# Chapter 8 Defensive Operations

Though the outcome of decisive combat derives from offensive actions, leaders often find it is necessary, even advisable, to defend. The general task and purpose of all defensive operations is to defeat an enemy attack and gain the initiative for offensive operations. It is important to set conditions of the defense so friendly forces can destroy or fix the enemy while preparing to seize the initiative and return to the offense. The platoon may conduct the defense to gain time, retain key terrain, facilitate other operations, preoccupy the enemy in one area while friendly forces attack him in another, or erode enemy forces. A well coordinated defense can also set the conditions for follow-on forces and follow-on operations.

### SECTION I — CHARACTERISTICS OF THE DEFENSE

8-1. Following are the characteristics of the defense that constitute the planning fundamentals for the Infantry platoon:

- Preparation
- Security
- Disruption
- Massing effects
- Flexibility

8-2. To ensure the success of the defense, the platoon leader must understand the characteristics of the defense and apply TLP during planning, preparation, and execution of the operation.

### PREPARATION

8-3. The friendly defender arrives in the battle area before the enemy attacker. As the defender, the platoon must take advantage of this by making the most of preparations for combat in the time available. By thoroughly analyzing the factors of METT-TC, the platoon leader gains an understanding of the tactical situation and identifies potential friendly and enemy weaknesses.

8-4. By arriving in the battle area first, the Infantry platoon has the advantage of preparing the terrain before the engagement. Through the proper selection of terrain and reinforcing obstacles, friendly forces can direct the energy of the enemy's attack into terrain of their choosing. Friendly forces must take advantage of this by making the most thorough preparations that time allows while always continuing to improve their defenses—security measures, engagement areas, and survivability positions. Preparation of the ground consists of plans for fires and movement; counterattack plans; and preparation of positions, routes, obstacles, logistics, and command and control (C2) facilities.

8-5. The Infantry platoon must exploit every aspect of terrain and weather to its advantage. In the defense, as in the attack, terrain is valuable only if the friendly force gains advantage from its possession or control. In developing a defensive plan, the friendly force takes account of key terrain and attempts to visualize and cover with fire all possible enemy avenues of approach into their sector. The friendly defense seeks to defend on terrain that maximizes effective fire, cover, concealment, movement, and surprise.

8-6. Friendly forces must assume that their defensive preparations are being observed. To hinder the enemy's intelligence effort, leaders establish security forces to conduct counter reconnaissance and deceive the enemy as to the exact location of the main defenses.

### **SECURITY**

8-7. The goals of the platoon's security efforts are normally tied to the company efforts. These efforts include providing early warning, destroying enemy reconnaissance units, and impeding and harassing elements of the enemy main body. The platoon will typically continue its security mission until directed to displace.

# **DISRUPTION**

8-8. Defensive plans vary with the circumstances, but all defensive concepts of the operation aim at disrupting the enemy attacker's synchronization. Counterattacks, indirect fires, obstacles, and the retention of key terrain prevent the enemy from concentrating his strength against selected portions of the platoon's defense. Destroying enemy command and control vehicles disrupts the enemy synchronization and flexibility. Separating enemy units from one another allows them to be defeated piecemeal.

# **MASSING EFFECTS**

8-9. The platoon must mass the overwhelming effects of combat power at the decisive place and time if it is to succeed. It must obtain a local advantage at points of decision. Offensive action may be a means of gaining this advantage. The platoon leader must remember that this massing refers to combat power and its effects—not just numbers of Soldiers and weapons systems.

# FLEXIBILITY

8-10. Flexibility is derived from sound preparation and effective command and control and results from a detailed analysis of the factors of METT-TC, an understanding of the unit's purpose, and aggressive reconnaissance and surveillance. The platoon must be agile enough to counter or avoid the enemy attacker's blows and then strike back effectively. For example, supplementary positions on a secondary avenue of approach may provide additional flexibility to the platoon. Immediate transitions from defense to offense are difficult. To ease this transition, the platoon leader must think through and plan for actions his platoon may need to take, and then rehearse them in a prioritized sequence based on time available.

# SECTION II — SEQUENCE OF THE DEFENSE

8-11. As part of a larger element, the platoon conducts defensive operations in a sequence of integrated and overlapping phases. This section focuses on the following phases within the sequence of the defense:

- Reconnaissance, security operations, and enemy preparatory fires.
- Occupation.
- Approach of the enemy main attack.
- Enemy assault.
- Counterattack.
- Consolidation and reorganization.

# **RECONNAISSANCE, SECURITY OPERATIONS, AND ENEMY PREPARATORY FIRES**

8-12. Security forces must protect friendly forces in the main battle area (MBA) and allow them to prepare for the defense. The goals of a security force include providing early warning, destroying enemy reconnaissance elements (within its capability), and disrupting enemy forward detachments or advance guard elements. The platoon may be attached to a larger element or remain with the parent company to conduct counter-reconnaissance. Additionally, the platoon may conduct security operations as part of the company defensive plan by conducting patrols or manning observation post(s) (OP) to observe named area(s) of interest (NAI).

8-13. The platoon may also be required to provide guides to the passing friendly security force and may be tasked to close the passage lanes. The passage could be for friendly forces entering or departing the security zone, and may include logistics units supporting the security forces. The platoon, as part of a larger force, may also play a role in shaping the battlefield. The battalion or brigade combat team commander may position the company to deny likely enemy attack corridors. This will enhance flexibility and force enemy elements into friendly engagement areas.

8-14. When not conducting security or preparation tasks, the Infantry platoon normally occupies dug-in positions with overhead cover to avoid possible enemy artillery preparatory fires.

# OCCUPATION

8-15. The occupation phase of the defense includes moving from one location to the defensive location. A quartering party under company control normally leads this movement to clear the defensive position and prepares it for occupation. The platoon plans, reconnoiters, and then occupies the defensive position. The battalion establishes security forces. The remaining forces prepare the defense. To facilitate maximum time for planning, occupying, and preparing the defense, leaders and Soldiers at all levels must understand their duties and responsibilities, including priorities of work (covered in the WARNO or by a unit TSOP).

8-16. Occupation and preparation of the defense site (see Section V of this chapter) is conducted concurrently with the TLP and the development of the engagement area (if required). The platoon occupies defensive positions IAW the company commander's plan and the results of the platoon's reconnaissance. To ensure an effective and efficient occupation, the reconnaissance element marks the friendly positions. These tentative positions are then entered on the operational graphics. Each squad moves in or is led in by a guide to its marker. Once in position, each squad leader checks his position location. As the platoon occupies its positions, the platoon leader manages the positioning of each squad to ensure they locate IAW the tentative plan. If the platoon leader notes discrepancies between actual positioning of the squads and his plan, he makes the corrections. Security is placed out in front of the platoon. The platoon leader must personally walk the fighting positions to ensure that everyone understands the plan and that the following are IAW the plan:

- Weapons orientation and general sectors of fire.
- Crew served weapons positions.
- Rifle squads' positions in relation to each other.

8-17. Each squad leader ensures he knows the location of the platoon leader and platoon sergeant for command and control purposes, and where the casualty collection point is located. The platoon may be required to assist engineers in the construction of tactical obstacles in their sector. All leaders must know where these obstacles are so they can tie them into their fire plan.

8-18. When the occupation is complete, subordinate leaders can begin to develop their sector sketches (paragraph 8-100) based on the basic fire plan developed during the leader's reconnaissance. Positions are improved when the direct fire plan is finalized and proofed. In addition to establishing the platoon's primary positions, the platoon leader and subordinate leaders normally plan for preparation and occupation of alternate, supplementary, and subsequent positions. This is done IAW the company order. The platoon and/or company reserve need to know the location of these positions. The following are tactical considerations for these positions.

#### **ALTERNATE POSITIONS**

8-19. The following characteristics and considerations apply to an alternate position:

- Covers the same avenue of approach or sector of fire as the primary position.
- Located slightly to the front, flank, or rear of the primary position.
- Positioned forward of the primary defensive positions during limited visibility operations.
- Normally employed to supplement or support positions with weapons of limited range, such as Infantry squad positions. They are also used as an alternate position to fall back to if the original position is rendered ineffective or as a position for Soldiers to rest or perform maintenance.

#### SUPPLEMENTARY POSITIONS

8-20. The following characteristics and considerations apply to a supplementary position:

- Covers an avenue of approach or sector of fire different from those covered by the primary position.
- Occupied based on specific enemy actions.

### **SUBSEQUENT POSITIONS**

8-21. The following characteristics and considerations apply to a subsequent position:

- Covers the same avenue of approach and or sector of fire as the primary position.
- Located in depth through the defensive area.
- Occupied based on specific enemy actions or conducted as part of the higher headquarters' scheme of maneuver.

# **APPROACH OF THE ENEMY MAIN ATTACK**

8-22. As approach of the enemy main attack begins, brigade combat team and higher headquarters engage the enemy at long range using indirect fires, electronic warfare, Army attack aviation, and close air support (CAS). The goal is to use these assets and disrupting obstacles to shape the battlefield and or to slow the enemy's advance and break up his formations, leaving him more susceptible to the effects of crew served weapons. As the enemy's main body echelon approaches the battalion engagement area, the battalion may initiate indirect fires and CAS to weaken the enemy through attrition. At the same time, the brigade combat team's effort shifts to second-echelon forces, depending on the commander's plan. Based on an event stated in the company commander's order, Infantry platoons cease security patrols and bring OPs back into the defense at a predetermined time. Positions may be shifted in response to enemy actions or other tactical factors.

### **ENEMY ASSAULT**

8-23. During an enemy assault attacking enemy forces attempt to fix and finish friendly forces. Their mission will be similar to those in friendly offensive operations: destroy forces, seize terrain, and conduct a penetration to pass follow-on forces through. During execution of the defense, friendly forces will mass the effects of fires to destroy the assaulting enemy. The platoon leader must determine if the platoon can destroy the enemy from its assigned positions.

### FIGHTING FROM ASSIGNED POSITIONS

8-24. If the platoon can destroy the enemy from its assigned positions, the platoon continues to fight the defense.

8-25. The platoon leader continues to call for indirect fires as the enemy approaches. The platoon begins to engage the enemy at their weapon systems' maximum effective range. They attempt to mass fires and initiate them simultaneously to achieve maximum weapons effects. Indirect fires and obstacles integrated with direct fires should disrupt the enemy's formations, channel him toward EAs, prevent or severely limit his ability to observe the location of friendly positions, and destroy him as he attempts to breach tactical and or protective obstacles. If there is no enlisted tactical air controller (ETAC) available, the forward observer or platoon leader will be prepared to give terminal guidance to attack aviation if available and committed into his area of operations.

8-26. Leaders control fires using standard commands, pyrotechnics, and other prearranged signals. (See Chapter 2, Employing Fires, for more information.) The Infantry platoon increases the intensity of fires as the enemy closes within range of additional friendly weapons. Squad leaders and team leaders work to achieve a sustained rate of fire from their positions by having buddy teams engage the enemy so both

Soldiers are not reloading their weapons at the same time. To control and distribute fires, leaders consider-

- Range to the enemy.
- Engagement criteria (what to fire at, when to fire [triggers], and why).
- Most dangerous or closest enemy targets.
- Shifting to concentrate direct fires either independently or as directed by higher headquarters.
- Ability of the platoon to engage dismounted enemy with enfilading, grazing fires.
- Ability of the platoon's SLM and CCMS to achieve flank shots against enemy vehicles.

