contact and can easily relay hand-and-arm signals to each other and any following infantry formations.

The wedge has these disadvantages:

- It requires lateral space for movement; therefore, it is difficult to use in closed terrain with dismounted infantry.
- It may expose the entire platoon to enemy fire simultaneously.

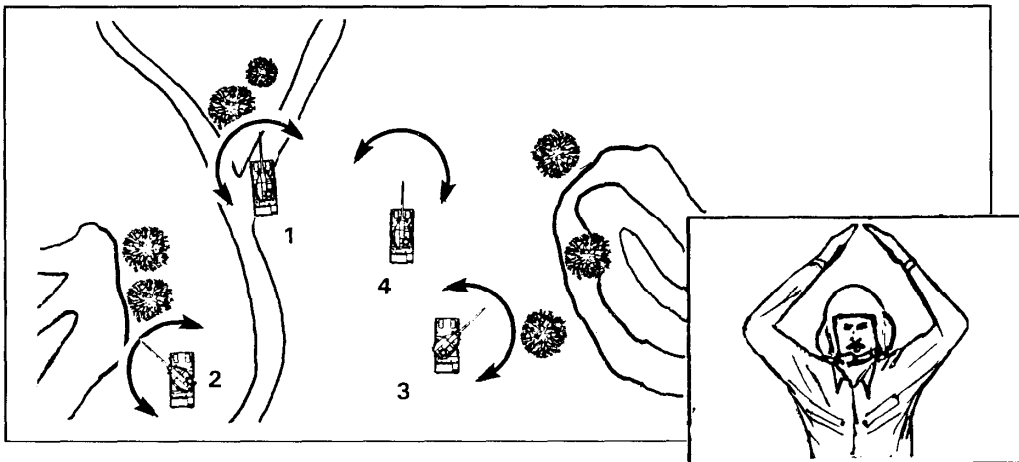


Figure 4-5. Wedge formation.

**Vee.** The platoon leader and his wingman lead, followed by the platoon sergeant's section. This formation is used when weather or terrain restricts movement or when overwatch within the platoon is required (see Figure 4-6).

The vee has these advantages:

- It provides excellent protection.
- It provides excellent control.
- It facilitates rapid deployment to any other formation.

The vee has these disadvantages:

- It limits fires to the front.
- It is more difficult to maintain orientation than in a wedge.
- It provides less control in wooded areas.

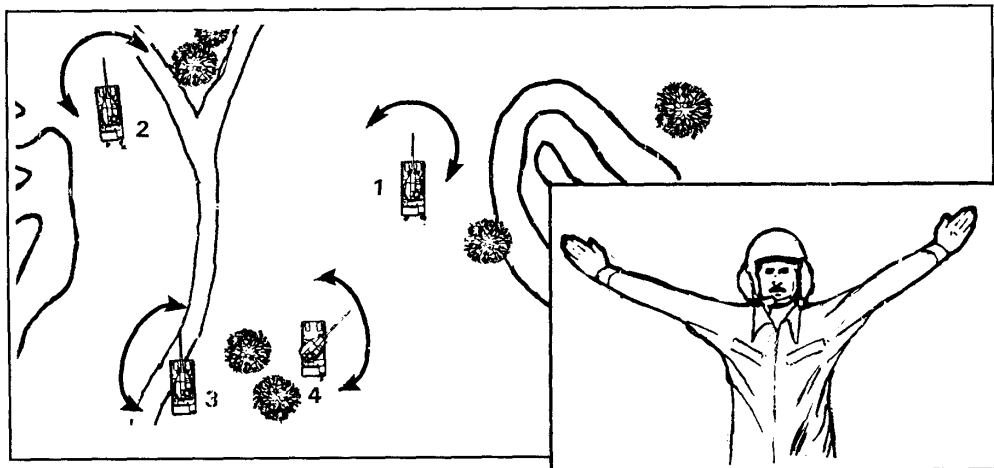


Figure 4-6. Vee formation.

**Echelon.** The echelon is used to screen an exposed flank of a larger moving force or the platoon (see Figure 4-7). It is also used when a light infantry unit faces a significant flank threat, such as when it is bypassing a strongpoint or BUA.

Echelons have these advantages:

- They provide excellent firepower to the front and one flank.
- They provide the best security to the higher unit formation.
- They facilitate rapid deployment perpendicular to the direction of movement.

The echelon has these disadvantages:

- It is difficult to control in wooded terrain.
- It is difficult to integrate into an infantry formation.

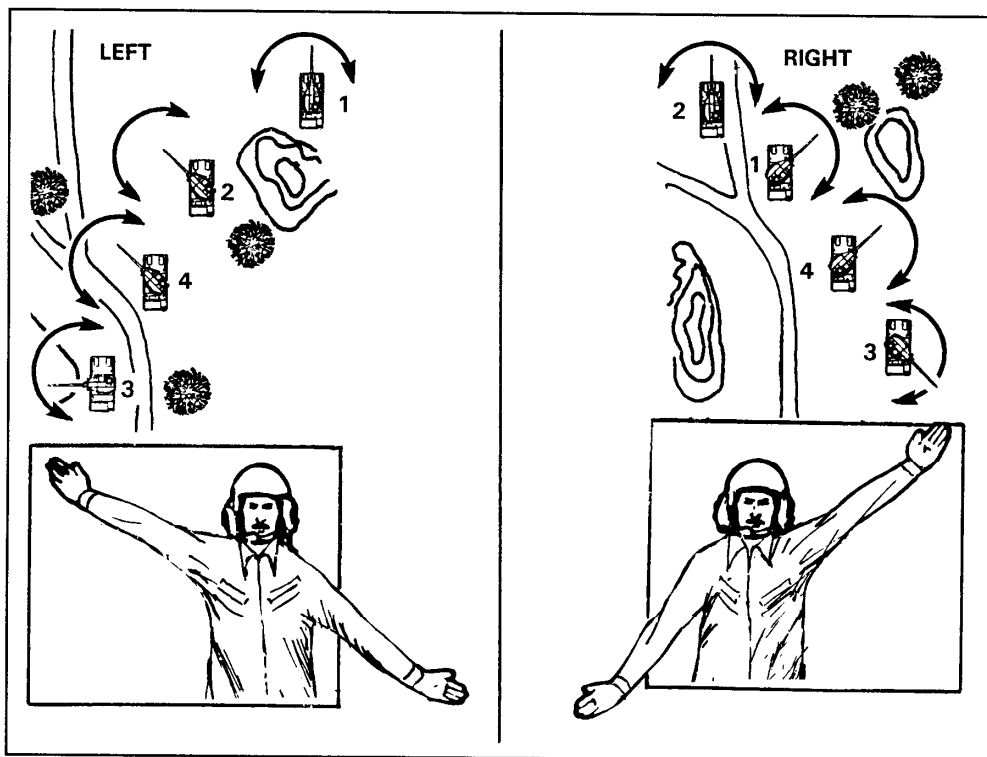


Figure 4-7. Echelon left and echelon right formations.

**Line.** A line formation is used to cross dangerous areas and assault a position (see Figure 4-8). It also facilitates mutual support when emerging from limited visibility conditions such as smoke or heavy woods.

The line has these advantages:

- It provides excellent firepower forward.
- It provides protection to dismounted infantry.
- Maximum vehicles can close on an objective in minimum time.

The line has these disadvantages:

- It provides minimum fire to flanks.
- It is less secure than other formations because of lack of depth.
- It is the most difficult to control.

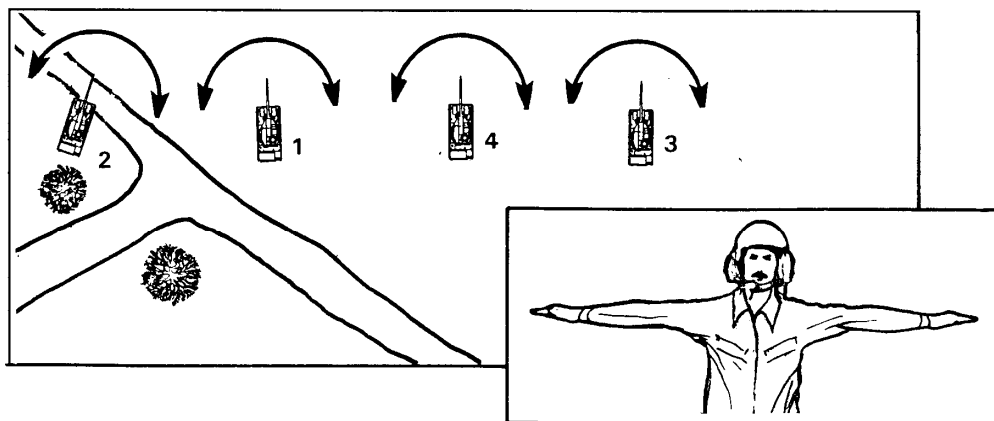


Figure 4-8. Line formation.

**Column/Staggered Column.** In these formations, the platoon leader positions himself where he can best control his elements. If he does not lead, he must ensure the lead vehicle commander is thoroughly familiar with the route of march and direction of travel. The column is used in night movements, in fog, when passing through defiles or dense woods, and during road marches when speed is required. The staggered column is used when terrain allows for dispersion (see Figure 4-9).

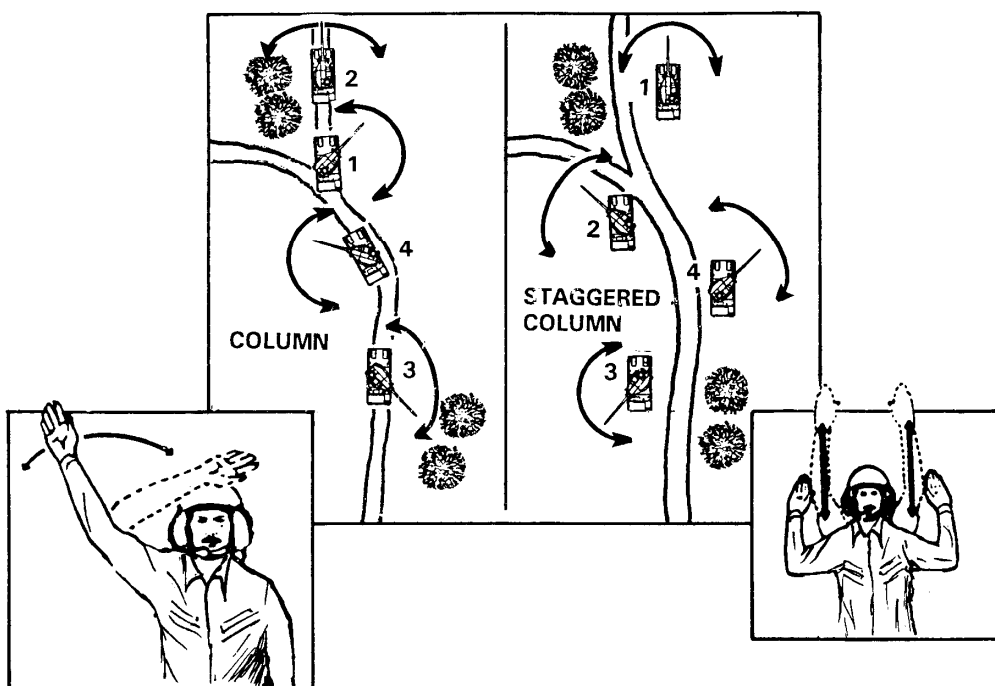


Figure 4-9. Column and staggered column formations.

The column or staggered column has these advantages:

- It provides excellent control.
- It provides excellent firepower to the flanks.
- It facilitates rapid deployment to other formations.
- It facilitates rapid movement.
- The dispersion increases security against enemy air and artillery attack.

A disadvantage of the column and staggered column is that they allow little fire to the front.

**Coil.** The platoon can employ this formation when it is operating independently and experiences extended halts or lulls in combat (see Figure 4-10). The platoon leader positions his M8, and the remaining tank commanders position their M8s based on the terrain.

The coil has these advantages:

- It provides good all-around security.
- It facilitates expanding to a perimeter defense.
- It provides protection to light infantry in open terrain.

A disadvantage of the coil is that without infantry it offers only limited security in heavily wooded terrain.

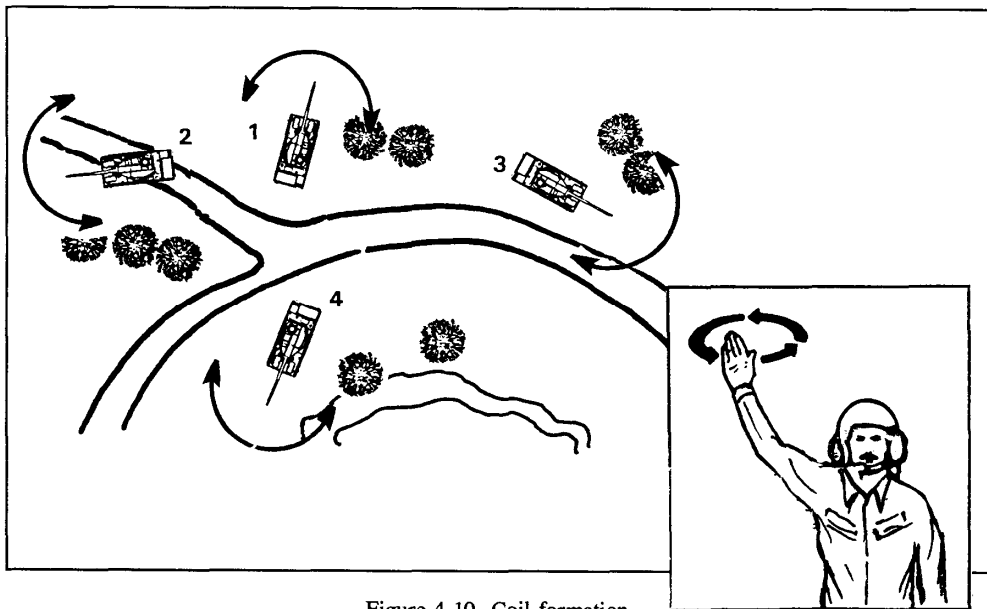


Figure 4-10. Coil formation.

**Herringbone.** The platoon uses this formation when it assumes a hasty defensive posture or temporary halt on a road where terrain does not allow adequate off-road dispersion. Vehicles move off the road if terrain permits (see Figure 4-11). Infantry should dismount and seek cover and concealment while providing additional security and observation.

The herringbone has these advantages:

- Vehicles can pass through the center of the formation.
- It facilitates dismounting of infantrymen prior to further deployment of the armor platoon.

The herringbone has these disadvantages:

- Vehicles may be vulnerable to enemy air attack.
- Security is limited (without infantry) and terrain does not allow for dispersion.

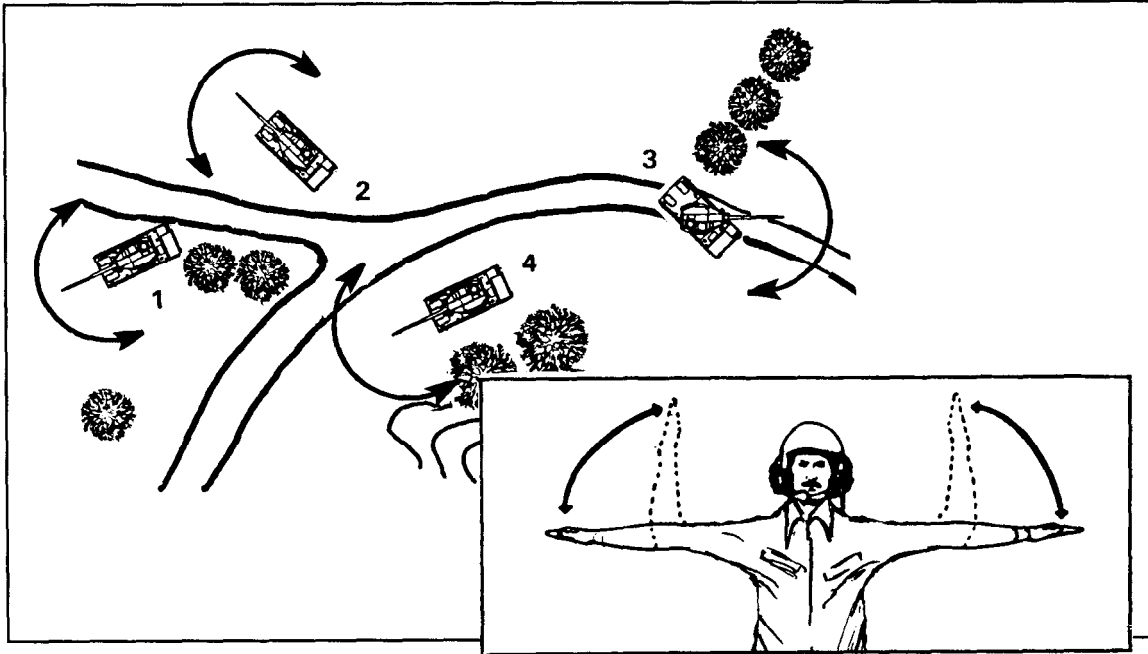


Figure 4-11. Herringbone formation.

## DIRECT FIRE CONTROL

M8 fires must be properly distributed and controlled to effectively support any operation, especially in close proximity to light infantry. In most cases, this is accomplished by the vehicle commanders following established unit SOPs and direct fire plans. Occasionally, the platoon leader will be in position to direct the fires of the entire platoon.

**Platoon Fire Plan.** The platoon fire plan provides the platoon leader with the necessary information to distribute and control the fire of all available direct and indirect weapons. The fire plan assists the platoon leader in determining how well the platoon has covered its assigned sector and in deciding which vehicle should move if shifts are required.

**Control Measures.** The dynamics of the offense will normally require that fires be controlled using the radio. Alerts and commands must be brief. Engagements will normally be initiated by the M8 crew that sees the enemy. During defensive operations, visual control measures can be used to start and stop engagements, shift fires, and signal prearranged actions.

**Engagement Priorities.** An M8 should always engage the most dangerous threat first. During offensive operations, the most dangerous threat will be the enemy antitank weapon systems. During defensive operations, platoons have more freedom of choice concerning what to engage and when to begin engagements. The platoon leader should control M8 fires so enemy C2 vehicles are engaged first. He can do this by assigning a vehicle or section the mission of observing for the C2 vehicles. Once they are acquired, the platoon leader initiates the platoon engagement.

**Fire Patterns.** Three basic fire patterns will cover most situations and provide fast, effective fire distribution. No matter which method of engagement is used, the goal is to engage near and flank targets first, then shift fires to the center and far targets. Fire patterns are particularly effective when all vehicles can see all of the enemy in the EA. The basic fire patterns are described in the following paragraphs.

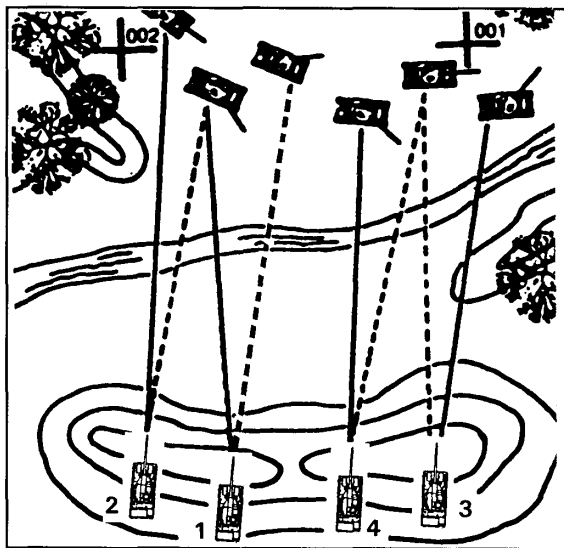


Figure 4-12. Frontal fire.

**Frontal Fire.** Frontal fire is used when the enemy is dispersed laterally in relation to the platoon and all M8s are firing to the front. The left-most vehicle engages the left-most target, and the right-most vehicle engages the right-most target. The two center vehicles engage targets to their direct front. When targets are destroyed, fires are shifted toward the center of the enemy formation (see Figure 4-12).

**Cross Fire.** Cross fire is employed when the enemy is exposed laterally but obstructions prevent all vehicles from firing to the front. The left-most M8 engages the right-most target, and the right-most M8 engages the left-most target. The two center M8s engage targets diagonal to their own positions. When targets are destroyed, fires are shifted toward the center of the enemy formation (see Figure 4-13).

**Depth Fire.** Depth fire is used when the enemy is exposed in column. The left-most M8 engages the rear target, then shifts toward the center. The M8 second from left engages a center target, then shifts toward the rear. The right-most M8 engages the front target, then shifts toward the center. The M8 second from right engages a target in the center and shifts toward the front of the enemy (see Figure 4-14).

**Techniques of Fire Control.** In addition to employing fire patterns to distribute fires, platoon leaders may choose one of three firing techniques to control the direct fires of their units:

- **Simultaneous fire.** This is the primary firing technique used by the platoon. It is employed during most offensive engagements when the unit encounters surprise targets. It is also used in most defensive engagements when the enemy array is numerous enough to require multiple engagements by each M8 in the unit.



- **Alternating fire.** Alternating fire is normally used when the platoon is in a defensive position or is undetected. Each vehicle alternates firing and observing with its wingman. Subsequent fire, by command, is simultaneous. During alternating fire, the wingmen are normally the first vehicles to fire. The platoon leader and platoon sergeant provide observation, then fire. The process continues until all targets are destroyed or the leader switches to simultaneous fire.
- **Observed fire.** This is normally used when the platoon is in protected defensive positions and engagement ranges are in excess of 2,000 meters. The first vehicle to fire engages while the wingman observes. This technique allows for maximum observation and assistance while protecting the location of the observing vehicle. The observer vehicle must remain prepared to engage in the event the firing vehicle consistently misses, experiences a malfunction, or runs low on ammunition.

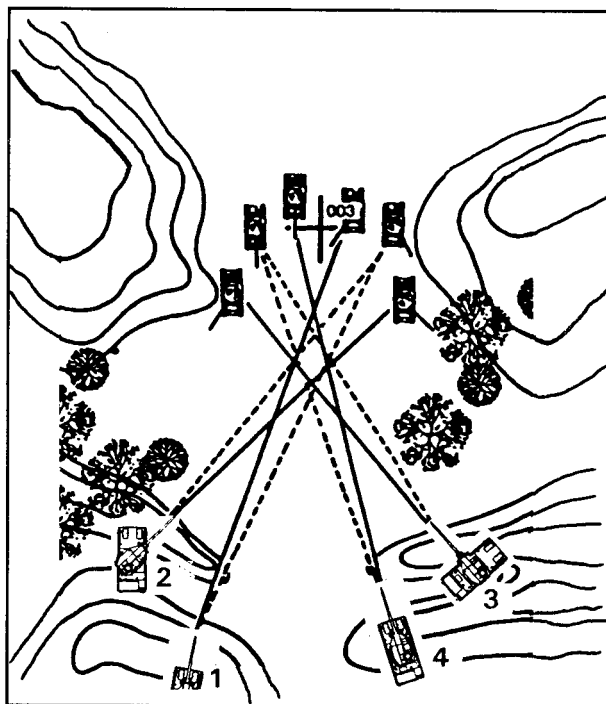


Figure 4-13. Cross fire.

## Section IV.

### Offensive Operations

#### DIRECT FIRE PLANNING

The platoon offensive fire plan establishes how direct fires will be used to support movement or other actions during an operation (assault or support by fire, for example). The platoon leader considers the following factors when developing his plan:

- Enemy situation.
- Friendly situation.
- Platoon's mission.
- Commander's scheme of maneuver and plan for FS.
- Ammunition status and plan for resupply.
- Special signals and communications to be used.

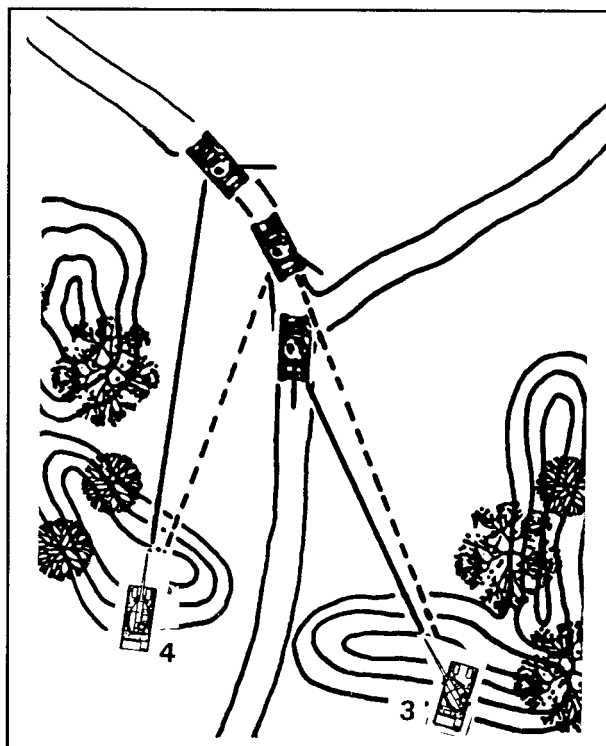


Figure 4-14. Depth fire.

The following issues should be addressed in the plan:

- Engagement of known enemy positions.
- Use of fire or smoke to conceal or cover movement.
- Any support by fire missions.
- Graphics used to control fires.
- Engagement techniques or fire patterns if different from unit SOP.

## TECHNIQUES OF ENGAGEMENT

The platoon uses one of three techniques to engage enemy forces.

**Assault.** Assault fire is employed when the platoon is assaulting the enemy. All weapons are used in assault fire.

**Support by Fire.** Support by fire is used to kill or suppress an enemy position while other elements move, assault, or withdraw. The platoon leader can direct the intensity of fire in his OPOD, or he may have to determine the intensity during the operation.

When delivering supporting fire, the platoon can expect to draw enemy return fire. Hull-down positions are desirable, and firing vehicles should alternate firing positions.

**Surprise and Ambush Fires.** In the offense, targets can appear on the battlefield without warning. These targets must be immediately engaged and destroyed to maintain momentum. Platoon battle drill procedures provide for positive action when such targets appear. The first vehicle to observe surprise targets engages them immediately. All vehicles in the same section or platoon then join in the engagement. The remaining platoons provide suppressive fire or move to support the engaged platoon.

## MOUNTED MOVEMENT

**Techniques of Mounted Movement.** The following are the primary mounted movement techniques:

- **Traveling.** Traveling is characterized by continuous movement of all elements and is best suited to situations where enemy contact is unlikely and speed is important. This is the most likely technique when infantry rides on the M8.
- **Traveling overwatch.** Traveling overwatch is an extended form of traveling that provides additional security when contact is possible but speed is desired. The lead element moves continuously. The trail element moves at various speeds and halts periodically to overwatch the movement of the lead element. The trail element maintains a minimum distance of 500 meters, depending on terrain, to permit movement in case the lead element is engaged.
- **Bounding overwatch.** Bounding overwatch is used when contact is expected. It is the most secure and slowest movement technique. There are two methods of bounding:
  - **Alternate bounds.** The lead element halts and assumes overwatch positions. The rear element advances past the lead element and assumes overwatch positions. The initial lead element then advances past the initial rear element and assumes overwatch positions. Only one element moves at a time. This method of bounding is usually more rapid than successive bounds.

- Successive bounds. In this method, the lead element, covered by the rear element, advances and assumes overwatch positions. The rear element advances to a position abreast of the lead element, halts, and occupies overwatch positions. The lead element then moves to the next position. Only one element moves at a time, and the rear element does not advance beyond the lead element. Successive bounding is easier to control and more secure than alternating bounds.

**Overshoot.** When light armor elements are given the task to overwatch, they should occupy positions that offer cover and concealment, good observation positions, and clear fields of fire. Elements occupying overwatch positions should—

- Visually check the security of the positions.
- Occupy hull-down firing positions.
- Assign sectors of fire.
- Orient weapons on likely or suspected enemy positions.
- Search for targets (see Figure 4-15).
- Use thermal sights to find heat sources not visible to the naked eye. Thermal signatures may reveal vehicles or troops in tree lines or wooded areas; towns or villages; depressions; or potential observation points, such as church steeples, silos, or hilltops.

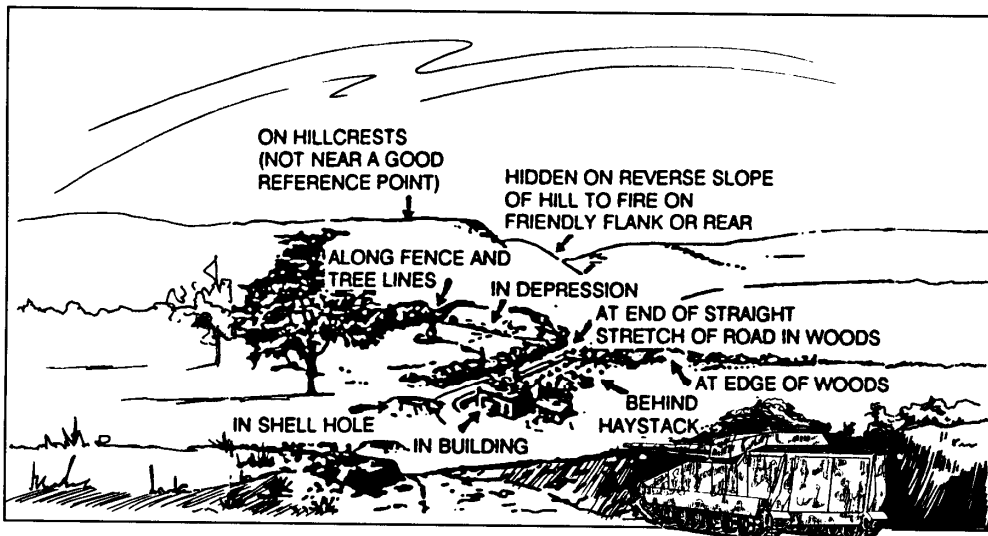


Figure 4-15. Searching for potential targets.

