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Mechanized Infantry Platoon and Squad (Bradley)

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Preface

This manual provides a doctrinal framework for the Bradley Fighting Vehicle (BFV) equipped Infantry rifle platoon and squads. It addresses the BFV and all variations, rifle platoon and squad combat and noncombat operations, across the spectrum of conflict. Content discussions include principles, tactics, techniques, procedures, terms, and symbols that apply to small unit operations in the operational environment.

This manual is not intended to be a stand-alone publication and is intentionally designed as a companion manual to FM 3-21.8, The Infantry Rifle Platoon and Squad. Many of the subjects covered in FM 3-21.8 are not only mutually applicable to the mechanized platoon and squads but also are nearly identical and need not be republished. Because of this, ATTP 3-21.71 focuses on the unique characteristics and capabilities of the mechanized platoon and squads. Major areas not included or reduced in this manual that are covered in detail in FM 3-21.8 include:

- Movement and maneuver.
- Patrols.
- Chemical, biological, radiological and nuclear (CBRN) operations.
- Employing fires.
- Employment of the dismounted element's weapons.
- Platoon and squad fire planning.
- Troop-leading procedures (TLP).
- Air assault operations.
- Sustainment.
- Urban operations (UO).
- Air defense.
- Improvised explosive devices (IED).
- Composite risk management.
- Obstacle reduction and employment.
- Fratricide avoidance.
- Dismounted fighting positions.
- Sniper operations.

These are basic skills that mechanized small units and their leaders must understand, practice, and execute. Their absence or reduction of information from this manual in no way diminishes their importance. Rather, they are fundamental skills applicable to all Infantry units and leaders.

To fully understand operations of the mechanized rifle platoon and squad, leaders must have an understanding of FM 3-90.1, *Tank and Mechanized Infantry Company Team*, and FM 3-90.5, *Combined Arms Battalion*. The primary audience for this manual comprises the mechanized Infantry rifle platoon leaders, platoon sergeants, and squad and fire team leaders. The secondary audience includes instructors in U.S. Army Training and Doctrine Command (TRADOC) schools, writers of Infantry

training literature, other Infantry leaders and staff officers, and Reserve Officer Training Candidate (ROTC) and military academy instructors.

Leaders should use this manual as a set along with the publications listed in the References. The Summary of Changes lists major changes from the previous edition by chapter and appendix. Although these changes include lessons learned from training and U.S. Army operations all over the world, they are not specific to any particular theater of war. They apply across the entire spectrum of conflict.

This publication applies to the Active Army, the Army National Guard (ARNG)/Army National Guard of the United States (ARNGUS), and the United States Army Reserve (USAR) unless otherwise stated.

The proponent for this publication is the United States Army Training and Doctrine Command. The preparing agency is the U.S. Army Maneuver Center of Excellence (MCoE). You may send comments and recommendations by any means—U.S. mail, e-mail, fax, or telephone—using or following the format of DA Form 2028, *Recommended Changes to Publications and Blank Forms*. Point of contact information follows:

E-mail:	BENN.CATD.DOCTRINE@CONUS.ARMY.MIL
Phone:	COM 706-545-7114 or DSN 835-7114
Fax:	COM 706-545-7500 or DSN 835-7500
U.S. Mail:	Commanding General, MCoE Directorate of Training and Doctrine (DOTD) Doctrine and Collective Training Division ATTN: ATZB-TDD Fort Benning, GA 31905-5410

Unless otherwise stated, whenever the masculine gender is used, both men and women are implied.

Summary of Changes

The following table outlines the major changes in this edition of ATTP 3-21.71.

<table>
<tr><td>Overall</td><td colspan="3">• Incorporated changes and terms based on FM 3-0.
• Deleted references to battlefield operating systems and added references to warfighting functions.
• Reduced content whenever possible by referring to other manuals for details, especially FM 3-21.8.
• Introduced standard chapter format for Infantry small unit publications.</td></tr>
<tr><td>Ch 1</td><td>INTRODUCTION
This is a revision of the old Ch 1. Additions include:
• Operational environment.
• Company team mission organization.
• Warfighting functions.
• The Soldier's rules.
• Every Soldier is a sensor.</td><td>Ch 2</td><td>COMMAND AND CONTROL
This is a revision of the old Ch 2. Additions include:
• Intelligence.
• Platoon-level C2 systems.
• Plans and orders.
• Troop-leading procedures.
• CBRN operations.
• Communications and digital systems.
• TACSOP.</td></tr>
<tr><td>Ch 3</td><td>OFFENSIVE OPERATIONS
This is a revision of the old Ch 4. Additions include:
• Offensive urban operations.
• Battlefield obscuration.
• Mobility and countermobility operations.</td><td>Ch 4</td><td>DEFENSIVE OPERATIONS
This is a revision of old Ch 5. Additions include:
• Withdrawals and delays.
• Defensive urban operations.
• Fighting positions.
• Area security operations.</td></tr>
<tr><td>Ch 5</td><td>STABILITY OPERATIONS
This is a new chapter that discusses:
• Fundamentals.
• Rules of engagement.
• Stability intelligence support at the company and below level.
• Platoon and squad tasks.</td><td>Ch 6</td><td>Other Tactical Operations
This is a revision of the old Ch 7. Additions include:
• Patrols and patrolling.
• Reconnaissance.
• Linkup operations.
• Passage of lines.
• Air assault operations.
• Security.
• Checkpoints, roadblocks, observation posts.</td></tr>
</table>

Ch 7	**DIRECT FIRE CONTROLS** This is a new chapter that incorporates the old Appendix A and discusses: • Direct fire control. • Range cards and sector sketches.	**Ch 8**	**FIRES** This is a new chapter that incorporates old Ch 8 Section I and discusses: • Planning and coordination. • Indirect fire support. • Call for fire. • Close air support and Naval surface fires.
Ch 9	**SUSTAINMENT** This is a revision of the old Ch 9. Additions include: • Soldier's load. • Maintenance. • Force health protection. • Resupply operations. • Casualty and detained persons procedures.	**App A**	**TANK CONSIDERATIONS** This is a new appendix that discusses: • Organization. • Capabilities, limitations and characteristics. • Roles of the tank platoon. • Sustainment. • Safety.

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Chapter 1

Introduction

The mechanized Infantry platoon and squad, equipped with Bradley fighting vehicles (BFV), is a versatile force that can conduct operations across the full spectrum of conflict. The BFV-equipped platoon has enhanced capabilities to conduct operations with greater lethality, survivability, sustainability, and mobility.

Among other things, the mechanized Infantry relies on the principles of war and the dynamics of combat power to operate effectively. This chapter discusses the doctrine that is the basis for platoon and squad tactics, techniques, procedures, and drills. It also discusses the skills and individual responsibilities required of leaders and Soldiers at the small unit level.

SECTION I – TEXT REFERENCES

1-1. Some of the warfighting fundamentals are common among all Infantry units. Refer to the referenced sections of FM 3-21.8 or other referenced publications for details on these subjects.

1-2. Table 1-1 consolidates the references to additional information.

Table 1-1. Guide for subjects referenced in text

Subject	***References***
Operational Environment	FM 3-0
M240B and Javelin Employment	FM 3-21.8
Individual Responsibilities	FM 3-21.8
Carbine FM	3-22.9
Grenade Launcher	FM 3-22.31
Squad Automatic Weapon	FM 3-21.8
Javelin Close Combat Missile	FM 3-22.37
Shoulder Launched Munitions	FM 3-23.25
Medium Machine Gun	FM 3-22.68
BFV Weapons Systems	FM 3-20.21
Warfighting Functions	FM 3-21.8
Soldier Combat Skills	FM 3-21.75
Soldier Surveillance and Reconnaissance	FM 2-91.6
DIDEA Process	FM 3-20.21

SECTION II – OPERATIONAL ENVIRONMENT

1-3. United States forces engage in periods of prolonged confrontation among states, nonstates, and individuals willing to use violence to achieve their political and ideological ends. To be effective, the Soldier must understand the operational environment that shapes the conflict.

1-4. The operational environment is a composite of the conditions, circumstances, and influences that affect the employment of the mechanized platoon and bear on tactical decisions. It includes all enemy, friendly, and neutral systems across the spectrum of conflict. It also includes an understanding of the physical environment, the state of governance, technology, local resources, and the culture of the local population relevant to a specific operation. (See FM 3-0 for details.)

THREATS

1-5. Threats are nation-states, organizations, people, groups, conditions, or natural phenomena able to damage or destroy life, vital resources, or institutions. Adversaries may use the following threats or a combination of these threats to achieve the desired effect against the United States: The four kinds of threats are--

- Traditional.
- Irregular.
- Catastrophic.
- Disruptive.

MISSION VARIABLES

1-6. The operational environment for each operation is different, and it evolves as each operation progresses. Army forces use operational variables to understand and analyze the broad environment in which they are conducting operations. They use mission variables to focus analysis on specific elements of the environment that apply to their mission.

1-7. Mission variables are those aspects of the operational environment that directly affect a mission. The categories of relevant information that commanders use for mission analysis at the tactical level are the following mission variables: mission, enemy, terrain and weather, troops and support available, time available and civil considerations (METT-TC). Commanders and leaders view all the factors of METT-TC in terms of their impact on mission accomplishment. (See Chapter 2 for details.)

SECTION III – COMBINED ARMS BATTALION

1-8. The mechanized Infantry platoon operates within larger organizations, such as the combined arms battalion (CAB). The CAB is part of the heavy brigade combat team (HBCT). The CAB is optimized for high-tempo offensive operations against conventional and unconventional forces in mixed and open terrain. In addition, it is highly capable in defensive operations, urban operations, screen

missions, and most stability operations. The CAB combines the efforts of its Armor and mechanized Infantry companies to execute tactical missions. CABs are an essential part of the Army's principal formation for conducting sustainable combined arms and close combat land operations.

1-9. The CAB is built around two mechanized Infantry companies and two Armor companies. Besides the maneuver companies and battalion staff, the CAB organization includes the following:

- A reconnaissance platoon with three tracked and five wheeled reconnaissance vehicles.
- A heavy mortar platoon with four 120-mm mortars.
- A sniper squad.
- A medical platoon.
- An attached forward support company for sustainment.
- Other attachments as required.

ARMOR COMPANY

1-10. The tank company is organized, equipped, and trained to fight pure or as a task organized company team. The tank company consists of a headquarters (HQ) and three tank platoons. The company HQ consists of the commanding officer, executive officer, first sergeant, and supply section. The company HQ is equipped with two tanks, a M113A2/A3 armored personnel carrier, and wheeled vehicles for command and control (C2) and sustainment. A maintenance section from the forward support company is normally attached to the tank company. A medic team, normally attached from the battalion medical platoon, travels in a medic armored personnel carrier.

1-11. A tank platoon consists of four main battle tanks organized into two sections, with two tanks in each section. Section leaders are the platoon leader, who is the tank commander of the vehicle designated as Tank 1 and the platoon sergeant, who is the tank commander of Tank 4. Tank 2 is the wingman in the platoon leader's section, and Tank 3 is the wingman in the platoon sergeant's section (see Figure 1-1).

COMPANY TEAM

1-12. The CAB commander usually task organizes his companies as teams to accomplish the battalion's mission. The company team is an organization that routinely includes a combination of two or more tank and mechanized Infantry platoons and may include other maneuver elements (Figures 1-2 and 1-3). Effective application of the company team as a combined arms force can capitalize on the strengths of the team while minimizing its respective limitations.

1-13. The tank or mechanized Infantry company team has an organic supply section. In addition, it is normally task organized with the following attachments:

- A field maintenance team from the forward support company maintenance platoon to perform on-system repairs of combat vehicles.
- Senior company medic, platoon medics (mechanized Infantry platoon only), and an armored ambulance M113 with crew from the battalion medical platoon.
- Fire support team and forward observers (FO) to the platoons.
- Other possible attachments to the company may include a—
  - Heavy mortar section.
  - Reconnaissance section.
  - Sniper team.
  - Combat engineer squad.
  - Explosive ordnance disposal team.
- Counterintelligence, civil affairs, and linguistic support teams during some stability and civil support operations.

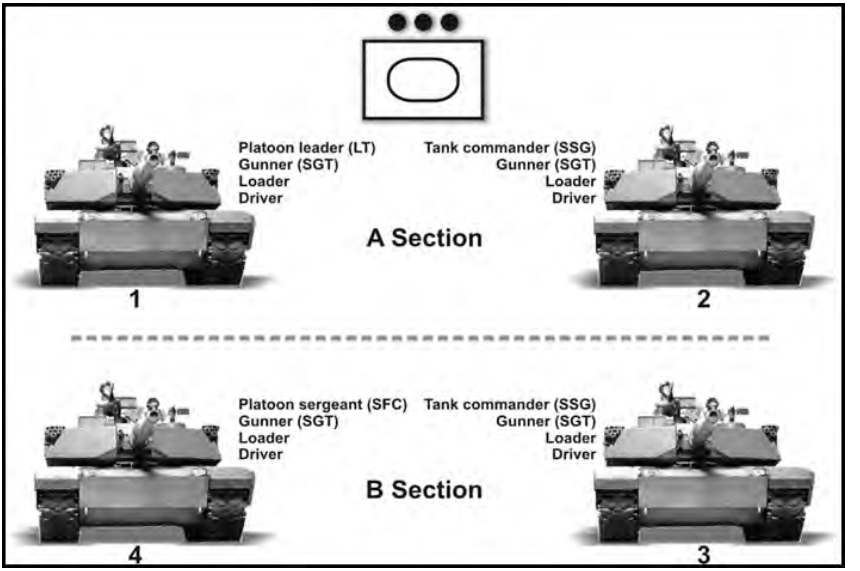

Figure 1-1. Tank platoon

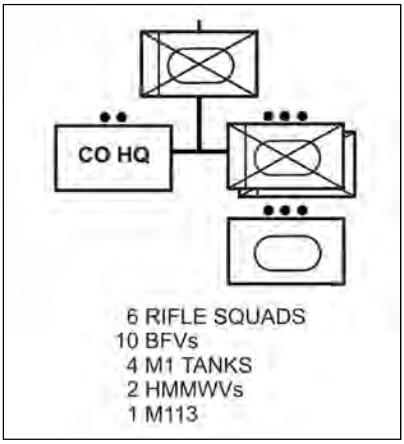

Figure 1-2. Bradley company team heavy

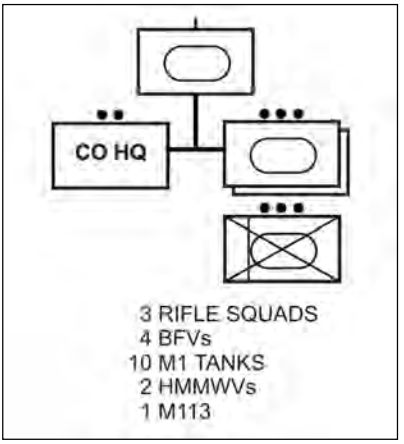

Figure 1-3. Tank company team heavy

SECTION IV – BRADLEY INFANTRY PLATOON AND SQUAD

1-14. Bradley Infantry platoon and squads are a versatile force that can fight mounted, dismounted while being supported by the BFVs, or dismounted and independent of the fighting vehicles. The BFV is an extremely powerful and robust weapons system that enables the mechanized Infantry to find and destroy the enemy at long ranges while the dismounted Infantry, supported by the BFV, can destroy the enemy in close combat.

MISSION

1-15. The mission of the mechanized Infantry is to close with the enemy by means of fire and movement to defeat or capture, or to repel his assault by fire, close combat, or counterattack.

1-16. Despite any technological advances, the only way to gain the advantage in operations is by close combat between ground forces. BFV-equipped mechanized Infantry rifle forces play the following main roles in close combat situations:

- Operate mainly at night or during other periods of natural or induced limited visibility.
- Penetrate and hold existing (natural and man-made) obstacles and difficult terrain as pivots for operational and tactical maneuver.
- Attack over approaches not feasible for armored forces.
- Seize or secure forested and built-up areas.
- Control restrictive routes for use by other forces.
- Conduct operations in the sustainment area.

ORGANIZATION

1-17. The mechanized Infantry rifle platoon is equipped with four BFVs and is divided into two elements: mounted and dismounted. Figure 1-4 depicts the BFV-equipped mechanized Infantry rifle platoon organization. The platoon can fight as two mutually supporting maneuver elements or as two distinct maneuver elements—one mounted and one dismounted. The platoon must prepare to fight in a variety of operational environments. Once the rifle squads have dismounted, the mounted element provides a base of fire for the rifle squads as they close with and destroy the enemy.

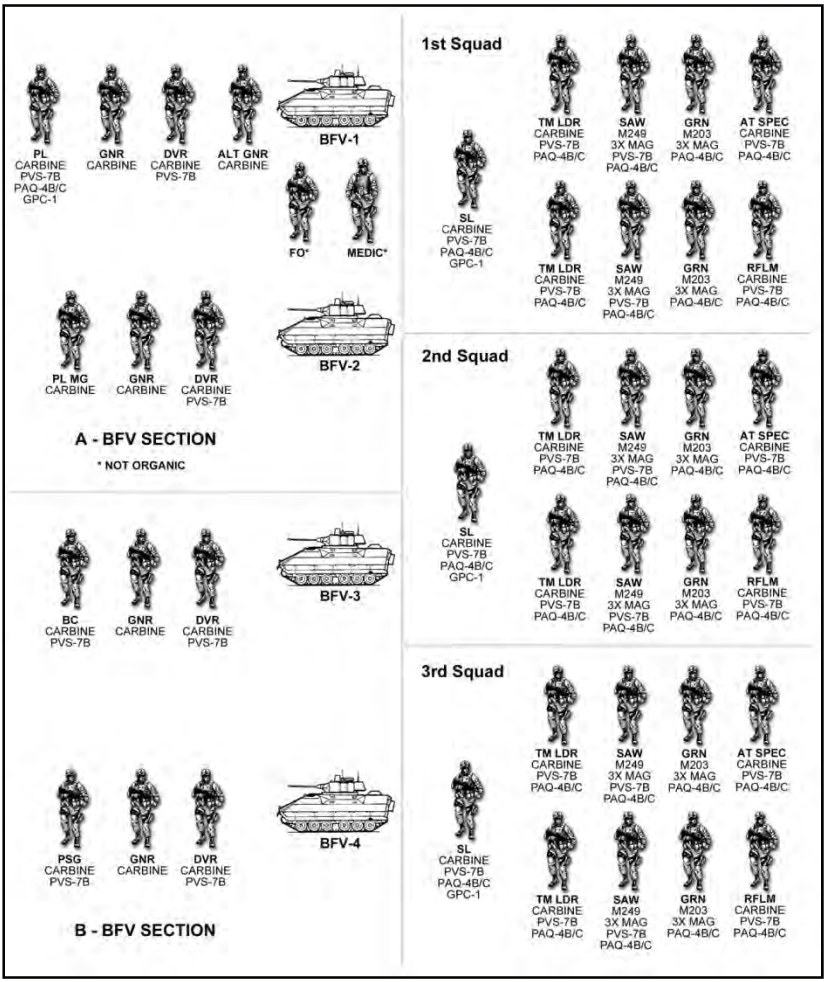

Figure 1-4. Example of platoon organization

MOUNTED ELEMENT

1-18. The mounted element consists of four BFVs that are organized into the following two sections:

- The A section with the platoon leader as the section leader and the second BFV as his wingman.
- The B section with the platoon sergeant as the section leader and the second BFV as his wingman.

DISMOUNTED ELEMENT

1-19. Three nine-man rifle squads make up the platoon's dismounted element. The rifle squads are organized as follows:

- The rifle squad has two four-man fire teams and a squad leader.
- Each fire team consists of a—
  - Fire team leader.
  - Squad automatic weapon (SAW) gunner.
  - Grenadier.
  - Rifleman. One of the riflemen in the fire team is designated and trained as the antiarmor specialist and fires the Javelin close combat munitions. The other rifleman in the squad is the squad's designated marksman.

1-20. Based on the mission, the squad can carry the Javelin command launch unit and missiles as well as a M240B medium machine gun. (See FM 3-21.8 for a discussion of the M240B characteristics and employment of the Javelin.)

RESPONSIBILITIES

1-21. The employment of the BFV by well-trained and proficient Soldiers enhances the platoon's capabilities to conduct operations with greater lethality, survivability, C2, and mobility. (See FM 3-21.8 for further details regarding individual responsibilities.)

PLATOON LEADER

1-22. The platoon leader bears the responsibility for all that the platoon does or fails to do. He is responsible for the tactical employment, collective training, administration, personnel management, and logistics of the platoon. The platoon leader must know each Soldier's capabilities and how to employ the platoon and its weapons. He is personally responsible for positioning and employing all assigned or attached weapons.

1-23. The platoon leader—

- Usually dismounts when the situation causes the platoon to dismount.
- Serves as leader of the A section when mounted.
- Informs the commander of his actions when operating without orders.
- Plans operations with the help of the platoon sergeant, section leaders, squad leaders, and other key personnel.

- Stays abreast of the situation and goes where needed to supervise, issue fragmentary orders, and accomplish the mission.
- Requests from the company team commander any support needed to help the platoon perform its mission.
- Helps the platoon sergeant plan and coordinate sustainment for the platoon.
- Receives on-hand status reports from the platoon sergeant, section leaders, and squad leaders during planning.
- Reviews platoon requirements based on the tactical plan.
- Develops the fire support plan with the platoon sergeant, section leaders, and squad leaders.
- Coordinates the obstacle plan.
- Analyzes tactical situations, disseminates and filters information, and employs the full capabilities of his platoon's equipment (digital or analog) to accomplish the mission.
- Manages C2 information.
- Ensures situation reports are accurately prepared and sent forward to the company team commander.
- Analyzes and disseminates pertinent tactical friendly and enemy updates to subordinates.
- Employs all available assets during limited visibility to designate targets for the direct and indirect fire weapons and for situational updates.
- Monitors his commander's tactical display for friendly position updates, overlay updates, and digital reports.
- Monitors his commander's tactical display to maintain awareness of BFV positions relative to the platoon formation or the dismounted rifle squads (if he remains mounted).
- Ensures the platoon's Bradley commanders use the precision navigation system to enhance navigation.

PLATOON SERGEANT

1-24. The platoon leader places the platoon sergeant in the tactical plan either dismounted or maneuvering the mounted element. The platoon sergeant is the senior noncommissioned officer and most experienced Soldier in the platoon.

1-25. The platoon sergeant—

- Assists and advises the platoon leader.
- Leads the platoon in the absence of the platoon leader.
- Serves as leader of the B section when mounted.
- Supervises the platoon's administration, logistics, and maintenance.
- Supervises individual training.
- Advises the platoon leader on appointments, promotions and reductions, assignments, and discipline of noncommissioned officers and enlisted Soldiers in the platoon.