8-27. When the enemy closes on the platoon's protective wire, machine guns fire along interlocking principal direction(s) of fire (PDF) or final protective line(s) (FPL) as previously planned and designated. Other weapons fire at their designated PDFs. Grenadiers engage the enemy with grenade launchers in dead space or as the enemy attempts to breach protective wire. The platoon leader requests final protective fire (FPF) if it is assigned in support of his positions.

8-28. The platoon continues to defend until it repels the enemy or is ordered to disengage.

### FIGHTING FROM OTHER THAN ASSIGNED POSITIONS

8-29. If the platoon cannot destroy the enemy from its assigned positions, the platoon leader reports the situation to the company commander and continues to engage the enemy. He repositions the platoon (or squads of the platoon) when directed by the commander in order to—

- Continue fires into the platoon engagement area.
- Occupy supplementary or alternate positions.
- Reinforce other parts of the company.
- Counterattack locally to retake lost fighting positions.
- Withdraw from an indefensible position using fire and movement to break contact.

**NOTE:** The platoon leader does not move his platoon out of position if it will destroy the integrity of the company defense. All movements and actions to reposition squads and the platoon must be thoroughly rehearsed.

# COUNTERATTACK

8-30. As the enemy's momentum is slowed or stopped, friendly forces may counterattack. The counterattack may be launched to seize the initiative from the enemy or to completely halt his attack. In some cases, the purpose of the counterattack will be mainly defensive (for example, to reestablish the forward edge of the battle area [FEBA] or to restore control of the area). The Infantry platoon may participate in the counterattack as a base-of-fire element or as the counterattack force. This counterattack could be planned or conducted during the battle when opportunities to seize the initiative present themselves.

### CONSOLIDATION AND REORGANIZATION

8-31. The platoon secures its sector and reestablishes the defense by repositioning friendly forces, destroying enemy elements, treating and evacuating casualties, processing EPWs, and reestablishing obstacles. The platoon conducts all necessary sustainment functions, such as cross-leveling ammunition and weapons, as it prepares to continue defending. Squad and team leaders provide liquid, ammunition, casualty, and equipment (LACE) reports to the platoon leader. The platoon leader reestablishes the platoon chain of command. He consolidates squad LACE reports and provides the platoon report to the company commander. The platoon sergeant coordinates for resupply and supervises the execution of the casualty and

EPW evacuation plan. The platoon continues to repair or improve positions, quickly reestablishes observation posts, and resumes security patrolling as directed.

8-32. Consolidation includes organizing and strengthening a position so it can continue to be used against the enemy. Platoon consolidation requirements include:

- Adjusting other positions to maintain mutual support.
- Reoccupying and repairing positions and preparing for renewed enemy attack.
- Relocating selected weapons to alternate positions if leaders believe the enemy may have pinpointed them during the initial attack.
- Repairing any damaged obstacles and replacing any Claymore mines.
- Reestablishing security and communications.

8-33. Reorganization includes shifting internal resources within a degraded friendly unit to increase its level of combat effectiveness. Platoon consolidation requirements include:

- Manning key weapons as necessary.
- Providing first aid and preparing wounded Soldiers for CASEVAC.
- Redistributing ammunition and supplies.
- Processing and evacuating EPWs.

### SECTION III — PLANNING CONSIDERATIONS

8-34. The Army warfighting functions incorporate a list of critical tactical activities that provide a structure for leaders to prepare and execute the defense. Synchronization and coordination among the warfighting functions are critical for success.

### **MOVEMENT AND MANEUVER**

8-35. Effective weapons positioning enables the platoon to mass fires at critical points on the battlefield to effectively engage the enemy in the engagement area. (See Section IV for more information on engagement area development.) The platoon leader must maximize the strengths of the platoon's weapons systems while minimizing its exposure to enemy observation and fires.

8-36. Mobility focuses on the ability to reposition friendly forces, including unit displacement and the commitment of reserve forces. The company commander's priorities may specify that some routes be improved to support such operations. Countermobility channels the enemy into the engagement area as it limits the maneuver of enemy forces and enhances the effectiveness of the defender's direct and indirect fires.

#### **DEPTH AND DISPERSION**

8-37. Dispersing positions laterally and in depth helps protect the force from enemy observation and fires. Platoon positions are established to allow sufficient maneuver space within each position for in-depth placement of crew-served weapons systems and Infantry squads. Infantry fighting positions are positioned to allow massing of direct fires at critical points on the battlefield, as well as to provide overlapping fire in front of other fighting positions. Although the factors of METT-TC ultimately determine the placement of weapons systems and unit positions, the following also apply:

- Infantry squads can conduct antiarmor fires in depth with CCMS, which have a maximum range of 2,000 meters.
- Infantry squads can retain or deny key terrain if employed in strongpoints or protected positions.
- Infantry squads can protect obstacles or flank positions that are tied into severely restrictive terrain.

### FLANK POSITIONS

8-38. Flank positions enable a defending friendly force to bring direct fires to bear on an attacking force. An effective flank position provides the friendly defender with a larger, more vulnerable enemy target while leaving the attacker unsure of the location of the defender. Major considerations for successful employment of a flank position are the friendly defender's ability to secure the flank, and his ability to achieve surprise by remaining undetected. Effective direct fire control (see Chapter 2, Employing Fires) and fratricide avoidance measures (see Chapter 5, Command, Control, and Troop-Leading Procedures) are critical considerations when employing flank positions.

### MOBILITY

8-39. During defensive preparations, mobility focuses initially on the ability to resupply, CASEVAC, reposition, and the rearward and forward passage of forces, supplies, and equipment. Once defensive preparations are complete, the mobility focus shifts to routes to alternate, supplementary, or subsequent positions. The company commander will establish the priority of mobility effort within the company.

### COUNTERMOBILITY

8-40. To be successful in the defense, the platoon leader must integrate obstacles into both the direct and indirect fire plans. (Refer to FM 90-7, *Combined Arms Obstacle Integration*, for additional information on obstacle planning, siting, and turnover.) A tactical obstacle is designed or employed to disrupt, fix, turn, or block the movement of the enemy. Platoons construct tactical obstacles when directed by the company commander.

### **Disrupting Effects**

8-41. Disrupting effects focus a combination of fires and obstacles to impede the enemy's attack in several ways, including breaking up his formations, interrupting his tempo, and causing early commitment of breaching assets. These effects are often the product of situational obstacles such as scatterable mines, and are normally used forward within engagement areas or in support of forward positions within a defensive sector. Normally, only indirect fires and long-range direct fires are planned in support of disrupting obstacles (Figure 8-1).



Figure 8-1. Disrupt obstacle effect.

### **Fixing Effects**

8-42. Fixing effects use a combination of fires and obstacles to slow or temporarily stop an attacker within a specified area, normally an engagement area (Figure 8-2). The defending unit can then focus on defeating the enemy by using indirect fires to fix him in the engagement area while direct fires inflict maximum casualties and damage. If necessary, the defender can reposition his forces using the additional time gained as a result of fixing the enemy. To fully achieve the fixing effect, direct and or indirect fires must be integrated with the obstacles. The company commander must specify the size of the enemy unit to be fixed.



Figure 8-2. Fix obstacle effect.

### **Turning Effects**

8-43. Turning effects (Figure 8-3) use the combination of direct and indirect fires and obstacles to support the company commander's scheme of maneuver in several ways, including the following:

- Diverting the enemy into an engagement area and exposing his flanks when he makes the turn.
- Diverting an enemy formation from one avenue of approach to another.
- Denying the enemy the ability to mass his forces on a flank of the friendly force.



Figure 8-3. Turn obstacle effect.

### **Blocking Effects**

8-44. Blocking effects use the combination of direct and indirect fires and obstacles to stop an attacker along a specific avenue of approach (Figure 8-4). Fires employed to achieve blocking effects are primarily oriented on preventing the enemy from maneuvering. Because they require the most extensive engineer effort of any type of obstacle, blocking effects are employed only at critical choke points on the battlefield. Blocking obstacles must be anchored on both sides by existing obstacles (severely restrictive terrain). Direct and or indirect fires must cover the obstacles to achieve the full blocking effect. The company commander must clearly specify the size of enemy force that he intends to block.



Figure 8-4. Block obstacle effect.

#### DISPLACEMENT AND DISENGAGEMENT PLANNING

8-45. Displacement and disengagement are key control measures that allow the platoon to retain its operational flexibility and tactical agility. The ultimate goals of displacement and disengagement are to enable the platoon to maintain standoff range of the CCMS and to avoid being fixed or decisively engaged by the enemy.

#### Considerations

8-46. While displacement and disengagement are valuable tactical tools, they can be extremely difficult to execute in the face of a rapidly advancing enemy force. In fact, displacement in contact poses great problems. The platoon leader must therefore plan for it thoroughly before the operation and rehearse moving to alternate and supplementary positions if time permits. Even then, he must carefully evaluate the situation whenever displacement in contact becomes necessary to ensure it is feasible, and that it will not result in unacceptable personnel or equipment losses. The platoon leader must consider several important factors in displacement planning:

- The enemy situation (for example, an enemy attack with battalion-sized element may prevent the platoon from disengaging).
- Higher headquarters' disengagement criteria.
- Availability of friendly direct fire to facilitate disengagement by suppressing or disrupting the enemy.

- Availability of cover and concealment, indirect fires, and smoke to assist disengagement.
- Obstacle integration, including situational obstacles.
- Positioning of forces on terrain (such as reverse slopes or natural obstacles) that provides an advantage to the disengaging elements.
- Identification of displacement routes and times that disengagement and or displacement will take place.
- The size of the friendly force available to engage the enemy in support of the displacing unit.

#### **Disengagement Criteria**

8-47. Disengagement criteria dictate to subordinate elements the circumstances under which they will displace to alternate, supplementary, or subsequent defensive positions. The criteria are tied to an enemy action (such as one motorized rifle platoon advancing past Phase Line Delta) and are linked to the friendly situation. For example, they may depend on whether a friendly overwatch element or artillery unit can engage the enemy. Disengagement criteria are developed during the planning process based on the unique conditions of a specific situation. They should not be part of the unit's SOP.

#### **Direct Fire Suppression**

8-48. The attacking enemy force must not be allowed to bring effective fires to bear on a disengaging force. Direct fires from the base-of-fire element, employed to suppress or disrupt the enemy, are the most effective way to facilitate disengagement. The platoon may also receive base-of-fire support from another element in the company, but in most cases the platoon will establish its own base of fire. Employing an internal base of fire requires the platoon leader to carefully sequence the displacement of his elements.

#### **Cover and Concealment**

8-49. Ideally, the platoon and subordinate elements should use covered and concealed routes when moving to alternate, supplementary, or subsequent defensive positions. Regardless of the degree of protection the route itself affords, the platoon should rehearse the movement. By rehearsing, the platoon can increase the speed at which it moves and provide an added measure of security. The platoon leader must make a concerted effort whenever time is available to rehearse movement in limited visibility and degraded conditions.