## BASIC LIGHT INFANTRY MOVEMENT TECHNIQUES

Because light armor works in close proximity with light infantry, the light armor platoon leader must understand the basic movement techniques of the infantry squads that will move forward, behind, and on the flanks of his platoon.

## FM 17-18

**Traveling.** Squad members form into two wedges, one behind the other, when the terrain allows (see Figure 4-16). When the terrain and/or visibility is very restricted, the squad may travel in a column by fire teams. The trail fire team follows at approximately 20 meters behind the lead team. Squad members move approximately 10 meters apart.

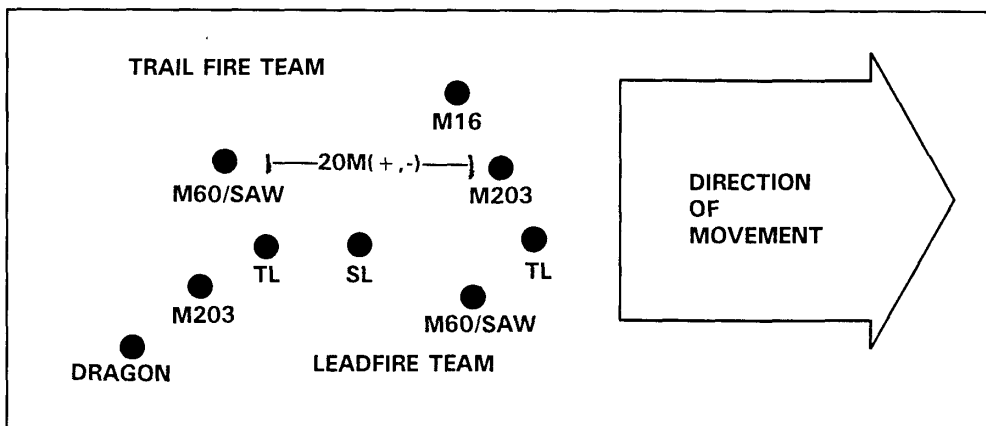


Figure 4-16. Traveling.

**Traveling Overwatch.** The traveling overwatch technique (see Figure 4-17 essentially the same as the traveling technique. The distance between wedges (fire teams) increases to approximately 50 meters to allow the trail team to overwatch the lead team.

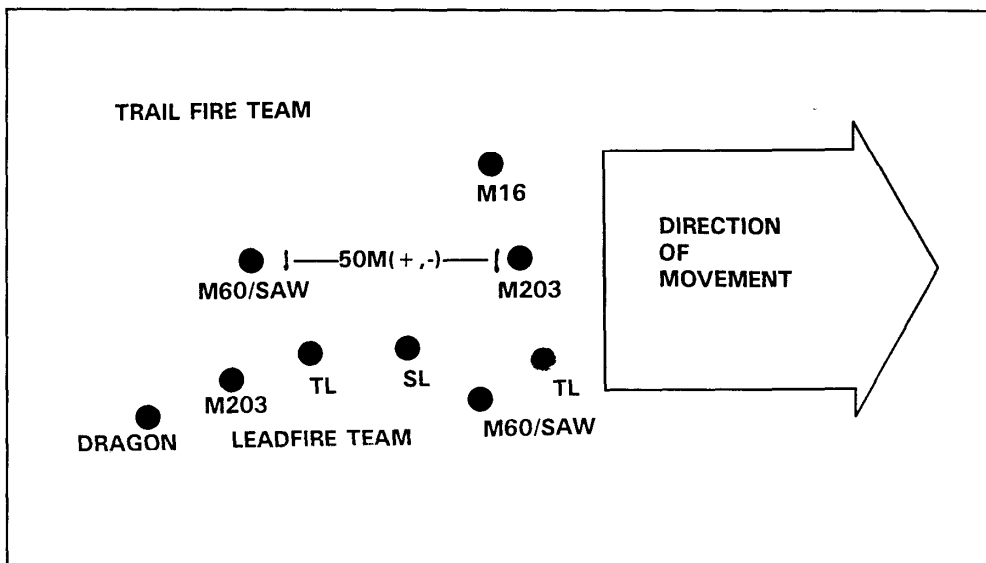


Figure 4-17. Traveling overwatch.

**Bounding Overwatch.** The squad is divided into a bounding team, which moves in a wedge formation, and an overwatch team, which remains in a position to overwatch the bounding team. The squad leader designates the next overwatch position and the route to be used. Bounds must not exceed the observation range of the overwatch team or the maximum effective range of its weapons (see Figure 4-18).

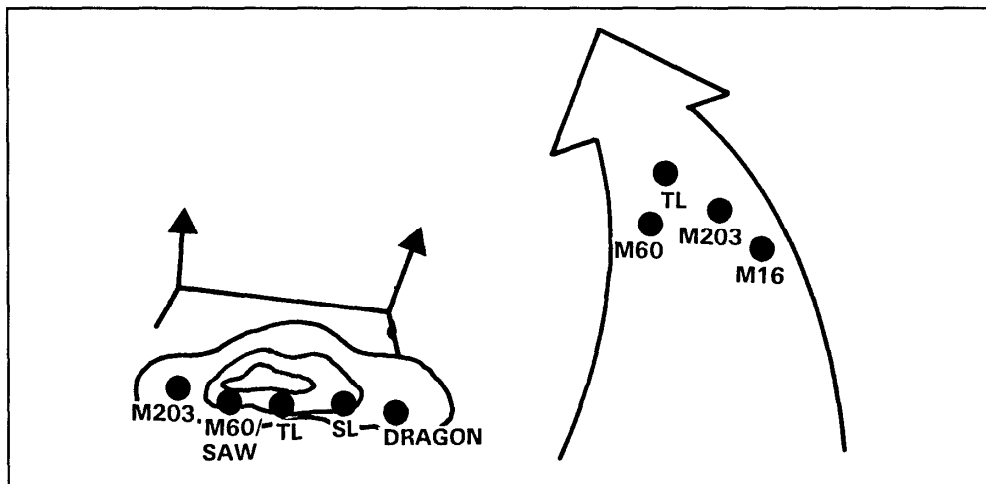


Figure 4-18. Bounding overwatch.

## METHODS OF LIGHT ARMOR/INFANTRY MOVEMENT

When light infantry and light armor move together in any operation, the infantry moves using one of three methods: dismounted, truck-mounted, or M8-mounted.

**Dismounted.** There are two ways dismounted infantry and light armor can move together: armored vehicles lead, followed by the dismounted infantry, or infantry leads and armored vehicles follow.

Movement with vehicles followed by infantry is used when the terrain is relatively open and the infantry has little or no cover and concealment. Moving behind the armor vehicles provides some protection and concealment from enemy small-arms fire.

Dismounted infantry followed by armor is used in restricted terrain when visibility is limited. Infantry provides security for M8s, clearing lanes or zones in front when fields of fire and observation are limited. Considerations for using dismounted movement include the following:

- Speed is reduced to that of dismounted elements. If M8s lead, leaders must guard against leaving infantrymen too far behind.
- Communications between infantry and armor elements can be accomplished through radio, hand-and-arm signals, or the external telephone mounted on the left rear of the M8.
- Prearranged signals (flags, smoke, panels, or hand-and-arm) are coordinated and practiced to ensure close team cooperation.
- Infantry do not move in front of vehicles unless told to do so.

**Truck Mounted.** In some cases, the infantry/armor team may have trucks and HMMWVs from internal or external sources to transport light infantry. This method may be used in several situations:

- When traveling over long distances to a LD.
- When speed is important and outweighs the risk of exposure to enemy fire. Examples include penetration, breakout from encirclement, exploitation, or pursuit.
- When light armor and truck-mounted infantry move together, the armor vehicles usually move in front to provide protection and firepower. One platoon or section may also be placed at the rear of the infantry formation for protection.

**M8 Mounted.** In the light infantry division, some of the infantrymen in the infantry/armor team may be transported on the vehicles. This occurs mostly during a march, exploitation, or pursuit. This method has the advantage of maintaining speed while keeping the infantry and armor together. It also saves infantrymen from fatiguing dismounted marches.

The decision to carry infantry on an armored vehicle requires careful planning. Tactical unity of the infantry and armor teams must be maintained. Infantry leaders should mount armor leaders' vehicles. Usually, an infantry squad (approximately nine infantrymen) can fit on one M8. During planning, each squad should link up with the vehicle it will ride to allow time for the squad and M8 crew to work together and rehearse mounting, dismounting, and action drills.

Infantry platoon leaders should ride armor platoon leaders' vehicles, and infantry platoon sergeants should mount the armor platoon sergeants' vehicles. The infantry leaders should locate next to the vehicle commanders.

The lead M8s should not carry mounted infantrymen. This will allow them to remain free to scan left and right during movement and to return fire immediately if enemy contact is made (see Figure 4-19).

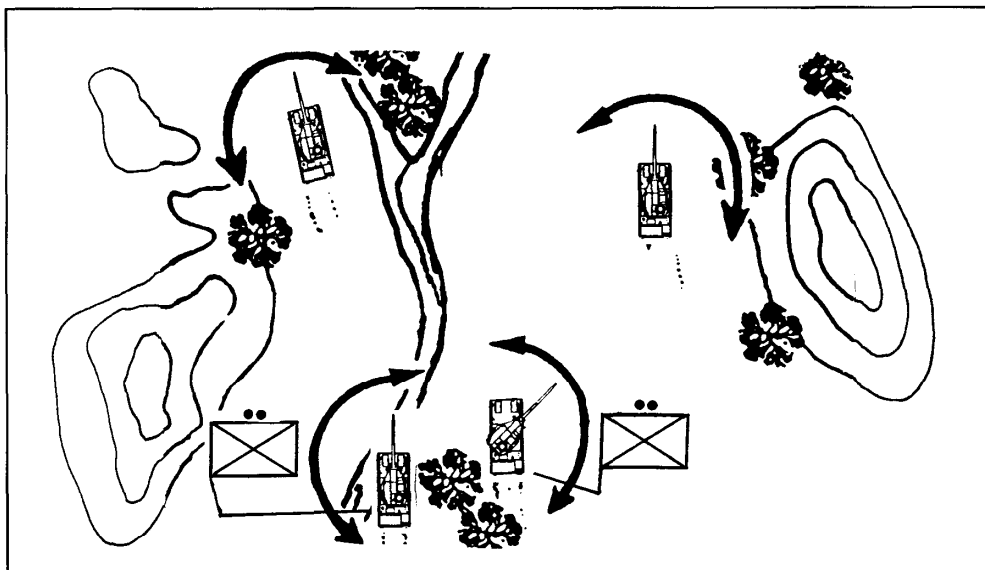


Figure 4-19. M8 formation with mounted infantry.

The following are considerations for infantry and armor leaders when mounting infantrymen on the M8:

- Always alert the M8 commander before mounting or dismounting.
- Follow the commands of the M8 commander.
- Infantry platoons should be broken down into squad-size groups, similar to airmobile chinks, with the infantry platoon leader on the light armor platoon leader's vehicle and the infantry platoon sergeant on the light armor platoon sergeant's vehicle.
- Platoon leaders, platoon sergeants, or team leaders should locate near the vehicle commander's hatch, using the external phone to talk to the vehicle commander and relay signals to the unit.
- M8 crew members must remember that the vehicle cannot return fire effectively with infantry on board.
- Whenever possible, mount and dismount over the left front slope of the vehicle. This ensures the driver sees infantry and that the infantry does not pass in front of the machine guns.
- Passengers must always have three points of contact with the vehicle and watch for low-hanging objects like tree branches.
- Passengers should take the following actions on contact:
  - Wait for the vehicle to stop.
  - Dismount **IMMEDIATELY** on the vehicle commander's command (one fire team on each side). **DO NOT** move forward of the turret.
  - Move at least 5 meters from the vehicle.
- Practice mounting, dismounting, and actions on contact so your team will be trained.
- If possible, the lead vehicle should not carry infantry because it restricts turret movement. Initial contact may also cause casualties among infantrymen mounted on the lead vehicle.
- Infantrymen should search in all directions. They may be able to spot a target the vehicle commander does not see.
- **DO NOT** move in front of vehicles unless ordered to do so.
- **DO NOT** move off a vehicle unless ordered to do so.
- **DO NOT** dangle legs, equipment, or anything else off the side of the vehicle; they could get caught in the tracks, causing death, injury, or equipment damage.
- **DO NOT** overcrowd the vehicle. Falls, bumps, and clogged air intakes can result.
- **DO NOT** fall asleep. The warm engine may induce drowsiness, and a fall could be fatal.
- **DO NOT** smoke when mounted on a vehicle.
- **DO NOT** stand near vehicles during refueling and rearming.
- **DO NOT** stand near a moving or turning vehicle at any time. M8s have a short turning radius.
- Stay clear of the vehicle's canister ejection device. Canisters ejected from main gun rounds can cause serious injury or death.

## FIRE AND MANEUVER

In fire and maneuver, one element maneuvers while another overmatches or supports by fire to suppress or destroy the enemy. Maneuver elements use movement techniques and covered and concealed routes to maneuver to the enemy's flank, maneuver to dominating terrain, or bypass. When the company commander uses one platoon to support by fire, that platoon occupies dominating positions and suppresses the enemy (see Figure 4-20).

**Support by Fire Element.** The company commander designates elements to support by fire while the remainder of the company moves for an assault. The support by fire element's primary mission is to destroy as much of the enemy as possible by long-range fires before the assault. The element uses direct and indirect fires to prevent the enemy from engaging the assault force or from adjusting positions to counter the assault force.

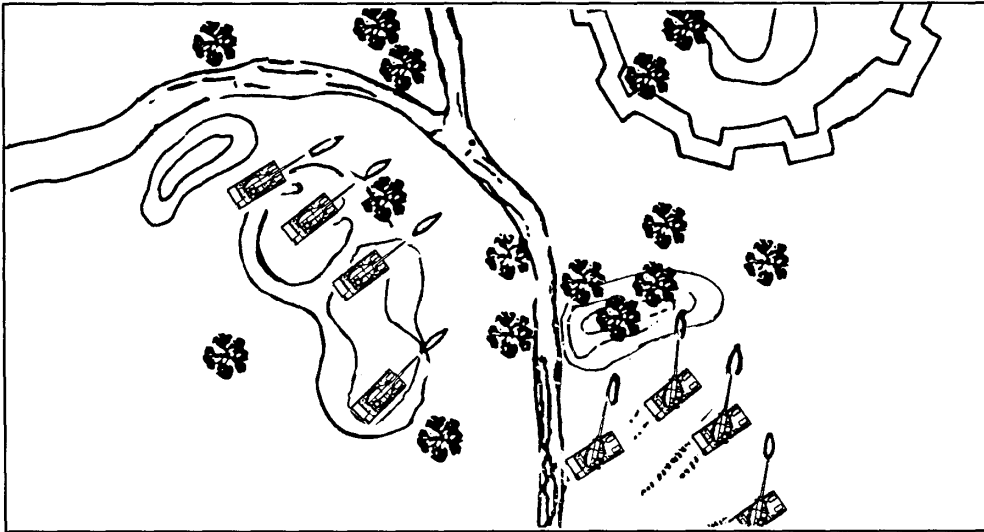


Figure 4-20. Fire and maneuver.

The support by fire element monitors movement of the assault force; it shifts fires as the assault force begins to move across the objective. To be effective, the element should be positioned on dominating terrain overmatching the enemy position. The distance between the support by fire element and the enemy position will vary. Several factors should be considered in positioning of the support by fire element:

- Available terrain. These considerations apply:
  - What terrain dominates the enemy position?
  - What dominant terrain supports the scheme of maneuver of the assault force?
- Enemy weapon system capabilities. These considerations apply:
  - Does the enemy have vehicles, ATGMs, attack helicopters, or prepared antitank positions? If so, the support by fire position should be 1,500 to 3,000 meters from the enemy to maximize the advantages of the M8.



- Is the enemy dismounted infantry? If so, the element is positioned to allow effective machine gun fires (900 meters).
- Does the enemy use mounted infantry? If so, the element is positioned beyond 1,000 meters, then repositioned closer once enemy vehicles are destroyed or enemy dismounts.
- Does the enemy have a combination of vehicles, mounted infantry, and dismounted infantry? If so, the element is positioned between 1,500 and 3,000 meters to destroy enemy vehicles, then moves closer to destroy enemy infantry.
- Support by fire weapons capabilities. These considerations apply:
  - The M8 provides the crew with protection from small arms fire.
  - The M8 can implement a ballistic solution to 5,000 meters.
  - Maximum effective range of the M240 machine gun is 900 meters.
  - Maximum effective range of the M2 machine gun is 1,800 meters.
- Time available. These considerations apply:
  - How much time is available to position the overwatch element?
  - Is any platoon currently in contact with the enemy?

**Assault Force.** The mission of the assault force is to close with and destroy the enemy. Normally composed of armored vehicles and infantry elements under the control of the company commander, the assault force moves along covered and concealed routes to the flanks or rear of the enemy. The elements move until they reach their last covered and concealed position (assault position). Once the commander has determined that all observed enemy vehicles and antitank weapons on the objective have been destroyed or suppressed, he orders the assault. The assault elements move rapidly in a line formation, under cover of direct and indirect fires, to the objective. En route, they engage enemy targets on the move (stabilized) or from a temporary halt (nonstabilized). The assault force calls for the lifting and shifting of supporting fires (direct and indirect) at the tire support coordination line (FSCL).

**Attack by Fire.** Some objectives lend themselves to an attack by fire. The purpose is to destroy the enemy from a distance. This method can be used when the enemy consists of armored vehicles and the mission does not dictate or support occupation of the objective. The support by fire element suppresses the enemy while the assault force moves to dominating terrain and, with the support by fire element, completes the destruction of the enemy (see Figures 4-21 and 4-40).

## BATTLE DRILLS

This discussion augments battle drills found in FM 17-15. These drills are a basic guide to infantry/light armor combined arms tactics. Light armor platoons, and the infantry they support, should be able to execute them upon command. Repetition in training, conducted to standard, is the key to the proper execution of drills in combat. When habitual relationships are maintained, the execution of such drills is enhanced. If habitual task organization is not possible, rehearsals are key to proper performance.

This discussion describes the drills that each light armor platoon must become familiar with and be able to execute, whether working alone or with light infantry. Each drill will show light infantry moving dismounted with the platoon, as well as mounted where applicable.

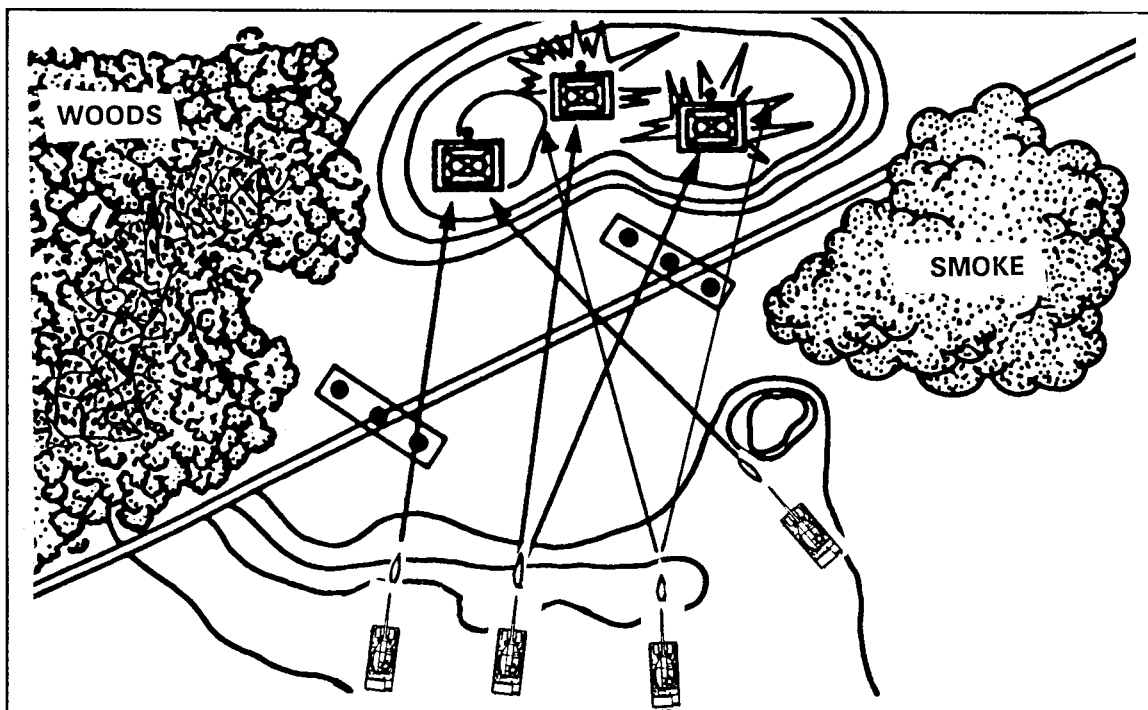


Figure 4-21. Attack by fire.

Platoons must practice drills to prepare for the C2 problems inherent in battle. Drills teach platoon members virtually automatic responses to combat situations, outlining actions to be taken immediately upon contact or in response to brief oral commands or visual signals. Crews and units gain proficiency only through practice before the battle. Drills can be carried out from any formation or movement technique.

**Actions on Contact.** When enemy fire is encountered, the platoon leader should execute the following actions on contact:

- Return fire and alert the rest of the platoon.
- Initiate a battle drill (action drill or contact drill). If no drill is specified, the platoon should seek cover and concealment.
- Send a contact report to the company commander.
- Develop the situation through fire and movement to determine the size, type, and location of enemy forces.
- Send a spot report to the commander. The platoon may destroy the target if initial fire is effective, or it may have to continue fire and movement to fix or destroy the enemy (based on instructions from the company commander).

**Change of Formation Drill.** To accomplish a rapid change of formation, each M8 commander must know the following information:

- The new formation.
- The relative position of each vehicle in the new formation.
- The position of infantrymen if they are moving dismounted within the formation.

The platoon leader can use hand-and-arm signals or the radio to inform the platoon of the new formation. He should always use hand-and-arm signals when dismounted infantrymen are in the vicinity, regardless of the method used to communicate to the other vehicles. Each TC will know his position in the formation by following an SOP that specifies M8 positions when assuming each formation. Figure 4-22 shows the movement of individual M8s during the change from column to wedge to line. The key to a successful change is practice.

**Contact Drill.** Contact drills teach the platoon how to orient weapon systems and engage an enemy without changing the direction or speed of movement along the axis of advance. This can be used when contact is made with small arms fire or when the platoon sights the enemy without being detected and does not want to stop or slow its momentum. The platoon leader can initiate a contact drill by hand-and-arm signals or radio. Even when using the radio, he should also use hand-and-arm signals when moving with dismounted infantrymen.

**Action Drill.** Action drills permit the platoon to change direction when reacting to changes in terrain or enemy contact.

**Changes in Terrain.** Using the wingman concept, this change occurs automatically when the platoon leader's vehicle changes direction. To speed up a change in direction, the platoon leader can direct an action drill using hand-and-arm signals or the radio. After executing the change of direction, the platoon automatically comes on line and continues to move. To return to the original formation, a hand-and-arm signal or radio command can be given. Figures 4-23 through 4-25 show the vehicles' relative positions during changes of direction.

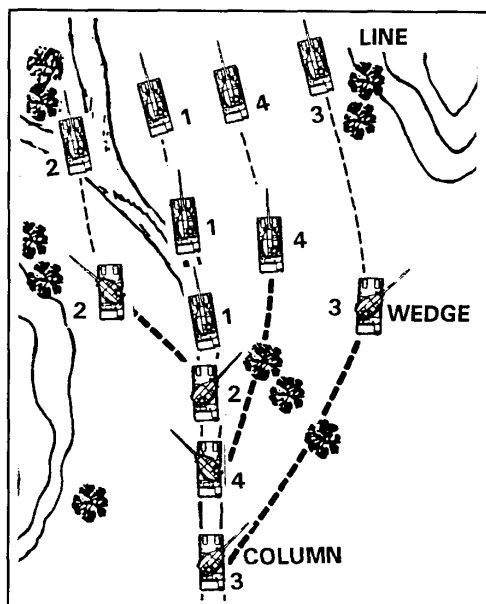


Figure 4-22. Change of formation drill.

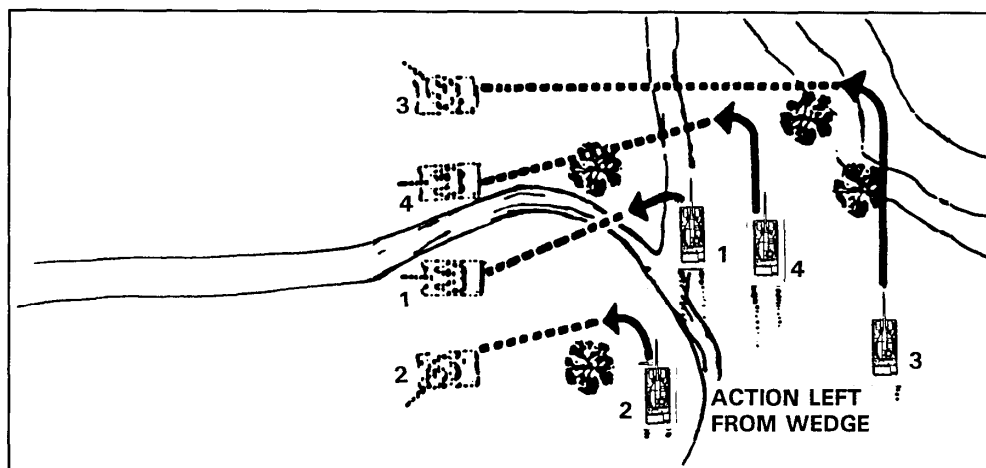


Figure 4-23. Action left drills.

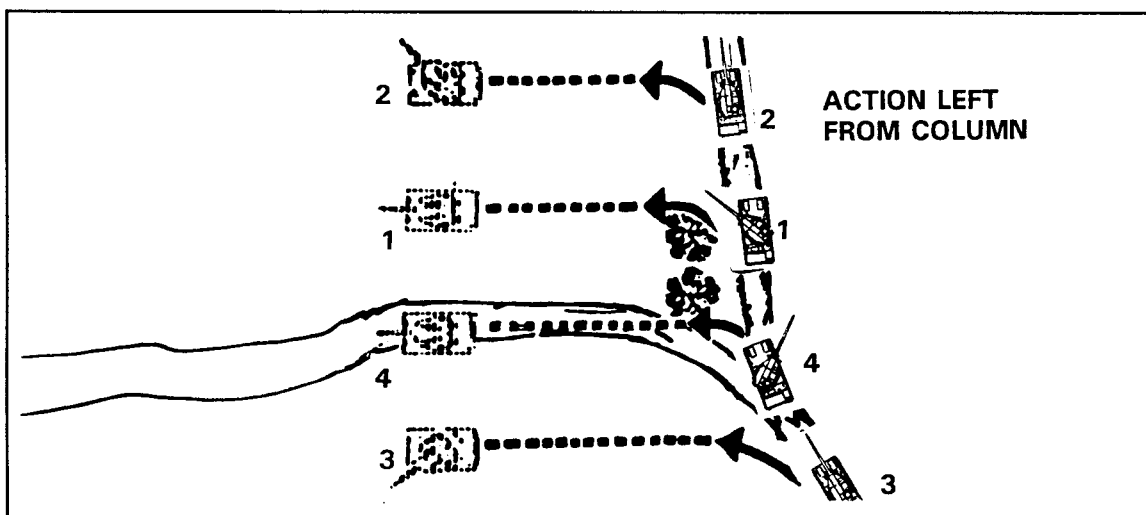


Figure 4-23. Action left drills (cont).

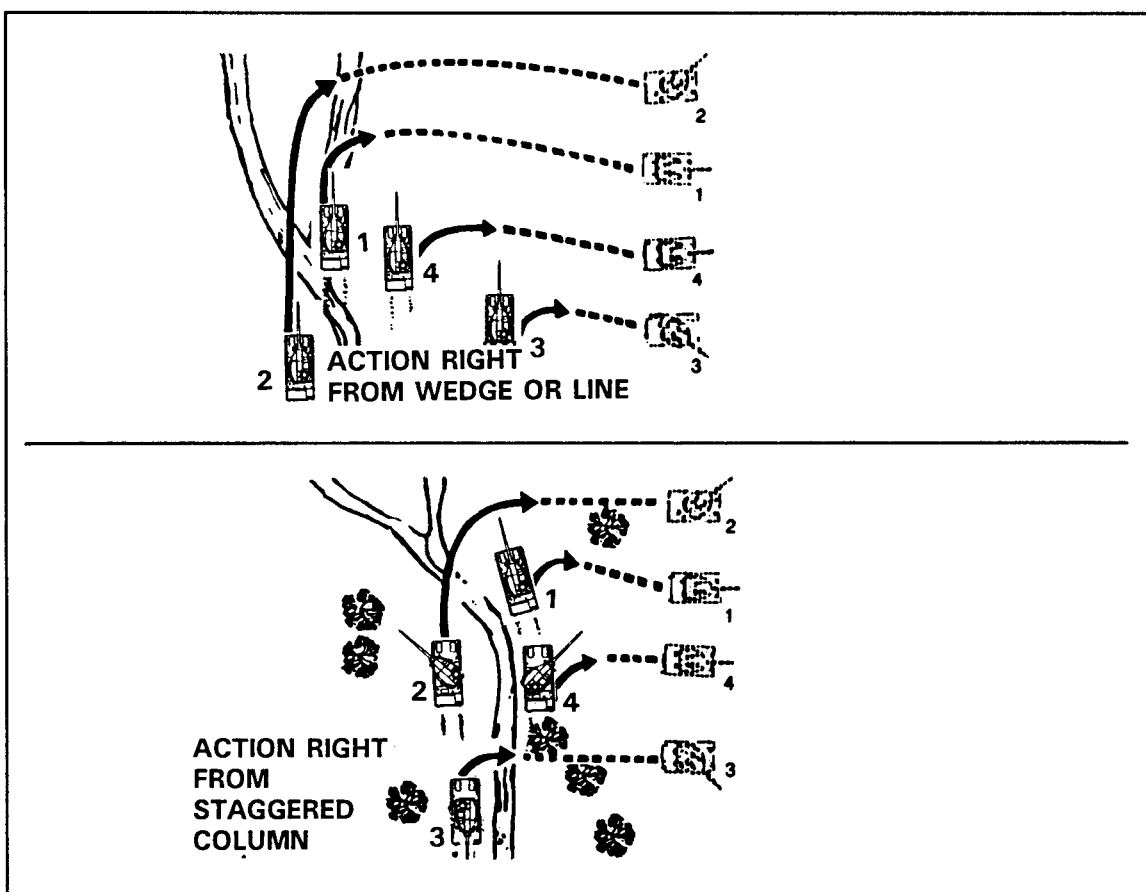


Figure 4-24. Action right drills.