- Controls the mounted element when the platoon leader dismounts, or dismounts and commands and controls the platoon when necessary (METT-TC dependent).
- Updates or ensures that someone else updates the platoon leader on appropriate reports and forwards any reports needed by company HQ.
- Takes charge of task organized elements in the platoon during tactical operations, including quartering parties, support elements in raids or attacks, and security patrols.
- Serves as a Bradley commander when the platoon operates mounted.
- Monitors the morale, discipline, and health of platoon members.
- Ensures Soldiers maintain all equipment.
- Coordinates and supervises company-directed platoon resupply operations.
- Collects, prepares, and forwards logistic status updates and requests to the company commander.
- Ensures ammunition and supplies are properly and evenly distributed after the platoon consolidates on the objective and while the platoon reorganizes.
- Ensures support supplies are present.
- Directs the platoon's casualty evacuation process during mounted or dismounted operations.
- Maintains platoon strength information, consolidates and forwards the platoon's casualty reports, and receives and orients replacements.
- Receives section and squad leaders' administrative, logistic, and maintenance reports and requests for rations, water, fuel, and ammunition.
- Ensures Soldiers distribute supplies in accordance with the platoon leader's guidance and direction.
- Controls digital reports (information management) during platoon contact to free the platoon leader to maneuver the rifle squads.
- Ensures Soldiers conduct digital precombat inspections during preparation while the platoon leader plans for the upcoming mission.
- Ensures Soldiers understand how to use the precision navigation system when navigating the BFVs.
- Monitors his commander's tactical display to maintain awareness of squad and section positions relative to the platoon and company formation.

PLATOON MASTER GUNNER

1-26. During combat or field exercises, the platoon master gunner—

- Advises the platoon leader and platoon sergeant concerning BFV weapons effects, capabilities, and safety.
- Advises the platoon leader about fire control measures and preparation.

- Serves as the lead technical trainer for the mounted element, under the routine supervision of the platoon sergeant.
- Helps the platoon leader set up the gunnery task for training.

SQUAD LEADER

1-27. The squad leader bears the responsibility for all the squad does or fails to do. The squad leader is a tactical leader and leads by example.

1-28. The squad leader—

- Monitors his squad leader's display, while mounted, for friendly position updates, overly updates, and situation reports.
- Monitors his squad leader's display to maintain awareness of the BFV's position relative to the platoon formation and the terrain.
- Initializes the system.
- Logs on and off the system.
- Sends and receives free text messages and digital overlays.
- Sends or receives messages and overlays to or from another station.

SECTION LEADER

1-29. While mounted, the platoon leader and platoon sergeant are the section leaders. However, in the event that the platoon leader or platoon sergeant must dismount, the senior Bradley commander within each section becomes the section leader, assisting and advising the platoon leader in the employment of the mounted section.

1-30. The section leader is responsible for—

- Tactically employing and maintaining the BFVs within the section and individual training of the section's personnel.
- Monitoring his commander's tactical display for vehicle and section position relative to the platoon formation, digital overlays, and digital reports.
- Navigating correctly, aided by the precision navigation system.
- Sending digital spot reports as requested or when the section makes contact.

BRADLEY COMMANDER

1-31. The platoon leader, platoon sergeant, and the two section leaders serve as the Bradley commander for their BFVs. In the platoon leader's absence, the gunner assumes the responsibilities of the Bradley commander.

1-32. The Bradley commander—

- Creates digital overlays.
- Creates messages (free text or standard format).
- Acquires targets.
- Commands the vehicle relative to the section and platoon.

- Controls vehicle fires.
- Ensures the welfare of the crew.
- Holds the vehicle's position in platoon formations.
- Issues fire commands.
- Lays the gun for deflection.
- Maintains the BFV hull and turret.
- Maintains the BFV weapons systems.
- Monitors the commander's tactical display for vehicle position, digital overlays, and digital reports.
- Navigates correctly.
- Sends situation reports as requested or when the vehicle makes contact.
- Trains Soldiers to use weapons.

BRADLEY GUNNER

1-33. The gunner observes the battlefield to detect enemy targets. The gunner is responsible for—

- Operating the turret weapons as directed by the Bradley commander to engage and destroy targets.
- Serving as Bradley commander when only two men remain in the BFV.
- Bearing the responsibility for performing unit-level maintenance on the turret and its weapons systems.
- Helping with navigation and with radio operation.

BRADLEY DRIVER

1-34. The driver operates the vehicle under the Bradley commander's control. The driver—

- Follows terrain-driving procedures and tries to select hull down positions.
- Helps detect targets and observe rounds fired.
- Helps with navigation by monitoring odometer readings and observing terrain.
- Bears the main responsibility for maintaining the vehicle's automotive (hull) systems.

TEAM LEADER

1-35. Each squad has two fire team leaders, who lead by example. The team leader—

- Monitors his squad leader's display, while mounted, for friendly position updates, overlay updates, and situation reports.
- Monitors his squad leader's display to maintain awareness of the BFV's position relative to the platoon formation and the terrain.
- Creates digital overlays.
- Creates messages (free text or standard format).

- Initializes the system.
- Logs on and log off the system.
- Sends and receives free-text messages and digital overlays.
- Sends or receive messages and overlays to or from another station.

1-36. Team members provide any local security needed. They also provide maintenance support for the BFV. Each team member is equally responsible for the welfare of the squad.

RIFLEMAN

1-37. Each Infantry squad has two riflemen. Each rifleman is designated as an antiarmor specialist or as a designated marksman.

Antiarmor Specialist

1-38. As the designated Javelin and antitank (AT) gunner, the squad antiarmor specialist has a Javelin AT missile system. This weapons system gives the squad, platoon, and company a lethal fire-and-forget, man-portable, top attack antiarmor capability. With it, they can defeat enemy main battle tanks up to 2,000 meters during day, night, and in adverse weather conditions. If required, the squad antiarmor specialist destroys enemy armor threats that might impede the squad or platoon's progress.

Designated Marksman

1-39. The designated marksman functions as a member of the squad under the direction of the squad leader or as designated by the platoon leader. Although he usually functions as a rifleman within one of the fire teams in a rifle squad, the designated marksman is armed with a modified rifle. He is employed at the direction of the fire team leader or squad leader. He is trained to eliminate high-payoff enemy personnel targets (such as enemy automatic rifle teams, AT teams, and snipers) with precision fires.

GRENADIER

1-40. The grenadier has an M203 weapons system, which consists of a carbine with an attached 40-mm grenade launcher.

AUTOMATIC RIFLEMAN

1-41. Each Infantry squad has two automatic weapons. The automatic rifleman mainly uses the M249 SAW.

COMBAT MEDIC

1-42. A combat medic is assigned to each platoon including the company HQ to provide emergency medical treatment. The platoon combat medic is assigned to the battalion medical platoon. The company medic's primary function is to provide Army Health System support, including health service support and force health protection, for the platoon. The treatment performed by the platoon combat medic is

under the supervision of the battalion surgeon or physician assistant and normally works for the first sergeant or platoon sergeants within the unit.

1-43. The duties of the combat medic include—

- Triaging injured, wounded, or ill friendly and enemy personnel for priority of treatment.
- Treating casualties and assisting the litter teams with their evacuation.
- Advising the platoon leader and platoon sergeant on all Army health system matters including the health and physical status of platoon members.
- Overseeing sick call screening for the platoon.
- Requesting and coordinating the evacuation of sick, injured, or wounded personnel under the direction of the platoon sergeant/company first sergeant.
- Assisting with training of company/platoon personnel in first aid and combat lifesaver (CLS) techniques, including enhanced first-aid procedures.
- Requisitioning Class VIII supplies from the brigade support area for the company according to the tactical standing operating procedures (TACSOP).
- Recommending locations for casualty collection points.
- Providing guidance and training to the company's combat lifesavers, as required.
- Monitoring the tactical situation, and anticipating and coordinating health service support requirements and Class VIII resupply as necessary.
- Advising the company team commander and leaders on mass casualty operations.
- Keeping the platoon sergeants/first sergeant informed on the status of casualties, and coordinating with him for additional Army health system requirements.

COMBAT LIFESAVER

1-44. The combat lifesaver is a nonmedical Soldier trained to provide enhanced first aid/lifesaving procedures beyond the level of self aid or buddy aid. The CLS is not intended to take the place of medical personnel. Using specialized training, the CLS can slow deterioration of a wounded Soldier's condition until treatment by medical personnel is possible. Each certified CLS is issued a CLS aid bag. Whenever possible, the platoon leader ensures there is at least one CLS in each fire team.

1-45. The combat lifesaver—

- Ensures that the squad CLS bag, litters, and IVs are properly packed.
- Identifies any Class VIII shortages to the platoon medic.
- Participates in all casualty treatment and litter carry drills.

- Uses enhanced first aid skills in the field until casualties can be evacuated.
- Knows the location of the casualty collection point and the TACSOP for establishing it.
- Possesses the laminated quick reference nine-line medical evacuation (MEDEVAC) card.

FORWARD OBSERVER

1-46. The forward observer, along with a fire support radio telephone operator, is the unit's subject matter expert on indirect fire planning and execution. (See Chapter 8 of this manual for further details.)

WEAPONS

1-47. The Bradley fighting vehicle mechanized dismounted platoon has a variety of direct fire weapons. Currently, it is armed with the following weapons:

CARBINE

1-48. The carbine is used to kill or suppress the enemy and provides close-in fires to secure the squad and crew-served weapons. It is able to mount a variety of accessories to aid in target detection and aiming. Currently, most Soldiers in the BFV platoon are armed with the M4 carbine. The M4 series carbine is a 5.56-mm, magazine-fed, gas-operated, air-cooled, shoulder-fired weapon. It weighs approximately 6.5 pounds unloaded and, with a 30-round magazine, 7.5 pounds loaded. (See FM 3-22.9 for details.)

GRENADE LAUNCHER

1-49. The grenade launcher provides the fire team with a high trajectory, high explosive (HE) capability. It enables the fire team to achieve complementary effects with high trajectory, HE munitions, and the flat trajectory ball ammunition of the team's other weapons. The grenade launcher suppresses and destroys enemy infantry and light armored vehicles, provides smoke to screen and cover his squad's fire and movement, and employs illumination rounds to increase his squad's visibility and mark enemy positions. The current grenade launcher is either the M203 or M320 mounted on the M4 rifle. (See FM 3-22.31 for details.)

SQUAD AUTOMATIC WEAPON

1-50. The squad automatic weapon provides the squad with a high volume of sustained suppressive and lethal fires for area and point targets. It suppresses enemy infantry and fighting positions, destroys enemy automatic rifle and AT teams, and enables the movement of other teams and squads. The squad is currently armed with the M249 SAW. (See FM 3-22.68 for details.)

DESIGNATED MARKSMAN WEAPON

1-51. The designated marksman employs an optically-enhanced, general purpose weapon. He receives training available within the unit's resources to improve the

squad's precision engagement capabilities at short and medium ranges. (See FM 3-21.8 for details.)

JAVELIN CLOSE COMBAT MISSILE

1-52. The Javelin surface attack guided missile can defeat any known armor threat. The Javelin is also effective in destroying bunkers and buildings. It is a fire-and-forget, man-portable, medium antiarmor weapon consisting of a command launch unit and a round. Soldiers can use the Javelin during the day, at night, and during limited visibility conditions because of its sophisticated sights. (See FM 3-22.37 for details.)

SHOULDER-LAUNCHED MUNITIONS

1-53. Shoulder-launched munitions are individual weapons and are effective against light armored vehicles, field fortifications, or other similar targets. They consist of unguided, free flight, fin-stabilized, rocket type cartridges packed in expendable, telescoping launchers (except for the AT4) that also serve as storage containers. These weapons are issued as rounds of ammunition to individual Soldiers in addition to their assigned weapons and the unit's organic antiarmor weapons. (See FM 3-23.25 for details.)

MEDIUM MACHINE GUN

1-54. The medium machine gun provides a heavy volume of close and continuous fire. It can place controlled and accurate fire on targets beyond the ranges of the SAW and individual weapons. The medium machine gun's long-range, close defensive, and final protective fires form an integral part of a unit's defensive fires. The M240B is the Army's current medium machine gun. (See FM 3-22.68 for details.)

CAPABILITIES

1-55. In accomplishing its assigned missions, the platoon employs close combat forces and sustainment assets within its capabilities. The platoon's effectiveness depends on the synergy of its subordinate elements, including its BFVs and the rifle squads. To employ the platoon effectively, the platoon leader capitalizes on its strengths. The BFV-equipped mechanized Infantry platoon can—

- Assault enemy positions.
- Assault with small arms and indirect fires to deliver rifle squads to tactical positions of advantage.
- Use 25-mm cannon and 7.62-mm machine gun fire to effectively suppress or destroy the enemy's infantry.
- Block dismounted avenues of approach.
- Seize and retain key and decisive terrain.
- Clear danger areas and prepare positions for mounted elements.
- Conduct mounted or dismounted patrols and operations in support of security operations.
- Develop the situation through reconnaissance and close combat.

- Establish strongpoints to deny the enemy important terrain or flank positions.
- Infiltrate enemy positions.
- Overwatch and secure tactical obstacles.
- Repel enemy attacks through close combat.
- Conduct assault breaches of obstacles.
- Participate in air assault operations.
- Destroy light armor vehicles using direct fire from the BFV.
- Employ 25-mm cannon fire to fix, suppress, or disrupt the movement of fighting vehicles and antiarmor systems up to 2,500 meters.
- Use tube-launched, optically-tracked, wire-guided (TOW) fires to destroy tanks and fighting vehicles out to 3,750 meters.
- Use Javelin fires to destroy tanks and fighting vehicles out to 2,000 meters.
- Operate in a CBRN environment.
- Participate in stability operations.
- Participate in civil support operations.

LIMITATIONS

1-56. The platoon leader must also understand the limitations of the BFV-equipped mechanized Infantry rifle platoon to effectively employ the platoon. These limitations include the following.

- BFVs are vulnerable to enemy antiarmor fires, attack helicopters, mines, AT guided missiles, and close attack aircraft.
- Rifle squads are vulnerable to small arms and indirect fires when not mounted.
- The foot speed of the dismounted Soldiers may establish the pace of operations.
- The BFV poses a variety of challenges in water-crossing operations. Among other things, the platoon could have difficulty finding adequate fording sites or a bridge with a sufficient weight classification.
- Radio communications may be significantly degraded in built-up areas and other restricted terrain.
- Noise generated by BFVs may prevent them from arriving in an area undetected.

EMPLOYMENT CONSIDERATIONS

1-57. Leaders must consider the following guidelines when employing mechanized Infantry during the full spectrum of operations.

- Squads and platoons fight through enemy contact at the lowest possible level. Upon enemy contact, all Soldiers and leaders must act at once and follow up. Battle drills are standard procedures that help the platoon take immediate action.

- Before they can maneuver, squads or platoons in contact must establish effective suppressive fires and gain fire superiority. If the platoon or squad cannot move under its own fires, the leader must request support from the commander. Once they gain fire superiority, they maneuver against an enemy position. The BFVs suppress the enemy, move to a dismount location (if caught in the open), and dismount the rifle squads. The BFVs quickly build a base of fire for the rifle squads to maneuver.

VEHICLE CAPABILITIES AND LIMITATIONS

1-58. The BFV enhances the platoon's capabilities to conduct operations with greater lethality, survivability, sustainability, and mobility. The C2 information systems also enhance the crew's communication during operations. Because the BFV platoon can transfer more information at every level, leaders and Soldiers must work together to manage the information.

WEAPONS SYSTEMS

1-59. The BFV's four weapons systems include the 25-mm automatic gun, the 7.62-mm coaxial machine gun, the TOW missile launcher system, and two smoke grenade launchers. (See FM 3-20.21 for details.)

LETHALITY

1-60. The BFV features an improved Bradley acquisition system, which adds an improved target acquisition subsystem and missile control subsystem. The improvements also include a second generation, forward-looking infrared (IR) radar; a thermal sight; a target designation function; dual-target tracking; an eye-safe laser range finder; an automatic gun-target adjustment; automatic optical alignment; and "hunter-killer" capability. Second generation forward-looking IR radar allows the Bradley commander or gunner to identify and acquire targets beyond the range of the vehicle's weapons systems. The improved Bradley acquisition system enables the user to acquire, recognize, identify, and automatically track two targets within the same field of view and selected magnification, day or night. The M2A3 BFV can use the 25-mm or 7.62-mm to engage either of two targets appearing in the same field of view and from any aspect, and the TOW while stationary.

SURVIVABILITY

1-61. Equipment on the BFV that helps ensure survivability includes—

- Roof fragmentation protection.
- Mounting capability for reactive armor tiles.
- Aluminum structure with steel appliqué spaced laminate, steel armor, or both.
- Titanium roof armor.
- Ten-Soldier gas particulate filter unit.
- Halon fixed fire extinguisher systems in engine and personnel compartments.
- Portable carbon dioxide fire extinguishers.

CLOSE COMBAT

1-62. Infantry rifle platoons and rifle squads that are equipped with BFVs usually operate as part of a larger force. They benefit from the support of armor, artillery, mortars, close air support, helicopters, air defense, and engineers. They also provide their own suppressive fires either to repel enemy assaults or to support their own maneuver. During close combat, platoon leaders determine how to employ the BFVs by considering the following objective:

- Support the rifle squads with direct fires.
- Provide mobile protection to transport rifle squads to the critical point on the battlefield.
- Suppress or destroy enemy infantry fighting vehicles and other lightly armored vehicles.
- Destroy enemy armor with TOW fires.

1-63. Success in operations hinges on the actions of platoons, sections, and rifle squads in close combat. It also depends on their ability to react to contact; employ suppressive fires; maneuver to an enemy's vulnerable flank; and fight to defeat, destroy, or capture an enemy. For success, the BFV-equipped Infantry rifle platoon relies on the ability of leaders and Soldiers to—

- Use the potential of both the rifle squads and the BFV.
- Operate their weapons with accuracy and deadly effect.
- Outthink, outmaneuver, and outfight the enemy.
- Use terrain to their advantage.

1-64. A warfighting function is a group of tasks and systems (people, organization, information, and processes) united by a common purpose that commanders use to accomplish missions and training objectives (FM 3-0). These warfighting functions replace the battlefield operating systems. (See FM 3-21.8 for details.)

1-65. The mechanized Infantry platoon operates as part of a larger force and some of its combat power originates outside the platoon. This includes the following:

- CAB heavy mortars, the HBCT's fires battalion, and other sources as required provide fires.
- Sustainment is provided through the attached forward maintenance team and the forward support company.
- C2 is performed at the platoon level, as well as higher levels.
- The platoon gathers most of the information, which is analyzed and converted to intelligence at the company and higher levels.

SECTION V – SOLDIER

1-66. The Soldier is the heart of the Infantry platoon and squad. He is trained in individual and collective Infantry skills and is instilled with the Army's warrior ethos and values. He is also a vital part of intelligence gathering.

INDIVIDUAL INFANTRY SKILLS, ETHOS, VALUES, AND RULES

1-67. Every Soldier, from the private enlisted Soldier to the general officer, is first a rifleman. As such, he must be a master of his basic skills: shoot, move, communicate, survive, and sustain. (See FM 3-21.75, STP 21-1-SMCT, and skill levels 2 and 4 of STP 21-24-SMCT.)

1-68. The Warrior Ethos refers to the professional attitudes and beliefs that characterize the American Soldier. It echoes through the precepts of the Code of Conduct and reflects a Soldier's selfless commitment to the Nation, mission, unit, and fellow Soldiers.

1-69. The Army Values consist of the principles, standards, and qualities considered essential for successful Army leaders. They are fundamental to helping Soldiers make the right decision in any situation. The Army's core values are loyalty, duty, respect, selfless service, honor, integrity, and personal courage (LDRSHIP).

1-70. The Soldier's Rules in AR 350-1 stress the importance of compliance with the law of war, outlining the ethical and lawful conduct required of Soldiers in operations.

SOLDIER SURVEILLANCE AND RECONNAISSANCE

1-71. Soldiers must actively observe details in an area of operations (AO) whether they are directly related to the commander's critical information requirements or not. They must also be competent in reporting their experience, perception, and judgment in a concise, accurate manner. To accommodate this, leaders must create a climate that allows all Soldiers to feel free to report what they see and learn on a mission. (See FM 2-91.6 for details.)

1-72. Information collection is fundamental to Soldier surveillance and reconnaissance. This process involves leaders directing and maximizing the collection of combat intelligence by patrols and Soldiers who understand their vital role as collectors of combat information. Tactical collection includes, but is not limited to, tactical and direct questioning, site exploitation, and reporting.

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Chapter 2

Command and Control

Command and control is the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of a mission. Commanders perform C2 functions through a C2 system (FM 3-0). The purpose of C2 is to implement the commander's will in pursuit of the unit's objective. C2 is both a system and a process. The essential component for both the process and the system is leadership.

SECTION I – TEXT REFERENCES

2-1. Much of the C2 and TLP are common among all Infantry units. Refer to the referenced sections of FM 3-21.8 or other referenced publications for details on these subjects.

2-2. Table 2-1 consolidates the references to additional information.

Table 2-1. Guide for subjects referenced in text

Subject	***References***
Visual Signals	FM 21-60
Intelligence	FM 3-21.8 FM 3-21.75
Combat Orders	FM 5-0
Troop-Procedures FM	5-0
Protection FM	3-21.8
Composite Risk Management	FM 5-19
Fratricide Avoidance	FM 3-21.8
CBRN Operations	FM 3-11
Air Defense	FM 3-21.8

SECTION II – LEADERSHIP

2-3. At the platoon and squad levels, leadership is the most vital component of C2. Leadership means influencing people by providing the following to accomplish a mission:

- Purpose gives Soldiers a reason to accomplish the mission.
- Direction gives Soldiers the means to accomplish the mission.
- Motivation gives Soldiers the will to accomplish the mission.

2-4. Leadership at the platoon and squad levels is direct and done by example. Small unit leaders ensure that their Soldiers understand the current situation and what is expected of them. Platoon and squad leaders instill confidence in their Soldiers through positive leadership and their technical and tactical knowledge.

2-5. To command or control, leaders must communicate with their subordinates. Digital radios represent a significant technical improvement over previous systems. Leaders and Soldiers at every level must ensure they know digital radio procedures and how to link digital systems. Soldiers quickly lose these skills, so leaders must constantly work to maintain them through sustainment training.

SECTION III – COMMUNICATIONS

2-6. The following discussion covers the capabilities, limitations, advantages, and disadvantages of the various means of communications available to the mechanized platoon.

MESSENGERS

2-7. When security conditions, resources, and time permit, the use of messengers is the preferred means of communication for the mechanized platoon. It is the most secure means and is generally very flexible and reliable. Messengers can deliver fire plans, status reports, and various types of messages. If possible, lengthy messages sent by messenger should be written to prevent confusion.

WIRE

2-8. This method of communications is especially effective in static positions. The mechanized platoon may employ a hot loop in defensive positions, observation posts (OP), and assembly areas (AA). Wire is both secure and reliable, but it imposes strict limits on the mobility of the user. This could interfere with unit TLP or other priorities of work.

Note. Wire also can be used on M1 series tanks and BFVs to facilitate communications with dismounted elements working with the unit. Wire is routed from inside the vehicle to an externally mounted phone.

VISUAL SIGNALS

2-9. Visual communications are valuable in identifying friendly forces or transmitting prearranged messages quickly over short distances. Standard hand-and-arm or flag signals work well during periods of good visibility. (See FM 21-60 for details.) Crews can use no-power thermal paper, flashlights, chemical lights, or other devices during periods of limited visibility, but they must exercise extreme care to avoid alerting the enemy to friendly intentions. Pyrotechnic ammunition also can be used for visual signaling. The meaning of these signals must be specified in paragraph five of the operations order (OPORD) or by unit TACSOP.