#### **Indirect Fires and Smoke**

8-50. Artillery or mortar fires can be employed to assist the platoon during disengagement. Suppressive fires, placed on an enemy force as it is closing inside the defender's standoff range, will disrupt his formations, slow his progress, and if the enemy is a mechanized force, cause him to button up. The defending force engages the enemy with long-range direct fires, then disengages and moves to new positions. Smoke may be employed to obscure the enemy's vision, slow his progress, or screen the defender's movement out of the defensive positions or along his displacement route.

#### **Obstacle Integration**

8-51. Obstacles should be integrated with direct and indirect fires to assist disengagement. By slowing and disrupting enemy movement, obstacles provide the defender the time necessary for displacement. Obstacles also allow friendly forces to employ direct and indirect fires against the enemy. The modular pack mine system (MOPMS) can be employed in support of the disengagement to either block a key displacement route once the displacing unit has passed through it, or to close a lane through a tactical obstacle. The location of obstacle emplacement depends in large measure on METT-TC factors. An obstacle should be positioned far enough away from the defender so enemy elements can be effectively engaged on the far side of the obstacle while the defender remains out of range of the enemy's massed direct fires.

# FIRE SUPPORT

8-52. For the indirect fire plan to be effective in the defense, the unit must plan and execute indirect fires in a manner that achieves the intended task and purpose of each target. Indirect fires serve a variety of purposes in the defense, including:

- Slowing and disrupting enemy movement.
- Preventing the enemy from executing breaching operations at turning or blocking obstacles.
- Destroying or delaying enemy forces at obstacles using massed indirect fires or precision munitions (such as Copperhead rounds).
- Defeating attacks along dismounted avenues of approach using FPF.
- Disrupting the enemy to allow friendly elements to disengage or conduct counterattacks.
- Obscuring enemy observation or screening friendly movement during disengagement and counterattacks.
- Based on the appropriate level of approval, delivering scatterable mines to close lanes and gaps in obstacles, disrupting or preventing enemy breaching operations, disrupting enemy movement at choke points, or separating or isolating enemy echelons.

# PROTECTION

8-53. Platoons are responsible for coordinating and employing their own protective obstacles to protect their defensive positions. To be most effective, these obstacles should be tied into existing obstacles and FPFs. The platoon may use mines and wire from its basic load or pick up additional assets (including MOPMS, if available) from the engineer Class IV or V supply point. (See Appendix F for details on MOPMS and mines.) The platoon, through the company, also may be responsible for any other required coordination (such as that needed in a relief in place) for recovery of the obstacle or for its destruction (as in the case of MOPMS). A detail discussion of Protection can be found in Chapter 4.

8-54. In planning for protective obstacles, the platoon leader must evaluate the potential threat to the platoon position and employ the appropriate asset. For example, MOPMS is predominately an antitank system best used on mounted avenues of approach, but it does have some antipersonnel applications. Wire obstacles may be most effective when employed on dismounted avenues of approach. FM 90-7 provides detailed planning guidance for the emplacement of protective obstacles.

8-55. Protective obstacles are usually located beyond hand grenade range (40 to 100 meters) from a Soldier's fighting position. They may extend out 300 to 500 meters to tie into tactical obstacles and existing restrictive or severely restrictive terrain. The platoon leader should therefore plan protective obstacles in depth and attempt to maximize the effective range of his weapons.

8-56. When planning protective obstacles, the platoon leader should consider the amount of time required to prepare them, the resources available after constructing necessary tactical obstacles, and the priorities of work for the Soldiers in the platoon.

### WIRE OBSTACLES

8-57. There are three types of wire obstacles: protective wire; tactical wire; and supplementary wire (Figure 8-5).

### **Protective Wire**

8-58. Protective wire may be a complex obstacle providing all-round protection of a platoon perimeter, or it may be a simple wire obstacle on the likely dismounted avenue of approach toward a squad position (Figure 8-6). Command-detonated M18 Claymore mines may be integrated into the protective wire or used separately.

#### **Tactical Wire**

8-59. Tactical wire is positioned to increase the effectiveness of the platoon's direct fires. It is usually positioned along the friendly side of a machine gun FPL. Tactical minefields may also be integrated into these wire obstacles or be employed separately.

#### **Supplementary Wire**

8-60. Supplementary wire obstacles are employed to break up the line of tactical wire to prevent the enemy from locating platoon weapons (particularly CCMS and machine guns) by following the tactical wire.



Figure 8-5. Three types of protective wire obstacles.



Figure 8-6. Protective wire groups.

#### **OBSTACLE LANES**

8-61. The platoon may be responsible for actions related to lanes through obstacles. These duties may include overwatching lanes in the obstacle, marking lanes in an obstacle, reporting the locations of the entry and exit points of each lane, manning contact points, providing guides for elements passing through the obstacle, and closing lanes when directed.

#### SURVIVABILITY

8-62. Survivability focuses on protecting friendly forces from the effect of enemy weapons systems. Survivability positions are prepared in defensive positions or strongpoints to protect weapons systems and rifle squads. Positions can be dug in and reinforced with overhead cover to provide rifle squads and crewserved weapons with protection against shrapnel from air bursts. The company may dig in ammunition prestocks at platoon alternate, supplementary, or subsequent defensive positions. The platoon leader may have time only to dig in positions that have the least amount of natural cover and concealment. Soil composition should also be a consideration in the selection of defensive positions. Sites to be avoided include those where the soil is overly soft, hard, wet, or rocky.

#### AIR AND MISSILE DEFENSE

8-63. The focus of an air and missile defense plan is on likely air avenues of approach for enemy fixedwing, helicopters, and unmanned aircraft systems that may not correspond with the enemy's ground avenues of approach. A platoon leader is not likely to emplace air defense assets, but he must be aware that higher headquarters may employ air defense assets near his defensive position. For a detailed discussion of air defense, see Section II, Chapter 4.

### SUSTAINMENT

8-64. In addition to the sustainment function required for all operations, the platoon leader should consider prestocking (also known as pre-positioning or caches). The platoon leader's mission analysis (or guidance from the company commander) may reveal that the platoon's ammunition needs during an operation may exceed its basic load. This requires the platoon to establish ammunition caches. The caches, which may be positioned at an alternate or subsequent position, should be dug in. Security should be provided by active or passive means (guarded or observed) to indicate when and if the cache is tampered with.

8-65. The platoon must have a plan to recover their assets when quickly transitioning to the offense or counterattack or when disengaging.

### INTELLIGENCE

8-66. The intelligence warfighting function consists of the related tasks and systems that facilitate understanding of the enemy, terrain, weather, and civil considerations. It includes tasks associated with ISR. It is a flexible, adjustable architecture of procedures, personnel, organizations, and equipment. These provide relevant information and products relating to the threat, civil populace, and environment to commanders. Intelligence warfighting function focuses on four primary tasks:

- (1) Support to situational understanding.
- (2) Support to strategic responsiveness.
- (3) Conduct ISR.
- (4) Provide intelligence support to targeting.

## **COMMAND AND CONTROL**

8-67. The command and control warfighting function consists of the related tasks and systems that support commanders in exercising authority and direction. It includes those tasks associated with acquiring friendly information, managing all relevant information, and directing and leading subordinates.

## SECTION IV — ENGAGEMENT AREA DEVELOPMENT

8-68. The engagement area is the place where the platoon leader intends to destroy an enemy force using the massed fires of all available weapons. The success of any engagement depends on how effectively the platoon leader can integrate the obstacle and indirect fire plans with his direct fire plan in the engagement area to achieve the platoon's purpose. At the platoon level, engagement area development remains a complex function that requires parallel planning and preparation if the platoon is to accomplish its assigned tasks. Despite this complexity, engagement area development resembles a drill. The platoon leader and his subordinate leaders use a standardized set of procedures. Beginning with an evaluation of the factors of METT-TC, the development process covers these steps:

- Identify likely enemy avenues of approach.
- Identify the enemy scheme of maneuver.
- Determine where to kill the enemy.
- Plan and integrate obstacles.
- Emplace weapons systems.
- Plan and integrate indirect fires.
- Conduct an engagement area rehearsal.

# **IDENTIFY LIKELY ENEMY AVENUES OF APPROACH**

8-69. The platoon leader conducts an initial reconnaissance from the enemy's perspective along each avenue of approach into the sector or engagement area. During his reconnaissance, he confirms key terrain identified by the company commander, including locations that afford positional advantage over the enemy and natural obstacles and choke points that restrict forward movement. The platoon leader determines which avenues will afford cover and concealment for the enemy while allowing him to maintain his tempo. The platoon leader also evaluates lateral mobility corridors (routes) that adjoin each avenue of approach.

# **IDENTIFY ENEMY SCHEME OF MANEUVER**

8-70. The platoon leader greatly enhances this step of the engagement area development process by gaining information early. He receives answers to the following questions from the company commander:

- Where does the enemy want to go?
- Where will the enemy go based on terrain?
- What is the enemy's mission (or anticipated mission)?
- What are the enemy's objectives?
- How will the enemy structure his attack?
- How will the enemy employ his reconnaissance assets?
- What are the enemy's expected rates of movement?
- How will the enemy respond to friendly actions?

# **DETERMINE WHERE TO KILL THE ENEMY**

8-71. As part of his TLP, the platoon leader must determine where he will mass combat power on the enemy to accomplish his purpose. This decision is tied to his assessment of how the enemy will fight into the platoon's engagement area. Normally this entry point is marked by a prominent TRP that all platoon elements can engage with their direct fire weapons. This allows the commander to identify where the platoon will engage enemy forces through the depth of the company engagement area. In addition, the leader—

- Identifies TRPs that match the enemy's scheme of maneuver, allowing the platoon (or company) to identify where it will engage the enemy through the depth of the engagement area.
- Identifies and records the exact location of each TRP.

- Determines how many weapons systems can focus fires on each TRP to achieve the desired purpose.
- Determines which squad(s) can mass fires on each TRP.
- Begins development of a direct fire plan that focuses at each TRP.

**NOTE:** In marking TRPs, use thermal sights to ensure visibility at the appropriate range under varying conditions, including daylight and limited visibility.

### PLAN AND INTEGRATE OBSTACLES

8-72. To be successful in the defense, the platoon leader must integrate tactical obstacles with the direct fire plan, taking into account the intent of each obstacle. At the company level, obstacle intent consists of the target of the obstacle, the desired effect on the target, and the relative location of the group. A platoon must have a clear task and purpose to properly emplace a tactical obstacle. The company or battalion will normally designate the purpose of the tactical obstacle. The purpose will influence many aspects of the operation, from selection and design of obstacle sites, to actual conduct of the defense. Once the tactical obstacle has been emplaced, the platoon leader must report its location and the gaps in the obstacle to the company commander. This ensures that the company commander can integrate obstacles with his direct and indirect fire plans, refining his engagement area development.