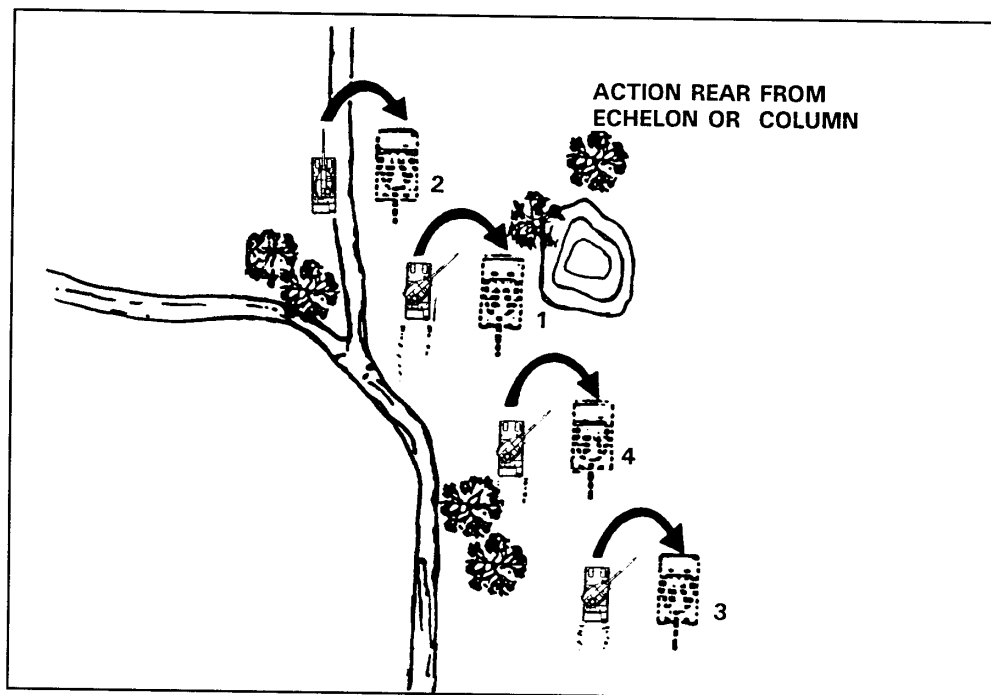


Figure 4-25. Action rear drills.

**Enemy Contact.** Following a contact report involving antitank weapon systems, the platoon leader can direct an action drill to orient the platoon's frontal armor toward the antitank fire while moving to cover and concealment.

**Figures 4-26a through 4-26e show examples of action drills when used to react to enemy contact.**

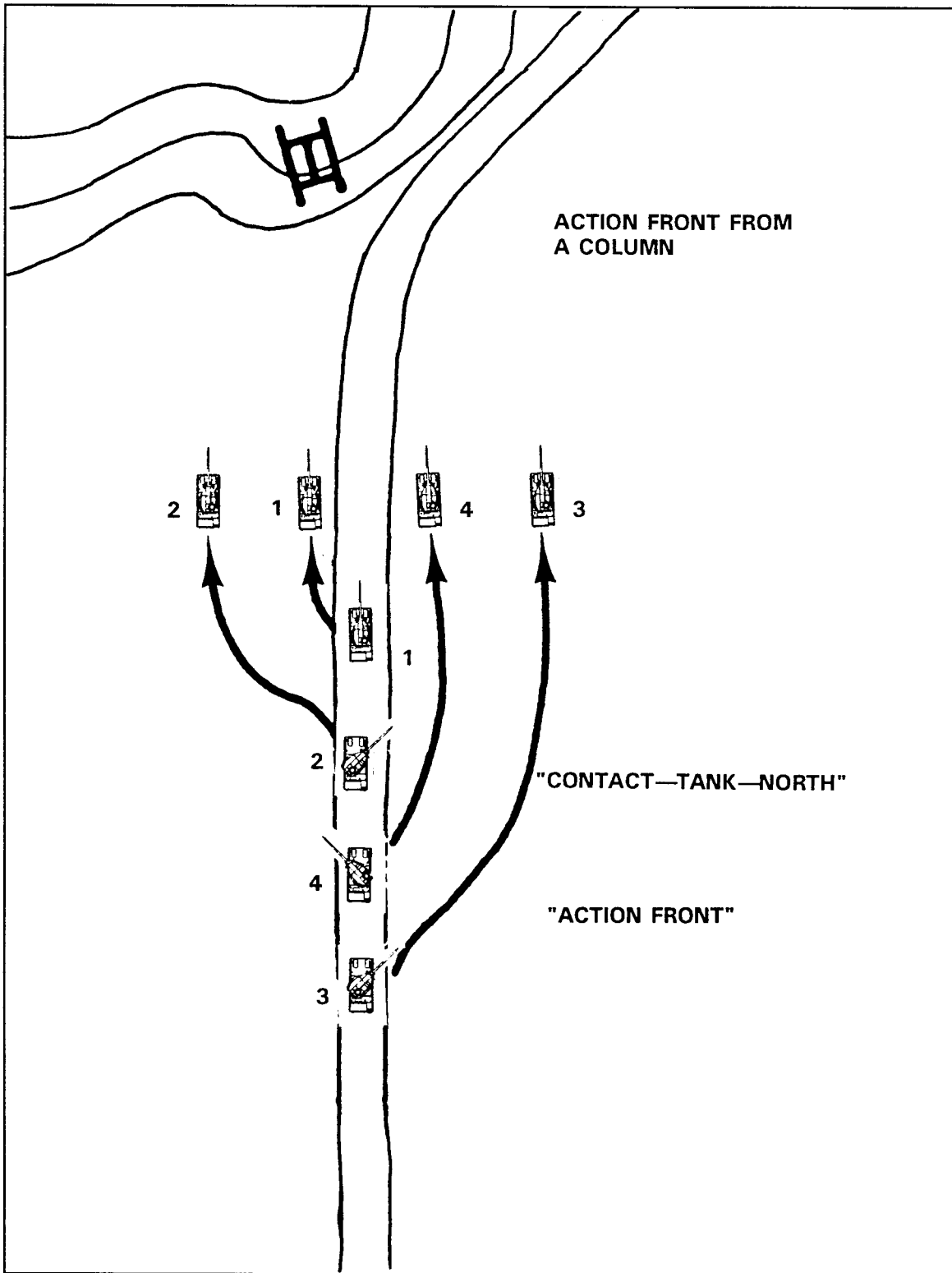


Figure 4-26a. Use of action drill to react to enemy contact (action front from a column).

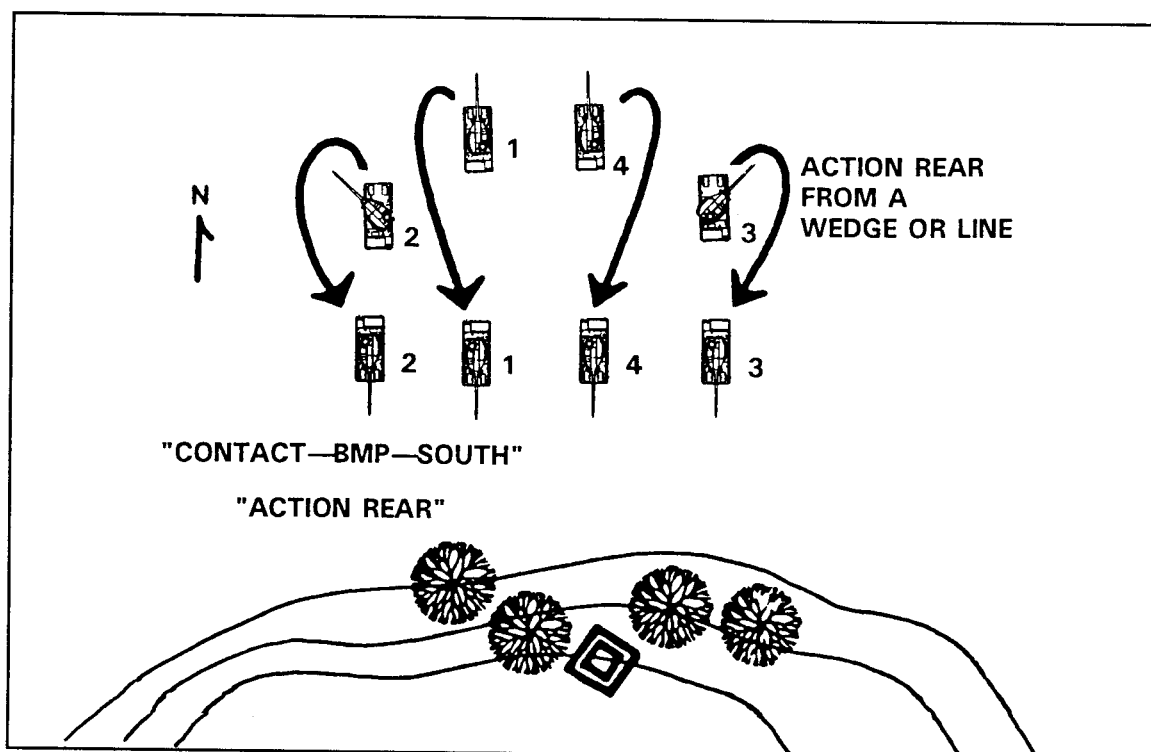


Figure 4-26b. Use of action drill to react to enemy contact (action rear from a wedge or line).

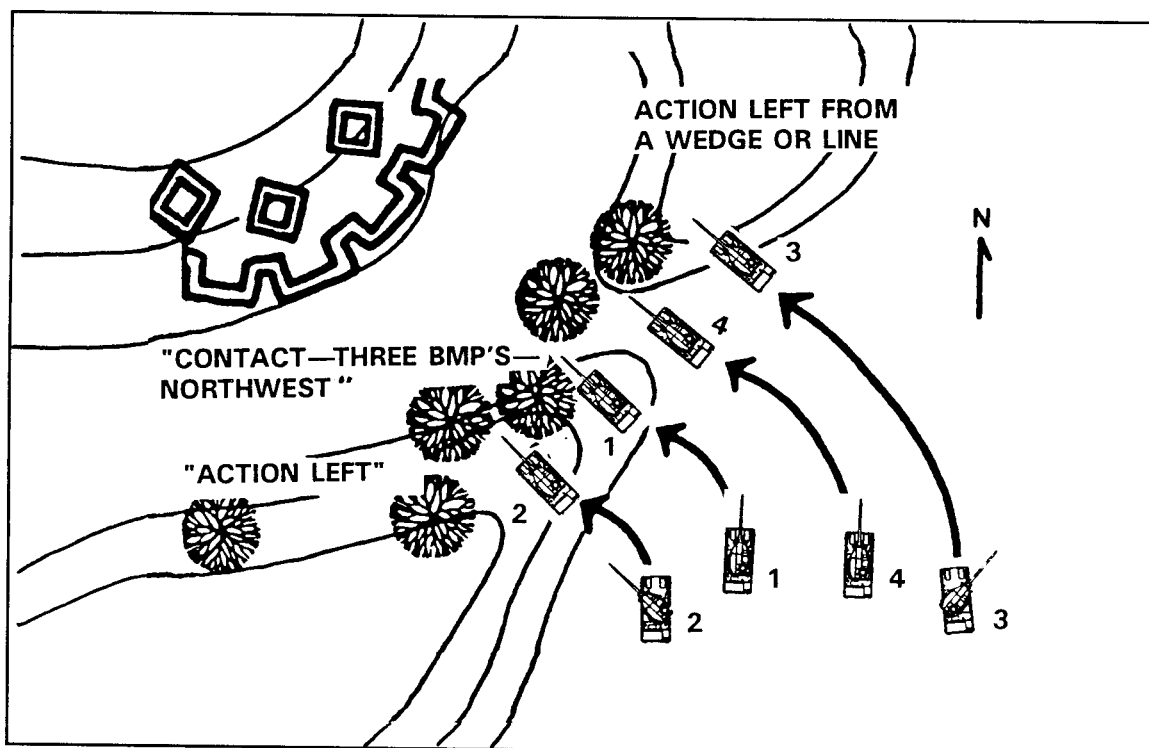


Figure 4-26c. Use of action drill to react to enemy contact (action left from a wedge or line).

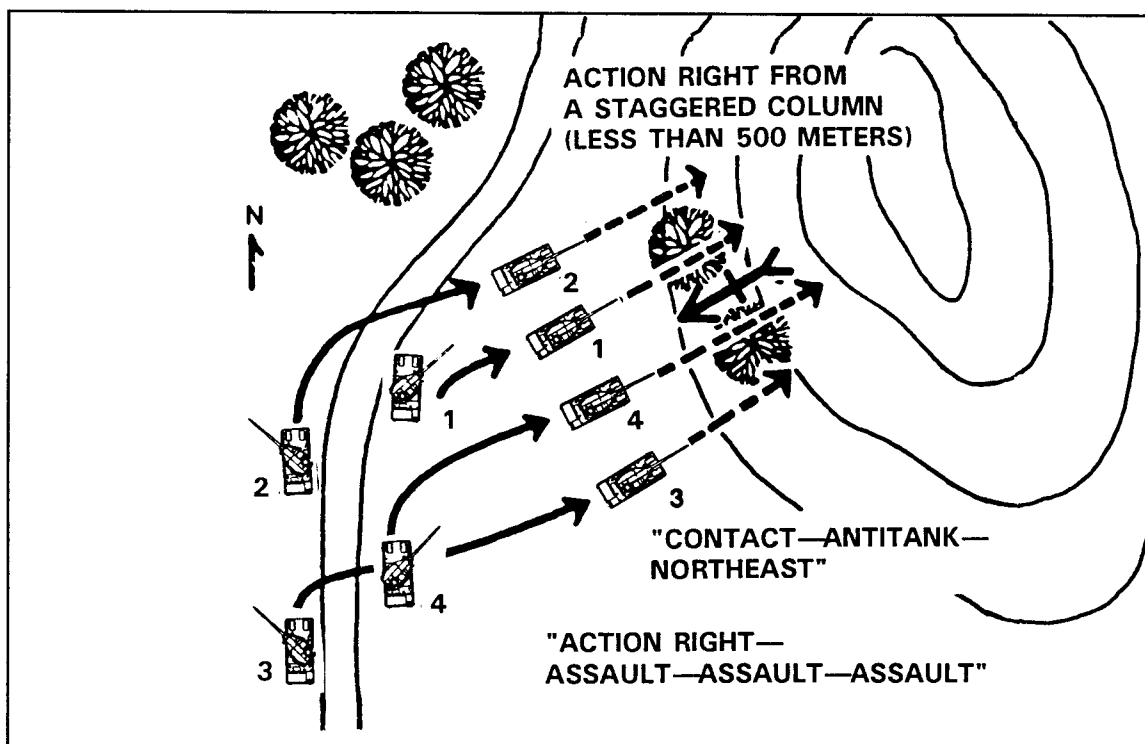


Figure 4-26d. Use of action drill to react to enemy contact (action right from a staggered column).

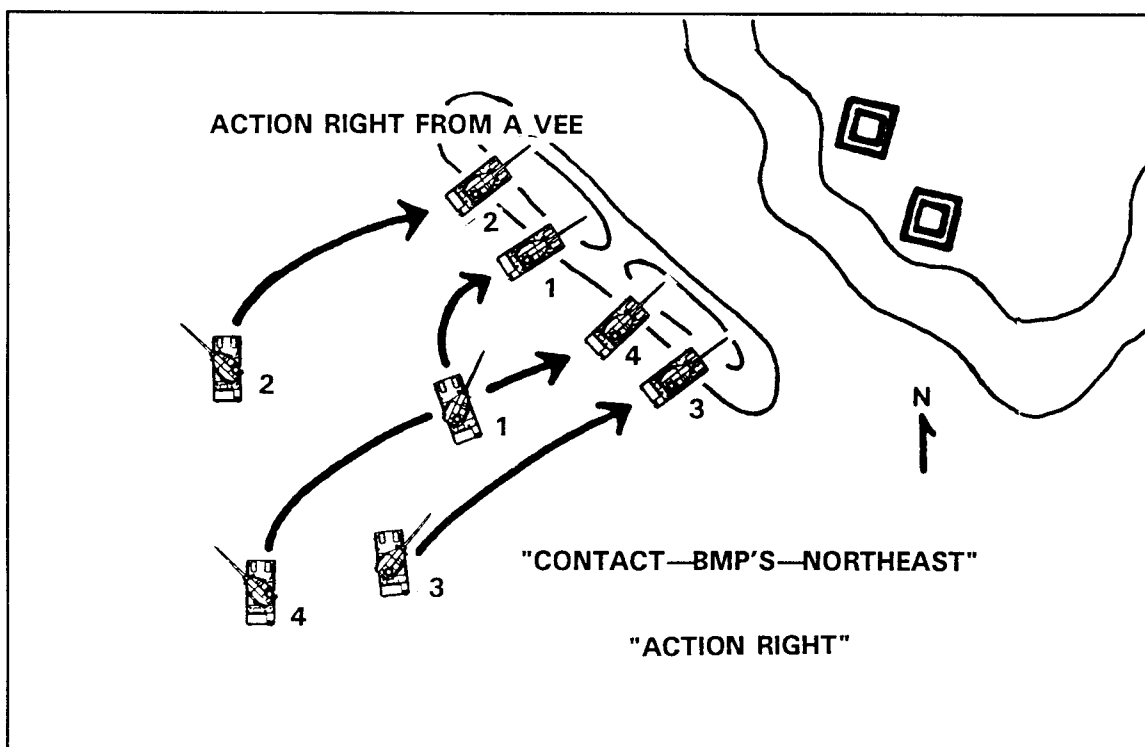


Figure 4-26e. Use of action drill to react to enemy contact (action right from a vee).



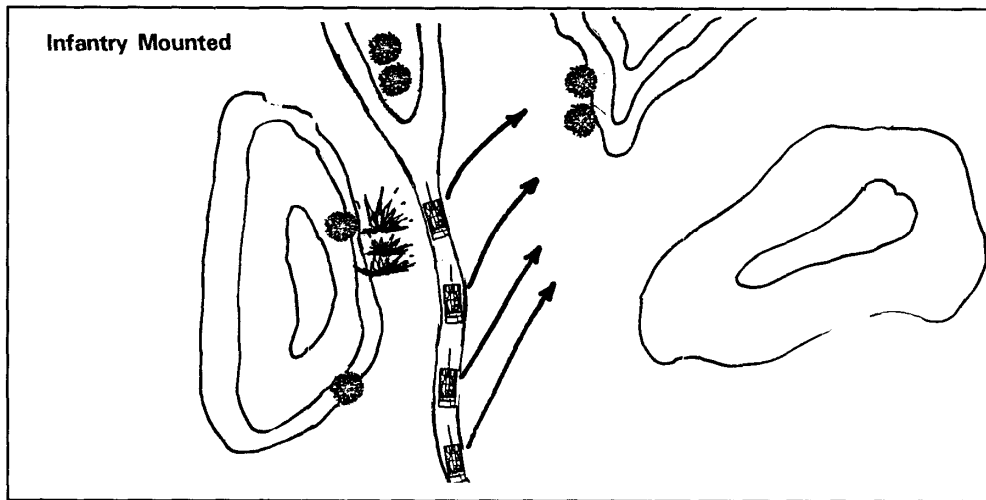


Figure 4-27. React to indirect fire drill.

**React to Indirect Fire Drill.** When the platoon receives indirect fire, crewmen close their hatches and ballistic doors. If on the move, the platoon maintains its speed and direction. With infantry mounted, the platoon leader may issue the command for an action drill to avoid casualties to the infantry. If maneuvering with light infantry, a common rally point is desirable. The platoon leader sends a spot report to the higher headquarters. If the situation permits, a more detailed shelling report (SHELREP) follows the spot report. If the mission requires the platoon to remain stationary, permission must be obtained from the higher headquarters before moving. Once clear of the indirect-fire effects, crews can open hatches and necessary ballistic doors. If masking was required by the OPORD (for example, when the enemy has NBC capability), the platoon leader has the flexibility to modify the mission-oriented protection posture (MOPP) guidance based on immediate test results. See Figure 4-27 for an example of this drill.

**React to Air Attack Drill.** The platoon should practice passive defense against air attack. Use of cover and concealment can frequently prevent high-performance aircraft and helicopters from detecting and attacking the platoon. The air attack drill involves the four steps discussed in the following paragraphs.

**Alert the Platoon.** Air guards can alert the platoon using one of two methods: announcing "CONTACT—ENEMY AIR—(direction)" over the radio or using hand-and-arm signals.

**Seek Cover and Concealment.** When moving, M8s seek immediate cover and concealment. If concealment is not available, moving vehicles should stop. A stationary vehicle is harder to see than a moving vehicle. If enemy aircraft detect the vehicles and initiate an attack, the platoon leader announces "ENEMY AIR" and exposed vehicles immediately move at a 45-degree angle toward or away from the attacking aircraft. Vehicles should maintain a 100-meter interval and avoid presenting a linear target in the direction of attack. See Figure 4-28 for a depiction of this drill.

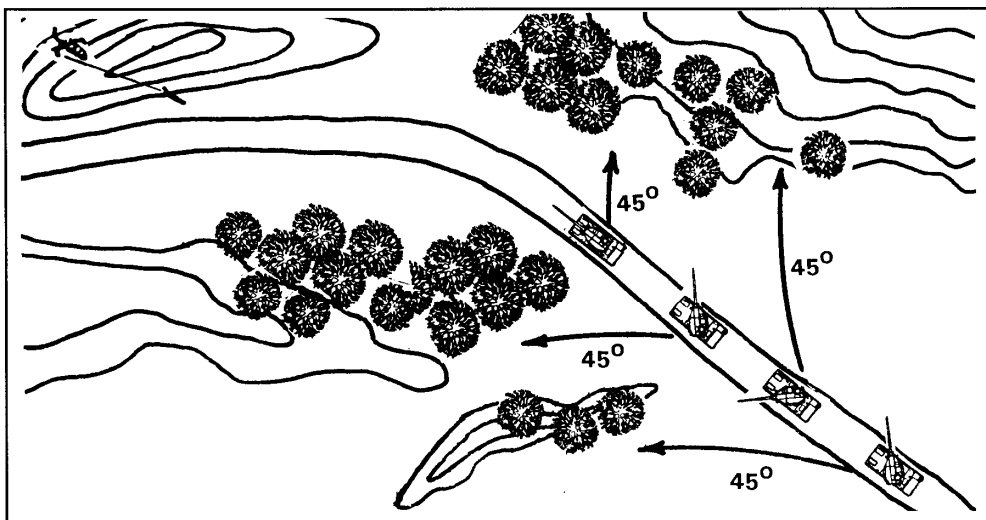


Figure 4-28. React to air attack drill.

**Prepare to Engage.** Vehicle commanders should prepare to engage aircraft with a high volume of machine gun fire on order of the platoon leader. The platoon leader must be sure that the aircraft are attacking, since firing machine guns could give away their positions. Volume is the key to effectiveness. The idea is to throw up a wall of fire and let the aircraft fly into it. In some cases, the main gun can be used against hovering helicopters. Figure 4-29 illustrates aiming points for engaging enemy aircraft.

**Report.** The platoon leader sends the higher headquarters a contact report. Example: "CONTACT—HELICOPTER—SOUTH." The platoon leader sends a complete spot report as soon as possible.

If the platoon is engaged by bombs or spray, the reaction to indirect fire drill is used.

Enemy aircraft operate in pairs, with two to eight, or more, aircraft in each flight. After the first aircraft passes overhead, another may follow. Vehicles should remain in covered and concealed positions for at least 60 seconds after the first aircraft leaves.

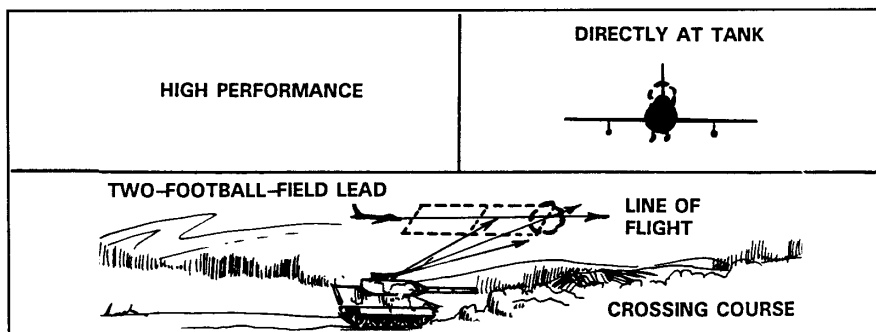


Figure 4-29. Aiming points for engaging enemy aircraft.

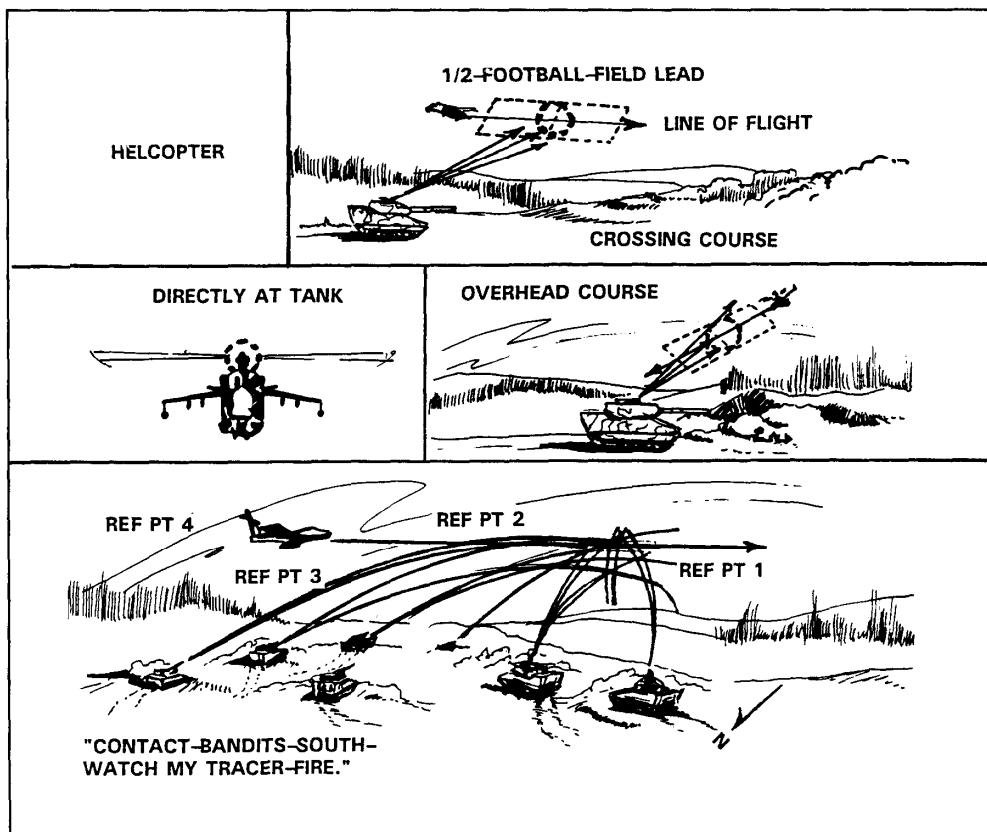


Figure 4-29. Aiming points for engaging enemy aircraft (cont).

**Break Contact Drill.** When the light armor platoon makes contact with a superior force, the commander may give the order to break contact. The voice command to break contact is "BREAK CONTACT," followed by a direction (clock method, or front, rear, left, or right). The visual signal is a red flag raised, then dropped in the direction the break is to be conducted (see Figure 4-30). The following are steps in successfully executing a break contact fire and movement drill:

- Make the initial break. The commander designates a support by fire element to provide overwatch and supporting fire, if needed. Dismounted infantry moves to a designated covered position in the direction of the break (clock method). If infantrymen are mounted on the vehicles not in contact (not the support by fire force), they may remain mounted as the vehicles move to break contact.
- M8s disengage. The support by fire element uses successive bounds to join infantry. These vehicles may employ smoke as needed. The bounds continue until contact is broken.
- Report. The platoon leader sends a spot report to the higher headquarters and prepares to continue the mission.