SOUND SIGNALS

2-10. This form of communications mainly is used to attract attention, transmit prearranged messages, and spread alarms. Sound signals, however, carry only short distances, and their range and clarity are greatly reduced by battle noise. In addition, since they are open to enemy interception, use of sound signals may be restricted for security reasons. They must be kept simple to avoid creating confusion. Pre-arranged meanings for sound signals must be covered in unit TACSOPs and signal operation instructions.

RADIO

2-11. The radio is the mechanized platoon's most flexible and most frequently used means of communications. It can transmit information quickly over long distances with great accuracy. It is also the least secure means, although secure equipment and the ability of single channel ground and airborne radio system (SINCGARS) to hop frequencies provide the mechanized platoon with protection against most enemy direction finding, interception, and jamming capabilities. To maintain effective radio communications, leaders must strictly enforce proper radio discipline and procedures and adhere to the following guidelines:

- Keep radio transmissions short (10 seconds or less); break up longer messages into short transmissions.
- Make clear, concise transmissions.
- When direct radio contact is broken, set up relays or go to high ground.
- Submit initial contact reports immediately, and then send additional information later.
- Prioritize transmissions.

2-12. Platoon leaders usually operate on their specific platoon nets and the company command net, while each platoon sergeant monitors the platoon and company command net. This allows platoon leaders to fight their platoons effectively while platoon sergeants remain responsive to routine traffic. Platoon leaders also must remain responsive to the commander via the company command net; they provide tactical assessments and other critical information to the commander and other platoon leaders as required or requested.

FORCE XXI BATTLE COMMAND BRIGADE AND BELOW

2-13. The Force XXI Battle Command Brigade and Below (FBCB2) is a network of computers, global positioning equipment, and communications systems that provides on-the-move, real time C2 information to units, Soldiers, and leaders. The FBCB2 is for units performing missions at the tactical level (brigade to individual fighting platform). It provides a common database with automated positional friendly information and current operational geometry for friendly and known or suspected enemy forces.

2-14. The FBCB2 is mounted on all the BFVs in the company team. Each vehicle in the platoon is equipped with the four basic components of the FBCB2:

- Global positioning system (GPS) provides precise location, date, and time for reporting real time friendly locations and for generating laser-designated map spots for reporting purposes.
- SINCGARS provides a secure means of transmitting both voice and digital information between units.
- Enhanced position location and reporting system and blue force tracker provide secure digital connection and serve as a router, sending message traffic within the platoon and out to the company and fire support (FS) nets. This routing capability ensures that information is passed even if the chain of command is disrupted by physical separation on the battlefield, casualties, or mechanical failures.
- Lower tactical Internet consists of the monitor, keyboard, mouse, and computing functions provided by the FBCB2 terminal that allow the crew to access the system. The upper tactical Internet consists of a variety of tactical computer systems and communications equipment located primarily at the battalion level and higher.

SECTION IV – MISSION COMMAND

2-15. The mission command method of directing military operations encourages and helps subordinates to act within their superiors' intent. Mission command requires that subordinate elements clearly understand the purpose and the commander's intent (two levels up). This allows them the freedom to respond, with disciplined initiative, to the changing situation without further guidance.

2-16. With mission command, the platoon and squad leaders must adhere to the tenets discussed in this section.

EXPECT UNCERTAINTY

2-17. No plan is executed flawlessly. Dynamic battle conditions, an uncooperative enemy, and the chaos of battle challenge the platoon leader's ability to know what is happening in his immediate AO. Through collected data and information, he must try to understand and envision the evolving battle beyond his personal knowledge and senses. Using all of his personnel, technical, and tactical resources helps the commander develop the situation and reduce uncertainty. Many times, the situation the leader anticipates during the planning phase will change. This requires flexible, dynamic leadership during the execution of current operations.

REDUCE LEADER INTERVENTION

2-18. Control stifles initiative. When Soldiers expect the platoon or squad leader to make every decision or initiate every action, they may become reluctant to act. To counter this tendency, the platoon leader must plan and direct operations in a manner that requires minimum intervention. The platoon leader must operate on the

principle that trained subordinates with a clear understanding of the mission will accomplish the task.

OPTIMIZE PLANNING TIME FOR SUBORDINATES

2-19. The platoon leader must ensure that the timelines he develops for mission planning and preparation provides adequate troop leading time for the subordinate elements. A good rule of thumb for leaders is to allocate one-third of the time available for his planning and two-thirds for his subordinate's planning.

ALLOW MAXIMUM FREEDOM OF ACTION FOR SUBORDINATES

2-20. Soldiers win battles. Their leaders can only place them in a position where they can seize the opportunity to do so. Given the expected battlefield conditions, leaders at every level must avoid unnecessary limits on their Soldiers' freedom of action. The leader at the decisive point must have the knowledge, training, and freedom to make the correct choice in support of the battalion and company team commander's intent. This concept must be emphasized at every opportunity and at every level of leadership.

ENCOURAGE INITIATIVE AND CROSS TALK

2-21. Effective leaders encourage subordinates to exercise initiative. Subordinate leaders and Soldiers who are not in leadership positions often are reluctant to recognize that a situation calls for them to accept responsibility and step forward. A good leader encourages initiative and input from anyone with an understanding of the situation. Leaders can set the conditions for initiative by guiding others in thinking through problems for themselves.

2-22. Problem solving involving direct coordination between subordinate elements is critical to mission command. This cross talk enables subordinates, who may have a better understanding of the problem because of their location or experience, to assess the situation and develop an effective course of action (COA).

LEAD WELL FORWARD

2-23. The platoon or squad leader positions himself where he can best employ his unit and make critical decisions to influence the outcome of the fight. He normally chooses a position with the main effort. This way, he can control his elements while supporting or drawing resources from the main effort as needed. From his forward position, he can use all of the available technology and personal resources to "see" the battlefield. In addition to visual observation, intelligence resources also include radio reports and, if available, information provided via FBCB2. The platoon sergeant positions himself where he can accomplish his tasks best and where he is able to assume command of the platoon rapidly when needed.

MAINTAIN THE COMMON OPERATIONAL PICTURE

2-24. An accurate and current common operational picture is a key tool for the platoon and squad leaders. It identifies friendly locations, suspected or confirmed

enemy positions, obstacles, and other information vital to the success of a mission. The same common operational picture is displayed to subordinates, superiors, and adjacent units. However, platoon and squad leaders have to understand that the common operational picture is only as accurate as the data fed into it. It might not identify all enemy positions or, especially, friendly units that are not equipped with FBCB2.

Note. The platoon and squad leaders must understand the situation and commander's intent two levels higher than their own and the locations and the missions of neighboring friendly units. However, they must know the real time battlefield situation in detail for his immediate higher level.

SECTION V – INTELLIGENCE

2-25. Traditionally, the lowest command with a formal intelligence staff element is the battalion. However, the need for current and actionable intelligence has driven the creation of intelligence cells at the company level and has placed emphasis on information gathering at the platoon and squad levels. The company intelligence section is a key intelligence source for platoons and squads. (See Chapter 5 of this manual and FM 3-21.8 for details.)

2-26. Leaders require information about the enemy and the AO to execute missions effectively. These products assist a leader in visualizing his AO, organizing his forces, and controlling operations to achieve the desired tactical objectives or end state. They also support force protection by alerting the commander to emerging threats and assisting in security operations.

2-27. The mechanized platoon and squads support the intelligence related operations of the company and higher elements by—

- Accurately reporting enemy or suspicious activity.
- Conducting reconnaissance patrols.
- Establishing observation posts.

2-28. Perhaps the most valuable source of intelligence is the individual Soldier. Soldiers and leaders learn to understand that intelligence development is everyone's responsibility through Every Soldier is a Sensor training.

2-29. See FM 3-21.75 for information on the following:

- Resources.
- Report levels.
- Size, activity, location, unit, time, and equipment format.
- Handling and reporting of the enemy.
- Operation security.
- Observation techniques.

SECTION VI – PLANS AND ORDERS

2-30. Plans are the basis for any mission. To develop his plan, the platoon or squad leader summarizes how best to accomplish his mission within the scope of the superior's intent two levels up. The platoon leader uses TLP to turn the concept into a fully developed plan and to prepare a concise, accurate OPORD. He assigns additional tasks for subordinate elements, allocates available resources, and establishes priorities to make the concept work. The platoon leader's plan should be uncomplicated, robust, and well understood by his subordinates.

2-31. Combat operations are fast-paced and time is very limited for planning at the platoon and squad levels. Planning based on incomplete information is standard. The initial warning order to the platoon leader may include the order to move out and the location of the line of departure (LD). The platoon and squad leaders have to make the most of the time available. Parallel planning, where two or more command echelons (such as the company and platoon) are planning for the same mission at nearly the same time, reduces planning time. The small unit leader makes and revises plans as information comes in and keeps his subordinates informed through the use of warning orders.

2-32. Mechanized platoon and squad leaders receive orders and graphics through FBCB2, saving valuable time. However, mechanized units often operate with friendly forces or U.S. units that do not have FBCB2 and must, therefore, transmit orders verbally. Also, platoon leaders may have to receive orders during a face-to-face meeting with their commander. The advantages of giving orders face-to-face include the immediate correction of any questions or discrepancies and a better understanding of the commander's intent by subordinates. Platoon leaders may often personally give orders to their squad leaders while providing orders and graphics electronically.

COMBAT ORDERS

2-33. Combat orders are the means by which the platoon leader receives and transmits information, from the earliest notification that an operation will occur through the final steps of execution. Warning orders, operation orders, and fragmentary orders are absolutely critical to mission success. In a tactical situation, the platoon leader and subordinate leaders work with combat orders on a daily basis, and they must have precise knowledge of the correct format for each type of order. Combat orders at the platoon and squad levels are preferably given orally or as a preformatted message in FBCB2, as a free text message in FBCB2, as a slide show briefing, or so on. They follow the five paragraph field order format as follows:

- **Clear**. State the order so that it can be readily understood.
- **Assign responsibilit y**. Establish command and support relationships, and fix responsibilities to carry out the plan according to the commander's intent.
- **Complete as possible** . State the mission and provide the necessary information required for execution. Provide control measures that are complete and understandable and that maximize subordinate's initiative.

However, platoons must plan to execute missions with incomplete information.

- **Coordinated**. Provide for direct contact among subordinates; fit together all combat power elements for synchronized, decisive action; impose only necessary control measures; and help identify and provide for mutual support requirements while minimizing the unit's exposure to fratricide.
- **Flexible**. Leave room for adjustments that unexpected operating conditions might cause. The best plan provides for the most flexibility.
- **Timely**. Send plans and orders to subordinates in time to allow them to adequately plan and prepare their own actions. When time is short, accept less than optimum products in the interest of timeliness.

WARNING ORDER

2-34. A warning order (WARNO) is a preliminary notice of an order or action that is to follow. Platoon leaders alert their platoons by using a WARNO during the planning of an operation, and issue additional WARNOs as additional information and guidance become available. The WARNO follows the five paragraph field order format, but the amount of detail it includes depends on the information and time available when the order is issued, and the information subordinate leaders need for proper planning and preparation. A WARNO clearly informs the recipient of what tasks he must do now as well as possible future tasks. However, a WARNO does not authorize execution other than planning unless specifically stated. (See FM 5-0 for details.) WARNOs:

- Allow subordinates to begin to plan their missions.
- Provide a planning timeline.
- Provide a priority for rehearsals.

OPERATION ORDER

2-35. An operation order (OPORD) is a directive issued by a leader to his subordinates in order to affect the coordinated execution of a specific operation. The leader uses the five-paragraph format to organize the information, ensure completeness, and help subordinate leaders understand and follow the order. The platoon and squad leaders normally give the OPORD orally. Whenever possible, the leader gives the order while observing the objective or uses a terrain model or sketch along with a map to explain the order. (See FM 5-0 for details.) When giving the OPORD, the platoon leader should consider the time available and whether to give the order to his squad leaders or to the whole platoon.

FRAGMENTARY ORDER

2-36. A fragmentary order (FRAGO) provides timely changes of existing orders to subordinates while providing notification to higher and adjacent commands. At the platoon and squad levels, a FRAGO is usually an oral brief or written order that addresses only those parts of the original OPORD that have changed. The OPORD format and all of the five-paragraph headings are used. After each heading, state

either "no change" or the new information. This ensures that recipients know they have received the entire FRAGO. (See FM 5-0 for details.) A FRAGO may—

- Communicate changes in the enemy or friendly situation.
- Change tasks of subordinate elements based on changes in the situation.
- Implement timely changes to existing orders.
- Provide pertinent extracts from more detailed orders.
- Provide interim instructions until the leader can develop a detailed order.

TACTICAL STANDING OPERATING PROCEDURES

2-37. A tactical standing operating procedure (TACSOP) is a set of instructions that standardize unit-level techniques and procedures without loss of effectiveness. TACSOPs detail how to apply tactics, techniques, and procedures within a specific unit. They also may be adapted in a given location for a given threat. TACSOPs standardize routine or recurring actions not needing the commander's personal involvement. However, TACSOPs also may include rare or abnormal events that could cause mission failure. TACSOPs regulate operations within and among C2 system elements.

SECTION VII – TROOP-LEADING PROCEDURES

2-38. Troop-leading procedures (TLP) begin when the platoon leader receives the first indication of an upcoming mission and they continue throughout the operational process (plan, prepare, execute, and assess). TLP comprise a sequence of actions that help platoon leaders use available time effectively and efficiently to issue orders and execute tactical operations. TLP are not a hard and fast set of rules, but rather a guide that leaders must consistently apply with the situation and the experience of the platoon leader and his subordinate leaders.

2-39. The following information concerning TLP assumes that the platoon leader will plan in a time-constrained environment. As such, the suggested techniques are oriented to help a platoon leader quickly develop and issue a combat order. (See FM 5-0 for the doctrinal TLP step details.) The following are the steps of the TLP:

- Step 1. Receive the mission.
- Step 2. Issue a WARNO.
- Step 3. Make a tentative plan.
- Step 4. Start necessary movement.
- Step 5. Reconnoiter.
- Step 6. Complete the plan.
- Step 7. Issue the complete order.
- Step 8. Supervise.

2-40. The tasks involved in some actions (such as initiating movement, issuing the WARNO, and conducting reconnaissance) may recur several times during the process. The last action (activities associated with supervising and refining the plan)

occurs continuously throughout TLP. The squad leader conducts TLP the same way as the platoon leader.

SECTION VIII – PROTECTION

2-41. Protection is the preservation of the Bradley platoon's and squad's fighting potential so leaders can apply maximum force at the decisive time and place. (See FM 3-21.8 for details on protection.)

COMPOSITE RISK MANAGMENT

2-42. Composite risk management is the Army's primary decisionmaking process for identifying hazards and controlling risks across the full spectrum of Army missions, functions, operations, and activities. Risk, or the potential for risk, is always present. The primary objective of composite risk management is not to remove but to mitigate risk. During combat operations, units conduct composite risk management to enable them to win the battle quickly and decisively with minimal losses. (See FM 5-19 for details.)

FRATRICIDE AVOIDANCE

2-43. Fratricide is the employment of friendly weapons with the intent of killing the enemy or destroying his equipment that results in the unforeseen and unintentional death or injury of friendly personnel. Fratricide avoidance is the platoon leader's responsibility. (See FM 3-21.8 for details.)

EFFECTS

2-44. The effects of fratricide within a unit can be devastating to morale, good order, and discipline. Fratricide causes unacceptable losses and typically affects the unit's ability to survive and function, increasing the risk of mission failure.

CAUSES

2-45. Leaders must identify any of the factors that may affect their units and then strive to eliminate or correct them. The primary causes of fratricide are—

- Inability to maintain situational awareness.
- Vague or unclear C2.
- Poor target recognition and acquisition.
- Failures in the direct fire control plan.
- Failures in land navigation.
- Failures in combat identification.
- Inadequate control measures.
- Failures in reporting and communications.
- Individual and weapons errors.
- Battlefield hazards.
- Reliance on instruments.

CHEMICAL, BIOLOGIC, RADIOLOGIC, AND NUCLEAR OPERATIONS

2-46. Chemical, biological, radiologic and nuclear weapons cause casualties, destroy or disable equipment, restrict the use of terrain, and disrupt operations. The enemy may use CBRN weapons separately or in combination with conventional weapons. The mechanized Infantry platoon must be prepared to operate in a CBRN-contaminated battlefield without permitting it to degrade the platoon's overall effectiveness. (See FM 3-11 for details on CBRN operations.)

2-47. These are the four types of CBRN weapons. They are as follows:

- Chemical agents are intended for use in military operations to kill, seriously injure, or incapacitate mainly through physiological effects. The term excludes riot control agents when used for law enforcement purposes, herbicides, smoke, and flames.
- Biological agents are microorganisms that cause disease in personnel, plants, or animals, or cause the deterioration of material.
- Radiological dispersal devices are improvised assemblies or processes, other than nuclear explosive devices, designed to disseminate radioactive material to cause destruction, damage, or injury.
- Nuclear weapons are complete assemblies capable of producing the intended nuclear reaction and energy release.

2-48. Protection of the force requires adherence to the following principles of CBRN defense:

- Contamination avoidance.
- Protection.
- Decontamination.

AIR DEFENSE

2-49. The focus of an air defense plan is on likely air avenues of approach for enemy fixed-wing, helicopters, and unmanned aircraft systems (UAS), which may or may not correspond with the enemy's ground (mounted and dismounted) avenues of approach. A platoon leader likely will not emplace air defense assets; however, he must be aware that the commander may employ air defense assets near his defensive position.

2-50. The mechanized Infantry platoon's best air defense is passive. If the enemy aircraft cannot identify the platoon, it cannot damage it. The mechanized Infantry platoon is especially vulnerable to attacks from the air during mounted movement. While moving, the vehicle can generate dust clouds when traversing dry and open areas. High vegetation, such as trees, may provide adequate concealment from enemy aircraft. If an air threat exists, the mechanized Infantry platoon should mount air guards and be prepared to engage with the remote weapons system. Enemy UASs may be an unusual threat because they can observe and adjust fires onto the mechanized Infantry platoon while being difficult to identify. They also have the potential to carry weapons or to be used as weapons themselves.

2-51. Air defense assets may operate in and around the mechanized Infantry platoon x. However, the platoon is unlikely to receive task organized air defense assets. Therefore, the platoon must be prepared to conduct its own active air defense operations. The mechanized Infantry platoon relies on disciplined, passive air defense measures, and the ability to engage aerial platforms actively with organic weapons systems. Troops should be familiar with air defense assets, capabilities, operational procedures, and self-defense measures. (See FM 3-21.8 for details on air defense.)

Chapter 3

Offensive Operations

The purpose of offensive operations is to defeat, destroy, or neutralize an enemy force. Offensive operations also are undertaken to secure key terrain, to gain information and intelligence to deprive the enemy of resources, to deceive and divert him, to hold him in position, to disrupt his attack, and to set the conditions for successful future operations. The platoon's ability to mass combat power at the decisive time and place, maintaining the momentum of the attack, is essential for successful offensive operations.

SECTION I – TEXT REFERENCES

3-1. Much of the offensive planning and execution are common among all Infantry units. Refer to the referenced sections of FM 3-21.8 or other referenced publications for details on these subjects.

3-2. Table 3-1 consolidates the references to additional information.

Table 3-1. Guide for subjects referenced in text

Subject	***References***
Characteristics of the Offense	FM 3-21.8
Types of Offensive Operations	FM 3-21.8 FM 3-90
Forms of Maneuver	FM 3-21.8
Offensive Planning Considerations	FM 3-21.8
Sequence of Offensive Operations	FM 3-21.8
Tactical Mission Tasks	FM 3-90
Offensive Tactical Tasks	FM 3-21.8
Dismounted Movement	FM 3-21.8
Countersniper Techniques	FM 3-06.11
Route and Navigational Techniques	FM 3-21.8
Movement and Maneuver with Tanks	FM 3-90.1
Actions on Contact	FM 3-21.8
Special-Purpose Attacks	FM 3-21.8
Movement to Contact	FM 3-21.8
Urban Operations	FM 3-06.11
Obstacle Reduction	FM 90-7

SECTION II – FUNDAMENTALS

3-3. Only through offensive operations can the mechanized platoon fulfill its mission, as stated in Chapter 1, of closing with the enemy by means of fire and movement to defeat or capture, or repelling his assault by fire, close combat, or counterattack. While tactical considerations may call for the platoon to execute defensive operations for a period of time, defeat of the enemy requires a shift to offensive operations. A sound doctrinal foundation during offensive planning assists the platoon leader in capitalizing the tactical flexibility of a mechanized Infantry platoon. To ensure the success of the attack, the mechanized Infantry platoon leader must understand the following fundamentals of offensive operations and apply the troop-leading procedures during the operations process:

CHARACTERISTICS

3-4. Offensive operations are characterized by the following:

- Surprise is achieved by attacking the enemy at a time or place he does not expect or in a manner for which he is unprepared. Unpredictability and boldness, within the scope of the commander's intent, help the platoon gain surprise.
- Concentration is achieved by massing the effects of their weapons systems and rifle squads to achieve a single purpose. Massing effects does not require all elements of the platoon to be collocated; it simply requires the effects of the weapons systems to be applied at the right place and time. Navigation tools, such as GPSs, allow the platoon leader to remain dispersed while retaining the ability to quickly mass the effects of the platoon's weapons systems.
- Tempo is the rate of speed of military action. Controlling or altering that rate is essential for maintaining the initiative. While a fast tempo is preferred, the platoon leader must remember that synchronization sets the stage for successful accomplishment of the platoon's mission. It is more important to move using covered and concealed routes than it is to maintain precise formations and predetermined speeds.
- Audacity is a boldly executed simple plan. Knowledge of the commander's intent one and two levels up allows the platoon leader to take advantage of battlefield opportunities whenever they present themselves. Audacity enhances the effectiveness of the platoon's support for the entire offensive operation.

3-5. See FM 3-21.8 for details regarding characteristics of the offense.

TYPES

3-6. The platoon usually conducts offensive operations as part of a company team or larger element. (See FM 3-21.8 and FM 3-90 for details.) The four types of offensive operations are—

- Movement to contact.
- Attack.

- Exploitation.
- Pursuit.

FORMS OF MANEUVER

3-7. Given the typical sequence for offensive operations, the platoon maneuvers against the enemy in an AO. Maneuver places the enemy at a disadvantage through the application of friendly fires and movement. (See FM 3-21.8 for details). The five forms of maneuver are—

- Envelopment.
- Turning movement.
- Infiltration.
- Penetration.
- Frontal attack.

PLANNING CONSIDERATIONS

3-8. The planning and coordination requirements and procedures for offensive operations are the same for both mechanized and Infantry units. (See FM 3-21.8 for details.) The mechanized platoon leader, however, must consider the following:

- The speed of the Bradley fighting vehicle vs. speed of the dismounted Infantryman.
- The increased firepower of the BFV and supporting weapons.
- The ability to rapidly bring combat power to bear at the decisive point with enhanced communication and coordination capabilities.