## **EMPLACE WEAPONS SYSTEMS**

8-73. To position weapons effectively, leaders must know the characteristics, capabilities, and limitations of the weapons as well as the effects of terrain and the tactics used by the enemy. Platoon leaders should position weapons where they have protection, where they can avoid detection, and where they can surprise the enemy with accurate, lethal fires. In order to position the weapons, the platoon leader must know where he wants to destroy the enemy and what effect he wants the weapon to achieve. He should also consider—

- Selecting tentative squad defensive positions.
- Conducting a leader's reconnaissance of the tentative defensive positions.
- Walking the engagement area to confirm that the selected positions are tactically advantageous.
- Confirming and marking the selected defensive positions.
- Developing a direct fire plan that accomplishes the platoon's purpose.
- Ensuring the defensive positions do not conflict with those of adjacent units and is effectively tied in with adjacent positions.
- Selecting primary, alternate, and supplementary fighting positions to achieve the desired effect for each TRP.
- Ensuring the squad leaders position weapons systems so the required numbers of weapons or squads effectively cover each TRP.
- Inspecting all positions.

**NOTE:** When possible, select fighting and crew-served weapon positions while moving in the engagement area. Using the enemy's perspective enables the platoon leader to assess survivability of the positions.

## PLAN AND INTEGRATE INDIRECT FIRES

8-74. In planning and integrating indirect fires, the platoon leader must accomplish the following:

- Determine the purpose of fires if the company commander has not already done so.
- Determine where that purpose will best be achieved if the company commander has not done so.
- Establish the observation plan with redundancy for each target. Observers include the platoon leader as well as members of subordinate elements (such as team leaders) with fire support responsibilities.

- Establish triggers based on enemy movement rates.
- Obtain accurate target locations using survey and navigational equipment.
- Refine target locations to ensure coverage of obstacles.
- Register artillery and mortars.
- Plan FPF.

# CONDUCT AN ENGAGEMENT AREA REHEARSAL

8-75. The purpose of rehearsal is to ensure that every leader and every Soldier understands the plan (Figure 8-7), and is prepared to cover his assigned areas with direct and indirect fires.



Figure 8-7. Integrated engagement area plan.

8-76. The platoon will probably participate in a company-level engagement area rehearsal. The company commander has several options for conducting a rehearsal, but the combined arms rehearsal produces the most detailed understanding of the plan. One technique the platoon leader may use for his rehearsal is the full dress rehearsal. In the defense, the platoon leader may have the platoon sergeant and squads conduct a movement through the engagement area to depict the attacking enemy force, while the platoon leader and squad leaders rehearse the battle from the platoon defensive positions. The rehearsal should cover—

- Rearward passage of security forces (as required).
- Closure of lanes (as required).
- Use of fire commands, triggers, and or maximum engagement lines (MELs) to initiate direct and indirect fires.
- Shifting of fires to refocus and redistribute fire effects.
- Disengagement criteria.

- Identification of displacement routes and times.
- Preparation and transmission of critical reports.
- Assessment of the effects of enemy weapons systems.
- Displacement to alternate, supplementary, or subsequent defensive positions.
- Cross-leveling or resupply of Class V items.
- Evacuation of casualties.

**NOTE:** When conducting his rehearsal, the platoon leader should coordinate the platoon rehearsal with the company to ensure other units' rehearsals are not planned for the same time and location. Coordination will lead to more efficient use of planning and preparation time for all company units. It will also eliminate the danger of misidentification of friendly forces in the rehearsal area.

### SECTION V — OCCUPATION AND PREPARATION OF DEFENSIVE POSITIONS

8-77. Occupation and preparation of defensive positions is conducted concurrently with the TLP and engagement area development. The process is not sequential. The potential problem associated with this process is the lack of adequate preparation time if the platoon has several other defensive positions (alternate, supplementary, and subsequent) and engagement areas to develop.

# **OCCUPATION OF THE DEFENSE**

8-78. The platoon occupies defensive positions IAW the platoon leader's plan and the results of the reconnaissance.

8-79. To ensure an effective and efficient occupation, rifle squads move to the locations marked previously by the reconnaissance element. These positions may also be on the operational graphics. Once in position, each squad leader checks his location on the map to ensure he is complying with the platoon leader's graphics. As the platoon occupies its positions, the platoon leader ensures that each squad locates IAW his plan. If the platoon leader notes discrepancies between actual positioning of the squads and his plan, he corrects it immediately.

8-80. Once each rifle squad has occupied its position, the platoon leader must walk the positions to ensure that weapons orientation, positioning of the rifle squads, and understanding of the plan are IAW the preestablished plan. The platoon leader should not rely on updates from his subordinates. He should always walk his defensive perimeter. For command and control purposes, each squad leader must know the location of the platoon leader and the platoon sergeant.

8-81. Night vision equipment enhances the occupation process under limited visibility conditions. For instance, the platoon leader can mark his position with an infrared light source and squad leaders can move to premarked positions with infrared light sources showing them where to locate. Additionally, the squad leaders can use AN/PAQ-4B/Cs or AN/PEQ-2As to point out sectors of fire and TRPs to their Soldiers, using infrared light sources to keep the occupation clandestine.

8-82. The platoon may conduct a hasty occupation in the defense during a counterattack or after disengagement and movement to alternate, supplementary, or subsequent defensive positions.

8-83. The platoon leader issues a FRAGO covering the following minimum information:

- Changes in the enemy or friendly situation.
- The platoon task and purpose (what the platoon must accomplish and why).
- The task and purpose for each subordinate element.
- The scheme of fires.
- Coordinating instructions.

8-84. At a minimum, the following actions must be taken:

- The platoon approaches the defensive positions from the rear or flank.
- The platoon establishes direct fire control measures or, if these are preplanned, reviews the plan.
- The platoon leader reports, "Occupied" to the company commander.

8-85. The platoon conducts deliberate occupation of defensive positions when time is available, when enemy contact is not expected, and when friendly elements are positioned forward in the sector to provide security for forces in the main battle area. Actually establishing defensive positions is accomplished concurrently with the development of the engagement area. The platoon leader directs the initial reconnaissance from the engagement area and then tentatively emplaces crew-served weapon systems.

8-86. Once the defensive positions are established, subordinate leaders can begin to develop their sector sketches and fire plans based on the basic fire plan developed during the leader's reconnaissance. Fighting positions are improved while the direct fire plan is finalized and proofed. The platoon leader, with guidance from the company commander, designates the level of preparation for each defensive position based on the time available and other tactical considerations for the mission. The three levels of defensive position preparation (occupy, prepare, and reconnoiter) are listed here in descending order of thoroughness and time required.

### OCCUPY

8-87. Complete the preparation of the position from where the platoon will initially defend. The position is fully reconnoitered, prepared, and occupied prior to the "defend not later than (NLT)" time specified in the company order. The platoon must rehearse the occupation, and the platoon leader must establish a trigger for occupation of the position.

#### PREPARE

8-88. The position and the corresponding engagement area will be fully reconnoitered. Squad positions in the defensive positions and direct fire control measures in the engagement area should be marked. Survivability positions may be dug, ammunition caches pre-positioned, and protective obstacles emplaced.

#### RECONNOITER

8-89. Both the engagement area and defensive positions will be fully reconnoitered. Tentative weapon positions should be planned in the defensive positions, and direct fire control measures should be established in the engagement area.

8-90. In addition to establishing the platoon's primary defensive positions, the platoon leader and subordinate leaders normally plan for preparation and occupation of alternate, supplementary, and subsequent defensive positions. This is done IAW the company order. See Section II for characteristics of alternate, supplementary, and subsequent defensive positions.

# **PRIORITY OF WORK**

8-91. Leaders must ensure that Soldiers prepare for the defense quickly and efficiently. Work must be done in order of priority to accomplish the most in the least amount of time while maintaining security and the ability to respond to enemy action. Below are basic considerations for priorities of work.

- Emplace local security (all leaders).
- Position and assign sectors of fire for each squad (platoon leader).
- Position and assign sectors of fire for the CCMS and medium machine gun teams (platoon leader).
- Position and assign sectors of fire for M249 MG, grenadiers, and riflemen (squad leaders).
- Establish command post and wire communications.
- Designate FPLs and FPFs.
- Clear fields of fire and prepare range cards.

- Prepare sector sketches (leaders).
- Dig fighting positions (stage 1 [see Section VII]).
- Establish communication and coordination with the company and adjacent units.
- Coordinate with adjacent units. Review sector sketches.
- Emplace antitank and Claymore mines, then wire and other obstacles.
- Mark or improve marking for TRPs and other fire control measures.
- Improve primary fighting positions and add overhead cover (stage 2).
- Prepare supplementary and then alternate positions (same procedure as the primary position).
- Establish sleep and rest plans.
- Distribute and stockpile ammunition, food, and water.
- Dig trenches to connect positions.
- Continue to improve positions—construct revetments, replace camouflage, and add to overhead cover.

8-92. Unit priorities of work are normally found in SOPs. However, the commander will dictate the priorities of work for the company based on the factors of METT-TC. Several actions may be accomplished at the same time. Leaders must constantly supervise the preparation of fighting positions, both for tactical usefulness and proper construction.

### **SECURITY IN THE DEFENSE**

8-93. Security in the defense includes all active and passive measures taken to avoid detection by the enemy, deceive the enemy, and deny enemy reconnaissance elements accurate information on friendly positions. The two primary tools available to the platoon leader are observation posts and patrols. In planning for the security in the defense, the platoon leader considers the terrain in terms of OAKOC. He uses his map to identify terrain that will protect the platoon from enemy observation and fires while providing observation and fires into the engagement area. Additionally, he uses intelligence updates to increase his situational understanding, reducing the possibility of the enemy striking at a time or in a place for which the platoon is unprepared.

### **OBSERVATION POSTS**

8-94. An observation post gives the platoon its first echelon of security in the defense. The observation post provides early warning of impending enemy contact by reporting direction, distance, and size. It detects the enemy early and sends accurate reports to the platoon. The platoon leader establishes observation posts along the most likely enemy avenues of approach into the position or into the area of operations. Leaders ensure that observation posts have communication with the platoon.

8-95. Early detection reduces the risk of the enemy overrunning the observation post. Observation posts may also be equipped with a Javelin CLU to increase the ability to detect the enemy. They may receive infrared trip flares, infrared parachute flares, infrared M203 rounds, and even infrared mortar round support to illuminate the enemy. The platoon leader weighs the advantages and disadvantages of using infrared illumination when the enemy is known to have night vision devices that detect infrared light. Although infrared and thermal equipment within the platoon enables the platoon to see the observation post at a greater distance, the observation post should not be positioned outside the range of the platoon's small-arms weapons.

8-96. To further reduce the risk of fratricide, observation posts use GPS, if available, to navigate to the exit and entry point in the platoon's position. The platoon leader submits an observation post location to the company commander to ensure a no-fire area (NFA) is established around each observation post position. The commander sends his operational overlay with observation post positions to the battalion and adjacent units. He receives the same type overlay from adjacent units to assist in better command and control and fratricide avoidance. The platoon leader confirms that the company fire support element (FSE) has forwarded these locations to the battalion FSO and has received the appropriate NFAs on the fire support graphics.