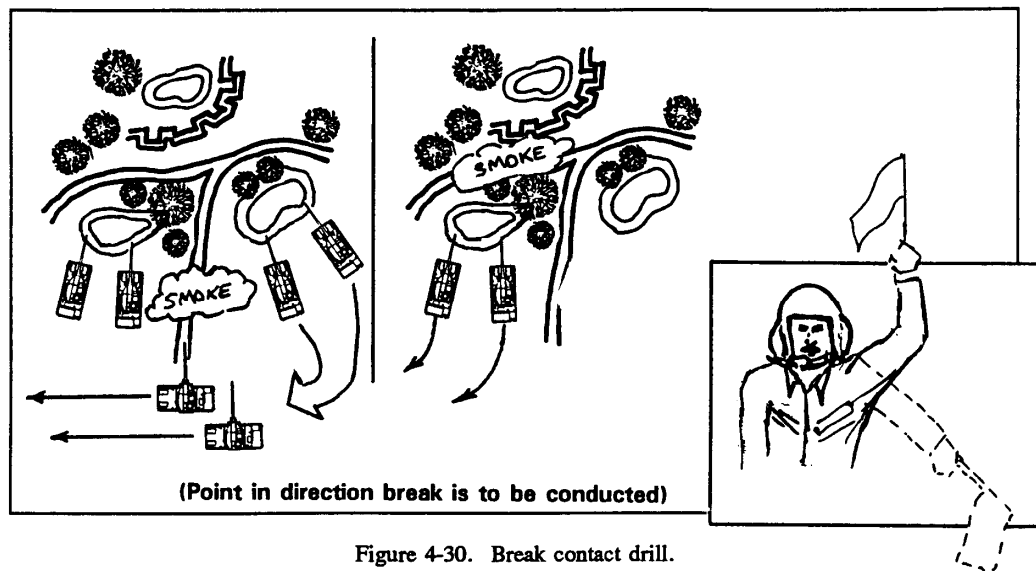


Figure 4-30. Break contact drill.

**Attack an Objective Drill.** This drill can be used during a hasty attack as a reaction to enemy contact. The voice command is “ASSAULT, ASSAULT, ASSAULT— (followed by a direction).” Steps for execution of this drill, which is illustrated in Figure 4-31, are as follows:

- The commander or platoon leader must determine and announce how the basic maneuver will be conducted. See “Methods of Attack” on pages 4-47 and 4-48):
  - Armor attacks by fire while infantry assaults.
  - Armor attacks by fire while infantry assaults, then armor joins in the assault.
  - Armor and infantry assault the objective on different axes.
  - Armor and infantry assaulting together.
- If necessary, infantrymen dismount the vehicles and move to the flanks.
- The designated element establishes a base of fire and suppresses the objective. Deception smoke is used to confuse the enemy as to the true location of the assault force. This support by fire position may later serve as the rally point for all elements if needed.
- The assault element maneuvers to the assault position (nearest covered and concealed position).
- The support by fire element shifts fires when the prearranged signal is given by the assault element as it reaches the final coordination line.
- The assault element conducts fire and movement onto the objective, secures it, begins consolidating its position, and reports to the commander or platoon leader.

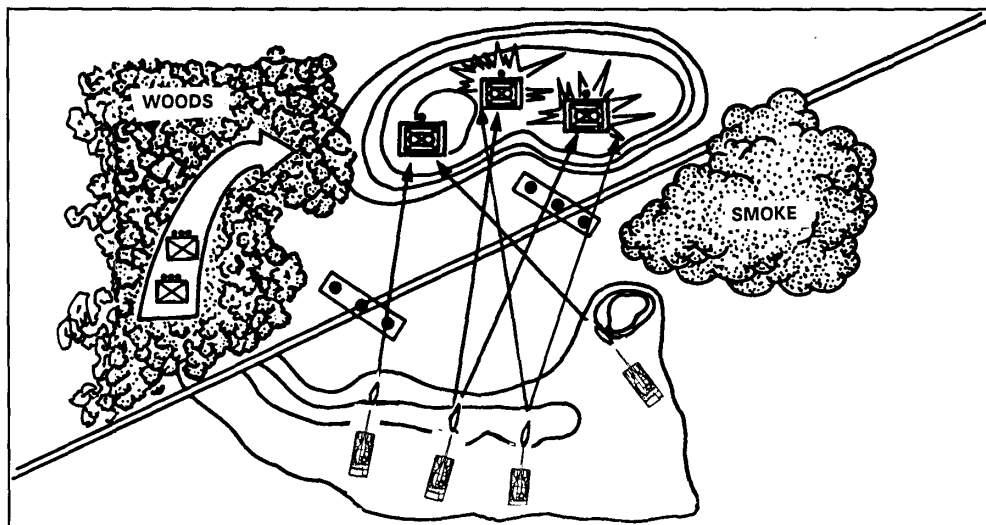


Figure 4-31. Attack an objective drill.

## ACTIONS AT DANGER AREAS

A danger area is any place the light armor platoon, or any force maneuvering with the light armor platoon, might be exposed to enemy observation, fire, or both. If a danger area cannot be avoided, light armor crosses it with great caution and as quickly as possible. The techniques used by light infantry when crossing danger areas are discussed in FM 7-8. Light armor and infantry maneuvering together use these same techniques, using armor's overwatch capabilities and infantry's ability to clear areas where hidden enemy infantry may engage friendly forces.

**Types of Danger Areas.** The following paragraphs discuss some examples of danger areas and crossing procedures.

**Open Areas.** The infantry on the near side observes and provides local security, including the near side flanks. Using an infantry guide, light armor maneuvers to the flanks to provide overwatch while the infantry moves across the open area to secure the far side (see Figure 4-32). When cleared, the remaining infantry moves across at the shortest exposed distance as quickly as possible. The light armor platoon then bounds by section across the open area and reassumes the previous designated formation. Different techniques could include the use of Dragon and TOW systems as overwatch to either supplement light armor, or to remain in overwatch as light armor bounds across the open area and clears the far side with the infantry. After clearing the far side, light armor would provide flank security.

**Linear (Roads and Trails).** Cross roads or trails at or near a bend, a narrow spot, or on low ground. Use the same techniques for linear areas as those used for open areas, except the light armor platoon may orient down the road or trail while providing near side flank security.

**Defiles.** Crossing defiles requires the infantry to clear the flanks of the defile (often high ground), the far side of the defile, and then the defile itself. If engineers are available they help locate and neutralize mines in the defile. Once the defile is cleared, light armor moves

through quickly and augments the infantry on far side security until the remaining infantry moves through or past the defile.

**Built-up Areas (Cities, Towns and Villages).** See “Offensive Operations in Built-up Areas” on pages 4-49 through 4-57.

**Trenches, Gullies, Wadis, and Tunnels.** Typically in operations other than war, the enemy will not have the resources to build fortifications and will maximize use of belowground protection. Light armor provides overwatch while infantry fights the belowground battle. Recognition signals such as smoke grenades, flares, and flags on antennas can indicate the location of friendly infantry to M8 crews. Light armor must be prepared to engage enemy reinforcements or any retreating enemy as they go aboveground. Light armor can also advance to engage the enemy with machine guns along the length of a trench, gully, or wadi.

**Obstacles.** See “Breach an Obstacle” on page 4-39.

**Planning Considerations for Crossing Danger Areas.** The following planning considerations apply for light armor and infantry when crossing danger areas:

- Plan rally points, the use of hand-end-arm signals (for example, signals for danger areas or bypasses), and for the use of indirect fire targets around suspected danger areas.
- Rehearse avoiding danger areas by practicing maneuvering around them.
- Rehearse actions to be taken at unavoidable danger areas; upon enemy contact (both direct and indirect fires); to control friendly direct and indirect fires; when consolidating; and upon reassuming the formation.

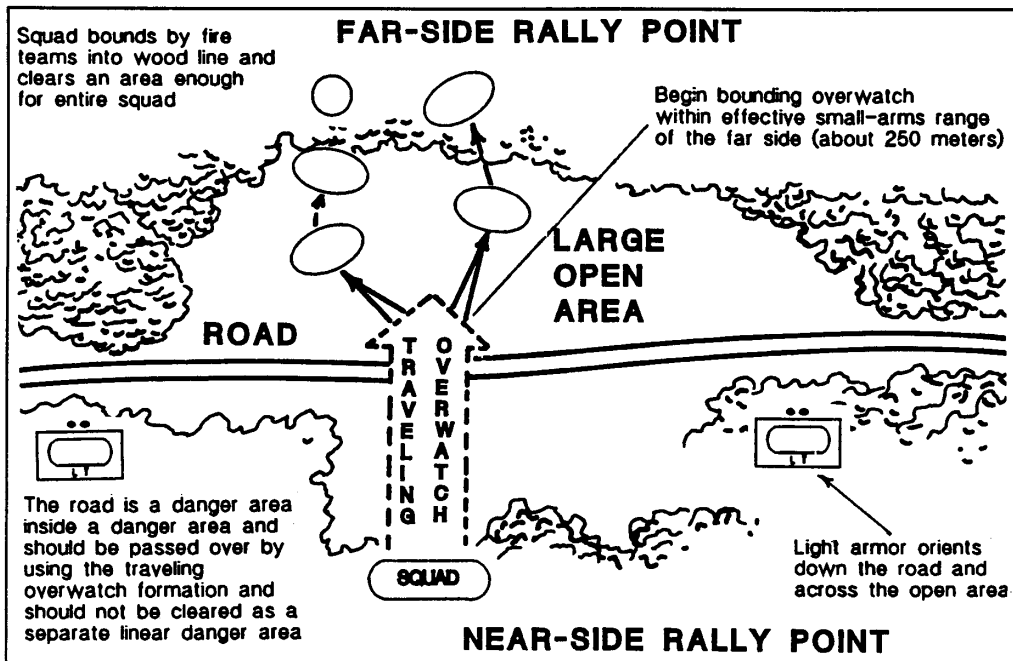


Figure 4-32. Example of actions at a danger area with light armor overwatching infantry.

**Breach an Obstacle (In-stride).** The light armor/infantry team may not be able to bypass a small or unmanned obstacle, so the commander determines to conduct an in-stride breach. The voice command for this exercise is “BREACH.” The hand-and-arm signal is shown in Figure 4-33. The steps for this drill are as follows:

**Organization.** The commander should organize the team into three elements as described below:

- **Support force.** This is usually a light armor platoon or section with an infantry weapons section (M60 machine gun and/or 60-mm mortar). It leads in the movement to the obstacle.
- **Breach force.** This consists of infantry and engineers if available. It follows the support force to the obstacle.
- **Assault force.** This is usually infantry, but the commander may be able to add a light armor section. It follows the breach force when moving to the obstacle.

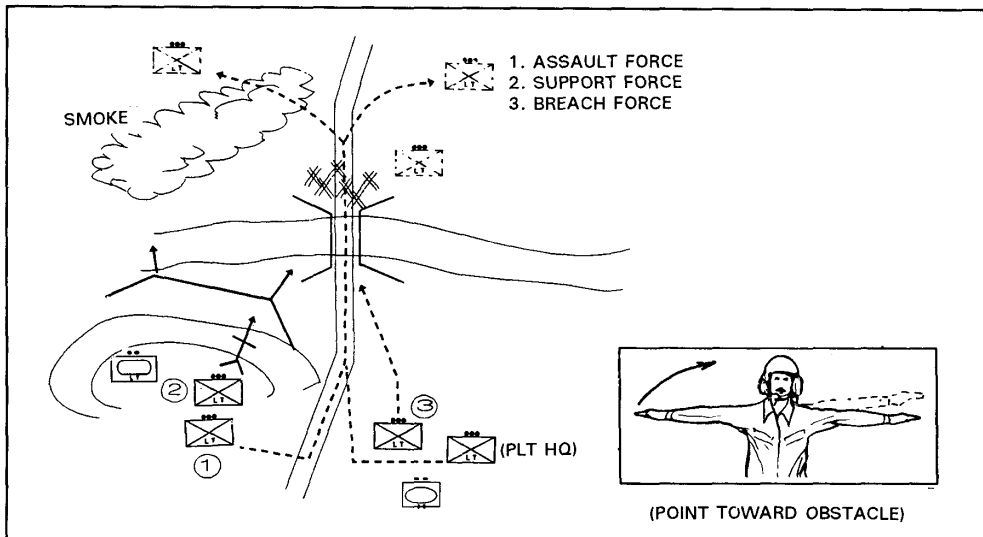


Figure 4-33. Breach an obstacle (in-stride).

**Suppression.** The support force (#2) establishes a base of fire and suppresses enemy direct-fire defenses. It must be able to suppress the enemy by direct and indirect fires, to include providing air defense coverage.

**Obscuration.** The support force adjust artillery-projected smoke on the far side of the obstacle to prevent enemy observation of the breach and assault forces.

**Security.** The breach force (#3) secures the near side of the obstacle while the assault force (#1) maneuvers to a better position to prepare for the assault. Ideally, the obstacle is breached after securing the far or enemy side. Friendly forces from the support force can reach the far side of the obstacle by infiltration, bypass, air assault, or minor breach.

**Reduction.** The breach force clears, marks, and secures the lane. The support force continues to suppress and shift indirect fires and smoke while the assault force is poised to move quickly through the breach once it is cleared and marked. The assault force moves

through the breach, conducts below ground battle, and provides far-side security by adding the shoulders against enemy counterattacks. The remainder of the breach force, followed by the support force, moves through the breach and continues the designated mission.

## **OFFENSIVE MISSIONS WITH LIGHT INFANTRY BATTALIONS**

The remainder of this section discusses light armor platoon offensive missions while operating with a light infantry battalion TF. The following paragraphs describe examples of how light infantry battalions attack and what role the light armor platoon will play in each mission. Light infantry battalions undertake offensive operations—

- To defeat a particular enemy force.
- To secure key or decisive terrain.
- To deprive the enemy of resources.
- To gain information.
- To deceive and divert the enemy.
- To hold the enemy in position.
- To disrupt an enemy attack.

Light infantry battalions can attack in a variety of ways and in a variety of situations. They prefer to attack under cover of darkness and bad weather, using approaches that are impossible or unlikely for other forces. The following are a few examples of likely light infantry offensive missions:

- Attack to penetrate a defensive position by infiltrating gaps and taking fortifications from the rear in preparation for the continuation of the attack by other forces (light infantry, motorized, mechanized, or armor) to greater depths.
- Attack to destroy reserves, C3, CS, or critical CSS installations in the enemy's rear by penetrating through infiltration, air assault, or stay-behind tactics. This can be as part of an attack or defense by other forces. The battalion may be a part of a brigade-size force making mutually supporting attacks.
- Attack by infiltration or air assault to seize an isolated enemy strongpoint in close terrain. This could be a guerrilla base camp or an isolated outpost guarding a defile or mountain pass.
- Attack by infiltration or air assault to seize and hold a bridge, defile, or mountain pass to assist the passage and continuation of the attack of a larger mechanized or armored force or to deny passage to an enemy counterattacking reserve force.
- Infiltration or stay-behind to ambush a mechanized column in the enemy's rear area in a defile, mountain pass, or densely wooded terrain. This mission may be part of a larger defensive operation, but it could also be part of a larger offensive operation in which the light infantry battalion provides flank protection by ambushing reinforcing enemy.
- Attack to clear and destroy small pockets of bypassed enemy or guerrillas in densely wooded, mountain, or jungle terrain. This could be in operations other than war, as a follow-and-support force in war, or as a rear area combat force to clear an area of enemy special operations forces.
- Attack to seize an enemy-held BUA. This mission requires augmentation and special training. Augmentation of engineers and firepower will be crucial.



- Attack to seize an enemy-held strongpoint by assault. This mission requires firepower augmentation and support if penetration or infiltration is not possible.
- Reconnaissance in force to determine the extent of enemy forces and positions in close terrain.
- Battalion-size raid on an enemy installation in the enemy rear.

## FORMS OF MANEUVER

The relationship between attacking light infantry and armor units is described by the five forms of maneuver. Attacks are conducted with similar forms of maneuver designed to place a light infantry battalion against a position of enemy vulnerability. Each form of maneuver has its place as an effective means of fighting the enemy. The estimate process establishes the basis of information for the commander to use in selecting the correct form. These terms describe the schemes of maneuver in paragraph 3 of the OPORD.

**Infiltration.** Infiltration permits the commander to move his force by stealth into a more favorable position to accomplish his mission. Successful infiltration requires, above all, that the force avoid detection and engagement. The commander may order an infiltration to move all or part of the battalion through gaps in the enemy's defense or to open gaps in the enemy defense for a breakthrough force (see Figure 4-34). As an alternative to infiltrating a battalion through the enemy defense, the battalion commander may order small units to infiltrate the main defensive positions along multiple infiltration lanes to—

- Destroy the enemy.
- Attack lightly held positions.
- Isolate strongpoints.
- Occupy an overwatch position from which the main effort can be supported.
- Facilitate forward movement of the exploitation force.
- Secure key terrain.
- Harass and disrupt the enemy's defensive system.
- Conduct ambushes.
- Destroy vital facilities.

Infiltrations are conducted in five phases as discussed in the following paragraphs.

**Patrol.** Find gaps, weak areas in the defense, and enemy positions.

**Prepare.** Make plans, give orders, coordinate with forward and flank units, and rehearse. Build sand tables. Give leader briefbacks to make sure the mission is understood. Tailor the soldier's load.

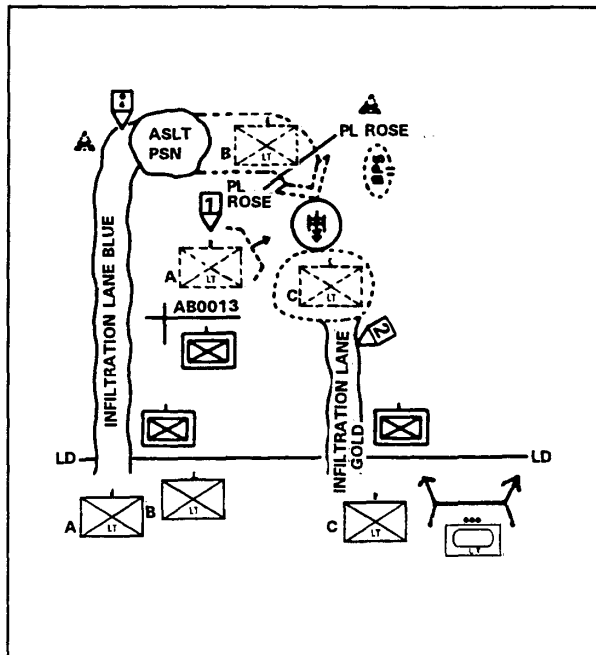


Figure 4-34. Light infantry infiltration.

Infiltrate. Avoid contact whenever possible. Ignore ineffective enemy fire.

Consolidate. Do this in the enemy rear or along a flank at a linkup point. Then move to an assembly area or objective rally point (ORP) to continue the mission.

Execute. Perform actions on the objective such as attack, raid, seize key terrain or an area, capture prisoners, or gather information. The attack is characterized by swift, violent action against the enemy to capitalize on surprise, boldness of action (doing the unexpected), and psychological effects (paralysis).

The plan for an infiltration must be simple. The commander and staff must gather detailed intelligence on the enemy, its dispositions, and the terrain to be infiltrated. Sources for information will include intelligence reports, scout situation reports (SITREP), patrol reports, weather and light data, and aerial photographs. This combat information is used to determine—

- Infiltration lanes.
- Location of rally points along the route of axis.
- Contact points, if required.
- Location of enemy security elements.
- Gaps in the enemy's defensive system.
- Strength of enemy defenses on the objective.

Control measures, such as infiltration lanes, are selected on the basis of avoiding the enemy, providing cover and concealment, and avoiding predictable routes that may lend themselves to enemy ambush sites. Single or multiple routes or axes may be used, depending on the size of the force to be infiltrated, the amount of detailed information required on enemy dispositions and terrain, the time allowed, and the number of routes or axes available. The following considerations apply:

- A single route or axis facilitates navigation, control, and reassembly. It reduces the area for which detailed intelligence is required. However, it requires more time to move the force through enemy positions.
- Multiple routes or axes reduce the possibility of compromising the entire force and make movement faster. However, they are more difficult to control.

Rally points are designated along each infiltration route. They are easily identifiable points where units can reassemble or reorganize if they become dispersed. Rally points should provide cover and concealment.

The assault position is as close as possible to the objective without compromising security. In addition to having the characteristics of a rally point, it should be large enough to allow the force to deploy. It should be reconnoitered and secured before occupation and can be used to make final adjustments prior to the attack.

Once infiltration routes or axes and rally points are selected, detailed planning continues to ensure that FS is available throughout the infiltration. Targets should be engaged first with indirect fire to avoid disclosing the exact location of the infiltrating force. Only essential equipment is taken. In very close terrain, for example, a TOW or Dragon may be a liability. Commanders should ensure the soldier's load is kept to a minimum. The largest unit possible, compatible with the requirement for stealth, moves with all elements together to increase control, speed, and responsive combat power.

**Penetration.** In a penetration, light infantry concentrates to strike at an enemy weak point and breaks through the position to rupture the defense. For the light infantry to conduct a successful penetration requires the concentration of all combat multipliers, to include use of limited visibility, stealth, and covered and concealed terrain at a selected breach point. Should METT-T analysis identify numerous weaknesses in the enemy's position, multiple penetrations may be made. In such cases, attacking forces might converge on a single, deep objective or secure independent objectives deep in the enemy's rear.

A penetration is normally attempted when enemy flanks are unassailable, when time does not permit another form of maneuver, or when the enemy is overextended and weak spots are detected in his position (see Figure 4-35). The main attack is made on a relatively narrow front and is directed toward a decisive objective.

The penetration of a well-organized position requires concentration of combat power to permit continued momentum of the attack. The attack should move rapidly to destroy the continuity of the defense; if the attack is slowed or delayed, the enemy will be afforded time to react. The attacker should avoid the enemy's EA. If the rupture is not made sharply and objectives are not secured promptly, the penetration is likely to resemble a frontal attack. This may result in high casualties and permit the enemy to fall back intact, thus avoiding destruction.

Selection of the location for the penetration is based on the following considerations:

- **Terrain.** Terrain must permit the maneuver of both the supporting attacks and the penetrating force. Lateral movement should be possible so that a successful attack can be rapidly reinforced.
- **Strength and depth of enemy position.** Ideally, the location chosen should be lightly defended to permit early penetration. The battalion should be looking for a place or places where the continuity of the enemy's defense has been interrupted, such as gaps in obstacles and minefield or areas not covered by fire or observation.
- **Distance to objective.** A short, well-concealed, direct route is desirable to prevent unnecessary exposure to enemy fires.
- **Surprise.** The place and time of attack should be selected to shatter the enemy's defense before he can react.

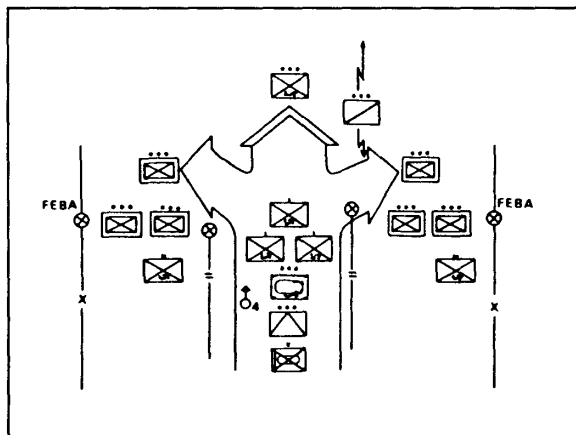


Figure 4-35. Light armor platoon participating in a light infantry penetration.

**Envelopment.** In the envelopment, the attacker passes around the enemy to strike the flank or rear of the enemy position. Envelopment is normally preferred over penetration or frontal attack; striking the enemy from several directions or from unexpected directions multiplies combat power. The enemy is forced to fight along avenues of approach that may be lightly defended or initially undefended. In an envelopment, a fixing element suppresses the enemy from the front, forcing the enemy to fight in multiple directions or to abandon his position. This disrupts his defensive continuity and makes him vulnerable to exploitation. If possible, the attacker should envelop forward positions and occupy undefended key terrain to force the enemy to abandon prepared positions.

Envelopment requires an assailable flank; that is, an open flank, weakness, or gap through enemy lines that permits the enveloping force to approach the objective. In the light infantry, a critical responsibility for scouts is to identify gaps. Routes selected for the envelopment should be covered and concealed and lead through areas where the enemy would least suspect a force to maneuver.

Envelopments require an appropriate balance of forces for the main and supporting efforts. Frequently, the forces holding the enemy in position are economy-of-force elements, with the majority of combat power being allocated to the enveloping force. Another variation of the envelopment is the double envelopment, where the attacker seeks to pass around both flanks of the enemy at the same time.

**Turning Movement.** An attacking force making a turning movement passes around the enemy, avoiding him entirely, to secure an objective deep in the enemy's rear area. This maneuver forces the enemy to abandon his position or to divert major forces to meet the threat. The selected objective may be along the enemy's line of contact (LC). The objective must be important enough to the enemy, such as a key bridge over an unfoldable river, to cause him to abandon his forward defenses.

**Frontal Attack.** Frontal attack is employed to overrun and destroy or capture a weakened enemy or to fix an enemy force in position to support another attack. It may also be used in conjunction with exploitation or pursuit of a weaker or disorganized enemy. Frontal attacks are the least desirable form of maneuver. They require intensive use of obscuration to cover friendly advances, and suppressive fires must be maximized.

## MOVEMENT TO CONTACT

A movement to contact is conducted to gain, maintain, or reestablish contact with the enemy. Once contact is made, units move quickly to develop the situation. The battalion makes contact with the smallest possible element to maintain flexibility and security. This is especially important for the light infantry because limited mobility and dependence on restrictive terrain make it quite vulnerable. Since movements to contact are usually characterized by lack of information about the enemy, commanders must plan for continuous and extensive reconnaissance and security. Movement to contact will terminate in a hasty attack or hasty defense. Two techniques are most commonly used by infantry battalions to conduct a movement to contact, an approach march and a search and attack.

**Approach March.** This is an advance of a combat unit when direct contact with the enemy is imminent. Troops are fully or partially deployed. The approach march ends when ground contact with the enemy is made or when an attack position is occupied. Using this technique, light infantry battalions normally organize into a security force, advance guard, main body, flank guards, and rear guard. The guard elements move with and secure the main body. Figures 4-36 through 4-39 show examples of light infantry battalion formations (with attached light armor platoon) in a movement to contact using the approach march technique.

**Search and Attack.** This technique is a decentralized movement to contact, requiring multiple, coordinated patrols (infantry squad- and platoon-size) to locate the enemy. It is most often used against an enemy operating in dispersed elements. When conducting a search and attack, infantry units spend more time operating in an AO rather than simply sweeping through it. Light armor platoons can have great value during search and attack operations. They primarily serve as a reserve to conduct a hasty attack to defeat the enemy by assaulting critical sites (CPs, supply points) once the infantry has found and fixed enemy forces. Figure 4-36 shows an example of a light armor platoon conducting a hasty attack on a fixed enemy force. Whether the purpose of the search and attack is destruction of the enemy, area denial, or force protection, the critical execution factor for light armor is always to be capable of rapidly massing combat power.

In conducting movement to contact, light infantry units protect the force by—

- Moving during period of limited visibility and using stealth and surprise.
- Conducting thorough reconnaissance and being able to attack at the time and place of the commander's choosing.
- Using all available combined arms assets.

Scouts are usually employed well forward of the advance guard to conduct reconnaissance for the battalion movement. Light armor elements should be given checkpoints along the movement route from which they can cover the most likely enemy armor avenues of approach. TOW sections move in bounds for mutual support and immediate responsiveness. Commanders and S3s must keep in mind that the TOWS and light armor need additional security forces. When overmatching the movement of light infantry, the light armor platoon can either move from one dominating piece of terrain to another, move with the light infantry, or move behind the light infantry. The light infantry commander must designate specific movement techniques and formations to reduce danger to the unit while moving. Once contact is made, platoons use fire and movement to develop the situation.

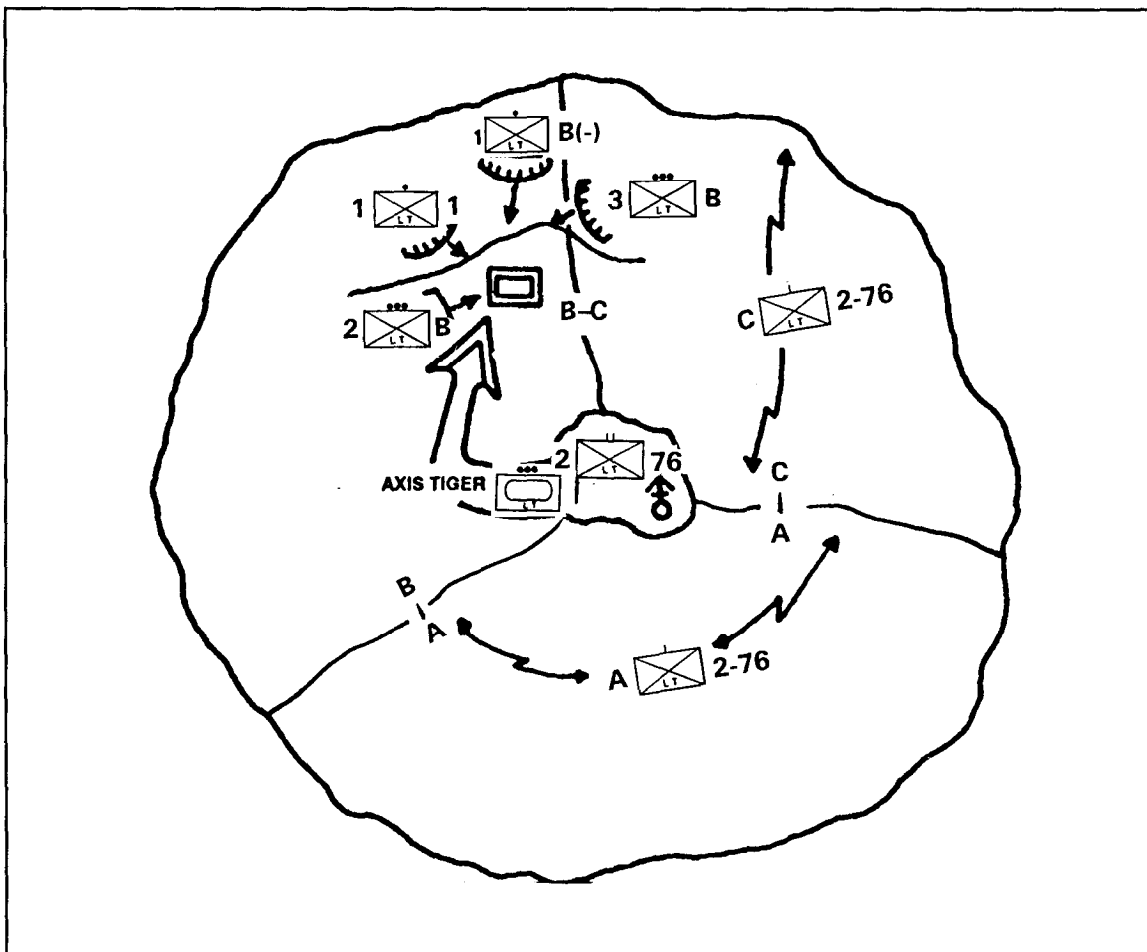


Figure 4-36. Example of a light armor platoon conducting a hasty attack on a fixed enemy force during search and attack operations.