SEQUENCE

3-9. As the platoon leader plans for an offensive mission, he generally considers the following sequence of events that apply to many, but not all, offensive operations. (See FM 3-21.8 for details.) The sequences of offensive operations are:

- Assembly area.
- Reconnaissance.
- Movement to the line of departure.
- Maneuver.
- Deployment.
- Assault.
- Consolidation and reorganization.

TACTICAL MISSION TASKS

3-10. Tactical mission tasks describe the results or effects the commander wants to achieve–the *what* and *why* of a mission statement. The *what* is an effect that is normally measurable. The *why* of a mission statement is the mission's purpose.

3-11. The following paragraphs discuss select tactical mission tasks that a platoon may receive, and that typically are associated with offensive operations.

Note. The situations used in this section are examples only. They are not applicable in every tactical operation, nor are they intended to prescribe any specific method for achieving the purpose of the operation.

BREACH

3-12. A platoon may conduct a breach during an attack to break through or secure a passage through an enemy defense, obstacle, minefield, or fortification. A platoon can participate in a hasty breach or participate as part of a larger unit during the conduct of a deliberate breach. A deliberate breach requires a synchronized combined arms operation.

DESTROY

3-13. A platoon destroys an enemy force when it physically renders an enemy force ineffective in combat and until the enemy force is reconstituted. A platoon can destroy an enemy force by:

- Executing an ambush where the entire enemy element is in the kill zone.
- Using surprise direct and indirect fire into an engagement area (EA).
- Coordinating direct and indirect fires onto an objective.
- Massing indirect fires onto an unprepared enemy.

SEIZE

3-14. A platoon has seized an objective when it physically occupies it and the enemy can no longer place direct fire on it. A platoon may seize during either offensive or defensive operations. Examples include:

- A platoon seizes the far side of an obstacle as part of a company team breach.
- A platoon seizes a portion of an enemy defense as part of a company team deliberate attack.
- A platoon seizes key terrain to prevent its use by the enemy.

SUPPRESS

3-15. A platoon or squad has suppressed an enemy when the enemy cannot prevent our forces from accomplishing their mission. It is a temporary measure. The platoon can use direct fire or call in indirect lethal and obscuring fires. Units in support positions and in attack by fire positions often use suppressive fires to accomplish their mission. The platoon often uses this during an attack to—

- Allow further movement of friendly forces.
- Isolate an objective by suppressing enemy units in mutually supporting positions.
- Cover the dismounted assault element from the LD to the objective.

OFFENSIVE TACTICAL TASKS

3-16. Tactical mission tasks are not solely offensive in nature. However, there are several tactical tasks that the platoon may perform solely during offensive operations. (See FM 3-21.8 for details.) The offensive tactical tasks are—

- Seize.
- Clear.
- Suppress.
- Support by fire.
- Attack by fire.

SECTION III – MOVEMENT AND MANEUVER

3-17. The movement and maneuver warfighting function consists of the related tasks and systems that move forces to achieve a position of advantage in relation to the enemy. Maneuver is the movement of forces in the operational area in combination with fires to achieve a position of advantage and accomplish the mission. Maneuver is the means by which commanders mass the effects of combat power to achieve surprise, shock, and momentum. Effective maneuver requires close coordination with fires. Movement is necessary to disperse and displace the force as a whole or in part when maneuvering. Both tactical and operational maneuver require logistic support. The movement and maneuver warfighting function includes the following tasks:

- Deploy.
- Maneuver.
- Move.
- Conduct mobility and countermobility operations.
- Conduct direct fire, including close combat attack by Army aviation.
- Occupy an area.

MOVEMENT

3-18. At the platoon and squad levels, the purpose of tactical movement is to move units on the battlefield either to initiate contact with the enemy or to reach a destination when contact with the enemy is likely.

3-19. The platoon must plan, rehearse, and execute a combination of mounted and dismounted movement. The platoon operates with and without vehicle support, so it must understand how to move and maneuver in either tactical situation. Movement during dismounted operations is similar to mounted movement but requires more C2 due to its decentralized nature.

MOVEMENT FORMATIONS

3-20. The platoon leader uses formations to relate one vehicle or squad to another on the ground and to position firepower to support the direct fire plan. He also uses

formations to establish responsibilities for security among vehicles or squads and to aid the execution of battle drills and directed courses of action.

Mounted Movement Formations

3-21. When mounted, the platoon uses the column, wedge, line, echelon, coil, and herringbone formations. The platoon leader determines which formation to use based on METT-TC variables. The platoon leader also tracks his platoon's formation and movement in conjunction with the company's formation. Table 3-2 shows characteristics, advantages and disadvantages of each type of standard mounted formations.

Table 3-2. Mounted movement characteristics

Formation	*Control*	*Fires*		*Security*
		Front/Rear	*Flank*	
Column Easy		Limited	Excellent Overall	Limited
Wedge Easy		Excellent	Good	Good
Line Difficult		Excellent	Poor	Least secure
Echelon Difficult		Excellent	Excellent for echeloned side	Good for echeloned side

Column

3-22. The platoon uses the column when moving fast, when moving through restricted terrain on a specific route, or when it does not expect enemy contact. Usually, each vehicle follows directly behind the vehicle in front of it. However, if the situation dictates, vehicles can disperse laterally to enhance security. This is sometimes referred to as a staggered column. Figure 3-1 shows this type of column movement.

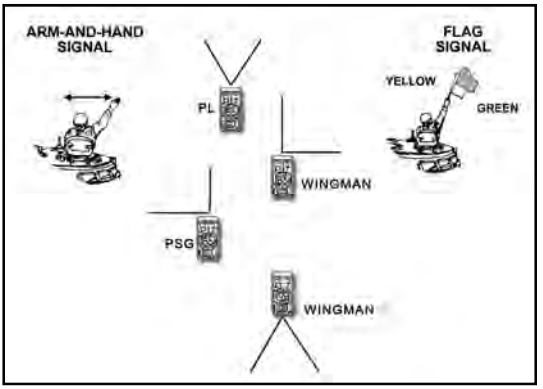

Figure 3-1. Column formation with dispersal for added security (staggered column)

Wedge

3-23. When the enemy situation seems unclear or when contact might occur, leaders often use the wedge formation shown in Figure 3-2. Both the platoon leader and platoon sergeant stay in the center of the formation, with their wingmen located to the rear of and outside of them.

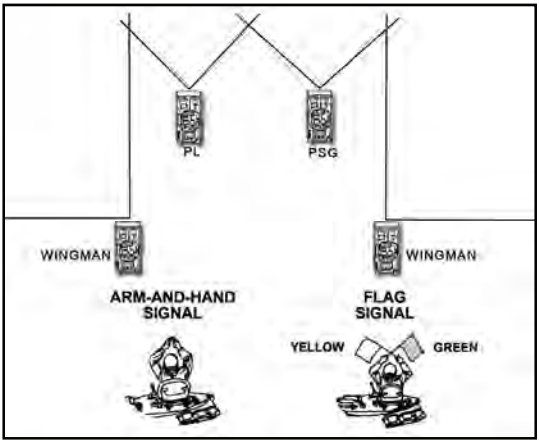

Figure 3-2. Wedge formation

Modified Wedge

3-24. The modified wedge is a compression or flattening of the basic wedge. The fire team uses this formation in close terrain, when traversing dense vegetation, and during limited visibility conditions. It is the easiest to control but lacks flexibility, permits maximum firepower only to the flanks, and is the least secure. The fire team automatically reassumes the wedge formation as soon as it can.

Line

3-25. When assaulting a weakly defended objective, crossing open areas, or occupying a support by fire position, the platoon mainly uses the line formation shown in Figure 3-3. The platoon can use the line formation in the assault to maximize the platoon's firepower and shock effect. The platoon normally uses the line formation when no terrain remains between it and the enemy, when the platoon has suppressed the enemy's AT weapons, or when the platoon is vulnerable to artillery fire and must move fast.

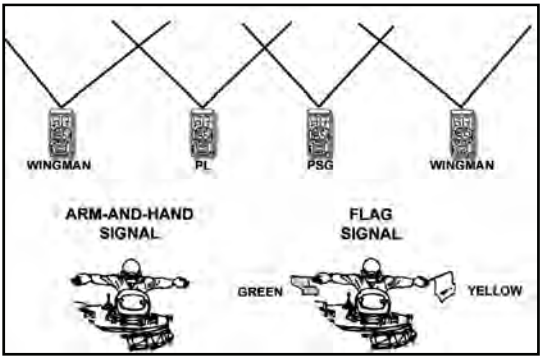

Figure 3-3. Line formation

Echelon

3-26. When the company team wants to maintain security or observation of one flank, and when the platoon does not expect enemy contact, the platoon uses the echelon formation shown in Figure 3-4.

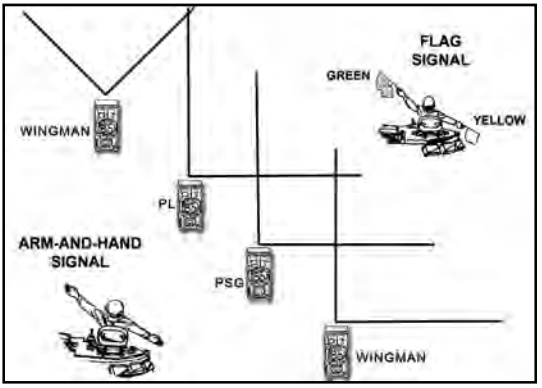

Figure 3-4. Echelon right formation

Coil and Herringbone

3-27. The coil and herringbone are platoon-level formations employed when elements of the company team are stationary and must maintain 360-degree security.

Coil

3-28. The coil (Figure 3-5) is used to provide all-around security and observation when the platoon is stationary. It is also useful for tactical refueling, resupply, and issuing platoon orders. Security is posted to include air guards and dismounted fire teams. The vehicle turrets are manned.

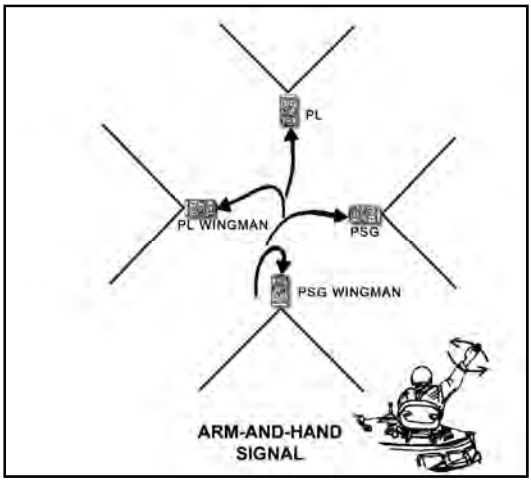

Figure 3-5. Coil formation

Herringbone

3-29. The platoon uses the herringbone to disperse when traveling in column formation (Figure 3-6). They can use it during air attacks or when they must stop during movement. It lets them move to covered and concealed positions off a road or from an open area and set up all-around security without detailed instructions. They reposition the vehicles as needed to take advantage of the best cover, concealment, and fields of fire. Fire team members dismount and establish security.

Dismounted Movement Formations

3-30. See FM 3-21.8 for dismounted movement formations.

MOVEMENT TECHNIQUES

3-31. The term "movement technique" does not refer to the movement of fixed formations; it refers to the fluctuating distances between vehicles, Soldiers, teams, and squads. These distances vary based on METT-TC variables. As the probability of enemy contact increases, the platoon leader adjusts the movement technique to provide greater security. For example, if an enemy update received from the company states that the enemy has moved much closer to the platoon than the platoon leader anticipated, he immediately switches the platoon from traveling overwatch to bounding overwatch.

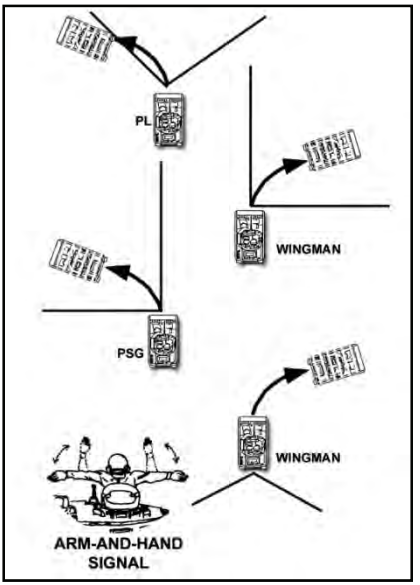

Figure 3-6. Herringbone formation

Mounted Movement Techniques

3-32. The following paragraphs detail movement techniques while mounted. The techniques are traveling, traveling overwatch, and bounding overwatch.

Traveling

3-33. The platoon travels mounted when contact with the enemy is not likely and speed is desired (Figure 3-7). The leader analyzes the latest intelligence on the enemy and determines if contact with the enemy is unlikely. Because units generally move faster when traveling mounted, leaders must remember the increased potential for a break in contact. This means more to the non-digitized platoon than it does to the digitized platoon. Should a break in contact occur:

- The leader or detached element uses GPS aids to reestablish contact with the main body.
- The platoon's main body can use an IR or thermal source to regain visual contact with the element and link it back to the main body.

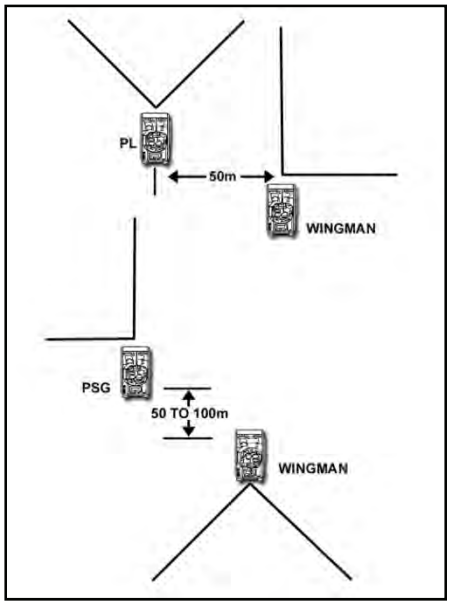

Figure 3-7. Traveling, platoon mounted

Traveling Overwatch

3-34. The platoon leader uses traveling overwatch when he thinks contact could occur (Figure 3-8). He designates one of his subordinate elements to provide security forward of the main body. In some cases, the improved awareness might prompt the security element to increase these distances. Leaders track the movement of forward security elements. They get position updates to ensure the forward security element remains on azimuth and within range of supporting direct fires.

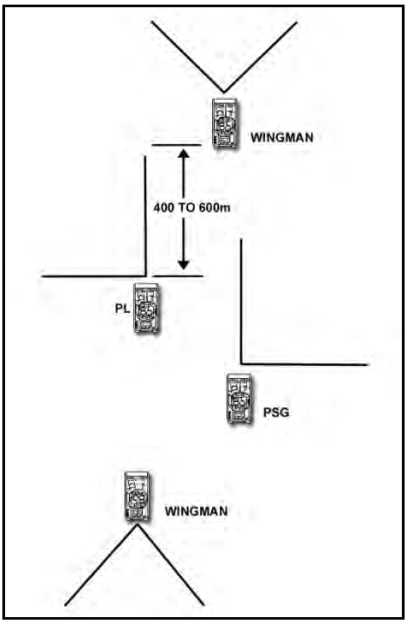

Figure 3-8. Traveling overwatch

Bounding Overwatch

3-35. When the platoon leader expects enemy contact, he uses bounding overwatch. He initiates it based on planning intelligence, surveillance, and reconnaissance received earlier about the enemy situation, and on situation reports received during movement. He bounds elements using successive or alternate bounds (Figure 3-9).

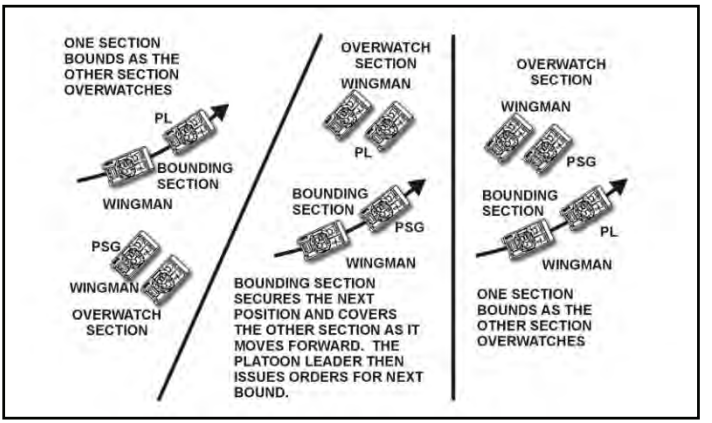

Figure 3-9. Bounding overwatch

3-36. Before bounding, the leader shows the bounding element the location of the next overwatch position. Ideally, the overwatch element keeps the bounding element in sight. Once the bounding element reaches its overwatch position, it signals READY by voice or visual means to the element that overwatched its bound (Figure 3-10). The platoon leader makes sure the bounding element stays within two-thirds of the weapons range of the overwatch element.

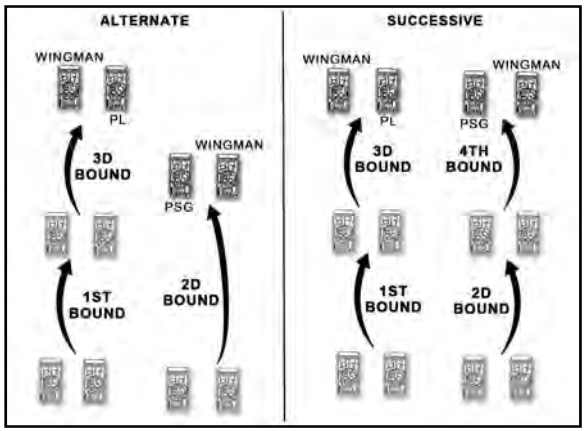

Figure 3-10. Methods of bounding overwatch

Dismounted Movement Techniques

3-37. See FM 3-21.8 for dismounted movement techniques at the fire team, squad, and platoon levels.

ACTIONS AT DANGER AREAS

3-38. When analyzing the terrain during troop-leading procedures, the platoon leader may identify danger areas. A danger area is any area on the route where the terrain exposes the platoon to enemy observation and possibly fire, including large open areas, roads and trails, and bridges or crossing sites over water obstacles. When planning the route, the platoon leader marks the danger areas on his digital concept sketch and overlay.

3-39. The platoon leader plans to avoid danger areas if possible. Navigational aids help, but the platoon and squads should always know their own location when using them. When the unit must cross a danger area, it does so as quickly and as carefully as possible, and covered by a base of fire.

3-40. If time and terrain permit, the platoon should dismount Infantry to reconnoiter the movement route and secure the far side of the open area. However, the distances between covered and concealed positions may make the use of dismounted Infantry impractical. If time constraints prevent the platoon from bypassing a large open area, the platoon uses either traveling overwatch or bounding overwatch to cross the open area. When the platoon has to move across large open areas with limited cover and concealment, the platoon leader should consider the

METT-TC variables and the rules of engagement (ROE) before using indirect or direct fire.

SIMULTANEOUS DISMOUNTED AND MOUNTED MOVEMENT

3-41. Both the mounted and dismounted elements of a mechanized platoon can simultaneously move and provide mutual support. This is often done in urban areas. The considerations for this technique in rural and urban conditions are described in the following paragraphs.

Rural

3-42. The METT-TC variables must be considered when using a movement technique while the Infantry is dismounted in a rural operation. The platoon leader can use different dismounted and mounted configurations in a rural operation, to include the following:

- Dismount the entire platoon.
- Dismount one fire team per squad.
- Dismount the lead BFVs dismounted element.
- Dismount the trail BFVs dismounted element.
- Rotate Infantry during long movements.

3-43. Advantages to using Infantry in the dismounted role are as follows:

- Additional local security.
- Quicker initial reaction to an ambush.
- Quicker implementation of a battle drill.

3-44. Disadvantages to using Infantry in the dismounted role are as follows:

- Slower movement.
- Increased risk to the dismounted Infantry.
- The need to rotate Infantry during long movements.
- The need to remount Infantry if increased speed becomes necessary.

Urban

3-45. When moving in an urban area, squads and platoons use modified variations of the traveling, traveling overwatch, and bounding overwatch movement techniques. The BFVs and tanks, if available, can be in overwatch behind the dismounted elements. The vehicles require dismounted Infantry to provide local security. Dismounted squads and fire teams may use the modified wedge formation to move through restricted terrain or to take advantage of available cover. Leaders must be aware of the three-dimensional aspect of urban terrain, such as streets, buildings, subsurface, and airspace. Squads and platoons are vulnerable to sniper fire; therefore, to prevent excess casualties, countersniper techniques must be well rehearsed and implemented. (See FM 3-06.11 for details on countersniper techniques.)

ROUTE AND NAVIGATIONAL TECHNIQUES

3-46. See FM 3-21.8 for route and navigation selection criteria and navigational techniques.

MANEUVER

3-47. Maneuver begins once a unit has made contact with the enemy. Direct fire is inherent in maneuver, as is close combat. At the Bradley platoon level, maneuver forms the heart of every tactical operation and task. It combines maneuver, direct and indirect fire, and other combat power. The platoon leader maneuvers his mounted element and dismounted squads to close with, gain positional advantage over, and ultimately destroy the enemy.

BASE OF FIRE ELEMENT

3-48. Combining fire and movement requires a base of fire. Some platoon elements (usually a section, the weapons squad, and the BFVs) remain stationary to provide protection for bounding elements by suppressing or destroying enemy elements. The dismounted mechanized platoon also can maneuver while protected by the BFVs in a base of fire position and then establish another base of fire with the weapons or a rifle squad.

3-49. Because maneuver is decentralized in nature, the platoon leader determines from his terrain analysis where and when he wants to establish a base of fire. During actions on contact, he adjusts maneuver plans as needed. Making maneuver decisions normally falls to the leader on the ground, who knows what enemy elements can engage the maneuvering element and what friendly forces can provide the base of fire.

3-50. The base of fire element occupies positions that afford the best possible cover and concealment, a clear view, and clear fields of fire. The platoon leader normally designates a general location for the base of fire, and the element leader selects the exact location. Once in position, the base of fire element suppresses known, likely, or suspected enemy elements while aggressively scanning its assigned AO. It also identifies previously unknown elements and then suppresses them with direct and indirect fires. The base of fire element allows the bounding unit to keep maneuvering so it can retain the initiative even when the enemy can see and fire on it. While maneuvering to or in position, the base of fire element leader is constantly looking for other locations that may provide better support for the maneuvering element.

BOUNDING ELEMENT

3-51. Maneuver is inherently dangerous. Enemy weapons, unknown terrain, and other operational factors all increase the danger. When maneuvering, the platoon leader considers the following:

- The bounding element must take full advantage of whatever cover and concealment the terrain offers.
- Squad members must maintain all-around security at all times and continuously scan their assigned AOs.

- METT-TC variables dictate the length of the bounds. However, the bounding element should never move beyond the range at which the base of fire element can effectively suppress known, likely, or suspected enemy positions. General practice is to limit movement to no more than two-thirds the effective range of the supporting weapons system.
- In severely restricted terrain, the bounding element makes shorter bounds than it would in more open areas.
- The bounding element must focus on its ultimate goal of gaining a positional advantage. Once achieved, the element uses this advantage to destroy the enemy with direct fires and dismounted Infantry assault.