### PATROLS

8-97. Platoons actively patrol in the defense. Patrols enhance the platoon's ability to fill gaps in security between observation posts (see Chapter 9). The platoon leader forwards his tentative patrol route to the commander to ensure they do not conflict with other elements within the company. The commander forwards the entire company's patrol routes to the battalion. This allows the battalion S3 and S2 to ensure all routes are coordinated for fratricide prevention, and that the company and platoons are conforming to the battalion intelligence, surveillance, and reconnaissance (ISR) plan. The patrol leader may use a GPS to enhance his basic land navigational skills as he tracks his patrol's location on a map, compass, and pace count or odometer reading.

# **ESTABLISHMENT OF DEFENSIVE POSITIONS**

8-98. Platoons establish defensive positions IAW the platoon leader and commander's plan. They mark engagement areas using marking techniques prescribed by unit SOP. The platoon physically marks obstacles, TRPs, targets, and trigger lines in the engagement area. During limited visibility, the platoon can use infrared light sources to mark TRPs for the rifle squads. When possible, platoons should mark TRPs with both a thermal and an infrared source so the rifle squads can use the TRP.

### **RANGE CARD**

8-99. A range card is a sketch of a sector that a direct fire weapons system is assigned to cover. Range cards aid in planning and controlling fires. They also assist crews in acquiring targets during limited visibility, and orient replacement personnel, platoons, or squads that are moving into position. During good visibility, the gunner should have no problems maintaining orientation in his sector. During poor visibility, he may not be able to detect lateral limits. If the gunner becomes disoriented and cannot find or locate reference points or sector limit markers, he can use the range card to locate the limits. The gunner should make the range card so he becomes more familiar with the terrain in his sector. He should continually assess the sector and, if necessary, update his range card.

### **SECTOR SKETCHES**

8-100. Detailed sketches aid in the planning, distribution, and control of the platoon fires. Gunners prepare the range cards. Squad leaders prepare squad sector sketches, section leaders prepare section sketches, and the platoon leader prepares the platoon sketch.

### WEAPONS PLACEMENT

8-101. To position weapons effectively, leaders must know the characteristics, capabilities, and limitations of the weapons; the effects of terrain; and the tactics used by the enemy. Additionally, the platoon leader must consider whether his primary threat will be vehicles or Infantry. His plan should address both mounted and dismounted threats. Also, the platoon leader may have an antitank section attached.

### CLOSE COMBAT MISSILE SYSTEMS EMPLOYMENT

8-102. The primary role of Close Combat Missile Systems (CCMS) is to destroy enemy armored vehicles. When there is no armored vehicle enemy, CCMS can be employed in a secondary role of providing fire support against point targets such as crew-served weapons positions. CCMS optics (such as the Javelin's command launch unit [CLU]) can be used alone or as an aided vision device for reconnaissance, security operations, and surveillance. Reduced or limited visibility will not degrade the effectiveness of the CCMS. This fact allows the antiarmor specialist to continue to cover his sector without having to reposition closer to the avenue of approach. The platoon leader's assessment of the factors of METT-TC will determine the employment of CCMS. (For a detailed discussion on the employment of the Javelin, refer to Appendix B.) Based on the situation, the platoon leader may employ all or some of the CCMS. He may use centralized control or decentralized control.

#### **Centralized Control**

8-103. The platoon leader controls the fires of his CCMS gunners by both physically locating the weapons in his vicinity and personally directing their fires, or by grouping them together under the control of the platoon sergeant or weapons squad leader.

#### **Decentralized Control**

8-104. CCMS gunners operate with and are controlled by their weapons squad leader. A rifle squad leader may need to employ one fire team with a CCMS. The platoon leader normally gives the command to fire.

#### **MEDIUM MACHINE GUN EMPLOYMENT**

8-105. Medium machine guns are the platoon's primary crew-served weapons that are positioned first if the enemy is a dismounted force. (For a detailed discussion on the employment of the M240B and the M249, refer to Appendix A.) Once these guns are sited, the leader positions riflemen to protect them. The guns are positioned to place direct fire on locations where the platoon leader wants to concentrate combat power to destroy the enemy.

#### M203 EMPLOYMENT

8-106. The M203 grenade launcher is the squad leader's indirect fire weapon. The platoon leader positions the grenadier to cover dead space in the squad's sector, especially the dead space for the medium machine guns. The grenadier is also assigned a sector of fire overlapping the riflemen's sectors of fire. The high-explosive dual purpose (HEDP) round is effective against lightly armored vehicles.

#### **EMPLOYMENT OF RIFLEMEN**

8-107. The platoon and squad leaders assign positions and sectors of fire to each rifleman in the platoon. Normally, they position the riflemen to support and protect machine guns and antiarmor weapons. Riflemen are also positioned to cover obstacles, provide security, cover gaps between platoons and companies, or provide observation.

### COORDINATION

8-108. Coordination is important in every operation. In the defense, coordination ensures that units provide mutual support and interlocking fires. In most circumstances, the platoon leader conducts face-to-face coordination to facilitate understanding and resolve issues effectively. The platoon leader should send and receive the following information prior to conducting face-to-face coordination:

- Location of leaders.
- Location of fighting positions.
- Location of observation posts and withdrawal routes.
- Location and types of obstacles, including Claymores.
- Location, activities, and passage plan for reconnaissance platoon and other units forward of the platoon's position.
- Location of all Soldiers and units operating in and around the platoon's area of operations.

### SECTION VI — DEFENSIVE TECHNIQUES

- 8-109. The platoon will normally defend IAW command orders using one of these basic techniques:
  - Defend an area.
  - Defend a battle position.
  - Defend a strongpoint.
  - Defend a perimeter.
  - Defend a reverse slope.

## **DEFEND AN AREA**

8-110. Defending an area sector allows a unit to maintain flank contact and security while ensuring unity of effort in the scheme of maneuver. Areas afford depth in the platoon defense. They allow the platoon to achieve the platoon leader's desired end state while facilitating clearance of fires at the appropriate level of responsibility. The company commander normally orders a platoon to defend an area (Figure 8-8) when flexibility is desired, when retention of specific terrain features is not necessary, or when the unit cannot concentrate fires because of any of the following factors:

- Extended frontages.
- Intervening, or cross-compartmented, terrain features.
- Multiple avenues of approach.

8-111. The platoon is assigned an area defense mission to prevent a specific amount of enemy forces from penetrating the area of operations. To maintain the integrity of the area defense, the platoon must remain tied to adjacent units on the flanks. The platoon may be directed to conduct the defense in one of two ways.

8-112. He may specify a series of subsequent defensive positions within the area from where the platoon will defend to ensure that the fires of two platoons can be massed.

8-113. He may assign an area to the platoon. The platoon leader assumes responsibility for most tactical decisions and controlling maneuvers of his subordinate squads by assigning them a series of subsequent defensive positions. This is done IAW guidance from the company commander in the form of intent, specified tasks, and the concept of the operation. The company commander normally assigns an area to a platoon only when it is fighting in isolation.



Figure 8-8. Concept of the operation for defending an area.

FM 3-21.8

# **DEFEND A BATTLE POSITION**

8-114. The company commander assigns the defensive technique of defending a battle position to his platoons when he wants to mass the fires of two or more platoons in a company engagement area, or to position a platoon to execute a counterattack. A unit defends from a battle position to—

- Destroy an enemy force in the engagement area.
- Block an enemy avenue of approach.
- Control key or decisive terrain.
- Fix the enemy force to allow another friendly unit to maneuver.

8-115. The company commander designates engagement areas to allow each platoon to concentrate its fires or to place it in an advantageous position for the counterattack. Battle positions are developed in such a manner to provide the platoon the ability to place direct fire throughout the engagement area. The size of the platoon battle position can vary, but it should provide enough depth and maneuver space for subordinate squads to maneuver into alternate or supplementary positions and to counterattack. The battle position is a general position on the ground. The platoon leader places his squads on the most favorable terrain in the battle position based on the higher unit mission and commander's intent. The platoon then fights to retain the position unless ordered by the company commander to counterattack or displace. The following are basic methods of employing a platoon in a battle position:

- Same battle position, same avenue of approach.
- Same battle position, multiple avenues of approach.
- Different battle positions, same avenue of approach.
- Different battle positions, multiple avenues of approach.

### SAME BATTLE POSITION, SAME AVENUE OF APPROACH

8-116. Rifle squads are on the same battle position covering the same avenue of approach (Figure 8-9). The platoon can defend against mounted and dismounted attacks and move rapidly to another position.

8-117. All squads are in the same battle position when the terrain provides good observation, fields of fire, and cover and concealment.

8-118. Employing all the squads of the platoon on the same battle position covering the same avenue of approach is the most conservative use of the platoon. Its primary advantages are that it facilitates command and control functions because of the proximity of squad elements on the same approach and it provides increased security.



Figure 8-9. Same battle position, same avenue of approach.

### SAME BATTLE POSITION, MULTIPLE AVENUES OF APPROACH

8-119. Rifle squads occupy the same battle position but cover multiple enemy avenues of approach (Figure 8-10).



Figure 8-10. Same battle position, multiple avenues of approach.

### **DIFFERENT BATTLE POSITIONS, SAME AVENUE OF APPROACH**

8-120. Rifle squads are on different battle positions covering the same avenue of approach (Figure 8-11). If positioned on separate battle positions, rifle squads must fight in relation to each other when covering the same avenues of approach. A weapons squad can provide supporting fires for the rifle squads from their primary, alternate, or supplementary positions. All squads are positioned to engage enemy forces on the same avenue of approach, but at different ranges.



Figure 8-11. Different battle positions, same avenue of approach.

### DIFFERENT BATTLE POSITIONS, MULTIPLE AVENUES OF APPROACH

**8-121**. Squads may be employed on different battle positions and multiple avenues of approach (Figure 8-12) to ensure that the squad battle positions cannot be fixed, isolated, or defeated by the enemy.



Figure 8-12. Different battle positions, multiple avenues of approach.

# **DEFEND A STRONGPOINT**

8-122. Defending a strongpoint (Figure 8-13) is not a common mission for an Infantry platoon. A strongpoint defense requires extensive engineer support (expertise, materials, and equipment), and takes a long time to complete. When the platoon is directed to defend a strongpoint, it must retain the position until ordered to withdraw. The success of the strong-point defense depends on how well the position is tied into the existing terrain. This defense is most effective when it is employed in terrain that provides cover and concealment to both the strongpoint and its supporting obstacles. Mountainous, forested, or urban terrain can be adapted easily to a strongpoint defense. Strongpoints placed in more open terrain require the use of reverse slopes or of extensive camouflage and deception efforts. This defensive mission may require the platoon to—

- Hold key or decisive terrain critical to the company or battalion scheme of maneuver.
- Provide a pivot to maneuver friendly forces.
- Block an avenue of approach.
- Canalize the enemy into one or more engagement areas.

### CHARACTERISTICS OF THE STRONGPOINT DEFENSE

8-123. The prime characteristic of an effective strongpoint is that it cannot be easily overrun or bypassed. It must be positioned and constructed so the enemy knows he can reduce it only at the risk of heavy casualties and significant loss of materiel. He must be forced to employ massive artillery concentrations and dismounted Infantry assaults in his attack, so the strongpoint must be tied in with existing obstacles and positioned to afford 360-degree security in observation and fighting positions.