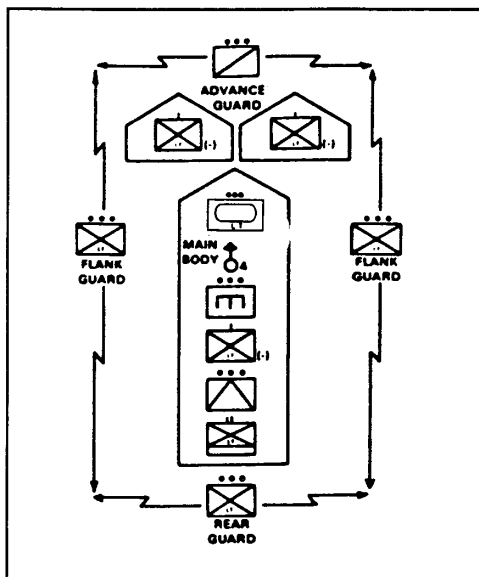


Figure 4-37. Movement to contact using the approach march technique (battalion vee).

Normally, priority of fires will be given to the advanced guard until contact is made and the main body assumes the attack; at this point, the main body receives priority of fires. The advance guard may disperse or concentrate during movement to contact. This decision is based on METT-T. Forces are concentrated when intelligence indicates the enemy is operating in company- or larger-size units or speed is a consideration. Forces are dispersed when intelligence indicates the enemy is operating in dispersed, small units or coverage is more important than speed.

When the movement to contact culminates in an attack, the battalion may attack from a wedge, vee, single-column, or multiple-column formation along the axis of advance or in a zone of action. The following considerations influence the decision of which formation to use:

- A wedge is normally used to allow the battalion to mass faster; give greater flexibility, increase the probability of contact, and increase the ease of movement. The primary disadvantage of the wedge is it is difficult to control. This formation allows the light armor to be forward for quick response.

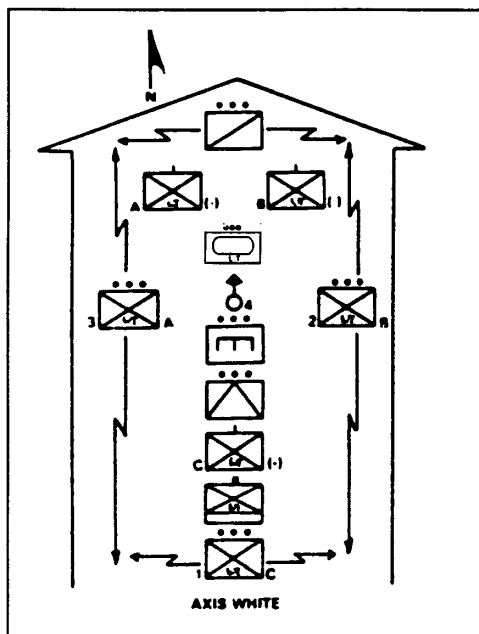


Figure 4-38. Movement to contact (wedge).

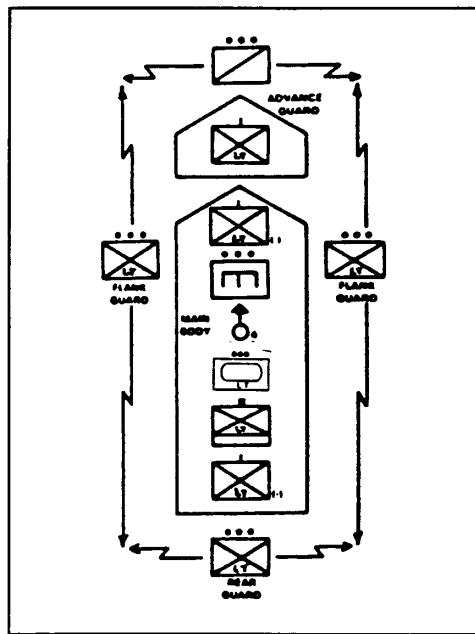


Figure 4-39. Movement to contact (battalion column).

- The vee formation is used to increase frontage, speed of reaction, and capability for envelopment. The disadvantages are that it is difficult to control and has fewer uncommitted forces and a smaller reserve. In this formation, the light armor platoon is farther back in the formation and requires greater response time.
- An attack using a single column is normally used when time is not critical. The primary disadvantages of using a single column are that it is susceptible to enemy delay tactics and takes longer to get the rear company into action.
- Multiple columns are normally used when speed is critical and wide deployment is necessary. The primary disadvantage of multiple columns is that C2 become more difficult.

## METHODS OF ATTACK

The light armor platoon and the light infantry can operate in the attack in many ways. The light infantry battalion commander, supported by the recommendations from his staff and the light armor platoon leader, will decide on which method to use based on the specific tactical situation. The following discussion examines the four most basic methods for conducting light/heavy attacks.

The light armor platoon attacks by fire while the infantry assaults the objective. The light armor platoon occupies hull-down defilade positions until the infantry masks the tank fires (see Figure 4-40). The light armor fires can be timed to divert the enemy's attention and cover the sounds of the light infantry's approach or breach. This method is most often used when enemy antitank weapons or obstacles block the only possible armor avenue of approach. Close coordination between the heavy and light forces is vital to ensure effective fire control and prevent fratricide.



Figure 4-40. Light armor platoon attacking by fire.

The light armor platoon initially attacks by fire, then moves forward rapidly and joins the infantry for the assault. As in the first method, the light armor platoon first suppresses the objective from hull-down defilade positions while the infantry moves to an assault position. When the infantry masks the M8 fires, or upon a prearranged signal, the light armor platoon moves forward quickly and assaults slightly ahead of the infantry. This method is used when the enemy has prepared obstacles on the mounted avenues of approach. The infantry must first breach the obstacles and clear a lane for the M8s to reach the objective. Careful coordination and preparation of a detailed fire plan by the light armor platoon are essential to keep indirect fires on the objective until the final assault.

The light armor platoon and light infantry converge on the objective from different directions and assault at the same time. Open or partially open terrain that is free of mines and other tank obstacles is vital. Effective neutralization of enemy antiarmor weapons by direct and indirect supporting fires and smoke is also necessary. However, neutralization is needed only during the time required for tanks to move from their LD to the near edge of the objective. The light armor platoon must coordinate directly with the assaulting infantry for timing of the assault (the infantry will have to move earlier) and fire control on the objective. Even though this method provides surprise, increases the fire effect, and maximizes shock, actions on the objective are complex. The light armor platoon must tightly control its fires while friendly infantry clears restrictive terrain on the objective.

The light armor platoon and light infantry advance together. The light armor platoon may bound short distances, stop to fire, then bound forward again as the infantry comes abreast. This method is used when the enemy situation is vague; when the objective is very large and consists of both open and restrictive terrain; or when visibility, fields of fire, and MS movement are restricted, such as in fog, in towns, in woods, or at night. The light armor platoon provides immediate, close, direct fires, and the infantry protects the armored vehicles from individual antiarmor measures. Rather than bounding, the light armor platoon may move at the same rate of speed as the infantry. The infantry may follow closely behind the M8s for protection from small arms fire; in turn, the infantry protects the M8s from

handheld antiarmor weapons by providing security to the flanks and rear. When this method of attack is used, it is imperative that the infantry and each MS use the external phones to coordinate fires and maneuver. Figure 4-41 depicts an attack with infantry and light armor forces advancing together.



Figure 4-41. Light armor platoon and light infantry advance together.

## TYPES OF ATTACK

There are two types of attacks—the hasty attack and the deliberate attack. The main difference between them is in the depth of planning. All attack plans address intent, maneuver, and fires; all seek to strike a weak point, flank, or rear area of the enemy force.

**Hasty Attack.** Light forces must seize every opportunity to destroy enemy with violent, offensive actions. The hasty



attack is used when such an opportunity is presented and little time is available for detailed planning. It is also used to gain or maintain the initiative. A hasty attack can develop when—

- A movement to contact results in contact.
- A deliberate attack changes after it is under way.
- Further advance is ordered after securing an objective.
- A counterattack is ordered in the defense.

The commander must rapidly assess the situation, formulate a scheme of maneuver and a supporting fire plan, and communicate the scheme of maneuver to his subordinates using FRAGOs. The unit then conducts the hasty attack using infantry and armor fire and movement.

The primary employment of the hasty attack is in conjunction with a movement to contact, during which the unit may be assigned the mission of securing a terrain feature or of destroying an enemy force. When enemy contact is made en route to securing an objective, the light armor platoon may conduct the hasty attack with the infantry TF by—

- Fixing and bypassing the enemy, depending on enemy strength and the unit's orders.
- Attacking by fire to destroy the enemy and then bypassing.
- Conducting a hasty attack to kill the enemy and continuing the attack to the objective.

Depending on his orders and the size and location of the enemy, the commander develops a plan to conduct a hasty attack when enemy contact is made. He designates an objective, a support by fire element, the support by fire element's overwatch positions, an assault element, and covered and concealed routes into the flanks of the enemy. He then issues a FRAGO to his platoon leaders.

The first unit to make contact with the enemy executes actions on contact and assumes the role of the support by fire element. As discussed in the methods of attack, the commander employs the light armor as the assault force or to engage the enemy upon contact while he develops and issues his plan to assault the objective with infantry.

**Deliberate Attack.** If the light armor platoon can execute a hasty attack, it can execute a deliberate attack. A deliberate attack is distinguished from a hasty attack by a more detailed knowledge of the enemy; a larger amount of time devoted to planning, coordination, and preparation; and more extensive collection and use of intelligence. Once begun, the deliberate attack is executed with the same speed, violence, and application of concentrated combat power as a hasty attack. Units normally conduct a deliberate attack from defensive positions.

## OFFENSIVE OPERATIONS IN BUILT-UP AREAS

Because of the nature of the terrain, offensive operations in BUAs are normally conducted by dismounted infantry. Combat is characterized by house-to-house fighting; restricted observation, fields of fire, and maneuver space for armored vehicles; and difficulty in C2. M8s are employed as much as possible in close support of dismounted teams to secure locations and provide direct FS.

**Types of Built-up Areas.** Characteristics of BUAs differ by country and region. The following are general categories that help separate BUAs by type:

- Villages, with populations of 3,000 or less.
- Strip areas, which are BUAs along roads connecting towns or cities.

- Towns or small cities, with populations of up to 100,000 and not part of a major urban complex.
- Large cities and associated urban sprawl, with populations of up to 20 million and covering hundreds of square kilometers.

**Basic Building and Street Patterns.** Each BUA or urban area has its own characteristics, making each objective a unique challenge for the infantry/armor team. The following list includes the typical building/street patterns that light forces will encounter in urban terrain:

- Dense, random construction.
- Closed, orderly blocks.
- High-rise areas.
- Industrial/transportation facilities.
- Dispersed residential areas.

On the outskirts of suburbs, small plots of land, gardens, farms, fields, or vacant lots surround isolated houses or groups of houses. The attacking force usually will start at this part of the BUA. It should treat houses as inferior bunkers or individual emplacements.

In the residential district, streets, gardens, and grassy plots usually flank closely spaced, detached, or semidetached buildings. The arrangement may or may not follow a geometric pattern. The center of the BUA is usually the business section. It will almost always consist of buildings of block-type construction, with little or no space between them, except for an occasional park, street or alley. This will require fighting from building to building and block to block.

**Attacking in Built-up Areas.** A detailed study of the city and the enemy's dispositions in and around it forms the basis for planning the attack and seizure of a BUA. Planning may include M8s for both maneuver and FS. The attacking force is normally separated into two forces-the enveloping force (armor heavy) and the direct assault force (infantry heavy). Follow the procedures and considerations listed below when attacking a BUA:

- Dissipate the enemy's strength by causing him to react to demonstrations, feints, or ruses.
- Concentrate overwhelming combat power to force a quick and violent disruption of the defenses, envelop the BUA, and move rapidly to the enemy's rear.
- When possible, reduce strongpoints with fires only, secure them with follow-on forces, and keep moving.
- Cut lines of communication and defeat the enemy through isolation.
- Attack at night to gain surprise or to take objectives whose assault during daylight would be too costly. An attack at night will take advantage of the M8's thermal sight capability.
- Once momentum has been gained, attack continuously until defenses have been splintered.

**Attack Phases.** An attack of a BUA comprises three phases:

- Isolation of the BUA.
- Gaining a foothold at the edge of the BUA.
- Systematic clearance and seizure of objectives.

Isolation. The first phase is the isolation of the city and the seizure of terrain features that dominate approaches to it. The attacker has the advantage of maneuver to isolate the city he will seize. The enveloping force—

- Prevents the escape of the enemy.
- Prevents reinforcements from entering the BUA.
- Provides direct fire support for the direct assault force.
- Protects the direct assault force from counterattack.

Once he has isolated the city, the attacker can either press the attack or contain the defender and force him to capitulate. If necessary, the unit then secures positions outside the BUA from which to support entrance into the city itself. The tactics and techniques for this phase of the operation are similar to those used in an attack against an enemy strongpoint (see Figure 4-42).

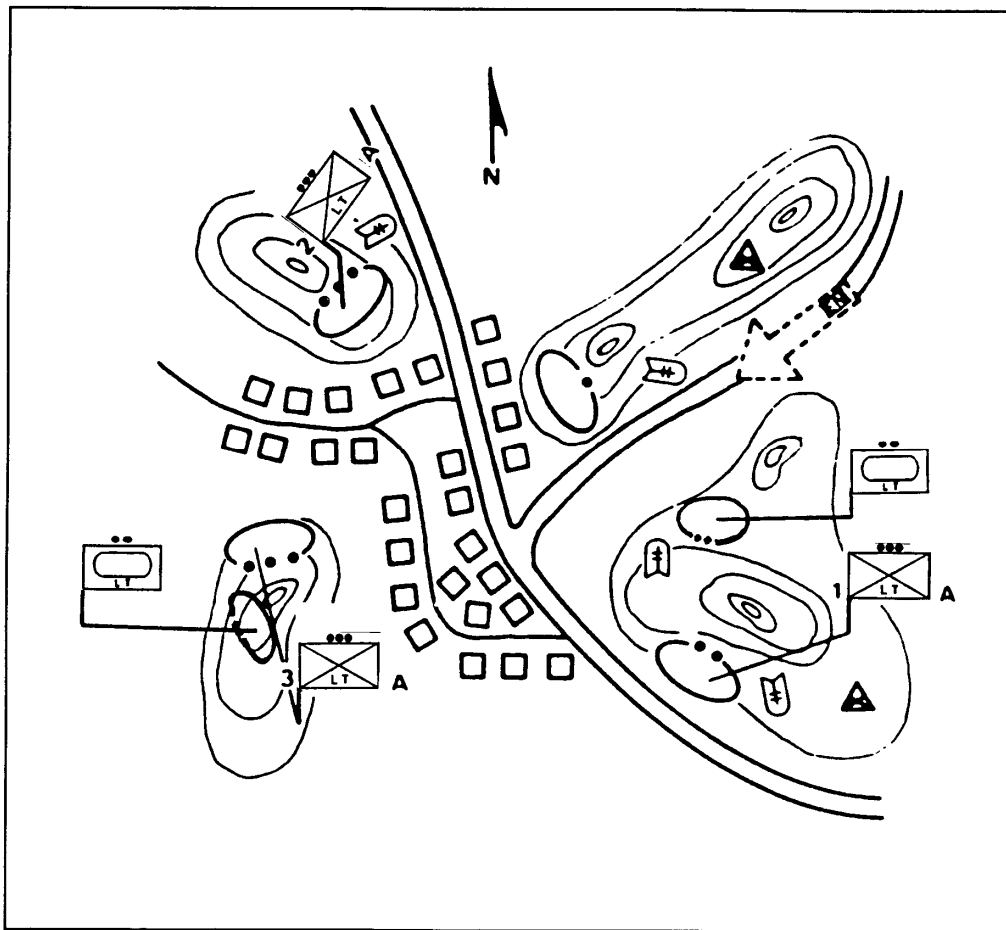
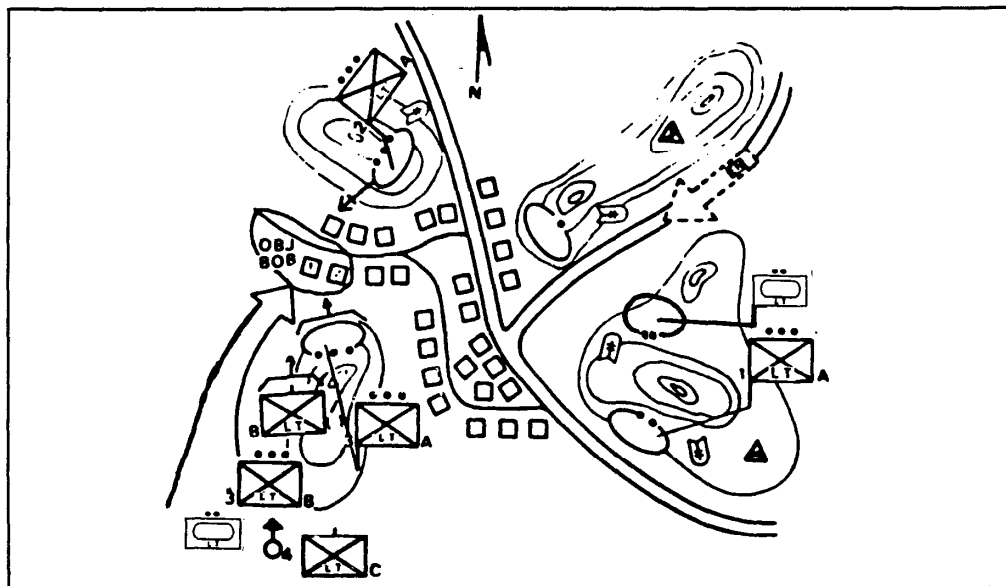


Figure 4-42. Isolating the built-up area.

**Gaining a Foothold.** In the second phase, the attacker selects his best point of entry into the city. He can attack from any direction; he can bypass strongly defended buildings by going under, over, and around them and by using cellars, sewers, subways, or other underground passages. The unit advances to the edge of the BUA to gain a foothold and eliminate the defender's observation of (and direct fires on) approaches into the area. The assault force uses the foothold area to reorganize, decentralize control, and displace units to supporting positions. The attacking unit penetrates the area on a narrow front; M8s with infantry lead the way. The commander concentrates all available supporting fires on the entry point (see Figure 4-43).

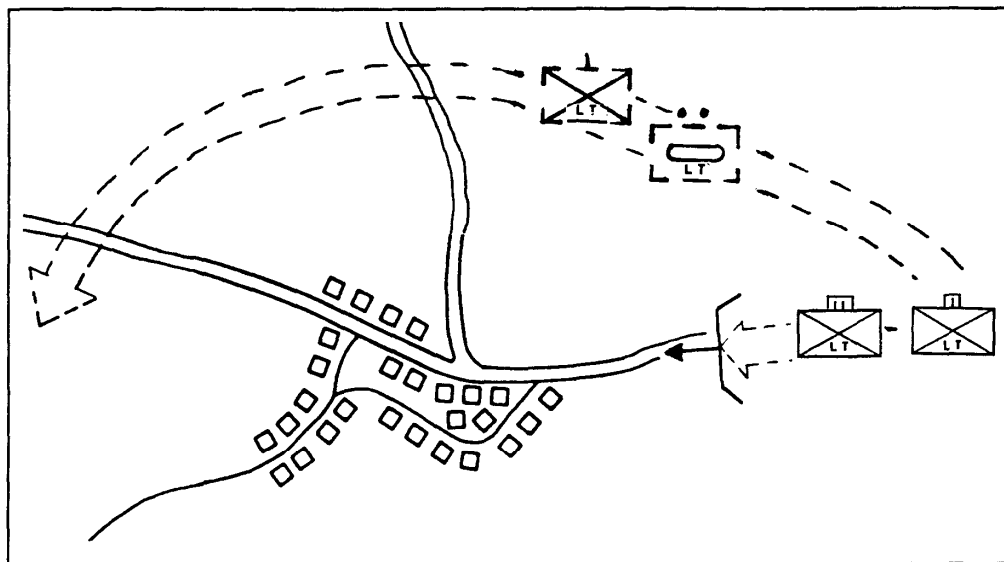


**Figure 4-43. Concentrate fire to gain a foothold.**

The probability of success increases when the commander launches his assault from an unexpected direction in the early morning just before light or under the cover of smoke. The commander normally employs a column formation in the initial assault. Assaulting forces can expect to encounter barricades, antitank mine obstacles, and antitank fire.

The commander may employ variations of the column formation. For example, a battalion TF may use a column, with each of its company teams in a line, wedge, or echelon. These formations tend to shorten the length of the column, reducing the time necessary to move into the BUA. The leading elements of the force should use a formation that speeds the delivery of maximum fire on the point of penetration. The commander should place artillery air bursts over the entry point to prevent the enemy from manning crew-served or individual antitank weapons. The infantry moves as close to the objective as possible. When the infantry attacks a strongly defended area, it provides close-in protection for the M8s. Unit leaders may assign fire teams or squads to work with each M8. Visual signals help maintain direct communication between the rifle squad or fire team leader and the M8 commander. The infantry maneuvers to engage or destroy the resistance. M8s move forward as soon as possible to support them. When possible, the M8 fires augment the assault or cover critical areas on the force's flanks. When buildings on the periphery of a town are heavily fortified, the commander may have to employ techniques for the attack of a fortified area.

**Clearance and Seizure.** Phase three can vary from a systematic block-by-block, house-to-house reduction of the BUA to a rapid advance with clearance of critical areas and buildings. It begins without pause after the completion of phase two. Clearance and seizure techniques depend on the mission, the size of the town, construction and building arrangement, and the enemy's disposition, strength, and objective. The direct assault force clears the city of enemy resistance and links up with the enveloping force when the unit must continue to move (see Figure 4-44).



**Figure 4-44. Enveloping and assault forces.**

When the BUA is large and heavily fortified or when the mission requires it, units may have to perform a methodical house-by-house, block-by-block clearance operation. The commander should divide the area into zones of responsibility. Each subordinate unit must clear its zone completely, leaving no enemy to its rear.

When the BUA is small or lightly defended, the attacking force should drive through or into it as rapidly as possible. Light armor should lead the column in this instance, closely followed and supported by infantry. It will rarely be possible to employ more than two M8s at the head of the column except when advancing on a wide street. M8s continuously concentrate main gun and automatic weapons fire on windows and the rooftops of buildings (see Figure 4-45). The infantry protects the M8s from close-in enemy fire. When required to protect tanks from fire from nearby buildings, an infantry squad moves along each side of the street, keeping abreast of the lead vehicles. Depending on the resistance, the squad may challenge every doorway or ground floor window by throwing in hand grenades and spraying the interior with small arms fire. Unit leaders will usually assign soldiers in each squad to locate and engage targets on the upper floors and rooftops of the buildings. The infantry may also assist in the removal of obstacles or barriers halting the advance.

When seizing buildings, the M8s support the assault by isolating the building and providing suppression during entry (see Figure 4-46). The M8 can also create a hole in a wall of a building with main gun fire to allow the infantry to enter the building through an unexpected entrance.

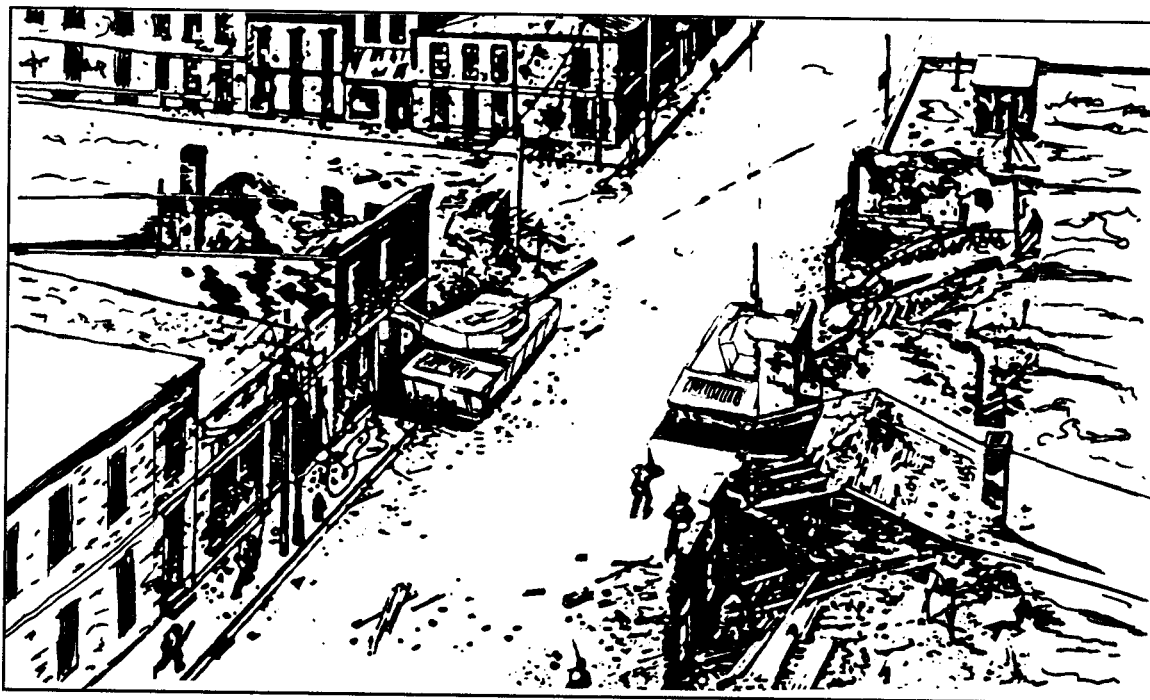


Figure 4-45. M8s advancing with infantry.

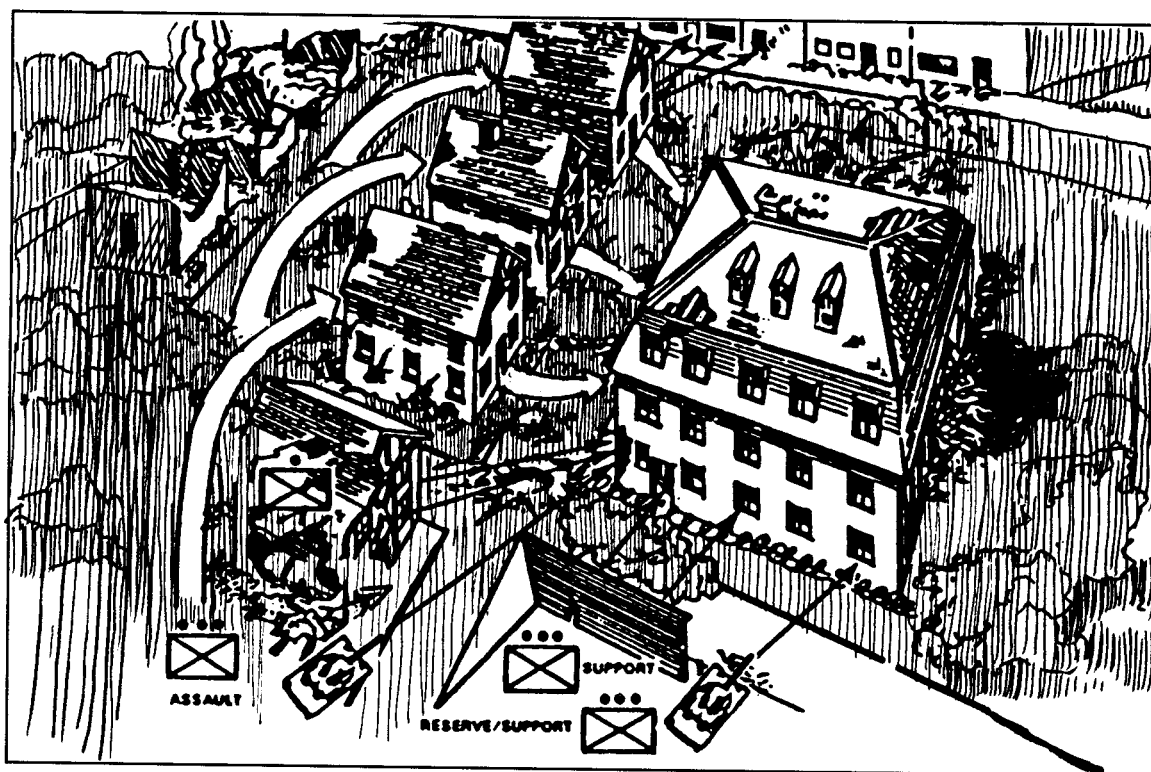


Figure 4-46. Isolating and seizing a building.