DISMOUNTING INFANTRY

3-52. When to dismount Infantry during maneuver is a critical decision for the mechanized platoon leader. He must balance the vulnerability of his mounted element, the speed and vulnerability of his dismounted Infantry, and the effectiveness of the enemy's fire. The platoon leader can use successive bounds with his dismounted Infantry moving along covered and concealed routes to secure the next base of fire position.

3-53. Considerations for remaining mounted include the following:

- Open terrain.
- Good covered and concealed mounted routes.
- Ineffective antiarmor fires.
- Maneuver distance.

3-54. Considerations for dismounting include the following:

- Good covered and concealed terrain for Infantry.
- Effective antiarmor fire.
- Restricted terrain and obstacles for mounted movement.

DIRECT FIRE SUPPORT

3-55. The mechanized Infantry companies routinely are task organized within the CAB. Bradley companies routinely have a tank platoon attached, or a Bradley platoon routinely can be attached to a tank company. The Bradley platoon may therefore have a tank platoon as a base of fire or become the base of fire while a tank platoon bounds.

3-56. Other units within or outside the HBCT also can be available as a base of fire or bounding element. Today's modular force can be tailored and task organized rapidly to meet tactical requirements. This means that mechanized units can be attached to other brigade combat teams (BCT) for operations. Therefore, the mechanized platoon leader has to be prepared to operate with tanks, Stryker antitank guided missile (ATGM) carriers, ATGM units mounted on high-mobility multipurpose wheeled vehicles, and so on.

PLATOON AS A RESERVE

3-57. The designation of a reserve allows the Infantry commander to retain flexibility during the attack. The commander should be prepared to commit his reserve to exploit success and to continue the attack. The reserve also may repulse counterattacks during consolidation and reorganization. Usually the commander controls the reserve and positions it where it can exploit the success of the attack best. The reserve should not be so close that it loses flexibility during the assault.

3-58. During the attack, the mechanized platoon may be designated the company or battalion reserve. It also may be an on-order or be-prepared mission. The company or battalion commander commits the reserve platoon to reinforce the decisive operation and to maintain the attack's momentum. To exploit the success of the other attacking units, the reserve should attack the enemy from a new direction. Because of the many missions the platoon may be assigned, the platoon leader has to maintain situational awareness, know the missions and tactical plans of the other units, and be familiar with the terrain and enemy situation in the whole AO. It must react quickly and decisively when committed.

3-59. The reserve platoon may be assigned one or more of the following missions:

- Protect the flank and rear of the unit.
- Conduct a counterattack or establish a blocking position.
- Maintain contact with adjacent units.
- Clear a position that has been overrun or bypassed by another unit.
- Establish a support by fire position.
- Assume the mission of an attacking unit.
- Attack from a new direction.
- Protect or assist in the consolidation and reorganization on the objective.

MOVEMENT, MANEUVER WITH TANKS WHILE MOUNTED

3-60. The mechanized platoon often moves and maneuvers with tanks. The platoon usually follows and provides, when required, suppressive fire between the tanks and to their flanks. It stays mounted until it receives effective antiarmor fires that cannot be suppressed. Tank and mechanized Infantry platoons usually maneuver as separate units. (See FM 3-90.1 for details.)

SECTION IV – ACTIONS ON CONTACT

3-61. The four-step process for actions on contact is not a rigid, lockstep response to enemy contact; rather, it provides an orderly framework to help the platoon survive the initial contact. Leaders can follow up with sound decisions and act promptly to complete the operation. The platoon must react instinctively and instantly to the contact. The platoon leader's initial consideration should be how

contact was made (for example, visual, unmanned aircraft system, or direct fire) and if the enemy detected the platoon.

3-62. The platoon leader has to decide what to do. He can have the platoon execute a planned battle drill or plan, or he can recommend to the company team commander that the platoon execute an alternate drill or action. At times, the platoon leader and his platoon must execute more than one of these steps at the same time, which is why the platoon must prepare thoroughly for contact situations. To ensure the platoon works as a team and reacts correctly, yet instinctively, the platoon leader must rehearse battle drills and established unit TACSOP. The four-step process gives the platoon leader a logical and well-organized decisionmaking process for executing actions on contact. (See FM 3-21.8 for details.) The four steps are—

- Deploy and report.
- Evaluate and develop the situation.
- Choose a COA.
- Recommend and execute a COA.

SECTION V – ATTACKS

3-63. Platoons and squads usually conduct an attack as part of a company team. A successful attack requires detailed planning, synchronization, and rehearsals. The company team commander designates platoon objectives with a task and purpose for his assault, support, reserve, and breach elements. To ensure synchronization, all leaders must know the location of their subordinates and adjacent units during the attack.

3-64. As part of a team, the mechanized Infantry platoon in the attack has the advantage over Infantry and Stryker platoons in that it is supported by and can generate massive direct firepower on an objective, and can maneuver while protected by the BFV. However, there are many enemy weapons that can disable and destroy a BFV and dismounted Infantry have an advantage in their ability to use the available cover for concealment, enabling them to disperse.

3-65. Attacks are characterized as hasty or deliberate and also have different forms based on their purposes. The primary difference between them is the extent of planning and preparation conducted by the attacking force, but there is no clear distinction between hasty and deliberate attacks. Also, attacks are either force or terrain oriented, and the enemy can be stationary or moving.

DELIBERATE ATTACK

3-66. A deliberate attack is an offensive action characterized by preplanned coordinated employment of firepower and maneuver to close with and destroy the enemy. It is a fully-coordinated operation that usually is reserved for situations in which the enemy defense cannot be overcome by a hasty attack.

3-67. Platoons and squads conduct deliberate attacks as part of a larger force. The commander may designate separate platoon objectives for his assault, support, reserve, and breach elements, resulting in decentralized execution at all levels.

Mechanized forces can conduct mounted deliberate attacks throughout the operation or dismount at the assault position and maneuver dismounted to the objective while covered by their BFVs. This decision to dismount or remain mounted is METT-TC dependent.

3-68. The platoon leader specifically organizes his platoon to seize the objective. He may organize his platoon into assault, support, and breach elements. One technique is to designate the BFVs as the support element, an Infantry squad as the breach element, and the other two squads as the assault element.

3-69. The following paragraphs discuss the phases of a deliberate attack.

RECONNAISSANCE

3-70. Before a deliberate attack, the platoon and company should gain as much information on the enemy as possible. This information can be gained by the platoon's own information-gathering activities (if it is in contact with the enemy) or from information that higher HQ gathered, collected, and analyzed.

3-71. The CAB or BCT reconnaissance units move forward of friendly forces to provide current, accurate information about the enemy, terrain, weather, and physical resources within a specified AO. This information is then disseminated and provides the basis for the plan of attack.

3-72. If time permits, sniper or reconnaissance teams may be inserted prior to the attack to establish observation posts and provide information on the enemy up to the time of the assault. Sniper teams also can engage key targets at the beginning of and during the assault. They also can call in fires and interdict enemy units trying to reinforce the objective. Attacking forces must use positive control measures to prevent fratricide of these units.

3-73. Unmanned aircraft systems (UAS) also can provide current information on the enemy and real time information on or near the objective. They should not, however, forecast the attack to the enemy.

3-74. The platoon and company should be prepared to conduct a reconnaissance of the objective to confirm, modify, or deny their tentative plan. Platoons should not conduct reconnaissance unless specifically tasked to do so in a consolidated reconnaissance plan. If possible, the company determines the enemy's size, location, disposition, most vulnerable point, and most probable COA. At this point, with permission from CAB, the company should direct the platoon to conduct a reconnaissance patrol. This element conducts a reconnaissance of the terrain along the axis of advance and on the objective. It determines where the enemy is most vulnerable to attack and where the support element can place fires on the objective most effectively. If feasible, the mechanized platoon can conduct mounted reconnaissance patrols and use the vehicles systems to identify enemy positions and obstacles. Otherwise the platoon may conduct dismounted reconnaissance patrols. Alternatively, the patrol can move mounted to an objective rally point and then move dismounted from that point with the mounted element acting as quick reaction force.

3-75. The tentative plan may change as a result of the reconnaissance if the platoon or squad discovers that terrain or enemy dispositions are different than determined earlier in the TLP. The platoon or squad leaders may modify graphic control measures based on the results of the reconnaissance and must send these adjustments as soon as possible.

MOVEMENT TO THE OBJECTIVE

3-76. The attacking force advances to within assault distance of the enemy position under supporting fires using a combination of traveling, traveling overwatch, and bounding overwatch. Platoons advance to successive positions using available cover and concealment. The company team commander may designate support by fire positions to protect friendly forces with suppressive direct fires. As the company maneuvers within its AO, it employs fires to suppress, neutralize, and obscure enemy positions. The platoon conducts mounted movement to a covered and concealed position and then dismounts. When dismounted, the platoon concentrates direct and indirect fires, establishes a base of fire, and maneuvers to maintain the initiative. Movement to the objective can be divided into several parts, which the following paragraphs detail.

Assembly Area to Line of Departure

3-77. The line of departure (LD) is a graphic control measure that is meant to coordinate the departure of attack elements. It is where elements of the attacking force transition to secure movement techniques in preparation for contact with the enemy. The platoon moves forward from the assembly area to the LD usually as part of a company formation, along a planned route. Before leaving the AA, the platoon leader should receive a common operational picture update showing the location of forward and adjacent friendly elements. He also should receive updated enemy locations. The platoon leader then disseminates these reports and digital overlays to each squad leader and BFV commander.

3-78. The platoon leader should have reconnoitered the route to the LD and specifically to the crossing point. During the planning stage, he may plot a waypoint on the LD at the point he intends to cross. The platoon navigates to the waypoint during movement. The move from the AA is timed during the reconnaissance, so the lead section crosses the LD at the time of attack without halting in the attack position. If the platoon must halt in the attack position, it uses a coil or herringbone formation, dismounts Infantry, and takes care of any last minute coordination. Platoons maneuver from the LD to designated support by fire positions, assault positions, or breach or bypass sites.

Line of Departure to Assault Position

3-79. The platoon's assault element moves in the designated formation from the LD to the assault position. The platoon leader plots waypoints to coincide with checkpoints along the route. During movement, he ensures the platoon navigates from command post to command post (or phase line) by using basic land navigation skills supplemented by precision navigation.

3-80. The platoon dismounts at the assault position and the platoon leader orients the squads to the direction of movement. The vehicles then move to a support position. The dismount point is an area that provides cover and concealment from enemy observation and direct fire.

3-81. During limited visibility, the platoon leader relies on the commander's tactical display position updates to keep track of his platoon vehicles. During movement, the platoon communicates primarily by frequency modulation (FM) radio and signals (embedded digital reports) because they are faster for the receiving station to understand and the sending station to prepare.

Assault Position and Dismounted Movement to the Objective

3-82. The assault position is the last covered and concealed position before reaching the objective. Its selection is important. Leaders do not want to dismount their units too far away from the objective and be exposed to enemy fire too long; however, they do not want to dismount too close to the enemy position and be exposed to close and effective enemy fire.

3-83. During the attack, maintaining the momentum is extremely important. Ideally, the platoon's assault element occupies the assault position without the enemy detecting any of the platoon's elements. If at all possible, the platoon does not stop in the assault position but moves smoothly into the assault formation and crosses the probable line of deployment.

3-84. Possible reasons for the platoon halting in the assault position are to prepare breaching or demolition charges, fix bayonets, lift or shift fires, or ensure the synchronization of the attack. Once the assault element moves forward of the assault position, the assault must continue. If stopped or turned back, the assault element could sustain excessive casualties.

3-85. The platoon must continue to suppress the enemy through the use of supporting fires, and must closely control the fires to prevent fratricide. At times, the assault element may mark each Soldier or just the team on the flank nearest the support element. During the assault, the assaulting Soldiers and the support element sustain a high rate of fires to suppress the enemy.

3-86. When the assault element moves to the breach point, the base of fire leader verifies the location of the assault element. The base of fire leader is responsible for tracking the assault element as it assaults the objective. The company team commander shifts or lifts indirect fire when it endangers the advancing Soldiers and coordinates this with the platoon's assaults. As the fire of the platoon's support is masked, the platoon leader shifts or lifts it, or displaces the base of fire and BFVs to a position where they can maintain continuous fire.

Mounted Assault

3-87. The mechanized Infantry platoon may remain in their vehicles and assault the position while mounted under certain conditions. These include:

- The enemy has retreated from the objective.
- Enemy fires are suppressed or are not effective.

- There is no cover or concealment for a dismounted assault.
- Speed is required.

3-88. The decision to remain mounted is critical because the platoon is exposed during the assault to close-in AT fires, mines, and other enemy weapons. A single enemy firing a rocket-propelled grenade can cause a large number of casualties within a struck vehicle. Mounted assault, however, may minimize the platoon's exposure to indirect fires and to small arms direct fires.

3-89. The platoon passes through the assault position and transitions to its mounted assault formation, usually in line. It crosses through the objective and the Infantry dismounts to clear the objective from the rear. The BFVs provide fires to suppress mutually supporting enemy positions and to defeat any immediate counterattacks.

ISOLATING THE OBJECTIVE

3-90. Isolating the objective prevents the enemy from reinforcing the objective and prevents enemy forces on the objective from leaving. It also suppresses the adjacent enemy positions and their ability to disrupt the assault. To isolate an objective, the platoon leader positions units in an attack by fire position.

3-91. The platoon leader may designate the BFVs to isolate the objective because it has significant firepower, protection from small arms fire, and can rapidly displace. Using the mounted element for this purpose allows the dismounted element to conduct the assault on the objective. Security for the vehicles should be considered.

ACTIONS ON THE OBJECTIVE

3-92. The platoon assaults through the objective and establishes temporary defensive positions. If there is an obstacle to breach, the breach element seizes a foothold supported by the support element. The assault element passes through the breach element, exploits the breach, and continues on to seize the objective.

Breach

3-93. Enemy positions often are covered by obstacles that must be breached prior to seizing the objective. (See FM 3-21.8 for details.)

3-94. Prior to the assault, the platoon leader should receive information on the type and extent of any obstacles covering the objective. He plans his assault to avoid these obstacles if possible, but prepares to breach them if he cannot. The platoon leader identifies the exact locations of the breach and the support element, and the conduct of the assault element.

3-95. If the obstacle has not been identified prior to the assault, the platoon leader moves forward and identifies the breach location. The forward observer calls in and adjusts smoke and high explosive fires to obscure and isolate the breach point. The support element suppresses the enemy covering the obstacle and the point of the breach. The breaching squad moves forward, and the squad leader establishes a base of fire with one team to further isolate the breach point. The other fire team makes

the breach, and the assault squad passes through the breach to seize the far side or the objective.

Seize a Foothold

3-96. The supporting elements support the breach element's initial breach of the objective by placing suppressive fires on the most dangerous enemy positions. As the breach is being established, the support element shifts fires to allow the breach element to penetrate the objective and secure the breach site. Visual observation is vital to maintain suppressive fires just forward of the breach and assault elements.

3-97. The supporting elements monitor the forward progress of the assault element and keep shifting suppressive fires at a safe distance in front of them. The weapons squad positions itself to provide continual close-in suppressive fires to aid the actions of the assault element as it moves across the objective. The supporting element lifts and shifts suppressive fires based on the weapons location relative to the assaulting force and its risk estimate distances.

Exploit the Penetration

3-98. Once the breach element has seized the initial foothold on the objective, the assault element may then move through the breach lane to assault the objective. As this occurs, the platoon sergeant closely observes the progress of the breach and assault elements to ensure that momentum is maintained, and that assault and breach elements do not cross in front of the supporting elements.

3-99. The assault element conducts the final assault on the objective, using the appropriate movement techniques based on the amount of fire being received. This is a busy time for all leaders because they have to maintain control and keep their Soldiers moving and returning fire while under fire.

3-100. During the assault, Soldiers minimize their exposure to fire and use any available cover. The assault element must remain generally on line throughout the assault; any Soldiers lagging behind or moving too far ahead endanger others and themselves. At this point, any resistance by the enemy must be overcome by the assault element because the assault element has masked the supporting fires.

CONSOLIDATION AND REORGANIZATION

3-101. Once enemy resistance on the objective has ceased, the platoon quickly consolidates to defend against a possible counterattack and prepares for follow-on missions.

3-102. Consolidation consists of actions taken to secure the objective and defend against an enemy counterattack. The platoon leader ensures the platoon—

- Eliminates enemy resistance on the objective.
- Establishes security beyond the objective by securing areas that may be the source of enemy direct fires or enemy artillery observation.
- Designates squad and crew-served weapons defensive positions.
- Designates and covers dismounted avenues of approach with machine guns and mounted avenues of approach with Javelins or AT4s.

- Brings the BFVs forward into designated positions.
- Establishes additional security measures, such as OPs and patrols.
- Prepares for and assists the passage of follow-on forces (if required).
- Continues to improve security by conducting other necessary defensive actions. (These steps, outlined in Chapter 4 of this manual, include EA development, direct fires planning, and battle position preparation.)
- Adjusts final protective fires.
- Secures detained personnel.

3-103. Reorganization, usually conducted concurrently with consolidation, consists of actions taken to prepare for follow-on operations. As with consolidation, the platoon leader must plan and prepare for reorganization as he conducts his TLP. He ensures the platoon is prepared to:

- Reestablish chain of command.
- Provide essential medical treatment and evacuate casualties as necessary.
- Cross-level personnel and adjust task organization as required.
- Conduct resupply operations, including rearming and refueling.
- Redistribute ammunition.
- Conduct required maintenance.

HASTY ATTACK

3-104. The hasty attack is often the preferred option during fast-paced or high tempo operations. It allows the commander to maintain the momentum of friendly operations while denying the enemy the time to prepare his defenses and recover from losses suffered during previous action. Hasty attacks usually result from a movement to contact, successful defense, or continuation of a previous attack. A hasty attack uses the same procedures and control measures as a deliberate attack, but with much more reliance on TACSOPs and battle drills.

3-105. The platoon usually participates in a hasty attack as part of a larger unit during a movement to contact or as part of a defense. It also does so whenever the commander determines that the enemy is in a vulnerable position and can be quickly defeated by immediate offensive action. A hasty attack is used to—

- Exploit a tactical opportunity.
- Maintain the momentum.
- Regain the initiative.
- Prevent the enemy from regaining organization or balance.
- Gain a favorable position that may be lost with time.

3-106. Maintaining unrelenting pressure through hasty attacks keeps the enemy off balance and makes it difficult for him to react effectively. Rapidly attacking before the enemy can act often results in success even when the combat power ratio is not as favorable as desired.

3-107. With its emphasis on agility and surprise, however, this type of attack may cause the attacking force to lose a degree of synchronization. To minimize this risk, the commander should maximize the use of standard formations and well-rehearsed, thoroughly understood battle drills and TACSOPs.

3-108. The hasty attack usually is conducted with only the resources that are immediately available. The use of digital devices to transmit information and graphics also facilitates rapid planning and preparation. By maintaining an awareness of the enemy and friendly situation and assigning on-order and be-prepared missions to subordinates as warranted, company team commanders better prepare the platoon to conduct hasty attacks.

EXECUTION

3-109. The platoon must first conduct actions on contact, allowing the commander to gather the information he needs to make an informed decision. The term "hasty" refers to limits on planning and preparation time, not to any acceleration in the conduct of actions on contact. Because the intelligence picture is vague, the commander normally needs more time, rather than less, during this process to gain adequate information about the enemy force.

3-110. Execution begins with establishment of a base of fire, which then suppresses the enemy force. The maneuver force uses a combination of techniques to maintain its security as it advances in contact to a position of advantage. These techniques include, but are not limited to the following:

- Using internal base of fire and bounding elements.
- Using covered and concealed routes.
- Using indirect fires to suppress or obscure the enemy or to screen friendly movement.
- Executing bold maneuver that initially takes the maneuver force out of enemy direct fire range.

3-111. Once the maneuver force has gained the positional advantage, it can execute a tactical task, such as assault, to destroy the remaining enemy.

SECTION VI – SPECIAL-PURPOSE ATTACKS

3-112. The platoon conducts special attacks at the direction of the company team commander. The commander bases his decision on the METT-TC variables. As forms of the attack, they share many of the same planning, preparation, and execution considerations of the offense. This section discusses the different types of special-purpose attacks.

AMBUSH

3-113. An ambush is an attack by fire from concealed positions on a moving or temporarily halted enemy. Its main characteristics are surprise and short, violent action, usually with direct fire weapons and other lethal devices, such as claymore mines from a flank. An ambush does not require that ground be seized or held.

3-114. Ambushes reduce the enemy's overall combat effectiveness. Destruction is the primary reason for conducting an ambush. Other reasons to conduct ambushes are to harass the enemy, capture the enemy, destroy or capture enemy equipment, and to gain information about the enemy.

3-115. Ambushes are classified by category (deliberate or hasty), formation (linear, L-shaped, etc.), and type (point, area, or antiarmor). The platoon leader uses a combination of these classifications when developing his ambush plan. (See FM 3-21.8 for details on the conduct and execution of an ambush.)

EXECUTION

3-116. The execution of an ambush is offensive in nature; however, the platoon may conduct an ambush during any operation. The platoon leader considers both mounted and dismounted options for conducting the ambush. The platoon must take all necessary precautions to ensure that it is not detected during movement to or preparation of the ambush site. The platoon also must have a secure route of withdrawal following the ambush.

3-117. An ambush usually consists of the following actions:

- Mounted (or dismounted) tactical movement to the objective rally point.
- Reconnaissance of the ambush site.
- Establishment of the ambush security site.
- Preparation of the ambush site.
- Execution of the ambush.
- Withdrawal.

ANTIARMOR AMBUSH

3-118. The platoon leader can employ armor-killer teams either during limited visibility or when cover, concealment, and withdrawal routes are available. The key to ambushing armored or other vehicles is to choose terrain that restricts their maneuverability and fields of fire, while allowing friendly forces to engage the vehicles from the flank and rear. Soldiers can emplace AT mines and claymores before the ambush so that enemy armor and dismounting soldiers deploy into them. Though shoulder-launched munitions can be used independently, they are normally used in support of designated organic antiarmor weapons such as the BFV TOW. Volley firing shoulder-launched munitions increases the probability of a quick kill and the BFV TOWs enhance the platoon's ability to destroy hostile armor vehicles at greater distances.

RAID

3-119. A raid is a limited objective attack, usually small-scale, entailing swift penetration of hostile territory to secure information, confuse the enemy, or destroy installations. A raid always ends with a planned withdrawal to a friendly location upon completion of the mission.

3-120. The platoon can conduct an independent raid (mounted or dismounted) in support of the battalion or company operation, or it can participate as part of the

company in a series of raids. Rifle squads do not execute raids. Rather, they participate in a platoon raid. (See FM 3-21.8 for details.)

3-121. The platoon may conduct a raid to—

- Capture prisoners.
- Capture or destroy specific C2 locations.
- Destroy logistic areas.
- Obtain information concerning enemy locations, dispositions, strengths, intentions, or methods of operation.
- Confuse the enemy or disrupt his plans.

TASK ORGANIZATION

3-122. The purpose of the operation determines the task organization of the raiding force. However, the raiding force normally consists of the following elements:

- Support force (with the task of support by fire).
- Assault force (with the task of destroy).
- Breach force (if required).