### **TECHNIQUES AND CONSIDERATIONS**

8-124. A variety of techniques and considerations are involved in establishing and executing the strongpoint defense, including considerations for displacement and withdrawal from the strongpoint.

8-125. The platoon leader begins by determining the projected size of the strongpoint. He does this through assessing the number of weapons systems and individual Soldiers available to conduct the assigned mission, and by assessing the terrain on which the platoon will fight. He must remember that although a strongpoint is usually tied into a company defense and flanked by other defensive positions, it must afford 360-degree observation and firing capability.

8-126. The platoon leader must ensure that the layout and organization of the strongpoint maximizes the capabilities of the platoon's personnel strength and weapons systems without sacrificing the security of the position. Platoon options range from positioning CCMS outside the strongpoint (with the rifle squads occupying fighting positions inside it), to placing all assets within the position. From the standpoint of planning and terrain management, placing everything in the strongpoint is the most difficult option and potentially the most dangerous because of the danger of enemy encirclement.



Figure 8-13. Defending a strongpoint.

8-127. In laying out the strongpoint, the platoon leader designates weapon positions that support the company defensive plan. Once these primary positions have been identified, he continues around the strongpoint, siting weapons on other possible enemy avenues of approach and engagement areas until he has the ability to orient effectively in any direction. The fighting positions facing the company engagement area may be along one line of defense or staggered in depth along multiple lines of defense (if the terrain supports positions in depth).

8-128. The platoon's reserve may be comprised of a fire team, squad, or combination of the two. The platoon leader must know how to influence the strongpoint battle by employing his reserve. He has several employment options including reinforcing a portion of the defensive line or counterattacking along a portion of the perimeter against an identified enemy main effort.

8-129. The platoon leader should identify routes or axes that will allow the reserve to move to any area of the strongpoint. He should then designate positions the reserve can occupy once they arrive. These routes and positions should afford sufficient cover to allow the reserve to reach its destination without enemy interdiction. The platoon leader should give special consideration to developing a direct fire plan for each contingency involving the reserve. The key area of focus may be a plan for isolating an enemy penetration of the perimeter. Rehearsals cover actions the platoon takes if it has to fall back to a second defensive perimeter, including direct fire control measures necessary to accomplish the maneuver. FPF may be employed to assist in the displacement.

8-130. Engineers support strongpoint defense by reinforcing the existing obstacles. Priorities of work will vary depending on the factors of METT-TC, especially the enemy situation and time available. For example, the first 12 hours of the strongpoint construction effort may be critical for emplacing countermobility obstacles and survivability positions, and command and control bunkers. If the focus of engineer support is to make the terrain approaching the strongpoint impassable, the battalion engineer effort must be adjusted accordingly.

8-131. The battalion obstacle plan provides the foundation for the company strongpoint obstacle plan. The commander or platoon leader determines how he can integrate protective obstacles (designed to defeat dismounted enemy Infantry assaults) into the overall countermobility plan. If adequate time and resources are available, he should plan to reinforce existing obstacles using field-expedient demolitions.

8-132. Once the enemy has identified the strongpoint, he will mass all the fires he can spare against the position. To safeguard his rifle squads, the platoon leader must arrange for construction of overhead cover for individual fighting positions. If the strongpoint is in a more open position (such as on a reverse slope), he may also plan for interconnecting trenchlines. This will allow Soldiers to move between positions without exposure to direct and indirect fires. If time permits, these crawl trenches can be improved to fighting trenches or standard trenches.

# **DEFEND A PERIMETER**

8-133. A perimeter defense allows the defending force to orient in all directions. In terms of weapons emplacement, direct and indirect fire integration, and reserve employment, a platoon leader conducting a perimeter defense should consider the same factors as for a strongpoint operation.

8-134. The perimeter defense allows only limited maneuver and limited depth. Therefore, the platoon may be called on to execute a perimeter defense under the following conditions:

- Holding critical terrain in areas where the defense is not tied in with adjacent units.
- Defending in place when it has been bypassed and isolated by the enemy.
- Conducting occupation of an independent assembly area or reserve position.
- Preparing a strongpoint.
- Concentrating fires in two or more adjacent avenues of approach.
- Defending fire support or engineer assets.
- Occupying a patrol base.

8-135. The major advantage of the perimeter defense (Figure 8-14) is the platoon's ability to defend against an enemy avenue of approach. A perimeter defense differs from other defenses in that—

- The trace of the platoon is circular or triangular rather than linear.
- Unoccupied areas between squads are smaller.
- Flanks of squads are bent back to conform to the plan.
- The bulk of combat power is on the perimeter.
- The reserve is centrally located.



Figure 8-14. Perimeter defense with rifle team in reserve.

**NOTE:** A variant of the perimeter defense is the use of the shaped defense, which allows two of the platoon's squads to orient at any particular time on any of three engagement areas.

# **DEFEND A REVERSE SLOPE**

8-136. The platoon leader's analysis of the factors of METT-TC often leads him to employ his forces on the reverse slope (Figure 8-15). If the rifle squads are on a mounted avenue of approach, they must be concealed from enemy direct fire systems. This means rifle squads should be protected from enemy tanks and observed artillery fire.



Figure 8-15. Reverse-slope defense options.

8-137. The majority of a rifle squad's weapons are not effective beyond 600 meters. To reduce or prevent destruction from enemy direct and indirect fires beyond that range, a reverse-slope defense should be considered. Using this defense conflicts to some extent with the need for maximum observation forward to adjust fire on the enemy, and the need for long-range fields of fire for CCMS. In some cases it may be necessary for these weapons systems to be deployed forward while the rifle squads remain on the reverse slope. CCMS gunners withdraw from their forward positions as the battle closes. Their new positions should be selected to take advantage of their long-range fires, and to get enfilade shots from the depth and flanks of the reverse slope.

8-138. The nature of the enemy may change at night, and the rifle squads may occupy the forward slope or crest to deny it to the enemy. In these circumstances, it is feasible for a rifle squad to have an alternate night position forward. The area forward of the topographical crest must be controlled by friendly forces through aggressive patrolling and both active and passive reconnaissance measures. The platoon should use all of its night vision devices to deny the enemy undetected entry into the platoon's defensive area. CCMS are key parts of the platoon's surveillance plan and should be positioned to take advantage of their thermal sights. The enemy must not be allowed to take advantage of reduced visibility to advance to a position of advantage without being taken under fire.

8-139. The company commander normally makes the decision to position platoons on a reverse slope. He does so when—

- He wishes to surprise or deceive the enemy about the location of his defensive position.
- Forward slope positions might be made weak by direct enemy fire.
- Occupation of the forward slope is not essential to achieve depth and mutual support.
- Fields of fire on the reverse slope are better or at least sufficient to accomplish the mission.
- Forward slope positions are likely to be the target of concentrated enemy artillery fires.

8-140. The following are advantages of a reverse-slope defense:

- Enemy observation of the position, including the use of surveillance devices and radar, is masked.
- Enemy cannot engage the position with direct fire without coming within range of the defender's weapons.
- Enemy indirect fire will be less effective because of the lack of observation.
- Enemy may be deceived about the strength and location of positions.
- Defenders have more freedom of movement out of sight of the enemy.
- 8-141. Disadvantages of a reverse-slope defense include the following:
  - Observation to the front is limited.
  - Fields of fire to the front are reduced.
  - Enemy can begin his assault from a closer range.

8-142. Obstacles are necessary in a reverse-slope defense. Because the enemy will be engaged at close range, obstacles should prevent the enemy from closing too quickly and overrunning the positions. Obstacles on the reverse slope can halt, disrupt, and expose enemy vehicles to flank antitank fires. Obstacles should also block the enemy to facilitate the platoon's disengagement.

### SECTION VII — FIGHTING AND SURVIVABILITY POSITIONS

8-143. The defensive plan normally requires building fighting positions. Fighting positions protect Soldiers by providing cover from direct and indirect fires and by providing concealment through positioning and proper camouflage. Because the battlefield conditions confronting Infantrymen are never standard, there is no single standard fighting position design that fits all tactical situations.

8-144. Soldiers prepare fighting positions even when there is little or no time before contact with the enemy is expected (Figure 8-16). They locate them behind whatever cover is available and where they can engage the enemy. The position should give frontal protection from direct fire while allowing fire to the front and oblique. Occupying a position quickly does not mean there is no digging. Soldiers can dig initial positions in only a few minutes. A fighting position just 18 inches deep will provide a significant amount of protection from direct fire and even fragmentation. All positions are built by stages. The initial fighting position construction can be improved over time to a more elaborate position.



Figure 8-16. Initial fighting position.

# PRINCIPLES

8-145. Leaders follow three basic principles to effectively and efficiently prepare fighting positions: site positions to best engage the enemy, prepare positions by stages, and inspect all positions. The leader's responsibilities include the following:

- Protect troops.
- Plan and select fighting position sites.
- Supervise construction.
- Inspect periodically.
- Depending on assets, request technical advice from engineers as required.
- Improve and maintain unit survivability continuously.
- Determine if there is a need to build the overhead cover up or down.

### SITE POSITIONS TO BEST ENGAGE THE ENEMY

8-146. The most important aspect of a fighting position is that it must be tactically well positioned. Leaders must be able to look at the terrain and quickly identify the best location for fighting positions. Good positions allow—

- Soldiers to engage the intended enemy element within their assigned sectors of fire.
- Soldiers to fire out to the maximum effective range of their weapons with maximum grazing fire and minimal dead space.
- Grenadiers to be placed in positions to cover dead space.

8-147. Leaders must ensure fighting positions provide mutually supporting, interlocking fires. This allows them to cover the platoon's sector from multiple positions. When possible, they site positions behind natural cover and in easily camouflaged locations. The enemy must not be able to identify the position until it is too late and he has been effectively engaged.

### **PREPARE POSITIONS BY STAGES**

8-148. Leaders must ensure their Soldiers understand when and how to prepare fighting positions based on the situation. Soldiers prepare fighting positions every time the platoon makes an extended halt. Half of the platoon digs in while the other half maintains security. Soldiers prepare positions in stages and a leader inspects the position at each stage before the Soldiers move to the next stage. When expecting an immediate enemy attack, Infantrymen dig stage 1 fighting positions. As time becomes available, these defensive positions are continually improved, enlarged, and strengthened.

### Stage 1

8-149. The platoon leader checks fields of fire from the prone position. For a stage 1 position (Figure 8-17) the Soldiers—

- Emplace sector stakes.
- Stake the primary sector.
- Position grazing fire log or sandbag between the sector stakes.
- Place the aiming stake(s) to allow limited visibility engagement of a specific target.
- Trace the outline of the position on the ground.
- Clear the fields of fire for both the primary and secondary sectors of fire.
- Ensure the leader inspects the position before they move to stage 2.

8-34



Figure 8-17. Stage 1, preparation of a fighting position.

### Stage 2

8-150. Soldiers prepare retaining walls (Figure 8-18) for the parapets. They ensure that-

- There is a minimum distance (equal to the width of one helmet) from the edge of the hole to the beginning of the front, flank, and rear cover.
- The cover to the front consists of sandbags (or logs), two to three high, and for a two-Soldier position, about the length of two M302 rifles (about 7 feet).
- The cover to the flanks is the same height, but only one M203 rifle length (about 3.5 feet).
- The cover to the rear is one sandbag high and one M203 long (about 3.5 feet).
- If logs are used, they must be held firmly in place with strong stakes.
- The leader inspects the retaining wall before they begin stage 3.