The following procedures apply when attacking a BUA:

- Dissipate the enemy's strength by causing him to react to demonstrations, feints, and ruses.
- Concentrate overwhelming combat power to force a quick and violent disruption of enemy defenses, envelop the BUA, and move rapidly to the enemy's rear.
- When possible, reduce strongpoints with fires only, secure them with follow-on forces, and keep moving.
- Cut lines of communication and defeat the enemy by isolating him.
- Attack at night to gain surprise or to take objectives that would be too costly to assault during daylight. A night attack will take full advantage of the M8's thermal sight capability.
- Once momentum is gained, keep the attack continuous until enemy defenses have been splintered.

**Light Armor Tasks.** When the light armor platoon is included as part of the direct assault force, it should be employed as a platoon. In BUAs that are very restricted, however, sections may have to operate separately, each under the control of an infantry commander. Light armor supports infantry in BUAs by—

- Providing shock action and firepower.
- Isolating objectives with direct fire to prevent enemy withdrawal, reinforcement, or counterattack.
- Neutralizing or suppressing enemy positions with smoke, high-explosive (HE), and automatic weapons fire as infantry closes with and destroys the enemy.
- Assisting opposed entry of infantry into buildings when doorways are blocked by debris, obstacles, or enemy fire.
- Smashing through street barricades or reducing barricades by fires.
- Using fires to reduce enemy strongpoints in buildings.
- Obscuring enemy observation using on-board smoke generators.
- Holding cleared portions of the objective by covering avenues of approach.
- Attacking by fire any other targets designated by the infantry.
- Establishing roadblocks.
- Suppressing identified sniper positions.

**Light Infantry Tasks.** Light infantry supports light armor in urban terrain by—

- Locating targets for engagement by light armor weapons.
- Suppressing and destroying antitank weapons with mortars, automatic weapons, and grenades.

- Assaulting positions and clearing buildings.
- Providing local security for M8s at night or during other periods of reduced visibility.

**M8 Employment Considerations.** The following are some techniques and concerns the light infantry and/or armor leader should consider when employing M8s in urban terrain:

- M8 main gun fire is an effective method for eliminating a sniper in a building or creating a psychological effect that destroys his will to continue.
- Streets and alleys constitute ready-made fire lanes and firing zones. They can greatly restrict and canalize vehicular traffic, making it vulnerable.
- In urban terrain, light armor works best in platoons or in sections of two M8s. In extreme cases, M8s can work individually, but this is not recommended.
- At least one infantry squad should remain with each armor vehicle to furnish local security.
- The external phone is an excellent means for communication between the infantryman and the vehicle commander.
- The M8 should use HE ammunition to create holes in the walls of buildings so the infantry can enter.
- The M8 should use HE ammunition against barricades. HE will demolish steeples, chimneys, and other tall structures likely to contain enemy artillery observers. This technique is dependent on the established rules of engagement. In operations other than war, minimizing collateral damage may be a priority. However, crews can fire on observed or known hostile enemy positions at all times.
- Crew members must be on the alert for bunkers or pillboxes in houses along the street.
- M8s should avoid stopping or moving slowly near nonsecure buildings.
- Units should check all bridges and overpasses for mines and should determine their weight-carrying capacity.
- M8s should stay near buildings held by friendly troops. Crew members should watch for signals from the infantry inside the buildings on their flanks.
- M8 crew members should keep their personal weapons ready for close-in combat.
- When possible, M8s should destroy enemy strongpoints with main gun fire. One technique is to fire armor-piercing ammunition to penetrate the reinforced wall of a building followed by high-explosive antitank (HEAT) rounds to kill or neutralize the enemy. M8s should fire first into the ground floor to drive the enemy into the basement, where infantry can attack them, or to higher floors, where light armor fire can destroy them.
- M8s are at a disadvantage because their main guns cannot depress or elevate sufficiently to fire into basements and upper floors at close range (see Figure 4-47).



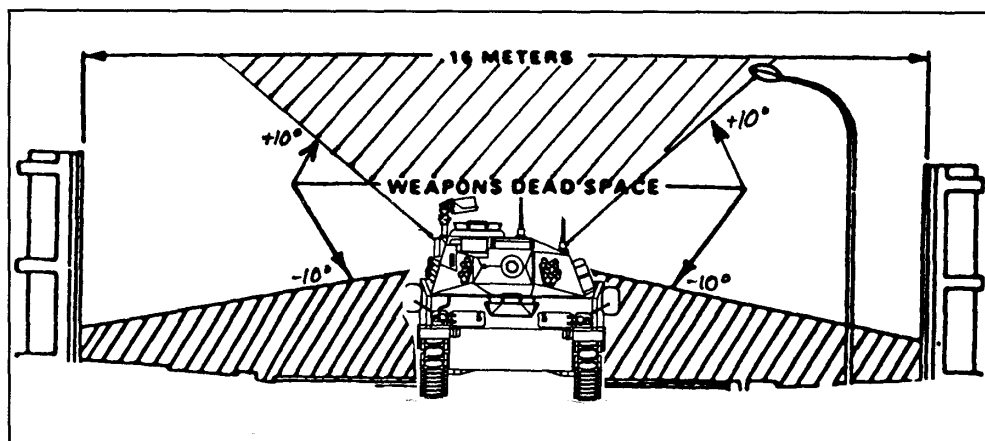


Figure 4-47. M8 dead space on narrow streets.

**Control Measures.** Combat in BUAs requires control measures with which all troops must be familiar. These include the following:

- **Boundaries.** In dense urban areas, units should place boundaries along one side of the street to provide easy and definite identification. In areas where observation and movement are less restricted, they may place boundaries in alleys or within blocks so that one unit's zone includes both sides of the street.
- **Objectives.** Objectives are specific and limited. Choosing major intersections, principal buildings, or other readily identifiable physical features improves control. Numbering buildings along the route of attack simplifies the assignment. As the unit moves forward through an area, unit leaders should designate the near side of the street as the objective. If they choose the far side of the street, the unit will have to secure buildings on both sides of the street to take the objective. Units must promptly report seizure of objectives.
- **Frontages, formations, and zones of action.** Attacking battalions normally operate within relatively narrow zones of action. The frontages depend on the enemy's strength, the size of the buildings, and the anticipated resistance. Normally, a light infantry battalion TF has a frontage of three to six blocks and attacking companies of one to two blocks. Frontages and zones of action influence M8 employment. The M8s should be well forward to add momentum to the attack, exploit success, repel counterattacks, and protect the flanks and rear against enemy action.
- **Phase lines (PLs).** PLs increase control by regulating the advance of attacking forces. They also indicate where the command passes from one phase of the assault to another. PLs are less restrictive than objectives. They encourage the rapid exploitation of success without halting. Principal streets, rivers, and trolley or railroad lines make good PLs.
- **Checkpoints and contact points.** Street corners, buildings, railway crossings, bridges, and easily identifiable features can be checkpoints or contact points. They improve the reporting of locations. The commander can use them as specific points where he desires units to make physical contact.

## RAID

A raid is a deliberate attack into enemy-held territory for a specific purpose. Light infantry forces are ideal for conducting a raid. Raids are conducted with swift, violent action to destroy or capture enemy personnel or equipment, rescue friendly personnel, gain intelligence, or gain the initiative. Stealth during movement, indirect approach, violent execution, and precision are all characteristics of successful raids. The same considerations apply as for a deliberate attack, except for the following points:

- There is always a planned withdrawal from the objective.
- Planned fire and security elements isolate the objective from enemy reinforcement or retreat.
- Raids can be done by any size unit.
- Raids require detailed planning and extensive rehearsals.

The keys to the raid are information, surprise, and timing. Surprise is obtained by using deception, stealth, and speed of execution when moving to the objective area. It is essential that the raiding force arrive in the objective area without being compromised. Timing is also essential to the execution of the raid.

It is difficult to use light armor in the conduct of small unit infiltration raids. In some cases, however, the light armor platoon can be used as the security element to—

- Block enemy reinforcement along the mounted avenues of approach.
- Assist the raid party in breaking contact.
- Assist the raid party in the withdrawal from the objective.

The raid plan includes a signal to withdraw; well-planned routes to an ORP or rendezvous point; routes covered by preplanned fire; units assigned to cover the withdrawal and assist in breaking contact; a way to evacuate casualties, enemy prisoners of war (EPWs), and captured equipment from the objective; and an order of withdrawal from the objective.

The withdrawal from the objective and the security force blocking positions must be planned with the same detail as the rest of the mission. Use of preplanned fire is essential to keep enemy forces from pursuing. The enemy's anticipated reactions must be considered when planning withdrawal routes. Once the main body has withdrawn from the area, the security force withdraws. In some cases, the security force may have to withdraw using delay tactics.

## BYPASS

The company commander uses fire and movement when he decides to bypass enemy forces. The enemy is suppressed by both indirect and direct fires while the force moves, using covered and concealed routes, past the enemy positions. Where covered routes are not available, the M8s should remain out of antitank weapon range or use smoke to conceal movement.

While bypassing enemy forces, moving platoons orient gun tubes on the enemy. The M8 platoon (as the support by fire element) suppresses the enemy positions, thus preventing the enemy from firing on or maneuvering against the moving infantry platoons. The infantry unit may halt and provide suppressive fire so the support by fire platoon can move and complete the bypass (see Figure 4-48).

## CONSOLIDATION AND REORGANIZATION

The platoon should consolidate and reorganize as soon as it takes an objective. This is done so the platoon is prepared to destroy an enemy counterattack or to continue with the attack.

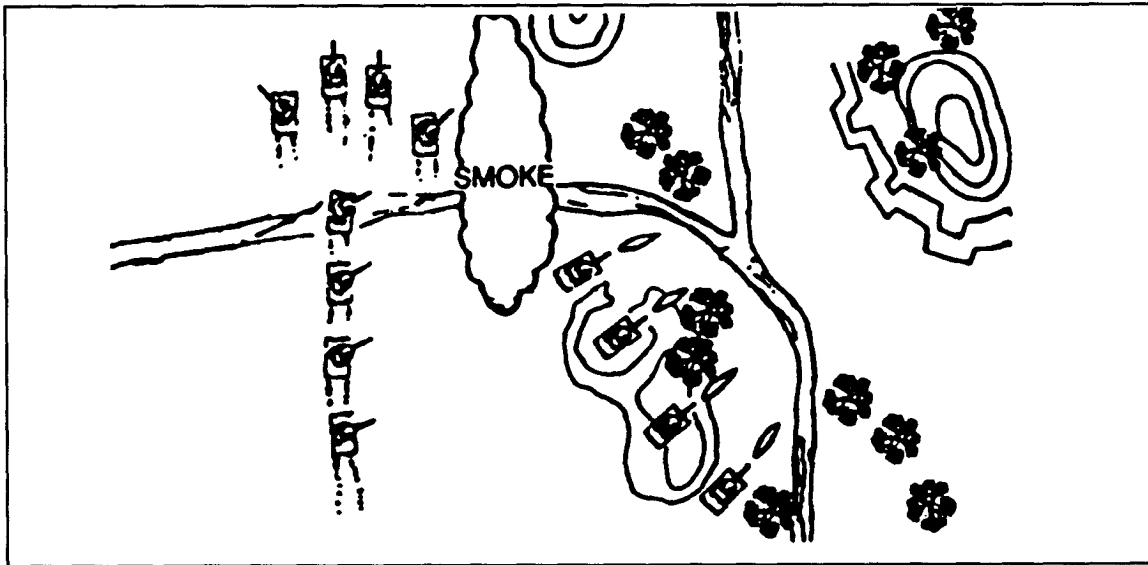


Figure 4-48. Bypass of an enemy position.

Consolidation consists of actions taken to secure an objective and to defend against an enemy counterattack. The commander designates platoon positions and weapon orientations. The platoon consolidates an objective by—

- Occupying the position designated in the OPORD. M8s are moved to hull-down positions, and the platoon leader assigns sectors of fire based on the commander's intent.
- Preparing for an enemy counterattack.
- Establishing security and mutual support between adjacent units.
- Eliminating any remaining pockets of enemy resistance and securing EPWs.
- Preparing to continue the mission.

Reorganization, the process of preparing for continued fighting, should be accomplished by SOP. The platoon leader, platoon sergeant, and vehicle commanders are responsible for the following actions:

- The platoon leader—
  - Redistributes personnel.
  - Oversees consolidation of personnel killed in action (KIA).
  - Informs the commander of the platoon's status.
  - Supervises essential maintenance.
  - Establishes communications with units that are out of contact.

- The platoon sergeant compiles status reports on personnel, equipment, and supplies from each vehicle and submits a consolidated report to the platoon leader and 1SG. He then directs cross-leveling within the platoon.
- The M8 commander—
  - Reloads machine guns and redistributes main gun ammunition to ready areas.
  - Moves wounded crewmen to a covered position and provides first aid.
  - Reports his situation, casualties, and status of equipment, ammunition, and fuel to the platoon sergeant.
  - Conducts essential maintenance.

## LIMITED VISIBILITY AND TERRAIN

**Limited Visibility.** Terrain and weather will not always be ideal for offensive operations. A platoon's ability to move, acquire the enemy, and control or request fires will be affected during periods of limited visibility. Equipment and training can help offset the effects. The platoon leader will have to adapt certain techniques or modify his tactics when operating under adverse conditions. This discussion covers the effects of limited visibility caused by adverse terrain or weather conditions and describes techniques for coping with these limitations.

The platoon often participates in offensive operations during periods of limited visibility. The concealment provided by adverse weather, nightfall, or smoke can favor the attacker by permitting him to mass forces and strike an unwarned enemy. The ability to surprise the enemy, plus the increased shock effect caused by an unseen attacker, may permit a smaller force to successfully attack and destroy a larger force.

During periods of limited visibility, the radio may become the primary means of communication. The commander decides whether visual signals—aided by the use of chemical lights, flashlights, or pyrotechnics—can provide secure, adequate communication or whether the radio must be employed.

When planning a night attack, commanders and leaders should make a detailed day and night reconnaissance of the route of march to the platoon points of departure. When a passage of lines is required, the reconnaissance should be conducted jointly with the passed unit at the passage point. Additional control measures such as direction of attack, probable line of deployment, and limit of advance may be used to aid in the C2 of an operation. Night operations using traditional illumination such as flares should be avoided. Flares may silhouette attacking forces or alert the enemy to the pending attack.

The following paragraphs describe some useful ways to offset the effects of limited visibility:

- Movement.
  - When navigation is degraded because of inability to see terrain features, a compass and the vehicle odometer are used to navigate.
  - The distance between vehicles should be decreased so that vehicle commanders can see each other to orient and provide overwatch. Crews can use white or luminous tape to outline unit marking panels. Flashlights, chemical lights, or dome lights can be fixed to the turret side or rear, the bustle rack, or the vehicle antenna. The column formation can also alleviate orientation problems. Platoons should employ traveling overwatch and bounding overwatch techniques internally when overwatch by another platoon is not possible.

- When natural obstacles (cliffs, holes, or cuts) are difficult to see, a detailed map study should be conducted before the operation to determine the best route. When moving with light infantry, the infantry can be used to move forward of the vehicles to reconnoiter. The column formation can minimize the chance of encountering unseen natural obstacles.
- Enemy acquisition.
  - In limited visibility conditions, the enemy may not be observed until he fires. Therefore, every movement must be overmatched. Elements should use the avenue of approach least likely to be watched by the enemy; this may cause him to shift his positions and give away his location. Every thermal or visual enemy signature, no matter how small, should be engaged. For example, the thermal signature of a tank commander's face may be the only detectable signature of a hull-down enemy tank.
  - Once a vehicle or section has located the enemy, it may have difficulty alerting the rest of the platoon. A steady burst of machine gun fire in the direction of the enemy can be used to orient the rest of the platoon to the direction and general position.
- Control of direct and indirect fires.
  - Limited visibility conditions or terrain may make it impossible for all of the vehicles in the platoon to see the enemy target. The platoon leader may not be able to determine which vehicles can engage before he issues a platoon fire command. After receiving the fire command, vehicle commanders who cannot see the target should report "CANNOT IDENTIFY" to the platoon leader.
  - When the platoon leader cannot determine a six-digit coordinate for the enemy position (for example, if he only sees muzzle flashes), he can use the shift from a known point method or polar method.

**Extremes of Terrain.** The following considerations apply to light armor employment in several types of difficult terrain:

- Forest and jungle. Heavy woods restrict the effectiveness of long-range fires and reduce M8 movement to trails, roads, and cleared areas. Since enemy infantry can operate freely in wooded areas and can surprise M8 positions, armored units must operate closely with infantry. For more information on jungle operations, see FM 90-5.
- Mountains. In rugged mountainous terrain, light armor forces are restricted to valleys and roads. From high ground, the enemy can engage the relatively thin armor on the top of the turret. Light armor units should operate with infantry when conducting operations in mountainous terrain. For more information concerning operations in a mountainous region, see FM 90-6.
- Arctic terrain and extreme cold. Extreme cold and its effect on men and equipment make operations in arctic terrain difficult. Thin ice, ice ridges, deep snow, and ravines hinder light armor movement. The absence of terrain features makes navigation difficult, and the intense white environment makes a camouflaged enemy difficult to see. For more information on arctic terrain and extreme cold, see FM 31-70.
- Desert. The desert may offer few covered and concealed positions. Once contact is made, units should return fire, continue to move, and use smoke to obscure themselves from enemy gunners. Moving units are exposed for longer periods and must use artillery, careful selection of routes, and high speeds to reduce exposure. Perceived ranges are distorted by the absence of terrain features. Targets that appear 2 or 3 kilometers

away may actually be 5 kilometers or more. Shapes are distorted by the effects of heat. The lack of identifiable terrain features also makes navigation difficult, especially at night. For more information on desert operations, see FM 90-3.

## Section V. Defensive Operations

This section describes the most common defensive missions conducted by the light armor platoon while operating with light infantry during defensive operations.

The light armor platoon operates with a light infantry battalion in closed terrain lacking in long-range observation and fields of fire. The light armor platoon, therefore, may not always be able to defend from BPs. Typically, the light armor platoon is used in the light infantry defense as a mobile reserve and counterattack force in the sector or antiarmor defense. Platoon BPs are used in strongpoint and perimeter defenses or in sector defenses when enemy armor or motorized avenues of approach exist.

### DIRECT FIRE PLANNING

The platoon defensive fire plan enables the platoon leader to distribute and control fires in support of the commander's defensive concept. It assists the commander in preparing his fire plan. If part of the platoon area is threatened, the platoon leader can use the fire plan to determine which weapon can cover the threatened area. Using radio or SOP signals, he can then direct fires to destroy the enemy.

To develop a defensive fire plan, the platoon leader must—

- Decide where to engage the enemy.
- Assign a location for vehicles and sectors of fire. A sector of fire is the area where an M8 has primary responsibility for acquiring and engaging the enemy. Sectors of fire should overlap between individual vehicles and with adjacent elements on the platoon's flanks.
- Designate TRPs and recommend indirect fire targets in the platoon sector. The company or battalion FSO assigns numbers to the indirect fire targets.
- Coordinate with adjacent units.
- Evaluate information from his vehicle commanders to determine if they can effectively observe and engage targets and TRPs within their sectors. Vehicle commanders prepare a sketch card for each position and give a copy to the platoon leader.
- Develop a sketch of the platoon's sector, with a list of direct fire engagements and a legend, for all primary, alternate and supplementary firing positions (see Figure 4-49). The sketch should include—
  - The platoon sector.
  - Individual vehicle positions.
  - OPs.
  - TRPs and EAs.
  - Obstacles.
  - Indirect fire targets.
- Give a copy of the platoon fire plan to the light infantry commander as well as to each of his MS commanders.

The legend lists targets in the sector and M8s that can fire on those targets. It should also explain the direct fire and indirect fire graphics, as well as obstacles and barriers within the sector of responsibility. The obstacles can assist in the defense by canalizing the enemy into an EA. Standard military symbols are used to depict the obstacles and barriers, which should be covered by direct or indirect fire.

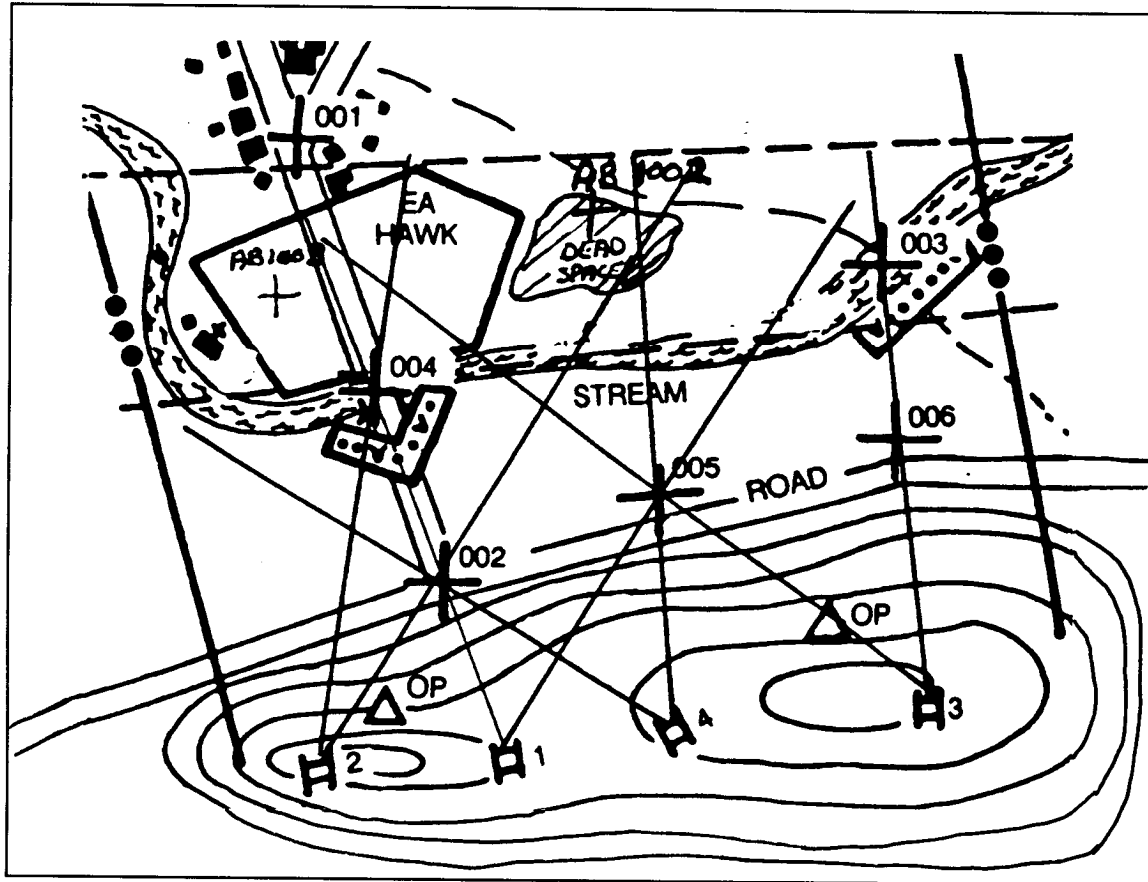


Figure 4-49. Light armor platoon sector sketch.

## PREPARATION

Ideally, the light armor platoon will be able to thoroughly prepare for defensive operations. It can conduct reconnaissance, position preparation, fire planning, and rehearsals. If possible, it occupies positions during limited visibility to mask preparations from the enemy.

Many tasks are accomplished concurrently. The infantry battalion commander may give priority to specific tasks based on his defensive plan. He may also need some advice for the employment of the light armor platoon. The light armor platoon leader is normally the senior armor advisor to the light infantry battalion commander. The following are the areas that the light armor platoon leader should consider when preparing for the defense. This list also includes issues the light infantry battalion commander may ask the platoon leader about.

**Establish Security.** The light armor platoon cannot provide its own security in close terrain. Mobility is a major factor in the survivability of the platoon. If the platoon must remain stationary to prepare defensive positions or in reserve, light infantry is needed to

secure the immediate area. MS crewmen are vulnerable to sniper attack when placed in closed terrain since the crewmen must usually unbutton to enhance visibility. The three-man crew characteristic of the MS considerably limits the platoon's ability to provide local security. Enemy light infantry will use stealth, darkness, and restrictive terrain to maneuver around armored vehicles; the enemy will then attack the vehicles with flank and rear shots using conventional antitank weapons as well as satchel charges, Molotov cocktails, and thermite grenades. In continuous operations, a dismounted force must be augmented to facilitate local security.

**Select M8 Positions.** The platoon leader will be the primary planner in choosing individual M8 positions. The platoon leader must understand the infantry commander's defensive plan and know what his targets are. He selects the location where he wants to kill the enemy and positions his M8s where they best support that location.

**Prioritize Targets.** The light armor platoon leader will most likely be responsible for executing a priority target if his position overmatches an obstacle, mounted avenue of approach, or other key point of the defense.

**Disseminate the Final Protective Fires (FPF).** The platoon leader must disseminate to the rest of the platoon the location of indirect targets and the FPF. This is important because the light armor platoon will probably have a key role in a counterattack by fire and/or maneuver.

**Distribute the Sector Sketch.** The platoon sector sketch, with individual M8 sector sketches, must be compiled and given to the infantry commander (company or battalion) and to adjacent units.

**Clear Fields of Fire.** If clear fields of fire do not exist, the platoon may be required to conduct some clearing on its own, or it may be assisted by engineers or infantry.

**Understand the Obstacle Plan.** Light armor platoons will normally not employ or plan the locations of obstacles, but they must have an understanding of the battalion commander's obstacle plan. The M8's long range and lethal weapon systems make it effective in over-matching obstacles (such as during a displacement) and preventing enemy breaching operations.

**Prepare Fighting Positions.** If engineer support is from division light engineers, digging assets may be limited, and light armor platoons may not be provided with standard fighting positions. Innovation may be necessary in constructing hasty fighting or hide positions; light armor may have to use existing terrain, buildings, or other means for protection. Corps engineer assets, when available, can construct two-tier fighting positions under the supervision of each tank commander.

**Establish Wire Communications.** Wire communications are maximized during the defense. Radio traffic must be minimized. Each vehicle should be linked by wire, and the platoon should be linked to its higher headquarters by wire.

**Stock Forward Supply Points.** The platoon leader should discuss the resupply plan with the battalion supply officer (S4) to ensure he can receive critical ammunition and fuel when needed. Caches of bulky supply items typical of light armor units should be constructed. The limited transportation assets organic to light battalions magnify the need to prestock during the preparation phase. The light armor platoon may have to help transport critical Class IV and V supplies from the caches to forward supply points or obstacle emplacement sites. Forward supply points should not be directly in front of fighting positions.



**Reconnoiter Movement and Counterattack Routes.** It is critical that the platoon leader, and each M8 tank commander, if possible, reconnoiter the route(s) established for movement or counterattack. Closed terrain may require accompanying infantry for security during movement. Heavy vegetation or defiles may slow the platoon's ability to execute rapid movement to a counterattack position. The leaders should rehearse the movement and determine the time required for the move.

**Prepare Alternate and Supplementary Positions.** M8s are usually the priority target of the enemy. Platoon leaders must identify alternate and supplementary positions to move to when receiving fire or covering other portions of an engagement area.

**Initiate Deception Measures.** Because the M8 is a valuable asset in the light infantry defense, the enemy will seek to identify these vehicles early. An ambitious deception plan may be needed to deny the enemy information relating to the size, location, and disposition of the light armor unit. Techniques for deception include use of decoy vehicles or sound effects (PSYOP units have loudspeaker sections that can be very easily prepared for this purpose) to disguise the actual positions or movement of the M8s. The visual and audible signatures of the M8 make it easy for the enemy to identify and locate in an environment that is dominated by dismounted forces. Leaders, however, can use this to their advantage as a deceptive measure during the preparation phase by positioning M8s in different areas of the defense.

## DEFENSE OF A BATTLE POSITION

When the terrain gives friendly forces the opportunity to defend from a BP, the light armor platoon uses the same defense as a tank platoon to control fires and movement. This defense is designed to concentrate direct fires at critical places and times to take advantage of available terrain. The light infantry battalion commander will assign the light armor platoon a BP when it dominates an armor or motorized avenue of approach.

The commander specifies critical tasks for platoons defending from BPs. A minimum level of preparation is assigned at each BP (occupy, prepare, or reconnoiter) to enable the platoon to accomplish its mission. The platoon orients its weapon systems on an enemy avenue of approach using designated EAs and sectors of fire established by TRPs. Other tasks may include—

- Destroying a specified enemy force, such as an enemy motorized company, from the BP.
- Controlling key terrain or blocking an avenue of approach by holding the BP against a determined assault.
- Reorienting weapon systems on a secondary or flanking avenue of approach from supplemental positions.
- Disengaging and moving to a subsequent BP when the enemy has passed a TRP or EA (break point) with a force of specified size.
- Assisting in any other task necessary to accomplish the infantry's mission (for example, assisting in passage of lines or reaming contact points).

The platoon positions its elements and maneuvers freely within the limits of the BP to accomplish the commander's intent. Engagement and disengagement criteria are included in the OPORD and must be understood by tank commanders. If the platoon leader must position elements outside the BP to make better use of terrain, increase dispersion, or maximize firepower, he coordinates locations with the commander (see Figure 4-50).