EXECUTION

3-123. The main differences between a raid and other special-attacks are the limited objectives of the raid and the associated withdrawal following completion. However, the sequence of platoon actions for a raid is very similar to those for an ambush. Additionally, the assault element of the platoon may have to conduct a breach of a protective obstacle (if a breach force is not designated).

3-124. Raids are not limited by visibility or distance. When the location to be raided is beyond supporting distances of friendly lines, the raiding party operates as a separate force. An objective, usually very specific in nature, is assigned to orient the raiding unit. During the withdrawal, the attacking force should use a route different from that used to conduct the raid itself.

PARTICIPATION AS PART OF A LARGER FORCE

3-125. Larger units usually conduct deliberate counterattacks, spoiling attacks, feints, and demonstrations. The mechanized platoon may participate in these as part of a larger force. Usually, however, the actual mission given to the platoon is to seize an objective, maneuver to a phase line, or perform other types of operations, such as those described in the following paragraphs.

COUNTERATTACK

3-126. The counterattack is an attack by part or all of a defending force against an enemy attacking force, with the general objective of denying the enemy his goal of attacking. This attack by defensive forces regains the initiative or denies the enemy success with his attack. The platoon may conduct a counterattack as a lightly committed force within the company team or as the company team or CAB reserve. The platoon counterattacks after the enemy begins his attack, reveals his main effort, or creates an assailable flank.

3-127. As part of a higher HQ, the platoon conducts the counterattack much like other attacks. However, the platoon leader must synchronize the execution of his counterattack within the overall defensive effort. Counterattacks afford the defender the opportunity to create favorable conditions for the commitment of combat power. The platoon should rehearse the counterattack and prepare the ground to be traversed. Counterattacks are more useful to the higher HQ when the platoon anticipates employment; plans and prepares for employment; and executes with the other defending, delaying, or attacking forces in conjunction with the higher commander's plan.

SPOILING ATTACK

3-128. A spoiling attack preempts or seriously impairs an enemy attack while the enemy is in the process of planning or preparing to attack. The purpose of a spoiling attack is to disrupt the enemy's offensive capabilities and timelines while destroying his personnel and equipment. The purpose is not to secure terrain or other physical objectives. A commander may direct a platoon to conduct a spoiling attack during friendly defensive preparations to strike the enemy while he is in AAs or attack positions preparing for his own offensive operation. The platoon leader plans for a spoiling attack as he does for other attacks.

FEINT

3-129. A feint deceives the enemy as to the location and time of the actual operation. Feints attempt to deceive the enemy and induce him to move reserves and shift his fire support to locations where they cannot immediately impact the actual operation. The platoon may need to make preparations and other actions that are detectable by the enemy. The enemy must believe that the feint is the actual attack.

3-130. When directed to conduct a feint, the platoon seeks direct fire (or physical) contact with the enemy but avoids decisive engagement. The commander assigns the platoon an objective limited in size or scope. The planning, preparation, and execution considerations are the same as for the other forms of attack.

DEMONSTRATION

3-131. A demonstration deceives the enemy as to the location or time of the actual operation by a display of force. Demonstrations attempt to deceive the enemy and induce him to move reserves and shift his fire support to locations where they cannot immediately impact the actual operation. Like a feint, the preparations and execution for a demonstration may have to be detectable by the enemy. It must appear to be an actual impending attack.

3-132. When conducting a demonstration, the platoon does not seek physical contact with the enemy. The planning, preparation, and execution considerations are the same as for the other forms of attack.

SECTION VII – OTHER OFFENSIVE OPERATIONS

3-133. This section addresses offensive operations that the platoon normally conducts as part of an HBCT Infantry company or larger element.

MOVEMENT TO CONTACT

3-134. Units generally conduct a movement to contact when it must gain or maintain contact with the enemy or when the enemy situation is vague or not specific enough to conduct an attack. Because of the increased amount of intelligence available to U.S. Forces, movements to contact are conducted less frequently than in the past. Battalions are normally the smallest formation to conduct a movement to contact, and a mechanized platoon participates as part of a company.

3-135. The formation often used during a movement to contact is the approach march, with subordinate units using the movement technique most appropriate for their assigned mission. A movement to contact ends when contact with the enemy is made or an assigned objective is occupied.

3-136. Important fundamentals of a movement to contact are to—

- Make enemy contact with the smallest element possible (ideally, an unmanned surveillance element).
- Rapidly orient combat power upon enemy contact.
- Provide all-around security for the unit.
- Support the company.
- Maintain contact once made.

3-137. In the HBCT, the CAB reconnaissance platoon should find the enemy through reconnaissance and surveillance; however, this is not always possible. Battalions may task or allow companies to gather intelligence through reconnaissance and surveillance. The company may in turn order a platoon or squad to conduct reconnaissance, surveillance, or both.

3-138. Bradley units normally initiate a movement to contact mounted and dismount when contact is made. (See FM 3-21.8 for details on movement to contact.)

SEARCH AND ATTACK

3-139. The search and attack is a type of movement to contact that employs multiple and coordinated small unit actions to find the enemy and then other units to fix and destroy him. A search and attack is conducted when the enemy is operating as small, dispersed elements or when the task is to deny the enemy the ability to move within a given AO. The platoon participates as part of a company or battalion search and attack. A unit conducts a search and attack to—

- Render the enemy in the AO combat ineffective.
- Prevent the enemy from operating unhindered in a given AO.
- Prevent the enemy from massing to disrupt or destroy friendly military or civilian operations, equipment, or facilities.
- Gain information about the enemy and the terrain.

3-140. The organization, control measures, and conduct of a search and attack by Bradley and Infantry units are similar. Bradley units can move more rapidly than Infantry units and can use the tanks to secure the outer perimeter. (See FM 3-21.8 for details.)

EXPLOITATION

3-141. A platoon normally takes part in exploitations as part of a larger force; however, the platoon should exploit tactical success at the local level within the higher commander's concept of the operation.

PURSUIT

3-142. The objective of the pursuit phase of an operation is to totally destroy the enemy force. The mechanized Infantry platoon may take part in a pursuit as part of a larger force. Because of its organic transportation, it also may participate as part of a task organized company acting as a pursuit force that can close with and destroy the remnants of the enemy force.

SECTION VIII – OPERATION DURING LIMITED VISIBILITY

3-143. Effective use of advanced optical sights and equipment during limited visibility attacks enhances the ability of squads and platoons to achieve surprise, hit targets, and cause panic in a lesser equipped enemy. Advanced optics and equipment enable the Infantry Soldier to see farther and with greater clarity. They provide an advantage over the enemy. Mechanized platoons and squads have—

- Night vision equipment mounted on the helmet of each Soldier.
- Weapon-mounted and handheld devices to identify and designate targets.
- Vision devices and thermal imagers on the BFV for both the driver and the vehicle commander manning the turret.

3-144. Night vision devices provide good visibility in all but pitch black conditions but limit the Soldier's field of view somewhat. Since they do not transmit a light source, the enemy detection devices cannot detect them.

3-145. The BFV is as effective at night as during the day. Its crew can drive it and fire its weapons systems during limited visibility. The driver has an enhanced vision capability, and the vehicle commander has both an enhanced vision and thermal imaging capability. The BFV is also capable of accurately identifying its current location with the onboard GPS. The common operational picture also enables leaders to locate their subordinate units at all times.

3-146. Bradley leaders and Soldiers have an increased ability to designate and control fires during limited visibility. Platoon leaders and Soldiers have three types of advanced optics and equipment for use in fire control. They are as follows:

- Target designators. Leaders can designate targets with greater precision using IR laser pointers that place an IR light to designate targets and sectors of fire and to concentrate fire. The leader lazes a target on which

he directs his Soldiers to place their fires. The Soldiers then use their weapon's aiming lights to engage the target.

- Aiming lights. Soldiers with aiming lights have greater accuracy of fires during limited visibility. Each Soldier in the mechanized platoon is equipped with an aiming light for his individual weapon. Aiming lights work with the individual Soldier's helmet-mounted night vision goggles. It puts an IR light on the target at the point of aim.
- Target illuminators. Leaders also can designate larger targets using target illuminators8. Target illuminators are essentially IR light sources that light the target, making it easier to acquire effectively. Leaders and Soldiers use the IR devices to identify enemy or friendly personnel and then engage targets using their aiming lights.

3-147. Illuminating rounds fired to burn on the ground can mark objectives. This helps the platoon orient on the objective, but also can adversely affect night vision devices.

3-148. Leaders plan, but may not use, illumination during limited visibility attacks. CAB commanders usually control the use of conventional illumination, but may authorize the company team commander to do so. If the commander decides to use conventional illumination, he should not call for it until the assault is initiated or the attack is detected. It should be placed on several locations over a wide area to confuse the enemy as to the exact place of the attack. Also, it should be placed beyond the objective to help assaulting Soldiers see and fire at withdrawing or counterattacking enemy soldiers.

3-149. The platoon leader, squad leaders, and vehicle commanders must develop TACSOPs and sound COAs to synchronize the employment of IR illumination devices, target designators, and aiming lights during their assault on the objective. These include using luminous tape or chemical lights to mark personnel, and using weapons control restrictions.

3-150. The platoon leader also can use the following techniques to increase control during the assault:

- Use no flares, grenades, or smoke on the objective.
- Use only certain personnel with night vision devices to engage targets on the objective.
- Use a magnetic azimuth for maintaining direction.
- Use mortar or artillery rounds to orient attacking units.
- Use a base squad or fire team to pace and guide others.
- Reduce intervals between Soldiers and squads.

3-151. Like a daylight attack, indirect and direct fires are planned for a limited visibility attack, but are not executed unless the platoon is detected or is ready to assault. Some weapons may fire before the attack and maintain a pattern to deceive the enemy or to help cover noise made by the platoon's movement. This is not done if it will disclose the attack.

3-152. Smoke further reduces the enemy's visibility, particularly if he has night vision devices. The forward observer fires smoke rounds close to or on enemy positions so it does not restrict friendly movement or hinder the breaching of obstacles. Employing smoke on the objective during the assault may make it hard for assaulting Soldiers to find enemy fighting positions. If enough thermal sights are available, smoke on the objective may provide a decisive advantage for a well-trained platoon.

Note. If the enemy is equipped with night vision devices, leaders must evaluate the risk of using each technique and ensure the mission is not compromised by the enemy's ability to detect IR light sources.

SECTION IX – URBAN OPERATIONS

3-153. While conducting urban operations, the mechanized platoon and squads use the same general tactics and techniques as Infantry units. This section only discusses the different tactics and techniques used by the mechanized platoon and squads when fighting in an urban environment. (See FM 3-06.11 for details on offensive urban operations.)

EMPLOYMENT CONSIDERATIONS

3-154. Mutual support and combined arms at the platoon level is a key to successful UO. The ability of dismounted Infantry to move and attack the enemy is enhanced by mounted heavy direct fire weapons that provide immediate fires.

MUTUAL SUPPORT

3-155. Infantry BFV and tank elements work together to bring the maximum combat power to bear on the enemy. The Infantry provides the eyes and ears of the team, locating and identifying targets for the BFVs or tanks to engage. Infantry moves along covered and concealed routes to assault enemy elements fixed or suppressed by BFV or tank fire. Squads provide protection for the BFVs or tanks against attack by enemy infantry. Meanwhile, a tank provides heavy, continuous supporting fires against enemy strongpoints. (See Appendix A of this manual for tank considerations.)

BRADLEY FIGHTING VEHICLE

3-156. The following factors can affect UO:

- The primary roles of the BFV in the UO environment are to provide suppressive fires and to breach exterior walls. The vehicle's armor-piercing rounds can be extremely useful in UO. They can penetrate concrete up to 16 inches thick, can easily penetrate brick structures, and are highly effective against earthen and sandbag-reinforced bunkers.
- The BFV can elevate its 25-mm gun up to 60 degrees and depress it as low as -10 degrees.

- The crew has limited visibility to the sides and rear, and no vision to the top when buttoned up.
- The BFV can be outfitted with an external phone hookup for communications with accompanying Infantry.
- The 25-mm gun can be used effectively against enemy occupied buildings and fortifications, firing antipersonnel, HE, and even target practice tracer rounds. (See FM 3-06.11 for detailed information on the effects of these rounds on typical urban construction materials.)
- The M240C coaxial machine gun can effectively deliver suppressive fires against enemy personnel and against enemy positions that are behind light cover.
- TOW missiles can be effectively employed to destroy heavily fortified positions. However, power lines around the urban area can interfere with the tracking wire and the TOW has a 20-degree firing angle limitation.
- The TOW back blast area extends 75 meters to the rear of the launcher and forms a 90 degree danger/caution area. The danger zone extends 50 meters to the rear of the launcher and the caution area extends an additional 25 meters to the rear of the danger zone.
- The discarding petals of 25-mm Sabot rounds create a downrange hazard within 30 degrees on either side of the gun-target line out to a range of 200 meters.

OTHER ARMS AND WEAPONS

3-157. Urban operations involve other branches, including:

- Armor reduces strongpoints and defeats enemy armor.
- Artillery and mortar support can be significant to the outcome of UO if allowed by the ROE. Fuzing options allow penetration of building walls, the destruction of enemy occupants, and the clearing of rooftop observation and weapons positions. Artillery in the direct fire role may be used to reduce strongpoints and to provide isolation of an objective. However, Infantry is required to provide security from enemy snipers and AT teams. Mortar and high-angle artillery fire also give flexibility to clear structures and places fires where low-angle indirect artillery fire and direct fire weapons cannot.
- Engineers can perform the following missions during UO—
  - Conduct technical reconnaissance.
  - Clear barricades and heavy rubble with earth-moving equipment or explosives.
  - Use explosives to destroy fortifications and strongpoints that cannot be reduced by the maneuver unit.
- Military police provide a wide range of support in urban terrain, to include law and order, internment and resettlement operations, maneuver mobility support, and area security.

TASK ORGANIZATION

3-158. Platoons seldom perform independent operations in urban areas, but they may become separated or isolated during combat operations. The following discusses the methods a platoon uses when conducting independent offensive UO.

3-159. When conducting offensive UO, the platoon leader usually organizes his platoon into three elements: an assault element, a support element, and a breach element. Depending on its complexity or the breaching method, the breach element may be separate or part of either the assault or support elements. The support element or an adjacent company, if part of a battalion effort, isolates the objective area and provides security.

ASSAULT ELEMENT

3-160. The assault element kills, captures, or forces the withdrawal of the enemy from any urban objective, and seizes key terrain. Because of the lack of maneuver room and places to support the movement of other teams, the assault and clearing of most buildings is a platoon fight, with squads responsible for a given floor and fire teams clearing rooms. The assault element of a platoon may consist of one, two, or three squads. Squad leaders normally organize their two fire teams into two clearing teams or, in special circumstances, the squad may be kept as a single assault squad.

SUPPORT ELEMENT

3-161. The support element provides immediate suppressive fire support to enable the assault element to close with the enemy. The support element provides direct fire support and other assistance to advance the assault element. Usually, the BFV is the primary support by fire weapons system for the platoon. The supporting fires must be closely controlled to avoid excessive expenditure of ammunition and to prevent fratricide. At platoon level, the platoon sergeant controls the support element, which consists of the platoon's BFVs, AT weapons systems, and any personnel not designated as part of the assault element. Usually one squad remains with the BFVs to provide security for the vehicles.

BREACH TEAM

3-162. The breach team clears and marks lanes through obstacles during movement and provides the assault element with access to an urban objective. The platoon leader organizes the force to ensure that breaching teams are identified. One technique is to assign one fire team from the assault element as the breaching team. The breach also can be conducted using an attached engineer or any member of the platoon who has had additional training in breaching techniques.

BASIC URBAN ASSAULT STEPS

3-163. At company and platoon levels, the actual attack inevitably becomes an assault of the objective. The basic steps of an urban building assault are—

- Isolate the objective. The platoon must isolate urban objectives to prevent reinforcement of or counterattack against the objective, and to kill or capture any withdrawing enemy forces.

- Suppress the objective with direct fire. The support element provides suppressive fire on enemy positions while the assault element is systematically clearing the building.
- Assault the building. The assault element must quickly and violently execute the assault and subsequent clearing operations. Once momentum has been gained, it is maintained to deny the enemy time to reorganize as follows.
- Employ obscuration. Before an assault, the unit should employ smoke to conceal the assaulting elements.
- Execute a breach. Units may have to conduct a breach to enter a building, various rooms, or stairwells.
- Secure a foothold. Concealed by smoke and supported by direct fire weapons, the assault element assaults the first isolated building and secures a foothold.
- Clear the entry floor. The assault element clears each room on the entry floor by killing, capturing, or forcing the withdrawal of all enemy personnel within the structure.
- Clear the building. After the entry floor is cleared and secured, the unit proceeds to clear the other floors, including the basement.
- Consolidate and reorganize. After seizing the block, the platoon consolidates and reorganizes to repel a counterattack or to continue the attack.

MARKING BUILDINGS, WINDOWS, AND DOORS

3-164. The line of sight within urban terrain is usually very limited and is a major reason that urban combat is often extremely close. These close encounters increase the chance of friendly fire incidents if the unit does not know accurate locations of nearby friendly forces. To mitigate this danger, units must mark their progress as they maneuver in urban terrain so that nearby friendly units can maintain situational awareness. (See FM 3-06.11 for details.)

CONTINUING THE ASSAULT MISSION

3-165. If the unit is going to continue with its original mission, its be-prepared or on-order mission, or receive a new mission, it must—

- Maintain the momentum. This is a critical factor in clearing operations. The unit cannot allow the enemy to move to its next set of prepared positions or to prepare new positions.
- Establish security for cleared areas according to the OPORD or TACSOP.

3-166. The support element must—

- Displace forward to ensure that it is in place to provide support to the assault element.
- Push replacements, ammunition, and supplies forward to the assault element.

SECTION X – BATTLEFIELD OBSCURATION

3-167. Obscuration mission planning and execution can occur during both the offense and the defense and can be very effective. Firing smoke on enemy positions can degrade the vision of gunners and known or suspected OPs, preventing them from seeing or tracking targets and, thereby, reducing their effectiveness. When employed against an attacking force, white phosphorus (WP) can cause confusion and disorientation by degrading the enemy's C2 capabilities. At the same time, friendly units retain the ability to engage the enemy using thermal sights and range cards. In addition, enemy vehicles become silhouetted as they emerge from the smoke. If smoke employment is planned and executed correctly, this occurs as the enemy reaches the trigger line.

PLANNING CONSIDERATIONS

3-168. Obscuration missions are important functions for mortars. Units must plan smoke missions well in advance so that the CAB mortar carriers are loaded with a sufficient number of smoke rounds.

3-169. Atmospheric stability, wind velocity, and wind direction are the most important factors when planning target effects for smoke and WP mortar rounds. The effects of atmospheric stability can determine whether mortar smoke is effective at all or, if effective, how much ammunition is needed.

3-170. Planning considerations include:

- During unstable conditions, mortar smoke and WP rounds are almost ineffective. This is because the smoke does not spread but often climbs straight up and quickly dissipates.
- Under moderately unstable atmospheric conditions, base-ejecting smoke rounds are more effective than BFV bursting WP rounds.
- Both red phosphorous and WP rounds are effective under stable conditions.
- The higher the humidity, the better the screening effects of mortar rounds.

3-171. The terrain in the target area also affects smoke and WP rounds. If the terrain in the target area is swampy, rain-soaked, or snow-covered, then burning smoke rounds may not be effective. These rounds produce smoke by ejecting felt wedges soaked in phosphorus. These wedges then burn on the ground, producing a dense, long-lasting cloud. If the wedges fall into mud, water, or snow, they can extinguish. Shallow water can reduce the smoke produced by these rounds by as much as 50 percent. The terrain in the target area affects BFV bursting WP rounds little, except that deep snow and cold temperatures can reduce the smoke cloud by about 25 percent.

EMPLOYMENT CONSIDERATIONS

3-172. The BFV bursting WP round provides a screening, incendiary, marking, and casualty-producing effect. It produces a localized, instantaneous smoke cloud by

scattering burning WP particles. The 120-mm heavy mortar WP round produces a long-lasting and wide area smoke screen and is used for incendiary effects, marking, obscuring, and screening. It also can be used as an aid in target location and navigation.

3-173. The BFV bursting WP round can start fires and produce casualties among exposed enemy troops. The casualty-producing radius of the WP round is much less than that of the HE round. Generally, firing HE ammunition produces more casualties than WP. However, the WP burst causes a significant psychological effect, especially when used against exposed troops. A few WP rounds mixed into a fire mission of HE rounds may increase the suppressive effect of the fire.

SECTION XI – MOBILITY AND COUNTERMOBILITY OPERATIONS

3-174. Mobility operations involve the preservation of force movement activities for extended periods of time. To allow the movement of combat power through obstacles in pursuit of the objective, the mechanized platoon must be effective in reducing obstacles. Countermobility operations require that the existing obstacles be expanded through the use of reinforcing obstacles that are integrated with direct or indirect fire systems.

3-175. One of the core qualities of the mechanized Infantry platoon is its high mobility. It can move over most terrain, but has limited ability to cross gaps and prepared obstacles. Its first option is to avoid the obstacle by maneuvering around it. The mechanized platoon also can dismount Infantry to overcome some obstacles. However, a well placed obstacle may require engineer support to overcome. Most prepared obstacles are covered by enemy fire and the mechanized platoon must be prepared to suppress those fires prior to any breach. Although the mechanized platoon has limited countermobility assets, it can secure the area for engineers during breaching operations and secure friendly obstacles. It also can plan for the use of other obstacles, such as scatterable mines and modular pack mine system.

ENGINEER SUPPORT

3-176. Engineers are trained and equipped to provide mobility to friendly units and impede the mobility of the enemy. An engineer platoon or squad might be attached to a company depending on METT-TC variables. The mechanized platoon may have engineer support or may have engineers operating within its AO.

OBSTACLE REDUCTION

3-177. The platoon may have to breach an obstacle in front of their objective. Types of obstacles include wire, mines, ditches, abatis, and so on. Each type of obstacle requires different breaching methods. Obstacles may be of such size and complexity that the platoon conducts a separate breach mission or supports a breach mission as part of a larger unit. The platoon leader should have a squad specially trained to make a breach as well as the specified or be-prepared mission to make a planned or unplanned breach. (See FM 90-7 for details.)

3-178. Fire control measures are essential because support and breach forces may be firing on the enemy when the assault force is committed. Suppression of overwatching enemy positions must continue and other enemy forces must remain fixed by fires until the enemy has been destroyed. The assault force must assume control for direct fires on the objective as support and breach forces cease or shift fires.

BREACHING FUNDAMENTALS

3-179. Platoon leaders apply breaching fundamentals to ensure success when breaching against a defending enemy. Breaching fundamentals will always apply, but they may vary based on METT-TC variables. The following paragraphs discuss breaching fundamentals.

Suppress

3-180. Effective suppression protects forces during reducing and maneuvering through obstacles. Effective suppression is a mission critical task performed during any breaching operation. Successful suppression generally triggers the rest of the actions at the obstacle.