Figure 8-18. Stage 2, preparation of a fighting position.

#### Stage 3

8-151. Soldiers dig the position and throw dirt forward of the parapet retaining walls and pack it down hard (Figure 8-19). They—

- Dig the position armpit (of the tallest Soldier) deep.
- Fill the parapets in order of front, flanks, and rear.
- Camouflage the parapets and the entire position.
- Dig grenade sumps and slope the floor toward them.
- Dig storage areas for two rucksacks into the rear wall if needed.
- Ensure the leader inspects the work.



Figure 8-19. Stage 3, preparation of a fighting position.

#### Stage 4

8-152. In stage 4, Soldiers prepare the overhead cover (Figure 8-20). At times, the terrain will accommodate the construction of a position with overhead cover that protects Soldiers from indirect fire fragmentation while allowing them to return fire. Sometimes, especially on open terrain, this is not possible, and the entire position must be built below ground level. Although this type of position offers excellent protection and concealment to Soldiers, it limits their ability to return fire from within a protected area. To prepare overhead cover, Soldiers—

- Always provide solid lateral support. They build the support with 4- to 6-inch logs on top of each other running the full length of the front and rear cover.
- Place five or six logs 4 to 6 inches in diameter and two M203s long (about 7 feet) over the center of the position, resting them on the overhead cover support, not on the sandbags.
- Place waterproofing (plastic bags, ponchos) on top of these logs.
- Put a minimum of 18 inches of packed dirt or sandbags on top of the logs.
- Camouflage the overhead cover and the bottom of the position.
- Ensure the leader inspects the position.


Figure 8-20. Stage 4, preparation of a fighting position.

### **INSPECT ALL POSITIONS**

8-153. Leaders must ensure their Soldiers build fighting positions that are both effective and safe. An improperly sited position cannot be used and an improperly constructed position is a danger to its occupants. Leaders should inspect the progress of the fighting position at each stage in its preparation.

# FIGHTING POSITION MATERIALS

8-154. Sometimes Soldiers must construct fighting positions using only the basic tools and materials they can carry or find in the local area such as entrenching tools, sandbags, and locally cut timber. At other times, significant amounts of Class IV construction materials and heavier digging tools may be available (Table 8-1).

Wall Revetment	Stand Alone Positions
<ul><li>Sheet metal</li><li>Corrugated sheet metal</li></ul>	<ul><li> Prefabricated concrete catch basins</li><li> Military vans</li></ul>
<ul> <li>Plastic sheeting</li> <li>Plywood</li> <li>Air mat panels</li> <li>Air Force air load pallets</li> </ul> Overhead Cover Stringers <ul> <li>Single pickets</li> <li>Double pickets</li> <li>Railroad rails</li> <li>"I" beams</li> </ul>	<ul> <li>Shipping containers</li> <li>Large diameter pipe/culvert</li> <li>Steel water tanks</li> <li>Vehicle hulks</li> <li>Wall Construction (Building Up)</li> <li>55-gallon drums filled with sand</li> <li>Shipping boxes/packing material</li> <li>Expended artillery shells filled with sand</li> <li>Prefabricated concrete panels</li> </ul>
<ul> <li>2-inch diameter pipe</li> <li>Timbers (2"x 4", 4"x 4", and larger)</li> <li>Reinforced concrete beams</li> <li>55-gallon drums cut in half</li> <li>Culverts cut in half</li> <li>Pre-cast concrete panels 6-8 inches thick</li> <li>Airfield panels</li> </ul>	<ul> <li>Prefabricated concrete parters</li> <li>Prefabricated concrete traffic barriers</li> <li>Sand grid material</li> </ul>
Aiming Stakes	Limiting Stakes
2-foot pickets	2-foot pickets
Wooden tent poles	Wooden tent poles
	Filled sandbags

 Table 8-1. Examples of field-expedient fighting position materials.

**NOTE:** Regardless of the position design, the type of construction materials, the tools available, or the terrain, all fighting positions must incorporate sound engineering construction principles. Unless it is constructed properly, a fighting position can easily collapse and crush or bury the Soldiers within. FM 5-103, *Survivability*, and FM 5-34, *Engineer Field Data*, provide excellent information on these principles. Additionally, GTA 05-08-001, *Survivability Positions, and* GTA 07-06-001, *Fighting Position Construction--Infantry Leader's Reference Card*, contain detailed information in easy-to-use formats.

# **TYPES OF FIGHTING POSITIONS**

8-155. There are many different types of fighting positions. The number of occupants; types of weapons; tools, materials, and time available; and terrain dictate the type of position.

8-156. The do's and don'ts of fighting position construction are listed in Table 8-2.

DO	DON'T
<ul> <li>Construct to standard.</li> <li>Ensure adequate material is available.</li> <li>Dig down as much as possible.</li> <li>Maintain, repair, and improve positions continuously.</li> <li>Inspect and test position safety daily, after heavy rain, and after receiving direct and indirect fire.</li> <li>Revet walls in unstable and sandy soil.</li> <li>Interlock sandbags for double wall construction and corners.</li> <li>Check stabilization of wall bases.</li> <li>Fill sandbags about 75% full.</li> <li>Use common sense.</li> <li>Use soil to fill sandbags, fill in any cavities in overhead cover, or spread to blend with surroundings.</li> </ul>	<ul> <li>Fail to supervise.</li> <li>Use sandbags for structural support.</li> <li>Put Soldiers in marginally safe positions.</li> <li>Take short cuts.</li> <li>Build above ground unless absolutely necessary.</li> <li>Forget lateral bracing on stringers.</li> <li>Forget to camouflage.</li> <li>Drive vehicles within 6 feet of a fighting position.</li> </ul>

Table 8-2. Do's and don'ts of fighting position construction.

8-157. Infantry fighting positions are normally are constructed to hold one, two, or three Soldiers. There are special designs adapted for use by machine gun (M240B) and antiarmor (Javelin) teams.

#### **ONE-SOLDIER FIGHTING POSITION**

8-158. Positions that contain a single Soldier are the least desirable, but they are useful in some situations. One-Soldier positions may be required to cover exceptionally wide frontages. They should never be positioned out of sight of adjacent positions. The one-Soldier fighting position (Figure 8-21) should allow the Soldier to fire to the front or to the oblique from behind frontal cover. Advantages and disadvantages to consider when choosing a one-Soldier fighting position include:

- The one-Soldier position allows choices in the use of cover.
- The hole only needs to be large enough for one Soldier and his gear.
- It does not have the security of a two-Soldier position.



Figure 8-21. One-soldier fighting position.

## **Two-Soldier Fighting Position**

8-159. A two-Soldier fighting position (Figure 8-22) is normally more effective than a one-Soldier fighting position. It can be used to provide mutual support to adjacent positions on both flanks and to cover dead space immediately in front of the position. One or both ends of the hole may extend around the sides of the frontal cover. Modifying a position in this way allows both Soldiers to have better observation and greater fields of fire to the front. Also, during rest or eating periods, one Soldier can watch the entire sector while the other sleeps or eats. If they receive fire from their front, they can move back to gain the protection of the frontal cover. By moving about one meter, the Soldiers can continue to find and hit targets to the front during lulls in enemy fire. This type of position—

- Requires more digging.
- Is more difficult to camouflage.
- Provides a better target for enemy hand grenades.



Figure 8-22. Two-soldier fighting position.

## **THREE-SOLDIER FIGHTING POSITION**

8-160. A three-Soldier position has several advantages. A leader can be in each position, making command and control easier. It supports continuous security operations better than other positions. One Soldier can provide security; one can do priority work; and one can rest, eat, or perform maintenance. This allows the priority of work to be completed more quickly than in a one- or two-Soldier position. This position allows the platoon to maintain combat power and security without shifting personnel or leaving positions unmanned. It provides 360-degree observation and fire, and is more difficult for the enemy to destroy because he must kill or suppress three Soldiers.

8-161. When using three-Soldier positions, the leader must consider several things. Either the distance between positions must be increased, or the size of the squad's sector must be reduced. The choice depends mainly on visibility and fields of fire. Because the squad leader is in a fighting position that will most likely be engaged during the battle, he cannot exert personal control over the other two positions. The squad leader controls the battle by—

- Communicating his plans and intent to his squad, including control measures and fire plans.
- Using prearranged signals like flares, whistles, or tracers.
- Positioning key weapons in his fighting position.
- Placing his fighting position so it covers key or decisive terrain.
- Placing his fighting position where his team might be able to act as a reserve.

8-162. The three-Soldier emplacement is a T-position (Figure 8-23). This basic design can be changed by adding or deleting berms, changing the orientation of the T, or shifting the position of the third Soldier to form an L instead of a T. The layout of the position can be oriented to fire on expected enemy avenues of approach from any direction. Berms must not block observation or fire into assigned primary or alternate sectors. Care must be taken to properly support the overhead cover.



Figure 8-23. Three-soldier T-position.

### MACHINE GUN POSITION

8-163. The primary sector of fire is usually to the oblique so a machine gun can fire across the platoon's front. The tripod is used on the side covering the primary sector of fire. The bipod legs are used on the side covering the secondary sectors, the gunner moves only the machine gun. Occasionally a sector of fire that allows firing directly to the front is assigned, but this can reduce the frontal cover for the crew when firing to the oblique (Figure 8-24). For a detailed discussion on the employment of the M240B, refer to Appendix A.



Figure 8-24. Machine gun position.

8-164. After the platoon leader positions the machine gun, he marks the position of the tripod legs and the limits of his sectors of fire. The crew then traces the outline of the hole and the frontal cover (if it must be improved).

8-165. The crew digs firing platforms first to lessen their exposure in case they must fire before completing the position. The platforms must not be so low that the gun cannot be traversed across its entire sector of fire, reducing the profile of the gunner when firing and reducing the frontal cover height.

8-166. After digging the firing platforms, the crew digs the hole. They first place the dirt where frontal cover is needed, digging the hole deep enough (usually armpit deep) to protect them while allowing the gunner to fire with comfort. When the frontal cover is high enough and thick enough, the crew uses the rest of the dirt to build flank and rear cover. Trench-shaped grenade sumps are dug at various points so either Soldier can kick a grenade into one if needed. Overhead cover for a machine gun position is constructed following the steps of stage 4, preparation of a fighting position (see paragraph 8-152f and Figure 8-20).

**NOTE:** In some positions, a machine gun might not have a secondary sector of fire. In this case, dig only half the position.

8-167. For a three-Soldier crew for a machine gun, the ammunition bearer digs a one-Soldier fighting position to the flank that is connected with the gun position by a crawl trench. From this position, the ammunition bearer can see and fire to the front and to the oblique. Usually the ammunition bearer is on the same side as the FPL or PDF. This allows him to see and fire his rifle into the machine gun's secondary sector and to see the gunner and assistant gunner.

## **JAVELIN POSITION**

8-168. The Javelin can be employed from initial or completed positions (Figure 8-25). However, some changes are required. For a detailed discussion on the employment of the Javelin, refer to Appendix B.