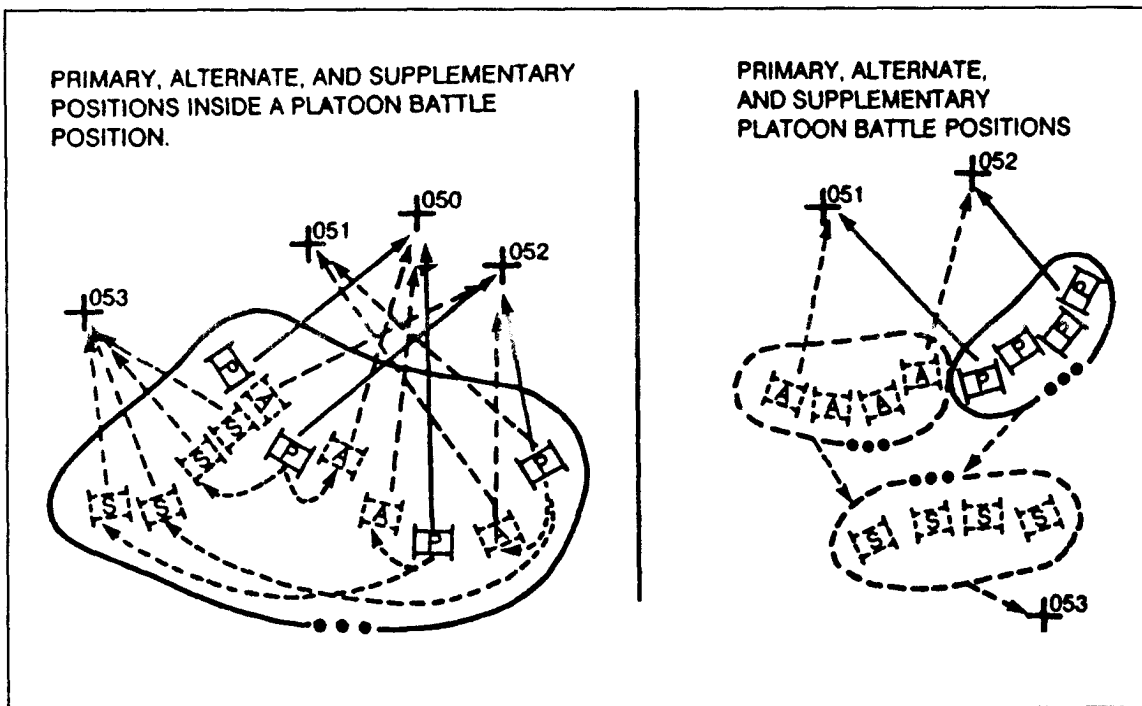


Figure 4-50. Platoon in a battle position.

## DEFENSE IN SECTOR

The purpose of a defense in sector is to destroy the enemy force forward of a rear boundary. A light armor platoon is not usually assigned a defense in sector mission when defending as part of a light infantry TF. A platoon is assigned a defend in sector mission as part of a light armor company team when—

- The enemy situation is vague.
- Multiple avenues of approach in company areas of responsibility cannot be covered by mutually supporting platoon BPs.
- Retention of terrain is not critical to success of the defense.
- Maximum flexibility is desired.

When defending in sector, the platoon uses mutually supporting fires to destroy the enemy, moves and concentrates fires to disrupt and destroy enemy formations, and counterattacks as needed to accomplish the mission. The platoon leader must correctly identify potential enemy avenues of approach entering his sector from the front, flanks, and rear. As in planning a BP, the company team commander selects tentative weapon positions to cover these avenues with fire and observation. He allocates space to platoons, giving them BPs, sectors, or a combination of both. If absolutely necessary, he task organizes platoons based on his estimate.

In a defend in sector operation, the antiarmor defense allows for planned penetrations, counterattacks, and ambushes throughout the enemy formation. The antiarmor defense is used against a superior armored or motorized enemy in close terrain. It is the most offensively oriented defensive technique that light infantry can employ. The battalion is

assigned a sector by brigade. The battalion commander analyzes his sector according to the estimate process. He may in turn assign sectors to his companies, or he may assign some companies sectors and some BPs. The sector is organized to make maximum use of dispersed small-unit tactics (down to squad level) to attack the enemy throughout the depth of his formations.

The primary focus of the technique is on the enemy force; it prevents the attacker from focusing full combat power at one point. Its goal is to reduce enemy forces by attrition with a series of antiarmor ambushes. The light armor platoon can be used in this mission to concentrate firepower or as a mobile reserve to exploit success or defeat enemy penetrations. Figure 4-51 shows an example of a light infantry battalion antiarmor defense.

With some slight adjustments, this technique can be used—

- To deny the enemy the use of a trail or road network in an area of restrictive terrain.
- To deny a chokepoint to the enemy. This could be a mountain pass, a bridge crossing, or a highway through wooded terrain.
- To deny the passage of dismounted infantry or infiltrating guerrilla forces through close terrain.
- To defeat a motorized enemy that is attempting a move through restrictive terrain.

## REVERSE SLOPE DEFENSE

A reverse slope defense is organized to use a topographical crest to mask the friendly force from enemy observation and supporting fires. Figure 4-52 illustrates organization of this defense. The battalion commander may adopt reverse slope positions for defensive elements when—

- Enemy fire or lack of cover and concealment makes occupation of the forward slope dangerous or tactically infeasible.
- The forward slope has been lost or has not yet been gained.
- The forward slope is exposed to enemy direct fires from beyond the effective range of the defender's weapons. Moving to the reverse slope removes the attacker's standoff advantage.
- The terrain of the reverse slope affords better fields of fire than are available on the forward slope.
- The defender must avoid creating a dangerous salient or reentrant in friendly lines.
- The commander wants to surprise the enemy or deceive him as to the true location of the battalion's defensive positions.

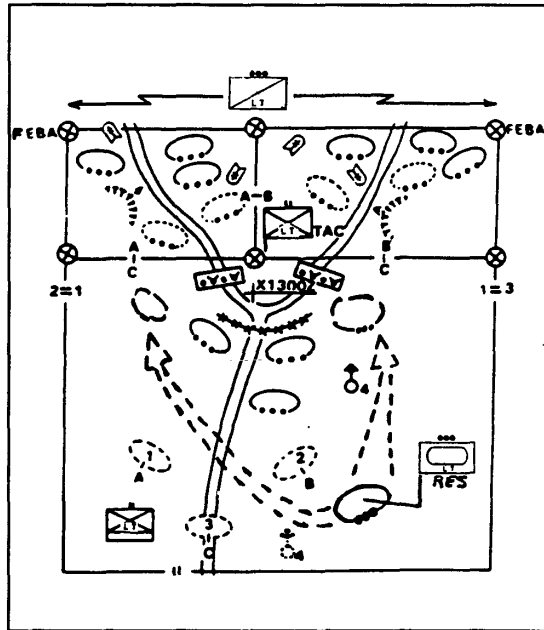


Figure 4-51. Light infantry battalion antiarmor defense.

Advantages of the reverse slope defense include the following:

- Enemy ground observation of the battle area is masked, even from surveillance devices and radar.
- Enemy direct fire weapons cannot effectively fire on the position without coming within range of the defender's weapons.
- The enemy is forced to try to breach obstacles on the reverse slope within direct fire range of the defender's weapons. The attacker cannot locate these obstacles until he runs into them.
- The enemy can be deceived as to friendly strength and location.
- Enemy indirect fire is less effective.
- The defender gains tactical surprise.
- The lack of enemy ground observation allows more freedom of movement within the battle area.
- If positions are properly positioned, M8s, Dragons, TOWs, and MK 19s can mass fires on the reverse military crest; infantry small arms can contribute their close fires to the battle.
- The unit can dig in more quickly, even when enemy ground forces are approaching, because the slope of the hill covers and conceals the unit from direct fire and observation. Defenders can make more thorough position preparations.
- The terrain protects the unit from the blast and thermal effects of enemy and friendly nuclear weapons.

Disadvantages of a reverse slope defense include the following:

- Observation of the enemy may be limited, and the defender may be unable to cover obstacles to the front with direct fires.
- The range of vital direct fire weapons such as M8s and TOWs may be limited by the topographical crest; they also may have to be positioned away from the infantry to exploit their range.
- The enemy will be able to attack downhill from high ground, while a friendly counter-attack will be uphill. This may provide a psychological advantage to the enemy.
- Effectiveness of this defense is reduced in limited visibility because the reverse military crest must be controlled.

The battalion commander organizes the reverse slope defensive position in accordance with procedures and considerations that apply to all defensive techniques. The forward edge of the position should be within small arms range of the crest; however, it should be far enough from the crest that fields of fire allow the defender time to place well-aimed fire on the enemy before he reaches friendly positions. The reverse slope position is most effective when the forward slope can be covered by flanking fires from units on adjacent terrain.

A security force should be established to the front of the position to stop or delay the enemy, disorganize his attack, and deceive him as to the location of the position. When this security element is withdrawn, observation, indirect fire, and security must be maintained to the front. OPs are established on or forward of the topographical crest. This allows long-range observation over the entire front and makes it possible to cover forward obstacles with indirect fires. OPs are usually provided by the reserve; they may vary in size from a few soldiers to a reinforced squad. They should include forward observers. At night, the number of OPs should be increased to improve security.

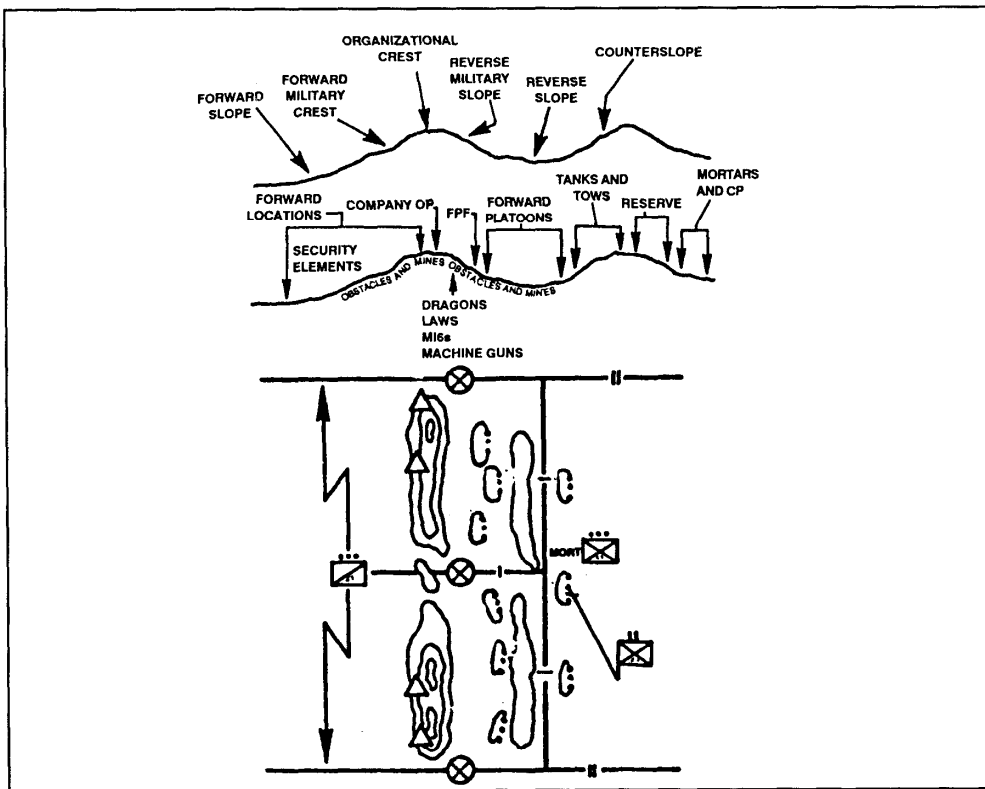


Figure 4-52. Organization of a reverse slope defense.

Conduct of the reverse slope defense closely parallels that of a forward slope defense. M8s, TOWs, and MK 19s may be positioned first on the forward slope to engage the enemy at long ranges. As the enemy nears, they move to positions on the reverse slope or on the forward slope of the next hill to the rear (counterslope).

The reverse slope defense can be adapted to fit a particular tactical situation based on the factors of METT-T; examples are illustrated in Figure 4-53. Possible adaptations include the following:

- Firing positions are prepared on or forward of the topographical crest when the commander wants to use the fields of fire afforded by the forward slope. Most personnel remain on the reverse slope to reduce their exposure to fire; only a skeleton force is kept forward to slow the attacker while the remainder of the friendly force occupies reverse slope fighting positions. Reserves (such as a light armor platoon) are held in covered positions. These forces are used for counterattacks around the flanks of the hill.
- The enemy may be denied the hill or suffer high casualties fighting for it even if neither the forward slope nor the reverse slope is suitable for a BP. The defender can engage the enemy on the reverse slope from positions on other hills. Mortars, artillery, and long-range machine gun fires are targeted on the reverse slope, the crest, and the forward slope. Positioning elements on flanking hills often allows grazing machine gun fire against otherwise protected areas just over the crest.

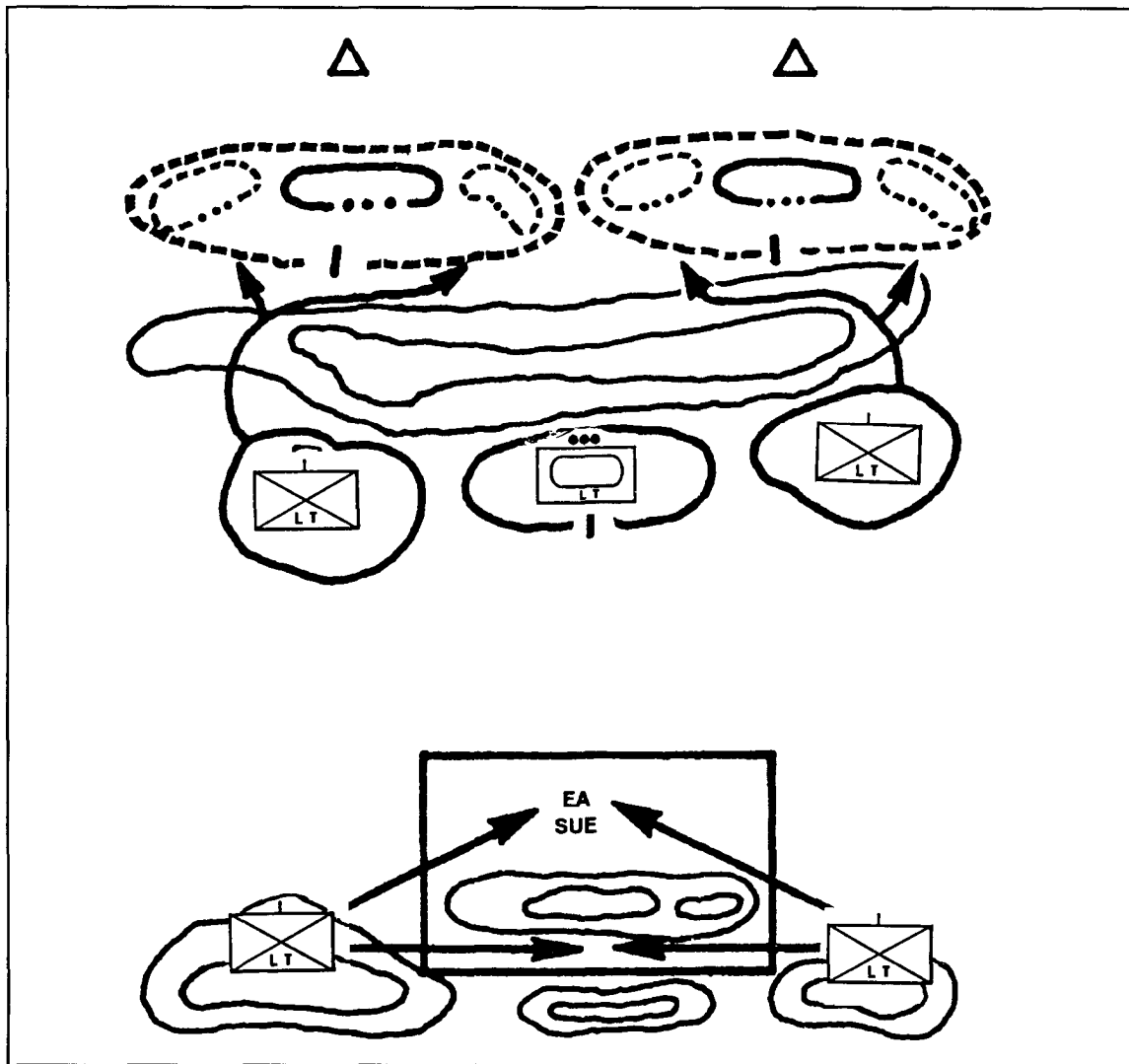


Figure 4-53. Adaptations of the reverse slope defense.

## PERIMETER DEFENSE

This is conducted in the same manner as defense of a BP except the perimeter defense orients on 360 degrees. The perimeter defense is often used as a light infantry technique. The light armor platoon participates in the perimeter defense as part of the light infantry TF defense. Perimeters may be used to defend—

- Assembly areas (refer to FM 17-15 for AA procedures).
- Specific installations or equipment (TOC, downed aircraft, bridges, airfields, road blocks).
- Key terrain (bridge, hilltop, pickup zone, landing zone, lodgement area).
- As part of a brigade perimeter, airhead, or lodgement.

While a BP can allow some penetration, a perimeter cannot. Perimeter defenses are used to protect the force, hold specific terrain, or protect a key installation from destruction. Flanks of all units are tied in to provide mutual support, and positions are planned in depth. If the perimeter is penetrated, the light armor platoon can be used to block the penetration or to counterattack to restore the perimeter. M8s are positioned on the most likely enemy mounted avenues of approach. Mortars are usually positioned in the center of the perimeter and can fire 360 degrees.

Patrols are used to provide security to the light armor platoon. Using the M8 platoon in the perimeter defense provides flexibility to counterattack in any direction, allows occupation and control of a specific area, and provides ease of control.

## **STRONGPOINT DEFENSE**

A strongpoint is a defensive position that is fortified as extensively as time and materials allow. It is used to hold key terrain critical for the defense, to provide a pivot for the maneuver of friendly forces, and to canalize the enemy into friendly EAs. A strongpoint may be part of any defensive plan. It may be built to protect vital units or installations, as an anchor or anvil around which light armor units maneuver, or as part of a trap designed to destroy enemy forces that attack. It may be in an urban area or in a wilderness.

A strongpoint is attacked at the risk of high casualties. It cannot easily be overrun or bypassed. It is tied in with existing obstacles, forcing the enemy to reduce it by dismounted assaults and massive artillery and tactical air concentrations.

While the size and type of force selected to execute a strongpoint defense will vary according to the situation, an infantry unit is normally used, with light armor retained for mobility. A unit required to defend a strongpoint will need a significant amount of time and engineer resources to construct the position. Defense of a strongpoint is sometimes an extension of a defense of a BP. Depending on the commander's intent, BPs can be developed into strongpoints if time, terrain, and resources allow.

The strongpoint must be planned so that it can be reduced only with the expenditure of overwhelming forces and much time. Each primary, alternate, and supplemental position must be dug in. Positions should be connected by tunnels or trenches if time permits. Each individual vehicle position must be connected by wire to the platoon leader's position, and the platoon and section leaders' positions must be wired into the infantry commander's position. The wire must be dug in to protect it from enemy indirect fires. This can be accomplished by laying wire through sewers and tunnels or by burying it.

Direct fire plans should provide mutual support and overlapping fires to the greatest extent possible. To reduce vulnerability, primary positions and sectors of fire are augmented by alternate and supplemental positions and sectors of fire.

Because of the nature of the operation, strongpoints are located in restrictive terrain, such as urban areas, mountains, and thick forests that cannot be easily bypassed. Since the unit must prevent the enemy from bypassing or reducing the strongpoint, priority tasks for engineers are countermobility and survivability.

Light infantry units may be directed to construct a strongpoint as part of a larger overall defensive plan. They must be augmented with extensive engineer support, additional key weapon systems, pioneer tools, additional transportation assets, and CSS resources. To offset some of the support requirements, the commander may decide to take advantage of an existing obstacle, such as a town or village, to reduce the time required to develop a strongpoint.

The following critical aspects of the strongpoint defense should be incorporated into the overall plan:

- Covered and concealed routes are constructed or planned between positions, along routes of supply and communication, and to support counterattacks and maneuver within the strongpoint.
- Food, water, ammunition, pioneer tools, and medical supplies are stockpiled in each fighting position.
- The strongpoint is divided into several independent but mutually supporting positions or sectors. If one of the positions or sectors must be evacuated or is overrun, obstacles and fires limit the enemy penetration and support a counterattack by M8s.
- Obstacles and minefield are constructed to disrupt and canalize enemy formations, to reinforce fires, and to protect the strongpoint from assault. The obstacles and mines are placed as far out as friendly units can observe and cover with fire, within the strongpoint itself, behind the strongpoint, and at points in between where they will be useful.
- Several means of communication within the strongpoint and with higher headquarters are planned and tested. These include radio, wire, messenger, pyrotechnics, and other signals. The strongpoint is improved or repaired until the unit is relieved or withdrawn. Additional positions can be built, tunnels and trenches dug, existing positions improved or repaired, and barriers built or fixed.
- The strongpoint position itself must be an obstacle to enemy mounted movement.

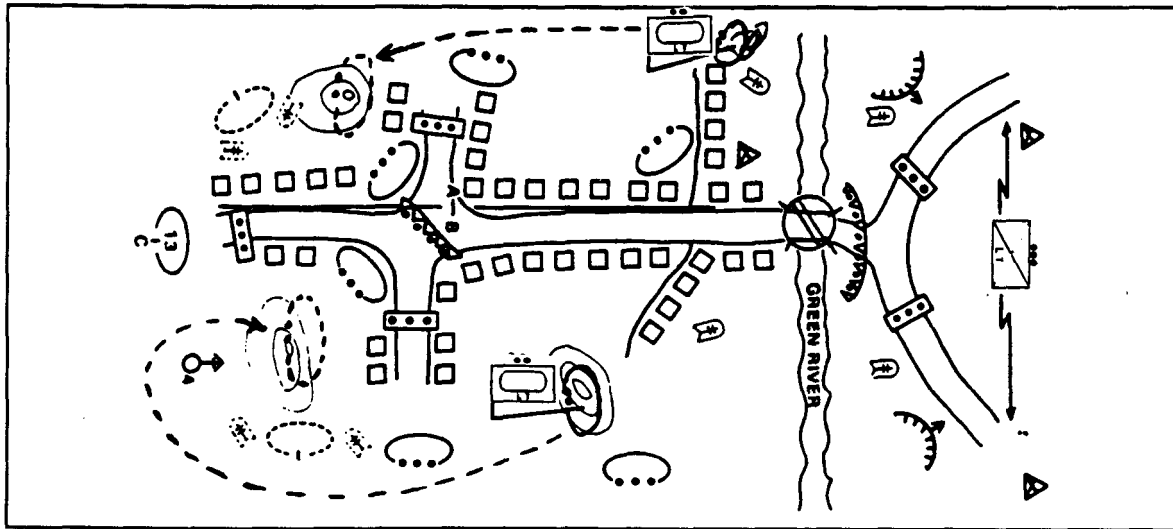
## **DEFENSE IN BUILT-UP AREAS**

A small, well-organized, determined force defending a BUA can hold off a much larger attacker for long periods of time. Strongly constructed cities give the defender a decided advantage. Each building or group of buildings is a potential strongpoint for light infantry.

The light infantry battalion combines BUA techniques with the elastic and strongpoint defensive techniques. The urban defense may force the enemy into planned EAs that are covered by antiarmor or light armor platoon BPs. Forward BPs or covering forces may be employed to disorganize and confuse the enemy as to the main defenses. Behind the BPs, defenses are set up to protect the friendly support element and stop the deepest penetration of the attacking force. Light armor may be located within this defense, on the flanks in BPs, or as a mobile counterattack force.

Light infantry battalions are employed in the urban defense to block the penetration of the enemy and to protect friendly logistics elements. The keys to success in this defense are surprise, effective use of terrain, protection, and coordinated massing of fires. An example of a light infantry urban defense with M8s is shown in Figure 4-54.





**Figure 4-54. Example of light infantry urban defense with M8s.**

Light infantry commanders should consider the following when integrating light armor into the urban defense plan:

- Light armor BPs must be positioned to mass their fires on the enemy from multiple directions to maximize destructive capability while minimizing vulnerability to enemy attacks.
- M8 fires must be included in the obstacle plan and counterattack plan.
- Use destroyed BUAs as obstacles when they give significant advantage to the direct fire plan.
- If terrain permits, light armor defenses can be established forward of a BUA.
- Adjacent terrain can be used to integrate M8s into the defense.
- Use light armor to assist security forces in limiting enemy ground reconnaissance and infiltration.
- Use obstacles, mines, and antitank augmentation to prevent enemy armor penetration of BPs.
- Use restrictive missions and detailed control measures to facilitate decentralized execution and prevent fratricide.
- Light armor leaders must know what passive resistance measures have been taken along the enemy's avenue of approach. Passive resistance includes removing route indicators and minefield markers and weakening bridges and culverts. M8 commanders must know these plans. Failure to know what passive measures have been taken may cause unnecessary mistakes and/or injury to M8 crewmen.
- Light armor leaders must be aware of patrol plans to prevent firing on friendly units. Extensive infantry patrolling is conducted to prevent enemy infiltration. Long- and short-range recognition signals should be incorporated into the security plan.
- Some M8s may be held in reserve to counterattack enemy attempts to envelop the town, while others provide direct FS for the infantry defense.
- LOCs must be controlled to provide the M8s with medical evacuation and resupply of Classes I, III, and V.

Use of M8s in defensive street fighting is limited. Streets and alleys provide limited fields of fire. Restricted observation and the proximity of friendly troops to enemy targets will limit the use of armor fires. However, when the town itself occupies the dominating terrain in the vicinity, it may be organized as a key part of the BP or strongpoint.

When the town itself is organized as a defensive position, light armor commanders select primary, alternate, and supplementary positions. Because observation in BUAs is greatly restricted, OPs should be set up and communications improvised between them and the M8s. These OPs should not be placed in steeples, prominent towers, or other obvious locations which the enemy is likely to suspect and take under fire.

Light armor unit commanders, when reconnoitering for covered routes of advance and withdrawal, should not overlook the possibility of moving through ground-floor lobbies and corridors of the larger buildings. This type of route requires careful marking, but has the advantage of being largely concealed from aerial observation. A careful reconnaissance, made with engineer assistance, if possible, is necessary to determine whether the floors will support the M8.

## **RESERVE FORCE**

Early in the planning stage, the commander makes important decisions concerning the size, composition, and mission of the reserve. The primary purpose of the reserve is to retain flexibility, reinforce success, or regain the initiative through counterattacks. Secondary purposes of the reserve are—

- To contain or counterattack enemy forces that have penetrated.
- To relieve depleted units and provide for continuous operations.
- To attack enemy forces not yet in contact.
- As a last resort, to react to rear area threats.

A light infantry battalion conducting a deliberate attack may initially retain a light armor platoon in reserve. A reserve is held to exploit success and continue an attack already under way, to maintain momentum of an attack by adding an armor unit at a critical time, and to provide security. The reserve is an active, not reactive, force and is not used to reinforce failure.

When employed in a positional defense, such as perimeter defense or a BP, light armor reserves can be used to conduct attacks against enemy penetrations by striking a decisive blow against an uncovered enemy flank. Additionally, should the enemy's attack fail, reserves could be used to regain initiative.

## **COUNTERATTACK FORCE**

The platoon may participate in a counterattack to exploit an existing enemy weakness in the AO. An element counterattacks to—

- Destroy enemy units.
- Regain freedom of maneuver.
- Regain the initiative.
- Regain key terrain.
- Relieve pressure on an engaged unit.

A platoon executes two types of counterattacks which are discussed in the following paragraphs.

**Counterattack by Fire.** A counterattack by fire is executed to complete the destruction of exposed enemy elements, to free decisively engaged elements, and to regain the initiative. The platoon executes a counterattack by fire by moving on a secured, concealed route to a predetermined BP from which it can engage the enemy in the flank and/or rear while other units hold their positions and continue to engage and maintain contact with the enemy (see Figure 4-55). When necessary, the platoon leader requests permission to maneuver outside the predetermined BP by prior planning, coordination with the commander, or immediate request. If this maneuver influences another unit's mission, the commander is responsible for coordination with that unit.

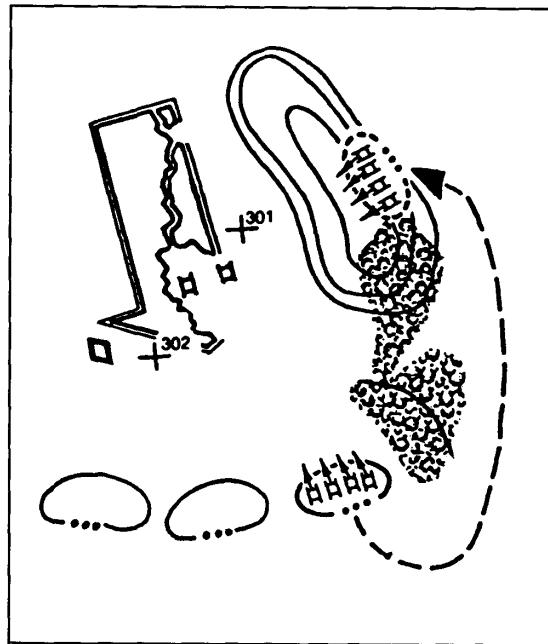


Figure 4-55. Counterattack by fire.

**Counterattack by Fire and Maneuver.** A company team normally uses counterattack by fire and maneuver to destroy remaining enemy elements completely, relieve pressure on a friendly unit, or regain key terrain. The counterattack force hits the enemy on the flank if possible, using fire and maneuver to overwhelm and destroy him. A platoon counterattacks by fire and maneuver in a manner similar to a hasty attack (see Figure 4-56).