Obscure

3-181. Obscuration protects forces during a breach. Obscuration hampers enemy observation and target acquisition by concealing friendly activities and movement. Obscuration must be carefully planned to provide maximum degradation of enemy observation and fires, but it must not significantly degrade friendly fires and control.

Secure

3-182. The platoon secures the breach area to prevent the enemy from interfering with obstacle reduction and the passage of the assault force. Security must be effective against outposts, fighting positions near the obstacle, and overwatching units. The far side of the obstacle must be secured by fires or be occupied before attempting any effort to reduce the obstacle. The attacking unit's higher HQ is responsible for isolating the breach area by fixing adjacent units, attacking enemy reserves in depth, and providing counterfire support.

Reduce

3-183. The platoon reduces the obstacle to create lanes through or over an obstacle, allowing an attacking force to pass. The number and width of lanes the platoon creates varies with the enemy situation, the assault force's size and composition, and the scheme of maneuver. The lanes must allow the assault force to pass rapidly through the obstacle. The breach force reduces, proofs (if required), marks, and reports lane locations and the lane-marking method to higher command HQ. Follow-on units further reduce or clear the obstacle when required. Reduction cannot be accomplished until effective suppression and obscuration are in place, the obstacle has been identified, and the point of breach is secure.

Assault

3-184. A breaching operation is not complete until—

- Friendly forces have assaulted to destroy the enemy on the far side of the obstacle, and the enemy is not able to place or observe direct and indirect fires on the breach area.
- Battle handover with follow-on forces has occurred (unless no battle handover is planned).

TASK ORGANIZATION

3-185. The mechanized platoon leader organizes friendly forces to accomplish breaching fundamentals quickly and effectively. This requires him to organize support, breach, and assault forces with the necessary assets to accomplish their roles. For tactical obstacle breaches, platoons and squads usually are assigned as either one or part of the elements discussed below.

Support Force

3-186. The primary responsibility of the support force is to eliminate the enemy's ability to place direct or indirect fire on friendly forces. It must—

- Isolate the area with fires and establish a support by fire position to destroy, fix, or suppress the enemy. Depending on METT-TC variables, this may be the weapons squad or the entire platoon.
- Mass and control direct and indirect fires to suppress the enemy and to neutralize any weapons that are able to bring fires on the breach force.
- Control obscuring smoke to prevent enemy-observed direct and indirect fires.

Breach Force

3-187. The breach force assists the passage of the assault force by creating, proofing (if necessary), and marking lanes. The breach force may be a combined arms force. It may include engineers, reduction assets, and enough maneuver forces to provide additional suppression and local security. The entire Infantry platoon may be part of the breach force.

3-188. The breach force may apply portions of the following breaching fundamentals as it reduces an obstacle:

- **Suppress.** The breach force must be allocated enough maneuver forces to provide additional suppression against various threats, including:
  - Any enemy direct fire systems that cannot be effectively observed and suppressed by the support force due to the terrain or the masking of the support force's fires by the breach force as it moves forward to reduce the obstacle.
  - Counterattacking or repositioning forces that cannot be engaged by the support force.

- **Obscure**. The breach force employs smoke grenades and smoke pots, if necessary, for self-defense and to cover lanes while the assault force is passing.
- **Secure**. The breach force secures itself from threat forces that are providing close-in protection of the obstacle. The breach force also secures the lanes through the tactical obstacles once they are created to allow safe passage of the assault force.
- **Reduce**. The breach force performs its primary mission by reducing the obstacle. To support the development of a plan to reduce the obstacle, the composition of the obstacle system must be an information requirement. If the obstacles are formidable, engineers augment the Infantry platoon to conduct reduction.
- **Assault**. The breach force assaults through the breach point to the far side of an obstacle and seizes the foothold.

Assault Force

3-189. The primary mission of the assault force is to destroy the enemy and seize terrain on the far side of the obstacle to prevent the enemy from placing direct fires on the created lanes. The assault force may be tasked to assist the support force with suppression while the breach force reduces the obstacle.

3-190. The assault force must be sufficient in size to seize the point of penetration. Combat power is allocated to the assault force to achieve a minimum 3:1 ratio on the point of penetration. The breach and assault assets may maneuver as a single force when conducting breaching operations as an independent company team conducting an attack.

3-191. If a small enemy force defends the obstacle, the missions of the assault force and the breach force may be combined. This simplifies C2 and provides more immediate combat power for security and suppression.

OBSTACLE REDUCTION TOOLS

3-192. Soldiers use obstacle reduction tools to breach specific types of obstacles. The three methods of breaching and the tools associated with each are as follows.

Mechanical

3-193. Mechanical breaching is the use of vehicles, tools, or other non-ballistic or non-explosive devices to make the breach. Mechanized platoons can use—

- The BFV to pull away wire obstacles.
- Dynamic entry tools.
- Onboard basic issue items.

Ballistic

3-194. Ballistic breaching is a forced entry or exit by the use of weapons, including:

- Explosive cannon fire from tanks.
- Shotguns, M4, or M249 SAW.
- Heavy machine gunfire or 25-mm from the BFV.

Explosive

3-195. When employing explosives during breaching operations, leaders must consider three major factors: overpressure, missile hazard, and minimum safe distance requirements. Explosive breaching tools include:

- Bangalore torpedoes.
- Material from demolition kits.
- Prepared explosive charges, such as flexible linear and water impulse charges.

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Chapter 4

Defensive Operations

The immediate purpose of all defensive operations is to defeat an enemy attack and gain the initiative for offensive operations. The company and higher units develop the conditions for future offensive operations, and it is important that the platoon leader understands that mission. However, the defensive mission of the mechanized Infantry platoon and squads is very basic:

- Retain or deny the use of terrain by the enemy.
- Kill enemy through direct and indirect fires and close combat.
- Retain the ability to maneuver or accept decisive engagement as the mission requires.

SECTION I – TEXT REFERENCES

4-1. Many aspects of defensive operations are common among all Infantry units. Refer to the referenced sections of FM 3-21.8 or other referenced publications for details on these subjects.

4-2. Table 4-1 consolidates the references to additional information.

Table 4-1. Guide for subjects referenced in text

Subject	***References***
Tactical Mission Tasks	FM 3-90
Obstacle Planning	FM 5-102 FM 3-21.8
Fighting Positions	FM 3-21.75 FM 3-21.8
Sequence of the Defense	FM 3-21.8
Engagement Area Development	FM 3-21.8
Patrols FM	3-21.8
Weapons Emplacement	FM 3-21.8
Javelin Employment	FM 3-21.8
Defensive Urban Operations	FM 3-06.11
Defensive Techniques	FM 3-90.1
Retrograde Operations	FM 3-21.8

SECTION II – FUNDAMENTALS

4-3. This section discusses the purpose, types, and characteristics of defensive operations and common tactical mission tasks for a mechanized platoon.

PURPOSE

4-4. Army forces conduct defensive operations to—

- Deter or defeat enemy offensive operations. This is the primary purpose of defensive operations. Successful defenses stall enemy actions and create opportunities to seize the initiative. Defensive operations may deter potential aggressors if they believe that breaking the friendly defense would be too costly.
- Gain time. Successful defenses slow or halt an attack while allowing friendly reserves enough time to reinforce the defense. Delaying actions improve defenses, expose enemy forces to joint attack, and prepare counterattacks.
- Economize forces. Wise use of terrain, depth, and security operations allows friendly forces to minimize resources used defensively. This allows commanders to concentrate combat power for offensive operations.
- Retain key terrain. Control of key terrain can sway the outcome of the battle or engagement depending on which side controls it. In operations dominated by stability tasks, friendly bases become key terrain.
- Protect the populace, critical assets, and infrastructure. Army forces protect military and civilian areas that are important to success and provide indirect support to operations worldwide. This protection is very important in counterinsurgency operations where some facilities have significant economic and political value as opposed to tactical military importance.

TYPES

4-5. At a high or operational level, an enemy offensive may compel joint forces to conduct major defensive operations. Such operations may require defeating or preventing attacks across international borders, defeating conventional attacks, or halting an insurgent movement's mobilization. Operational defenses may be executed anywhere in the operational area. However, the mechanized platoon usually has a limited mission of defending an AO with or without time constraints.

AREA DEFENSE

4-6. In an area defense, the defender concentrates on denying enemy forces access to designated terrain for a specific time, limiting their freedom of maneuver and channeling them into killing areas. The defender retains terrain that the attacker must control in order to advance. The enemy force is drawn into a series of kill zones where it is attacked from mutually supporting positions and destroyed, largely by fires.

MOBILE DEFENSE

4-7. In a mobile defense, the defender withholds a large portion of available forces for use as a striking force in a counterattack. Mobile defenses require enough depth to let enemy forces advance into a position that exposes them to counterattack. The defense separates attacking forces from their support and disrupts the enemy's command and control. As enemy forces extend themselves in the defended area and lose momentum and organization, the defender surprises and overwhelms them with a powerful counterattack.

RETROGRADE OPERATIONS

4-8. Retrograde operations are organized movements away from the enemy. This includes delays, withdrawals, and retirements. Retrograde operations gain time, preserve forces, place the enemy in unfavorable positions, or avoid combat under undesirable conditions.

CHARACTERISTICS

4-9. 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. The characteristics of the defense that constitute the planning fundamentals for the mechanized Infantry platoon are discussed in the following paragraphs.

PREPARATION

4-10. The defender usually arrives in the battle area before the attacker. As the defender, the platoon must take advantage of this by making the most of combat preparations in the time available. By thoroughly analyzing the variables of METT-TC, the platoon leader gains an understanding of the tactical situation and identifies potential friendly and enemy weaknesses.

SECURITY

4-11. The goals of the platoon's security efforts usually are 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. Security includes the establishment of observation posts and the use of UASs, and other manned and unmanned systems to reconnoiter and detect the enemy. The platoon typically continues its local security mission until directed to displace.

DISRUPTION

4-12. Defensive plans vary with the circumstances, but all defensive concepts of the operation aim at disrupting the 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 defense. Destroying enemy C2 vehicles also disrupts the enemy's synchronization and flexibility.

MASSING EFFECTS

4-13. The platoon must concentrate combat power at the decisive place and time. 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 concentration refers to combat power and its effects, not just numbers of Soldiers and weapons systems.

FLEXIBILITY

4-14. Flexibility results from a detailed analysis of the METT-TC variables, an understanding of the unit's purpose, and aggressive reconnaissance and surveillance. The platoon must be agile enough to counter or avoid the attacker's blows and then strike back effectively. Multiple alternate and supplementary positions for both the dismounted and mounted elements of the mechanized platoon, in combination with current and accurate intelligence, may provide additional flexibility to the platoon.

TACTICAL MISSION TASKS

4-15. The following are select tactical mission tasks that a platoon may receive that are typically associated with defensive operations. (See FM 3-90 for a list of common tactical mission tasks.)

Note. The situations used in this section are examples only. They are not applicable in every tactical operation, nor are they intended to prescribe any specific method for achieving the purpose of the operation.

BLOCK

4-16. A mechanized platoon in the defense blocks an enemy when it denies him access to an area or prevents his advance in a direction or along an avenue of approach. A blocking task normally requires the friendly force to block the enemy force for a certain time or until a specific event has occurred. Some typically defensive blocking missions include:

- Defending an AO.
- Establishing a defense around a bridge.
- Acting as a blocking force to deny enemy movement along a road, through a defile, and so on.

CONTAIN

4-17. The platoon contains an enemy by stopping, holding, or surrounding him. Containment allows an enemy to reposition himself within the designated geographical area, whereas fixing an enemy does not. During defensive operations, a platoon may contain the enemy by—

- Blocking his avenue of approach or escape.
- Defending a defile.

DEFEAT

4-18. A platoon defeats an enemy force when the enemy force has temporarily or permanently lost the physical means or the will to fight. During a defeat, the defeated force's leader is unwilling or unable to pursue his adopted course of action, thereby yielding to the friendly commander's will. Also, he can no longer interfere with the actions of friendly forces to a significant degree.

DESTROY

4-19. A platoon destroys an enemy force when the enemy force is physically combat ineffective until it is reconstituted.

DISRUPT

4-20. A platoon disrupts an enemy attack by breaking up his formation, upsetting his attack tempo, or causing him to commit his forces prematurely or in piecemeal. This increases the enemy's vulnerability, increases his C2 problems, and reduces his combat power. The platoon can disrupt an enemy attack by—

- Targeting C2 assets.
- Massing direct and indirect fires on vulnerable points.
- Using well selected and concealed positions to fire from an unexpected direction.

RETAIN

4-21. A platoon can be given a retain mission during the defense to ensure an area is free of enemy and deny its use by the enemy. The commander assigning this task must specify the area to retain and the duration of the retention, which is time or event driven. A platoon with a retain mission should expect the enemy to attack and prepares to become decisively engaged. A unit tasked to retain a specific piece of terrain does not necessary have to occupy it. A platoon can be given this mission to retain—

- Terrain.
- A utility structure to prevent its destruction or use by the enemy.
- A defile, bridge, or other area to deny enemy access.

PLANNING CONSIDERATIONS

4-22. The planning and coordination requirements and procedures for defensive operations are the same for both mechanized and Infantry units. The mechanized platoon leader, however, must consider the following:

- The increased firepower of the BFV and supporting weapons.
- Maximum range effects of both the BFV and dismounted supporting weapons.
- The ability to bring combat power to bear at the decisive point rapidly with enhanced communication and coordination capabilities.

DEPTH AND DISPERSION

4-23. Dispersing positions laterally and in depth helps protect the force from enemy observation and fires. Platoon positions are established in depth, allowing sufficient maneuver space within each position for in-depth placement of vehicle weapons systems and dismounted Infantry elements. Vehicle and Infantry fighting positions are positioned to allow massing of direct fires at critical points on the battlefield. Although the METT-TC variables ultimately determine the placement of weapons systems and unit positions, the following also apply:

- Tube-launched, optically-tracked, wire-guided missiles are employed best at a range of 2,500 to 3,750 meters where targets can be tracked for at least 12 seconds.
- BFVs are best employed from flank positions and in positions from which they can destroy lightly armored vehicles and Infantry or fix or severely limit the movement of tanks, usually at a range of 2,500 meters or less.
- Infantry rifle squads should be positioned on reverse slopes or in restricted terrain where they cannot be engaged before they take the enemy under fire.
- Infantry rifle squads can supplement the antiarmor fires of tanks and BFVs with Javelin missiles, which have a maximum range of 2,000 meters.
- Infantry rifle squads can retain or deny key terrain if employed in strongpoints or well-covered positions.
- Infantry rifle squads can protect obstacles or flank positions that are tied into severely restricted terrain.

FIRE SUPPORT

4-24. 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.

4-25. 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.
- Defeating attacks along dismounted avenues of approach with the use of final protective fires.
- Disrupting the enemy to allow friendly elements to disengage or conduct counterattacks.
- Obscuring enemy observation or screening friendly movement during disengagement and counterattacks.

- 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.

MOBILITY, COUNTERMOBILITY, AND SURVIVABILITY

4-26. Mobility focuses on the ability to reposition forces, including unit displacement and the commitment of reserve forces. The company team commander's priorities may specify that some routes be improved to support such operations. Countermobility limits the maneuver of enemy forces and enhances the effectiveness of direct and indirect fires. Survivability focuses on protecting friendly forces from the effects of enemy weapons systems. Typically, all or most of the engineer assets will be allocated to the survivability and or countermobility effort during the defense.

Mobility

4-27. During defensive preparations, mobility focuses on the ability to resupply, reposition, and conduct rearward and forward passage of forces, supplies, and equipment. Once defensive preparations are complete, the mobility focus shifts to routes from hide positions, and to alternate, supplementary or subsequent positions. The company team commander establishes the priority of mobility effort within the company team.

Countermobility

4-28. To be successful in the defense, the platoon leader must integrate obstacles into both the direct and indirect fire plans. (See FM 5-102 for details regarding obstacle planning, siting, and turnover.)

4-29. The two types of obstacles are:

- **Tactical Obstacles** . Tactical obstacles are designed or employed to disrupt, fix, turn, or block the movement of the enemy. Platoons typically construct tactical obstacles when directed by the company team commander.
- **Protective Obstacles** . Platoons are responsible for coordinating and employing their own protective obstacles to protect their defensive positions.

Protective Obstacles

4-30. To be most effective, protective obstacles should be tied into existing obstacles and final protective fires. Because of its weight and ease of construction, the platoon normally uses wire when employing protective obstacles. (See FM 3-21.8 for details.)

4-31. When planning protective obstacles, the platoon leader evaluates the potential threat to the platoon position, and employs the appropriate asset. For example, the modular pack mine system is predominately an AT 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. (See FM 5-102 for details regarding the emplacement of protective obstacles.)

4-32. Protective obstacles usually are located beyond hand grenade range (40 to 100 meters) from a Soldier's fighting position, and may extend out 300 to 500 meters to tie into tactical obstacles and existing restricted/severely restricted terrain. The platoon leader should plan protective obstacles in depth and attempt to maximize the effective range of his weapons.

4-33. 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

4-34. The three types of wire obstacles are as follows (Figure 4-1):

- Protective wire may be a complex obstacle providing all-around protection of a platoon perimeter, or it may be a simple wire obstacle on the likely dismounted avenue of approach toward a squad position. Command-detonated M18 claymore mines may be integrated into the protective wire or used separately.
- Tactical wire is positioned to increase the effectiveness of the platoon's direct fires. It usually is positioned along the friendly side of a machine gun final protective line. Tactical minefields also may be integrated into these wire obstacles or be employed separately.
- The purpose of supplementary wire obstacles is to break up the line of tactical wire to prevent the enemy from locating platoon weapons (particularly BFV, Javelin, and M240B) by following the tactical wire.

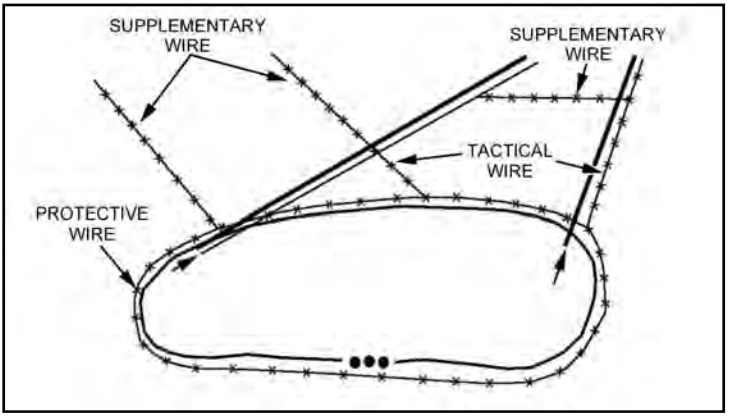

Figure 4-1. Wire obstacles

Obstacle Lanes

4-35. 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

4-36. Units prepare survivability positions in defensive positions or strongpoints to protect vehicles, weapons systems, and the rifle squads. Dismounted positions can be dug in and reinforced with overhead cover to provide rifle squads and crew-served weapons with protection against fragmentation. (See FM 3-21.75 for more information on the construction of Infantry fighting positions.) Vehicle fighting positions are constructed with both hull defilade firing positions and turret defilade observation positions. However, construction of vehicle fighting positions usually requires engineer assets that are usually in short supply at the maneuver platoon level. (See the discussion in the later part of this chapter on the construction of vehicle fighting positions.)

SUSTAINMENT

4-37. When planning defensive operations, the platoon leader should consider future sustainment operations. The platoon leader should consider pre-stocking (otherwise known as pre-positioning or caches). The platoon leader's mission analysis (or guidance from the company team commander) may reveal that during an operation, the platoon's ammunition needs 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 and guarded.

SECTION III – SEQUENCE

4-38. As part of a larger element, the platoon conducts defensive operations in a sequence of integrated and overlapping steps. The sequence of the defense is the same for both mechanized and Infantry small units. (See FM 3-21.8 for details on the sequence of the defense.)

SECURITY

4-39. Security is established prior to the platoon and squads reconnoitering their defensive positions. An Infantry unit or the CAB's scout platoon may provide the security elements. Their mission is to provide early warning, destroy enemy reconnaissance elements, and disrupt enemy attack formations.

4-40. The platoon usually establishes local security with OPs. It also establishes temporary fighting positions for the platoon and BFVs. Crew-served weapons are emplaced and assigned principle directions of fire or final protective fires.

4-41. If the platoon is the company reserve, it may have the initial task of providing security for the other platoons while they conduct their reconnaissance. It

may do this as a separate mission or as part of a larger force. As the security force, the platoon occupies defensive positions to destroy any enemy reconnaissance elements and to disrupt any attacks. To not become decisively engaged, the security force disengages and conducts a rearward passage of lines once its mission is accomplished.

LEADER'S RECONNAISSANCE

4-42. Once security is established, the platoon leader and designated personnel reconnoiter the tentative defensive positions and identify the exact positions for the BFVs, crew-served weapons, and other Infantry positions. The leaders may have to reconnoiter multiple positions before or after the occupation of the initial position. The platoon leader also confirms the location and extent of engagement areas, planned fires, and direct fires from supporting positions, obstacles, and routes. During reconnaissance and occupation, the platoon may provide guides to the passing security force and be tasked to close the passage lanes.

4-43. If the platoon leader cannot go, he may direct the platoon sergeant or Bradley commanders to reconnoiter the routes and tentative positions, such as battle positions. Either can confirm or recommend any position changes.

Note. "Designated personnel" refers to those personnel as established in the TACSOP, to include squad leaders, the forward observer, Bradley commanders, and security.

OCCUPATION AND PREPARATION

4-44. During this step the platoon plans, reconnoiters, and occupies the defensive position. This includes movement from one location to the defensive location and usually is led by a quartering party that clears the defensive position and prepares it for occupation by the C-company team. The task force establishes security forces, and 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, such as priorities of work (usually covered in the WARNO or by a unit TACSOP). Units conduct occupation and preparation of the defense site concurrently with the TLP and the development of the EA (if required).

APPROACH OF THE ENEMY MAIN ATTACK

4-45. As this step begins, the brigade engages the enemy at long range using indirect fires, electronic warfare, and close air support. The goal is to use these assets and disrupting obstacles to shape the battlefield, to slow the enemy's advance, and disrupt his formations, leaving him more susceptible to the effects of combined arms weapons. As the enemy's main body echelon approaches the task force EA, the task force may initiate indirect fires and close air support to weaken the enemy through attrition. At the same time, the brigade's effort shifts to second echelon forces, depending on the commander's intent. Platoons cease security patrolling and usually bring OPs back into the defense. Friendly forces will occupy their actual

defensive positions before the enemy reaches direct fire range. Positions may be shifted in response to enemy actions or other tactical mission variables.

ENEMY ASSAULT

4-46. During this step, enemy forces attempt to fix friendly forces and complete their assault. During execution of the defense, friendly forces attempt to mass effects of fires to destroy the assaulting enemy.

4-47. If the platoon leader determines that the platoon can destroy the enemy from its current positions, then the platoon stays and fights. The platoon leader continues to call for indirect fires as the enemy approaches. The platoon begins to engage the enemy at maximum effective range and attempts 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 the enemy toward EAs.
- Prevent or severely limit the enemy's ability to observe the location of friendly positions.
- Destroy the enemy as he attempts to breach tactical obstacles.