Figure 8-25. Javelin position.

8-169. The gunner must keep the weapon at least 6 inches above the ground to allow room for the stabilizing fins to unfold. The hole is only waist deep to allow the gunner to move while tracking to acquire a target. Because the Javelin gunner must be above ground level, the frontal cover should be high enough to hide his head, and, if possible, the backblast of the Javelin. A hole is dug in front of the position for the bipod legs.

8-170. When the Javelin can be fired in one direction only, the position is adjusted to provide cover and concealment from all other directions, and the Javelin should be fired to the oblique. This protects the position from frontal fire and allows engagement of the target from the flank. Both ends of the launcher must extend out over the edges of the hole.

8-171. Overhead cover must be built on the flanks. Cover must be large enough for the gunner, the tracker, and the missiles. Overhead cover that allows fire from underneath can be built if the backblast area is clear. Overhead cover must be well camouflaged.

8-172. The Javelin is an important weapon and is easy to detect. Therefore, selection and preparation of alternate positions have high priority. When preparing an alternate position, the gunner should select and improve a covered route to it so he can move to the position under fire.

## **SLM POSITION**

8-173. The AT4 can be fired from Infantry fighting positions. If the AT4 is to be fired from a two-Soldier position, the gunner must ensure the other Soldier is not in the backblast area. Assume the basic standing position, but instead of stepping forward, lean against the back wall of the fighting position. Ensure that the rear of the weapon extends beyond the rear of the fighting position.

**NOTE:** Leaders must ensure that light antiarmor weapons are positioned so the backblast misses other fighting positions.

# TRENCHES

8-174. When there is time and help available, trenches should be dug to connect fighting positions so Soldiers can move by covered routes. The depth of a trench depends on the type of help and equipment available. Without engineer help, platoons dig crawl trenches (about 3 feet deep by 2 feet wide) (Figure 8-26). With engineer help, they dig standard trenches. The trench should zigzag so the enemy cannot fire down a long section. Platoons normally dig crawl trenches because engineer assets are usually limited. Platoons use crawl trenches to conceal their movement into and within positions. Spoil is placed on parapets, normally on each side of the trench. If the trench runs across a forward slope, all the spoil is placed on the enemy side to make the forward parapet higher. All spoil needs careful concealment from enemy direct observation.



Figure 8-26. Crawl trenches.

# SECTION VIII — RETROGRADE

8-175. The retrograde is a type of defensive operation that involves organized movement away from the enemy. The enemy may force these operations, or a commander may execute them voluntarily. Retrograde operations are transitional and are not considered in isolation. There are three forms of retrograde: withdrawal; delay; and retirement. Platoons may participate in stay-behind missions as part of a withdrawal or delay.

# WITHDRAWAL

8-176. A withdrawal occurs when an element disengages from enemy contact to reposition itself for another mission. A platoon usually conducts a withdrawal as part of a larger force. As part of a company, a platoon may withdraw with the main element (under pressure) or may be used as the detachment left in contact (DLIC) in a withdrawal not under pressure. This information applies whether or not the platoon is under pressure from the enemy. Regardless of employment, the platoon leader conducts his withdrawal IAW his higher commander's guidance. On receipt of the order to conduct a withdrawal, the platoon leader begins preparing his order based on his higher unit's FRAGO. He identifies possible key terrain and routes based on the higher unit's graphics and his map. He formulates and briefs his FRAGO to his squad leaders. When the withdrawal is executed, squad leaders ensure they are moving IAW the platoon leader's plan by monitoring position locations.

## WITHDRAWAL NOT UNDER PRESSURE

8-177. In a withdrawal not under pressure, platoons may serve as or as part of the DLIC. A DLIC is used to deceive the enemy into thinking that the entire force is still in position (Figure 8-27). As the DLIC, the platoon—

- Repositions squads and weapons to cover the company's withdrawal.
- Repositions a squad in each of the other platoon positions to cover the most dangerous avenue of approach into the position.
- Continues the normal operating patterns of the company and simulates company radio traffic.
- Covers the company withdrawal with planned direct and indirect fires if the company is attacked during withdrawal.



• Withdraws by echelon once the company is at its next position.

Figure 8-27. Withdrawal not under pressure.

#### WITHDRAWAL UNDER PRESSURE

8-178. If the platoon cannot prepare and position the security force, it conducts a fighting withdrawal. The platoon disengages from the enemy by maneuvering to the rear. Soldiers and squads not in contact are withdrawn first to provide suppressive fire and to allow Soldiers and squads in contact to withdraw.

#### DISENGAGEMENT

8-179. Based on orders from the battalion commander, the company commander determines how long to retain defensive positions. The company may be required to remain and fight for a certain amount of time, or it may be required to disengage and displace to subsequent positions. A platoon, as part of a company, may disengage to defend from another battle position, prepare for a counterattack, delay, withdraw, or prepare for another mission.

8-180. Fire and movement to the rear is the basic tactic for disengaging. All available fires are used to slow the enemy and allow platoons to move away. The company commander may move his platoons and mass fires to stop or slow the enemy advance before beginning the movement away from the enemy.

8-181. Using bounding overwatch, a base of fire is formed to cover platoons or squads moving away from the enemy. One platoon or squad acts as the base of fire, delaying the enemy with fire or retaining terrain blocking his advance, while other platoons or squads disengage.

8-182. Moving platoons or squads get to their next position and provide a base of fire to cover the rearward movement of forward platoons and squads.

8-183. Fire and movement is repeated until contact with the enemy is broken, the platoons pass through a different base-of-fire force, or the platoons are in position to resume their defense (Figure 8-28).



Figure 8-28. Bounding overwatch to the rear.

8-184. Tactics used by the platoon to disengage from the enemy differ according to the company commander's plan for disengagement, how the platoon is deployed, and other factors. The following actions apply in all cases:

- Maximum use is made of the terrain to cover rearward movement. Squads back out of position and move, attempting to keep a terrain feature between them and the enemy.
- Rapid movement and effective base of fire enhance mobility and are key to a successful disengagement.

8-185. Plans for disengagement may be part of any defensive plan. When squads are separated, there are three ways they can disengage: by teams; by thinning the lines when they must cover their own movement; or simultaneously when they are covered by another force.

#### Teams

8-186. When the rifle platoon must cover their own movement, two squads stay in position as a base of fire (Figure 8-29). The third squad and weapons squad move to the rear (crew served weapons move based on the platoon leader's assessment of when they could best move). The squads left in position must fire into the entire element's sector to cover the movement of the other squad(s). Sectors of fire are adjusted for better coverage of the element's sector. The moving squad may displace by fire teams or as squads because there are two squads covering their movement. The squads left in position sequentially disengage. Movement to the rear by alternating squads continues until contact is broken.



Figure 8-29. Disengagement by squads.

# Thinning the Lines

8-187. When disengaging by thinning the lines, selected Soldiers from each fire team (usually one Soldier from each fighting position) disengage and move to the rear (Figure 8-30). The Soldiers still in position become the base of fire to cover the movement.



Figure 8-30. Disengagement by thinning the lines.

#### Simultaneous

8-188. Squads disengage simultaneously when they are covered by another force. Simultaneous disengagement is favored when rapid movement is critical; when the disengaging element is adequately covered by overwatching fires; when the enemy has not closed on the rifle squad or cannot fire effectively at it; and when there are obstacles to delay the enemy. Simultaneous disengagement is used when rifle squads are able to move before the enemy can close on their position. Other platoons of the company or battalion cover the disengagement with supporting fires.

# DELAY

8-189. In a delay, the enemy slows its forward momentum when the platoon forces him to repeatedly deploy for the attack. After causing the enemy to deploy, the delaying force withdraws to new positions, trading space for time. A delay is typically done to buy time for friendly forces to regain the offensive. It is also done to buy time so friendly forces can establish an effective defense, or to determine enemy intentions. Inflicting casualties on the enemy is normally secondary to slowing the enemy approach. As part of a company or larger operation, the platoon can expect to be tasked as a reserve, security force, or part of the main body. The squads or sections and platoons disengage from the enemy as described in a withdrawal under pressure (see paragraph 8-176) and move directly to their next position and defend again. The squads and platoons slow the advance of the enemy by causing casualties and equipment losses by employing—

- Ambushes.
- Snipers.
- Obstacles.
- Minefields (including phony minefields).
- Artillery and mortar fire.

8-190. A common control measure used in these missions is the delay line, which is a phase line the enemy is not allowed to cross until a specified date and time. Infantry must carefully consider the mobility difference between themselves and the attacking force, maximizing the use of both terrain and countermobility obstacles. A delay operation terminates when the delaying force conducts a rearward passage of lines through a defending force, the delaying force reaches defensible terrain and transitions to the defense, the advancing enemy force reaches a culminating point and can no longer continue to advance, or the delaying force goes on the offensive.

# **STAY-BEHIND OPERATIONS**

8-191. Stay-behind operations can be used as part of defensive or retrograde operations. In these operations, the commander leaves a unit in position to conduct a specified mission while the remainder of his forces withdraw or retire from an enemy. Stay-behind is inherently risky, and resupply and casualty evacuation are difficult. Conducting stay-behind operations places a premium on Infantry leadership and initiative, and ultimately terminates when the unit conducts a linkup with attacking friendly forces or reenters friendly lines.

### TYPES

8-192. The two types of stay-behind operations are unplanned; and deliberate.

#### Unplanned

8-193. An unplanned stay-behind operation is one in which a unit finds itself cut off from other friendly elements for an indefinite time. In this kind of operation the unit has no specific planning or targets, and must rely on its organic assets.

#### Deliberate

8-194. A deliberate stay-behind operation is one in which a unit plans to operate in an enemy-controlled area as a separate yet cohesive element for a certain amount of time or until a specified event occurs. A deliberate stay-behind operation requires extensive planning. Squads, sections, and platoons conduct this type of operation as part of larger units.

#### PLANNING

8-195. Troop-leading procedures (TLP) apply to stay-behind operations. Planners must pay strict attention to task organization, reconnaissance, and sustainment.

#### Task Organization

8-196. A stay-behind unit includes only the Soldiers and equipment needed for the mission. It provides its own logistics support and security, and must be able to hide easily and move through restrictive terrain.

#### Reconnaissance

8-197. Reconnaissance is most important in a stay-behind operation. Reporting tasks and information requirements can include suitable sites for patrol bases, hide positions, observation posts, caches, water sources, dismounted and mounted avenues of approach, kill zones, engagement areas, and covered and concealed approach routes. The unit may be required to collect intelligence on enemy forces around them.

#### Logistics

8-198. Because the stay-behind unit will not be in physical contact with its supporting unit, supplies of rations, ammunition, radio batteries, water, and medical supplies are cached. Provisions for casualty and EPW evacuation depend on company and battalion plans.

# RETIREMENT

8-199. Retirement is a form of retrograde in which a force not in contact with the enemy, moves away from the enemy. Retiring units organize to fight but do so only in self defense. Retirements are usually not as risky as delays or withdrawals. Retiring units normally road march away from the enemy. Infantry platoons participate in retirements as part of their company and higher headquarters.