## LIMITED VISIBILITY

Although limited visibility creates opportunities for deadly close-range engagements that will achieve surprise, the possibility that the enemy may pass the platoon's position or close to point-blank range must be considered in planning the defense.

The fundamentals of defensive operations do not change with limited visibility. Depending on the situation, the light armor platoon should—

- Occupy dominating positions along avenues of approach when visibility is good, and reposition closer to or occupy the avenues of approach during periods of limited visibility.

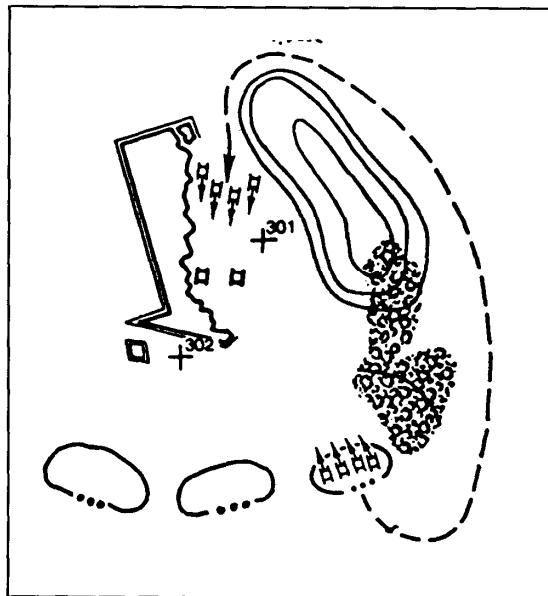


Figure 4-56. Counterattack by fire and maneuver.

- Reconnoiter the limited visibility positions, mark them, and mark the routes to them.
- Incorporate the use of night-vision devices (NVD) in the platoon fire plan and plan for indirect illumination to supplement passive image intensification or infrared night sights.
- Request additional security forces, such as light infantry squads, to compensate for lack of traditional organic manpower because of the M8s' three-man crews.
- Enforce noise and light discipline.
- Ambush as far forward and as many times as METT-T factors allow.

## Section VI. Other Operations

### LODGE-MENT

The lodgement area is a designated, secure area that permits the air or sea landing of follow-on forces and provides the maneuver space needed for planned operations. The lodgement area is established by force or by a host nation.

After the initial insertion, the lodgement area is expanded. Expansion is usually followed by a defense until enough forces arrive to initiate offensive operations. Forces may include CS and CSS elements as well as some corps or JTF assets.

Planning for defense of a lodgement area is similar to establishment of an airhead. When ordered to establish and defend a lodgement area as an independent operation, the light infantry commander plans—

- Task organization.
- Assault objectives.
- An airhead line and unit boundaries.
- Reconnaissance and security.
- Follow-on forces.
- A reserve.

There are two basic types of lodgement operations, an opposed entry and an unopposed entry. Airborne infantry and light armor are employed in opposed entry lodgement operations; light infantry and light armor forces are specifically designed for unopposed entry lodgement operations.

**Opposed Entry.** The opposed entry lodgement begins with the seizure of one or more airfields. Seizing airfields facilitates the rapid introduction and buildup of combat forces needed to conduct further actions.

The phases of airfield seizure include the following:

- Seizing key facilities and eliminating the enemy direct fire threat. The light armor platoon, task organized to the assault TF, usually assaults directly onto the airfield, assembles rapidly, and moves to seize assault objectives and/or supports infantry assaults by fire. Light armor platoons may be required to destroy enemy bunkers and fortified positions, eliminate roadblocks, or support assaults of buildings on the airfield.
- Isolating the lodgement from enemy reaction and indirect fire. Light armor platoons that follow the assault may participate in movement to contact to eventual establishment of a screen (airhead line) to isolate the airfield from observed indirect fires and block access by motorized or armored enemy forces. M8s may be required to assist in removing obstacles and towing vehicles from runways to allow follow-on aircraft to land.

- Receiving follow-on forces that arrive by airlanding. Light armor platoons arriving in the follow-on echelons act as reserve forces and, eventually, as offensive forces to accomplish objectives of the campaign.

An airborne light armor platoon is task organized to an airborne infantry TF to seize an airfield. The battalion is usually part of a brigade-size TF that includes a light armor company.

**Unopposed Entry.** An unopposed entry is usually executed at the request of the host nation. Advance parties are sent ahead of the main body to make face-to-face coordination with host nation forces. Coordination may also be required with SOF or other units in the area. Characteristics of planning by the staff include—

- A movement plan that identifies when each element moves and where it is located.
- A small advance party to assist in the orderly movement of vehicles from the carrier to an assembly area.
- Preparations for quick transition to combat operations.
- Identification (on operations overlays) of enemy elements that affect the entry unit (or, as a minimum, enemy forces operating in the AO).

Once the unopposed force is assembled at the arrival airfield, it operates and conducts missions as directed by the parent headquarters. The tasks assigned to light armor for expansion, security, or offensive action are dependent upon the overall objectives and situation.

## RETROGRADE OPERATIONS

This discussion deals with the retrograde missions that light armor platoons may conduct as part of a light infantry TF or light armor company. To conduct a retrograde operation, the light infantry unit must have mobility equal to or greater than that of the enemy. Light infantry can conduct retrograde missions against a light threat. Light armor units give the light infantry the capability to conduct retrograde operations against a mounted or large dismounted threat.

**Delay.** The purpose of a delay is to slow the enemy or draw him into an unfavorable situation by trading terrain for time while inflicting maximum damage. Enemy forces are delayed by the effective use of obstacles, firepower, and terrain. Delaying forces avoid decisive engagement. The delay can be oriented either on the enemy or on specified terrain.

When conducting the delay, friendly forces must always consider the intent of the commander. The light armor platoon conducts a delay as part of a larger unit. A light infantry battalion conducting a delay may require the platoon to attack, defend, screen, ambush, raid, or feint. The considerations of planning and executing a delay at platoon level are the same as for defensive operations, with emphasis on—

- Avoiding decisive engagement.
- Avoiding being outmaneuvered.
- Causing the enemy to conduct successive attacks.
- Preserving the freedom to maneuver.
- Preserving the force.

Light infantry battalions delay aggressively, but because of the limited range of their organic weapons, they cannot delay continuously. They delay the enemy by engaging him

from the front, flanks, and rear with multiple ambushes and surprise attacks. They can use artillery, mortar, and M8 fire to disrupt the enemy's movement, causing him to take cover and move more cautiously. Friendly forces then withdraw to alternate positions to engage the enemy again; as they do, part of the delaying force may stay behind and continue to aggressively engage subsequent enemy echelons and CS and CSS elements.

Enemy-oriented delays focus on keeping the enemy from advancing faster than a specified rate. Control measures that are most often used in this type of operation include the following:

- **PL.** The commander specifies that the enemy is to be held beyond the PL for a specified time or until a specific event occurs.
- **Sector.** As in the defense, the sector allows wide latitude in the conduct of the delay. PLs can be used with sectors if the commander desires more control.
- **BP.** BPs can be used with phase lines and sectors or alone. In the delay, a unit fighting from a BP must be able to stop the enemy's advance along his most likely avenue of approach, not just deny access to the position it occupies. Units can delay from successive positions or alternate positions. Light infantry can delay from successive positions only if it has a mobility advantage over the enemy or the enemy advance is not aggressive. Once light infantry leaves prepared positions to move, it is vulnerable. This vulnerability is increased if the enemy is not suppressed as the light infantry moves. Light armor can be used to provide this suppression.

Terrain-oriented delays require the retention of specified terrain for a specified time or until a specified event occurs. They are often vital to continued friendly operations in a given area; however, they carry the risks inherent in any mission that requires delay until a specified time or event.

**Withdrawal.** The purpose of a withdrawal is to disengage from the enemy. Light infantry needs equal or greater mobility than the enemy to successfully conduct a withdrawal. There are two types of withdrawals—a withdrawal under enemy pressure and a withdrawal not under enemy pressure. A withdrawal under enemy pressure requires maneuver to break contact. In this case, the unit is under attack from the enemy. Withdrawal not under enemy pressure requires deception and speed. The unit is not under attack and does not expect to be attacked during the withdrawal.

During a withdrawal, deception and operational security are stressed. A unit conducting a withdrawal not under enemy pressure from a defensive position is organized into a main body and a DLIC. A unit conducting a withdrawal under enemy pressure is organized into a security force and a main body. The withdrawal should always be conducted to preclude discovery. Timing is critical. The unit must disengage by using massed fires and redeploy before the enemy can react to its movement. Light armor platoons can assist the light infantry in conducting withdrawals.

The withdrawal plan must be modified to fit the technique used to defend or delay. Defense or delay techniques that are fluid and use a series of ambushes and raids to accomplish the mission can use withdrawal techniques associated with those operations. Defenses or delays that are more static require different withdrawal techniques. The techniques used for a unit to withdraw from a BP must be enhanced by a plan that addresses the elements discussed in the following paragraphs.

**The DLIC.** The size, makeup and mission of the DLIC is directed by the battalion commander. He will also name the DLIC commander. This is normally the battalion XO.

Although one company could serve as the DLIC, the light armor platoon can also be part of the battalion DLIC, which may include TOWs from the antiarmor platoon or company to provide further mobility. The DLIC usually includes infantry squads, which must be moved on the M8s or HMMWVs. When the withdrawal starts, the DLIC comes under control of the DLIC commander.

**The Security Force.** The M8 platoon can assist as part of the security force, which conceals the withdrawal of the main body and deceives the enemy by continuing the battalion's normal operational patterns. If the enemy attacks during a withdrawal, the security force covers the withdrawal with fires. Priority of artillery and mortar fires is given to the security force. Once the battalion has reached its next position or a designated distance from the old position, the commander withdraws the security force. If under attack, the security force may have to maneuver to the rear until contact is broken.

**The Quartering Party.** Each unit sends a quartering party to the next position before the withdrawal starts. As their units arrive at the new location, members of the quartering party act as guides to lead elements into their new positions.

**Retirement.** In a retirement operation, a force not in contact moves away from the enemy to avoid combat under unfavorable conditions. A retirement may be made to increase the distance between the defender and the enemy, to occupy more favorable terrain, to reduce the distance between maneuver and CSS elements, to conform to the disposition of a higher command, or to permit employment of a unit in another sector. A withdrawal becomes a retirement after the main force has disengaged from the enemy and march columns have been formed. A battalion usually conducts a retirement as part of a larger force.

The prospect of retirement may have an adverse impact on unit morale. Leadership must be positive, and discipline must be maintained. Rumors related to the retirement can be stopped by keeping troops informed of the purpose of the retirement and the future intentions of the leaders.

Planning considerations for a retirement are similar to those for delay and withdrawal. Movement during reduced visibility is preferred. Light infantry battalions usually seek to move on multiple routes for reasons of dispersion, speed, and security. This may require the light armor platoon to split into sections to support each route.

Appropriate advance, flank, and rear security is provided. When contact with the enemy is possible, such as when a withdrawal has preceded retirement, a light armor security force should be employed. If the enemy attacks the rear, delay tactics are used by the light armor platoon to extend the distance between the main body and the enemy.

## RECONNAISSANCE IN FORCE

The purpose of a reconnaissance in force is to discover and test enemy dispositions, composition, strength, and intentions. The decision to reconnoiter in force is made after analyzing—

- The enemy situation and the need for additional information.
- The ability of other collection agencies to gather the desired information.
- The extent to which future plans may be revealed to the enemy.
- The possibility that the reconnoitering force may be engaged under unfavorable conditions.

Although a reconnaissance in force is an effective means of developing information about the enemy, it should not be undertaken if the information can be acquired through other sources. The possibility of having a portion of the force engaged under unfavorable conditions must be a primary concern in planning.

A battalion is normally the smallest light infantry unit to conduct a reconnaissance in force. It may be employed in such a role independently or as part of a larger force. The light armor platoon participates in the reconnaissance in force as a maneuver or FS force. Light armor used in this mission may only be effective against an armored, mechanized, or motorized threat.

If a light infantry battalion is the reconnoitering force, it plans and executes either a movement to contact or an attack. The force must be strong enough to make the enemy react, revealing weapons, positions, and planned use of resources. The mission assigned to the unit may be to—

- Secure a terrain objective that will force the enemy to react, and then to prepare to continue the attack from that objective.
- Occupy a terrain objective that will force the enemy to react, and then return to friendly positions.

## CONVOY SECURITY

Light armor platoons can provide convoy security, which is a challenging mission in operations other than war. Supply convoys are high-payoff targets for guerrilla forces who may lack the firepower to fight the force conventionally. Successful interdiction of supply lines can significantly weaken the force.

Convoy escort missions require the same tactical considerations as any offensive operation. Protection of the convoy is a combined arms effort. The light armor platoon provides the light infantry commander with mobility, firepower, and shock effect. Light armor platoons can conduct security alone, or with other elements such as MP and infantry TOW/MG HMMWVs. Organic field artillery units provide indirect FS along the entire route. Air reconnaissance aircraft can provide aerial reconnaissance and/or FS.

The convoy commander is responsible for the overall planning and execution of the convoy operation. After the operation, the convoy commander should complete the local unit convoy debrief checklist and/or debrief the TF commander and S2 to provide input into the intelligence collection effort. The convoy commander must consider the following when planning a convoy security mission:

- 'Convoy organization, spacing, and weapons orientation.
- 'Communication plan (including air, FS, and long range).
- 'Timetables for movements.
- 'Graphic control measures, including friendly units along the entire route, SPs, and RPs.
- 'Security required during maintenance (including breakdowns), resupply, and rest halts.
- 'Where combat assets will be positioned in the convoy to best protect the convoy.
- 'Actions under hazardous weather conditions.
- 'Actions on contact with the enemy and/or a minefield or obstacle.
- 'Actions on a delay caused by the local populace, such as a nonoperational vehicle blocking the road.
- Fire control measures and ROE.
- Primary and alternate routes.



Light armor is well suited to protect convoys by deterring enemy ambushes or snipers. If deterrence does not work, the M8 has the firepower and protection to eliminate the attacker.

The makeup of the force allocated to provide convoy security is based on the size of the convoy and METT-T. The TF commander task organizes the forces available to provide the necessary security and then appoints a convoy commander. MP platoons supporting a light infantry brigade may be sufficient. When needed, light armor may provide convoy security; such force may range from an M8 section augmenting an MP platoon to a full light armor company team providing the support.

The convoy commander is responsible for the overall planning and execution of the convoy operation. The convoy security force is the operational control (OPCON) for the convoy commander. He receives a mission, conducts a reconnaissance, plans the operation, issues orders, inspects personnel and vehicles, and synchronizes security. The convoy security commander may be a light armor company commander, platoon leader, military police (MP) platoon leader, or M8 section noncommissioned officer (NCO), depending on the size of the convoy.

Convoy escort missions generate unique circumstances that the convoy commander must take into account when formulating his plan. In operations other than war, it may be advantageous to conduct convoys during daylight hours to deny a guerrilla force the veil of darkness in which it is most effective. Establishing a timetable is critical. Supporting units use the timeline established by the commander to plan their internal operations and ensure their assets are available for timely support of the convoy.

Convoys are not standard; they vary in size and composition based on the current tactical and logistical situation. The convoy commander must plan ahead, identify a security element, (an advance and rear guard if available) establish a time to consolidate, properly brief convoy elements, and provide time for rehearsals.

A common convoy radio frequency must be established and disseminated to the entire force for several reasons:

- A convoy comprising armed wheeled and tracked vehicles may cause alarm among the predominantly dismounted forces it is passing through, especially during hours of limited visibility. By having a common convoy frequency, commanders of these forces can track the progress of the convoy and quickly communicate with the convoy commander if necessary.
- Each convoy will most likely comprise vehicles and personnel from different units. Once the convoy is constituted, the common frequency facilitates C2 until units reach the release point.

Control of fires and rules of engagement are vital in preventing fratricide as the convoy moves in friendly areas. Personnel performing local security within the convoy itself must be briefed on locations of friendly forces along the route. If contact is made with small guerrilla units, the convoy security commander must effectively control fires; he employs only fires needed to defeat the enemy while avoiding collateral damage and casualties among friendly forces and in the local area.

Landmines are a significant and constant threat to convoys. Convoys will typically encounter point-type minefield with no patterns to them, especially in operations other than war. A wide variety of mines may be found, requiring proper IPB obstacle templating, detection, removal, proofing, cleared route marking, and area clearance operations. Obviously, the light armor security force will not have the assets or capabilities to accomplish these tasks; however, certain precautions and actions are recommended:

- Study landmine recognition handbooks.
- Use authorized translators with the local populace to help identify mine locations.

- Expect constant changes in local mine emplacement techniques.
- Ideally, the lead vehicle will be able to breach any mines encountered, or should call the engineers forward to breach.
- The proofing vehicle is the first vehicle through a breached lane, and may also mark the lane concurrently. Follow in the tracks of this vehicle.
- Never pull, stack, or cut any wire (taut or slack), without first examining both ends for mine/booby trap wires.
- Institute a mine or suspicious object drill. This drill should include warning procedures, determination of type and limits, marking, reporting, avoidance/bypass, and casualty evacuation.

Figure 4-57 shows an M8 platoon providing convoy security. The lead section (#1 and #2) leads the convoy and provides flank security to the right and/or left flank (based on METT-T). The flank security M8 (#2) maintains a position approximately one-third of the way back from the head of the column. The trail section (#3 and #4) provides rear security and flank security on the opposite side of the lead section. M8 #3 is positioned approximately two-thirds back from the head of the column. M8s #2 and #3 react to contact by the lead or trail M8s, respectively, and support each other when contact is made on either flank. M8s #1 and #4 continue to move the column through the area. The security commander is the platoon leader; he positions himself where he can best control the platoon. The convoy commander identifies vehicles to allow space for #2 and #3 to maneuver (in this case, vehicles #8 and #9). This keeps the convoy moving and allows #2 and #3 to suppress or destroy any resistance.

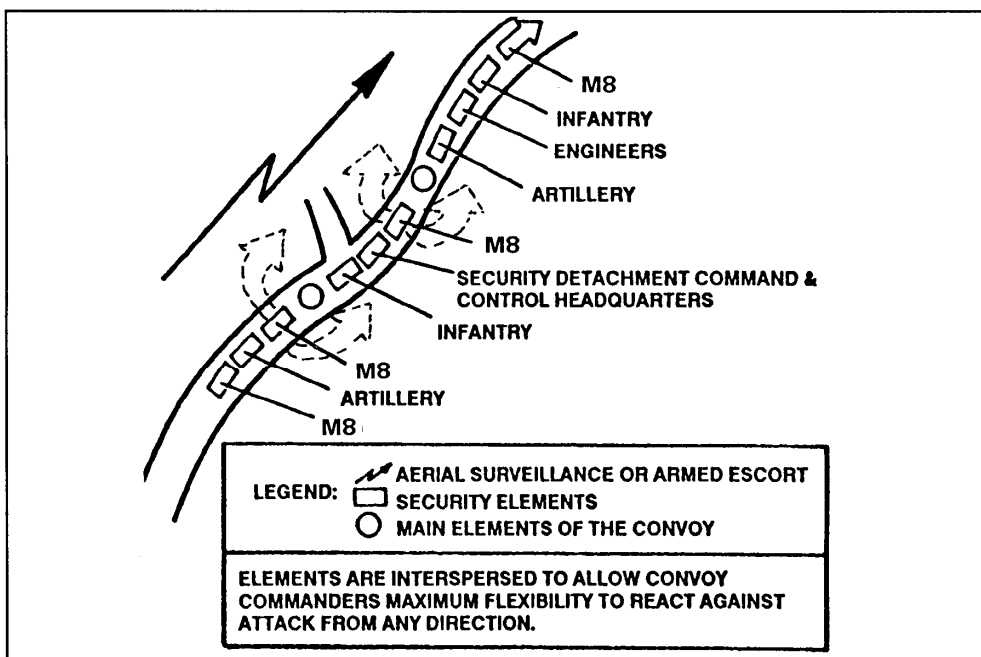


Figure 4-57. M8 platoon escorting a convoy.

## PASSAGE OF LINES

In a passage of lines, one unit moves through another unit that is stationary and disposed in a tactical formation on a forward edge of battle area (FEBA). This mission may also occur when an exploiting force moves through a force that conducted the, initial attack. Movement in forward areas must be controlled, coordinated, and kept to a minimum to avoid conflict with friendly troops. Light forces must treat the positions of forward units as danger areas that are under enemy surveillance in all weather or visibility conditions. Detailed reconnaissance and coordination are crucial to ensure that the passage is conducted quickly and smoothly.

The light armor platoon is particularly vulnerable during a passage of lines. Personnel and units may be overly concentrated; fires of the stationary unit may be masked temporarily; and the disposition of the passing unit may not allow an effective reaction to enemy forces.

The light armor platoon normally conducts the passage as part of a larger force such as a light armor company or light infantry battalion TF. The parent unit headquarters is responsible for the coordination of the passage. The higher commander provides the M8 platoon leader with the necessary details.

The commander of the passing unit makes a tentative plan for the conduct of the overall operation. The plan includes the following:

- Organization. Unit and team integrity is maintained to provide better C2.
- Order of movement. This is prescribed based on the number of passage points (PP), degree of security required, enemy situation, terrain, and the formation the unit will be traveling in after the passage. An order of movement reduces confusion and congestion by setting priorities on who moves and when.
- Security. The light armor platoon can assist in the passage of lines by overmatching to provide early warning and limited protection. It must enforce noise, light, and radio discipline.
- C2. The technique of C2 depends on the number of PPs. Ideally, multiple PPs will be established. The unit commander must decide how he can influence the action by positioning the M8 platoon. For example, if the battalion is conducting a passage of lines to attack forward of the FEBA, the M8s will probably follow the lead unit.

Control measures that can be incorporated into a passage of lines include the following:

- Assembly areas. These are areas in which a force prepares or regroups for further action. They are selected so as not to interfere with friendly forward positions.
- Attack position. This is the last position an attacking force may occupy before crossing the LD.
- Passage lanes. These are lanes along which a passing unit moves to avoid stationary units and obstacles. Planning should provide for primary and alternate lanes.
- PP. This is the point where units will pass through one another, either in an advance or a withdrawal. It is located where the commander wants subordinate units to physically execute a passage of lines.
- Time of passage. The specific time may be set by the commander ordering the passage.

- Recognition signals. These are used to send messages. Signals may consist of one or more letters, words, visual displays, characters, signal flags, or special sounds with prearranged meaning whereby individuals and units can be identified.
- Contact point. This is the point on the terrain at which two or more units are required to make physical contact.
- RP. This is a clearly defined control point on a route where specified units revert to the control of their respective commanders. Each of these elements continues its movement toward its own destination.
- Route. This is the line of travel from a specific point of origin to a specific destination.

FS planning is an essential element for a successful passage of lines. M8 direct fires of the stationary unit are normally integrated into the FS plan of the passing unit. Assets and control means may be collocated to provide coordinated and responsive support.

At a prearranged time, movement toward passage lanes begins. To increase speed and reduce vulnerability, multiple lanes are used consistent with the passing unit's scheme of maneuver, available routes, and needs of the stationary force. Marches are carefully calculated so that units arrive at passage lanes at the correct time with as few halts as possible en route. At a location short of the PP, the recognition signal is identified, and a guide links up with the passing unit. The guide taking the passing unit through the PP leads it through friendly obstacles to an RP.

The passing unit representative who conducted the last-minute coordination may position himself at the passage point to identify vehicles and troops as they move through the passage point. If necessary, challenges are made to ascertain whether units know the correct password. Command groups of both units may be collocated at a point from which they can observe critical areas, make timely decisions, and issue instructions to ensure the uninterrupted movement of subordinate units.

During rearward passages, the danger of being fired on by friendly forces makes the coordination of recognition signals critical. The stationary unit should be informed when the passing unit is just beyond direct fire range. This is normally accomplished by radio or other approved recognition signal. Once the stationary unit acknowledges the recognition signal, the passing unit moves to the PP. M8 commanders must remember to orient gun tubes toward the enemy. During the passage, stationary units must exercise particular caution in identifying enemy vehicles before engaging them.

## LINKUP

The light armor platoon may, as part of a larger force, participate in linkup to reinforce air assault forces, conduct a relief in place, move to join another force in a counterattack, or move to friendly lines after a breakout. The initial phase of a linkup is a movement to contact. As the linkup forces come close together, they are subject to coordination, control, and restrictions.

Recognition signals and a restrictive fire line (RFL) are established to prevent friendly troops from exchanging fire. Signals may include pyrotechnics, arm bands, vehicle markings, panels, colored smoke, lights, or challenge and passwords. Forces engaged by direct-fire weapons from the other side of an RFL should not return fire. Instead, they should seek cover, use smoke to conceal their actions, and notify higher headquarters. The headquarters then contacts the other unit to determine if the fires are from enemy or friendly forces. Linkup forces cannot fire across the RFL until the other unit has given permission.

## BREAKOUT FROM ENCIRCLEMENT

Encirclement occurs when the enemy blocks a unit's ground routes of evacuation, resupply, and reinforcement. This does not necessarily mean the unit is blocked by enemy forces in strength. The enemy may not be aware of the encircled unit. The unit should attack to break out as soon as possible. A delay might allow the enemy to reinforce his blocking units or to take action against the encircled unit.

The light armor platoon participates in a breakout either in the attack to rupture an enemy encirclement or as the security force conducting a defense or delay. The considerations for these operations at platoon level are the same as for a hasty attack and a hasty occupation of a BP. Logistics, however, play a key role. Equipment and supplies that cannot be carried or towed must be destroyed.

There will be situations where forces become encircled because of the mobility of enemy forces, however unsophisticated, and the nonlinear nature of battle in operations other than war. Light infantry battalions may be cut off from friendly forces either by design or because of rapidly changing situations. The battalion faces encirclement when defending strongpoints, retaining key terrain, conducting attacks, or holding the shoulder of friendly or enemy penetrations. M8s face encirclement most often when enemy forces bypass defending forces or when advancing friendly forces are cut off as a result of an enemy counterattack.

The most important consideration for encircled forces is the continuation of their mission for as long as possible. In rare cases, forces may accept encirclement to continue supporting the commander's concept of operations. The encircled force commander attempts to establish communications with his higher commander. In the absence of communications, the encircled commander acts on his own initiative to achieve the commander's desired outcome.

Encircled forces may elect or be assigned the mission to stay in position and defend themselves while they are encircled. The decision to stay and fight is based on whether—

- The available terrain provides defensive cover and concealment and is restrictive in nature.
- The encircled force can receive reinforcement or relief before the enemy can eliminate it.
- The encircled force has or can get the necessary CS to sustain its operation.
- The mission directs the unit to stay and fight.
- The mobility differential of the enemy and friendly forces is such that the encircled force could be destroyed while moving.

The senior maneuver commander within the encirclement assumes control of all forces. He informs his superior of the situation and immediately begins to—

- Reestablish a chain of command.
- Establish the best possible defense.
- Establish a reserve.
- Organize all available FS.
- Reorganize logistics.
- Establish security.
- Reestablish communications if they were interrupted.
- Maintain morale.

Encircled forces have two offensive options—a breakout attack or an exfiltration toward friendly forces. The attack to break out of an encirclement differs from other attacks only in that a simultaneous defense in other areas of the perimeter must be maintained. To achieve a breakout, the commander must accomplish the following tasks:

- Deceive the enemy as to time and place of the breakout attack.
- Exploit gaps or weaknesses in the encircling force.
- Exploit darkness and limited visibility.
- Organize the force for the breakout using the four functional forces: rupture, reserve, main body, and security force.
- Concentrate combat power at the breakout.
- Use FS to create the gap.
- Coordinate with supporting attacks.
- Follow the commander's guidance for wounded personnel.

## **RELIEF IN PLACE**

A relief in place operation, in which one unit replaces another in a combat situation, may be accomplished during offensive or defensive operations, preferably during periods of limited visibility. The primary purpose for a relief in place is to maintain the combat effectiveness of committed elements. It may be conducted to—

- Replace a combat-ineffective force.
- Replace a unit that has received a change of mission.
- Relieve a unit that has conducted prolonged operations and requires rest and reconstitution.
- Replace a unit that requires medical treatment or decontamination as a result of exposure to NBC munitions.

Relief in place requires extensive planning. Security, secrecy, and speed are critical. Incoming and outgoing commanders must coordinate—

- Exchange of liaison personnel down to company level.
- Joint reconnaissance of the AO.
- A deception plan to support the relief.
- CS and CSS from units being relieved until the relieving units are prepared to support the operation.
- Positions of weapons.
- Exchange of sketch cards and tactical fire plans and relief of organic FSE.
- Locations of and transfer of responsibility for obstacles.
- Guides and routes into and out of positions to facilitate a speedy relief.
- Transfer to the incoming unit of excess ammunition; wire lines; petroleum, oils, and lubricants (POL); and other material.
- Communications.

- Enemy situation and intelligence.
- Sequence of relief.
- Time of change of responsibility for the area.

The tactical situation dictates whether the relief will be conducted during the day or at night. Before the relief operation, the incoming unit moves to a preplanned assembly area behind the unit to be relieved. The incoming command group sets up close to the outgoing CP.

Units conduct the relief of forward positions using one of the following techniques:

- The relieving platoons occupy hide positions and move into the primary positions after the relieved elements begin to withdraw to subsequent positions.
- The relieving platoons occupy alternate positions as the relieved units withdraw from primary positions. This relief procedure is initiated when speed is desired.
- During periods of limited visibility, relieving platoons move into primary positions before the relieved platoons withdraw. Once primary positions have been occupied, the relieved platoons withdraw.

During the relief, both units are on the relieved unit's radio net. The outgoing unit maintains its previous level of radio traffic. The incoming unit maintains radio listening silence. When relief is complete, the incoming unit switches to its assigned frequency.