4-48. Leaders control fires using standard commands, pyrotechnics, and other prearranged signals. The platoon increases the intensity of fires as the enemy closes within range of additional weapons. Squad leaders work to achieve a sustained rate of fire from their positions by having buddy teams engage the enemy so that both Soldiers are not reloading their weapons at the same time. In controlling and distributing fires, the platoon and squad leaders consider—

- Range to the enemy.
- Priority targets.
- Most dangerous or closest 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 antiarmor weapons to achieve flank shots against enemy vehicles.

4-49. If the enemy closes on the platoon's protective wire, machine guns, and SAWs, the platoon fires along interlocking principal directions of fire as previously planned and designated. These may include BFV weapons systems or the platoon's M240Bs. Other weapons fire in their designated principle direction of fire. Grenadiers engage the enemy with M203 grenade launchers in dead space or as the enemy attempts to breach protective wire. If required, the platoon leader requests final protective fires if they have been assigned in support of his positions. The platoon continues to defend until it repels the enemy or is ordered to disengage.

4-50. If the platoon leader determines that the platoon cannot destroy the enemy from its current positions, the platoon leader reports the situation to the company

team commander and continues to engage the enemy. He repositions the platoon (or squads of the platoon) when the commander directs to—

- Continue fires into the platoon AO.
- Occupy supplementary positions.
- Reinforce other parts of the company team.
- Counterattack locally to retake lost fighting positions.
- Withdraw from an untenable 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 team defense. All movements and actions to reposition squads and the platoon must be thoroughly rehearsed.

COUNTERATTACK

4-51. As the enemy's momentum is slowed or stopped, friendly forces may counterattack. The counterattack may be launched purely for offensive purposes to seize the initiative from the enemy. In some cases, the purpose of the counterattack will be mainly defensive (e.g., to reestablish the forward edge of the battle area or to restore control of the AO). The company team or 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 operations when opportunities to seize the initiative present themselves through situational understanding.

CONSOLIDATION AND REORGANIZATION

4-52. Consolidation includes organizing and strengthening a position so that it can continue to be used against the enemy. Platoon consolidation requirements include the following:

- Adjust other positions to maintain mutual support.
- Reoccupy and repairs positions and prepares for renewed enemy attack.
- Relocate selected weapons to alternate positions if leaders believe that the enemy may have pinpointed them during the attack.
- Repair damaged obstacles and replaces mines (claymore) and booby traps.
- Reestablish security and communications.

4-53. Reorganization includes shifting internal resources within a degraded unit to increase its level of combat effectiveness. Platoon reorganization requirements include:

- Man key weapons, as necessary.
- Provide first aid and prepare wounded Soldiers for casualty evacuation.
- Redistribute ammunition and supplies.
- Process and evacuate enemy prisoners of war.

4-54. The platoon conducts all necessary sustainment as it prepares to continue defending. Squad and team leaders provide status reports to the platoon leader. The platoon leader reestablishes the platoon chain of command. He consolidates squad status reports and provides the platoon report to the commander. The platoon sergeant coordinates for resupply and supervises the execution of the casualty and enemy prisoner of war evacuation plan. The platoon continues to improve positions. The platoon quickly reestablishes OPs and resumes security patrolling as directed.

SECTION IV – ENGAGEMENT AREA DEVELOPMENT

4-55. The engagement area (EA) is the place where the platoon leader intends to destroy an enemy force using the massed fires of all available weapons. (See FM 3-21.8 for details.) 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 EA to achieve the platoon's purpose. At the platoon level, EA development remains a complex function that requires parallel planning and preparation if the platoon is to accomplish the tasks for which it is responsible. Beginning with an evaluation of the METT-TC variables, the development process covers the following steps:

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

SECTION V – DEFENSIVE POSITIONS

4-56. The platoon plans, reconnoiters, and occupies the defensive position concurrently with the TLP and EA development. Although the process is METT-TC dependent and not sequential, the establishment of security and the leader's reconnaissance usually precede the occupation of the position. Time is usually short and leaders must make the most of the time available, especially if the platoon has several other defensive positions and EAs to develop.

PRIORITY OF WORK

4-57. Leaders ensure that Soldiers prepare for the defense quickly and efficiently. Work must be done in priority to accomplish the most in the least time while maintaining security and the ability to respond to enemy action. The platoon leader also works closely with his forward observer to confirm, modify, or create additional targets for the targets list. Below are basic considerations for priorities of work:

- Emplace local security.
- Position and assign sectors of fire for each BFV.
- Position and assign sectors of fire for Javelin and machine gun (M240) teams.
- Position and assign sectors of fire for M249 gunners, grenadiers, and then riflemen.
- Clear fields of fire and prepare range cards.
- Prepare sector sketches.
- Dig fighting positions.
- Establish communications with the company team and adjacent units.
- Coordinate with adjacent units; review sector sketches.
- Emplace AT and claymore mines, then wire and other obstacles.
- Improve primary fighting positions and add overhead cover.
- Prepare supplementary and then alternate positions (same procedure as the primary position).
- Distribute and stockpile ammunition, food, and water.

4-58. TACSOPs usually contain unit priorities of work. However, the commander dictates the priorities of work for the company team based on the variables 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.

COORDINATION

4-59. 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 to resolve issues effectively. However, when time is extremely limited, digital coordination may be the only means of sending and receiving this information. Prior to conducting face-to-face coordination, the platoon leader should use his radio (or FBCB2 if equipped) to send and receive the following information prior to conducting face-to-face coordination:

- Location of leaders.
- Location of fighting positions.
- Location of OPs and withdrawal routes.
- Location and types of obstacles.
- Location, activities, and passage plan for scouts and other units forward of the platoon's position.
- Platoon's digital sector sketch.
- Location of all Soldiers and units operating in and around the platoon's AO.

4-60. Current techniques for coordination hold true for units that are M2A3 equipped. If a digitized (M2A3) and a non-digitized unit conduct adjacent unit coordination, face-to-face is the preferred method. The leader of the digitized unit has the option to enter pertinent information about the non-digitized unit into

FBCB2 for later reference. The M2A3 equipped platoon leader should show the adjacent unit leader his digital sector sketch. If face-to-face coordination is not possible, leaders share pertinent information by radio.

SECURITY

4-61. 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 OPs and patrols. When planning for the security in the defense, the platoon leader considers the military aspects of terrain: observation and fields of fire, avenues of approach, key terrain, obstacles, and cover and concealment. He uses his map to identify terrain that will protect the platoon from enemy observation and fires, while enabling observation and fires in/from the EA. 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.

4-62. Current FBCB2 systems enable mechanized squads to digitally transmit enemy situation and observation reports. This simplifies the reporting process without compromising security. Dismounted OPs still render reports by FM radio transmission.

OBSERVATION POSTS

4-63. An observation post (OP) provides the primary security in the defense. OPs provide 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 OPs along the most likely enemy avenues of approach into the position or into the AO. Leaders ensure that OPs (mounted and/or dismounted) have communication with the platoon.

4-64. Early detection reduces the risk of the enemy overrunning the OP. OPs also may be equipped with a Javelin command launch unit to increase its ability to detect the enemy. They may receive IR trip flares, IR parachute flares, IR M203 rounds, and even IR mortar round support to illuminate the enemy. The platoon leader weighs the advantages and disadvantages of using IR illumination when the enemy is known to have night vision devices that detect IR light. Although IR and thermal equipment within the platoon enable the platoon to see the OP at a greater distance, the OP should not be positioned outside the range of the platoon's small arms weapons.

4-65. To further reduce the risk of fratricide, OPs use GPSs to navigate to the exit and entry points in the platoon's position. The platoon leader submits an OP location to the company team commander to ensure a no fire area is established around each OP position.

PATROLS

4-66. Platoons actively patrol in the defense. Patrols enhance the platoon's ability to fill gaps in security between OPs. (See FM 3-21.8 for details.) The platoon leader

forwards his tentative patrol route to the commander to ensure they do not conflict with other elements within the company team. The commander forwards the entire company team's patrol routes to the task force. This allows the operations and intelligence staff officers to ensure all routes are coordinated to avoid fratricide and that there are no gaps. 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.

BRADLEY FIGHTING VEHICLE FIRING POSITION

4-67. After a range card has been completed, the position should be marked with ground stakes. This enables the BFV or a replacement BFV to reoccupy the position and to use the range card data. The steps in marking a BFV position are to stake the position and then to move into position.

Stake the Position

4-68. Before the BFV is moved, the position should be staked. Three stakes are required to effectively mark the position as shown in Figure 4-2.

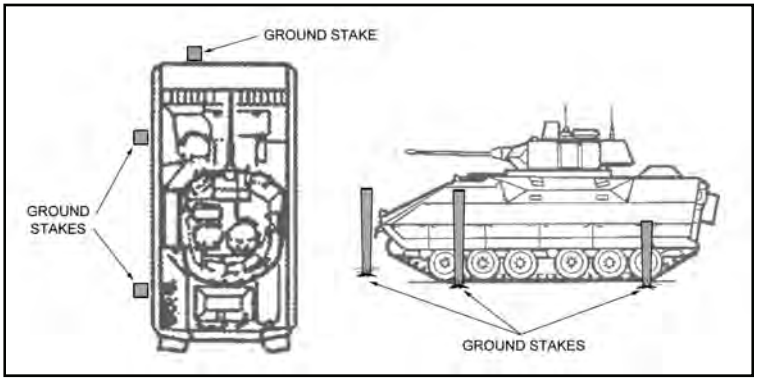

Figure 4-2. Stake the position

4-69. One stake is placed in front of the BFV, centered on the driver's station and just touching the hull. The stake should be long enough for the driver to see it when in position. The other two stakes are placed parallel to the left track and lined up with the hub on the front and rear wheels. The stakes should be placed close to the BFV with only enough clearance to move the BFV into position.

4-70. The stakes should be driven firmly into the ground. Engineer tape or luminous tape can be placed on the friendly side of the stakes so that the driver can see them. A rock is placed at each of the front two corners of the vehicle to assist in reoccupation if the stakes are lost.

Move into Position

4-71. If the situation permits, a ground guide can be used to assist the driver. If a ground guide cannot be used, the driver moves the BFV in, parallel to the side

stakes, with the front stake centered on the driver's station. Once the BFV is in position, the gunner should index the range and azimuth for one of the target reference points (TRP) on the range card. If the sight is aligned on the TRP, the BFV is correctly positioned. If the sight is not aligned on the TRP, the gunner should tell the driver which way to move the vehicle to align the sight on the target. Only minor adjustments should be necessary. If the stakes are lost and the position is not otherwise marked, the vehicle is moved to the approximate location. The BFV commander or gunner can use a compass to find the left and right limits. The vehicle should be moved if time allows until it is within 6 to 8 inches of exact position.

RECONNAISSANCE

4-72. Usually the platoon moves to a position behind the planned defensive position and establishes a hasty defensive position. If time is critical, the platoon may have to establish a hasty position on the planned defensive position and then re-position later. The platoon leader moves forward to the planned defensive position as part of a leader's reconnaissance or by himself, usually accompanied by a security element or his BFV. During the reconnaissance, the platoon leader determines the following:

- Enemy mounted and dismounted avenues of approach and probable support by fire positions.
- The trace of his defensive position to—
  - Maximize fields of fire and mutual support between squads.
  - Identify support by fire positions for his BFVs and attached vehicles.
  - Make the best use of available cover and concealment.
  - Minimize dead space in front of the position.
  - Tie in his position with adjacent platoons.
- Primary and supplementary positions for his squads, BFVs and attached vehicles, crew-served weapons, and Javelins.
- Locations of OPs and his command post.

OCCUPATION

4-73. The platoon occupies defensive positions according to the company team commander's plan and the results of the reconnaissance. To ensure an effective and efficient occupation, each BFV and squad moves to the marker used by the reconnaissance element to mark friendly positions, or a guide leads them in. These tentative positions are entered on the operational graphics. Once in position, each squad leader and Bradley commander checks his position location on the map to ensure he is complying with the platoon leader's graphics.

4-74. As the platoon occupies its positions, the platoon leader manages the positioning of each squad and vehicle to ensure the locations are in accordance with the tentative plan. If the platoon leader notes discrepancies between actual positioning of the squads or vehicles and his plan, he makes the corrections.

4-75. The platoon leader must personally walk the positions to ensure that everyone understands the plan and that the following are in accordance with the plan:

- Weapons orientation and general sectors of fire.
- Vehicle positions.
- Crew served weapons positions.
- Rifle squads' positions.

4-76. Each squad leader ensures he knows the location of the platoon leader and platoon sergeant for C2 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 defensive position. All leaders must know where these obstacles are so they can tie them into their fire plan.

4-77. When the occupation is complete, subordinate leaders can begin to develop their sector sketches based on the basic fire plan developed during the leader's reconnaissance. Positions are improved when the direct fire plan is finalized and proofed. Depending on METT-TC variables, the platoon may occupy hide positions when preparations are completed, then occupy the defensive positions just before initiating the defensive operation. The platoon leader, with guidance from the company team commander, designates the level of preparation for each defensive position based on the time available and other tactical considerations for the mission.

HASTY OCCUPATION

4-78. 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.

4-79. The platoon leader issues a FRAGO covering a minimum of the following information:

- Changes in the enemy and friendly situation.
- Platoon task and purpose.
- Task and purpose for each subordinate element.
- Scheme of fires.
- Coordinating instructions.

4-80. 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 team commander.

DELIBERATE OCCUPATION

4-81. 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 AO to provide security for forces in the main battle area. Establishing defensive positions is accomplished concurrently with the development of the EA. The platoon leader directs the initial reconnaissance from the EA and then tentatively emplaces vehicle and weapons system positions.

OCCUPATION DURING LIMITED VISIBILITY

4-82. "Own-the-night" equipment enhances the occupation process under limited visibility conditions. For instance, the platoon leader can mark his position with an IR light source. Squad leaders and Bradley commanders can move to pre-marked positions with IR 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 IR light sources to keep the occupation clandestine.

RANGE CARDS

4-83. A range card is a sketch of an area that a direct fire weapons system is assigned to cover. A range card aids in planning and controlling fires and aids the crew in acquiring targets during limited visibility. It is also an aid for replacement personnel or platoons or squads to move into the position and to orient on their AO. During good visibility, the gunner should have no problems maintaining orientation in his AO. 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 area limit markers, he can use the range card to locate the limits. The gunner should make the range card so that he becomes more familiar with the terrain in his area. He should continually assess the area and if necessary update his range card. In M2A3-equipped units, individual Soldiers still prepare handwritten range cards for their positions since they do not have the capability to enter this data into FBCB2. (See Chapter 7 of this manual for more details.)

SECTOR SKETCHES

4-84. 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. In M2A3-equipped units, leaders still prepare handwritten sector sketches for their positions since they do not yet have a tool (sketch card) to enter this data into FBCB2. However, leaders may use the overlay tool to mitigate the absence of a sketch card tool. (See Chapter 7 of this manual for more details.)

ALTERNATE, SUPPLEMENTARY, AND SUBSEQUENT POSITIONS

4-85. Other planned defensive positions and routes are reconnoitered and developed as time allows. This may be extensive if the platoon is defending an AO with multiple battle positions (BP). The platoon leader, with guidance from the company team 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 follow in descending order of thoroughness and time required. They are:

- **Occupy**. The unit reconnoiters, prepares, and occupies the position prior to the "defend not later than" time specified in the company order. The platoon rehearses, and the platoon leader establishes a trigger for the occupation of the position.
- **Prepare**. The leaders reconnoiter the position and corresponding EA. Squad and BFV positions are marked, along with direct fire control measures, in the EA. Time permitting, the unit prepares fighting positions, pre-positions ammunition caches, and emplaces protective obstacles.
- **Reconnoiter**. Leaders reconnoiter the EA and the defensive positions. They plan tentative weapon positions and establish limited direct fire control measures.

4-86. 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 according to the company order. The following paragraphs discuss the tactical considerations for these positions.

ALTERNATE POSITIONS

4-87. An alternate position is—

- Used to cover 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.
- Usually employed to supplement or support positions with weapons of limited range, such as dismounted Infantry positions.

SUPPLEMENTARY POSITIONS

4-88. 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

4-89. A subsequent position is—

- Used to cover the same avenue of approach and or sector of fire as the primary position.
- Located in depth through the defensive AO.
- Occupied based on specific enemy action or conducted as part of the company commander's scheme of maneuver.

REMOUNT POINT

4-90. The platoon leader selects a remount point that permits the rapid loading of the dismounted element into the BFVs, while minimizing both the dismounted Soldier's and BFV's exposure to enemy fire. He tries to locate the remount point as close as possible to his dismounted element. Squad leaders ensure that their Soldiers know the remount point location. When moving to the BFVs, the dismounted element ensures that they do not mask the BFV's fields of fire.

4-91. There are three possible remount point locations: near the dismounted element, near the mounted element, or between the two. Positioning the remount point near the dismounted element is preferred if it does not unnecessarily expose the BFVs to enemy fire. Based on the situation however, the platoon leader may have to accept risk and expose his BFVs to remount his platoon. Locating the remount point near the BFVs is preferred if the area around, or the mounted route to the dismounted element, is exposed to enemy fire, and there is a covered dismounted route back to the BFVs. The platoon leader selects a remount point between the two elements when both can reach it without unnecessarily exposing themselves to enemy fire.

WEAPONS EMPLACEMENT

4-92. To position weapons effectively, leaders must know the characteristics, capabilities, and limitations of the weapons, the effects of terrain, and the tactics the enemy uses. Platoon leaders should position weapons where they have protection, avoid detection, and surprise the enemy with accurate and lethal direct fires. In order to position the weapon, the platoon leader must know where he wants to destroy the enemy and what effect he wants the weapon to achieve. Additionally, the platoon leader must consider whether his primary threat will be armored vehicles or infantry. His plan should address both mounted and dismounted threats. (See FM 3-21.8 for details on the emplacement of machine guns, Javelins, and shoulder-launched munitions.)

BRADLEY FIGHTING VEHICLE EMPLACEMENT

4-93. Leaders should position BFVs where flank engagements will occur. This means placing fighting positions on the flank of enemy mounted avenues of approach.

4-94. BFVs use defilade positions when in the defense. Defilade positions are classified as either turret down or hull down. A turret down position uses terrain to mask most of the BFV with only the integrated sight unit or improved BFV acquisition system exposed to the enemy. Because the TOW, when erected, is above the integrated sight unit, it may be fired from this position without exposing more of the BFV than necessary as long as the missile has 18 inches of clearance. The BFV cannot engage the enemy with the 25-mm from this position. A hull down position exposes only as much of the BFV as needed to engage the enemy with the three primary weapons systems.

4-95. Flank positions in restrictive terrain provide windows of opportunity to engage the enemy and afford the BFV additional protection from enemy overwatching fire. The basis for this technique is to limit exposure only to the targets at which it is firing. It then shifts to other firing positions as enemy vehicles are destroyed. These positions restrict observation and vulnerability to only one segment of the platoon's EA. Therefore, only those enemy vehicles that the BFV can see and engage can return fire.

4-96. Leaders should consider the following when employing BFVs in the defense:

- Use a hide position when possible and stay in it until the enemy is in the area where the platoon will destroy him.
- A keyhole position provides a window to engage the enemy and afford the BFV additional protection from enemy overwatching fires.
- A prone or dug-in forward observer gives a much smaller signature than a BFV.
- Have a backdrop and avoid anything that may catch the enemy's eye.
- Position to the flank of an enemy mounted approach and behind frontal cover. It is easier for the attacker to acquire and destroy a target to his front than those to his flank or rear.
- Use covered routes into and out of firing positions.
- Plan multiple positions for each vehicle. Use a guideline of 75 meters or more between primary and alternate BFV positions. This decreases the enemy's ability to acquire the BFV following an engagement.
- Do not construct berms. To be effective, a berm needs more than 20 feet of dirt, and this makes it easier for the attacker to spot the position. Dig one- and two-step fighting positions instead.
- Avoid positions that expose weapons to large numbers of enemy systems. It is best to hide weapons from major portions of the enemy formation. The weapon should be able to engage one or two of the enemy vehicles at the same time. It must be able to shift from its assigned sector of fire to engage other portions of the enemy formation (Figure 4-3).

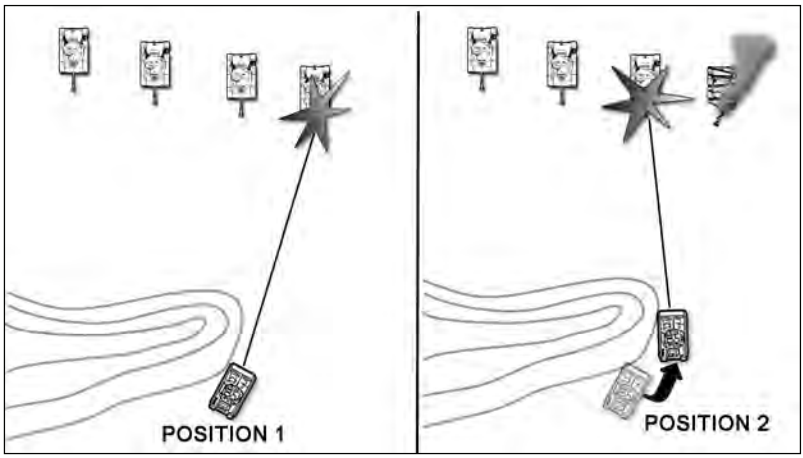

Figure 4-3. Hidden position with smaller fields of fire

4-97. Battlefield dust, smoke, fog, and darkness normally limit observation. When engagement ranges are reduced, flanking fires, the use of obstacles, mutual support with rifle squads, and covered and concealed positions increase in importance. Because of battlefield obscuration, weapons should be positioned to fight during limited visibility or be able to quickly move to alternate positions.

CLOSE COMBAT MISSILE SYSTEMS EMPLOYMENT

4-98. Javelin employment is key to the destruction of enemy armor elements. (See FM 3-21.8 for details.) Based on the situation, the platoon leader may employ all or some of the Javelins. He has the following two options:

- **Centralized Con trol.** The platoon leader controls the fires of his Javelin gunners, by either physically locating the weapons in his vicinity or personally directing their fires, or by grouping them together under the control of the platoon sergeant or another designated leader.
- **Decentralized Con trol**. Javelin gunners operate with, and are controlled by their squad leaders. The squad leader may need to employ one fire team with a Javelin. The platoon leader normally gives the command to fire.

PLATOON AS A RESERVE

4-99. If assigned as the company reserve, the mechanized platoon usually is positioned to the rear of the other platoons. The reserve adds depth to the defense. The company team commander gives the reserve platoon a primary and several supplementary positions. The reconnoitering, occupation, and preparation of the reserve position are the same as for any defensive position.

4-100. Besides conducting a defense, the reserve platoon may have one of the following missions:

- Block penetrations.
- Secure the company flanks and rear.
- Support a refueling platoon by fire.
- Plan and conduct a counterattack.

SECTION VI – URBAN OPERATIONS

4-101. Infantry units are well suited to conduct defensive operations in close urban terrain where engagement ranges are short, there is abundant cover and concealment, and the enemy's assault must be repelled. Defensive operations in urban areas are based on established defensive doctrine modified to conform to the urban terrain. Small units must be prepared to operate while being physically separated from the parent unit.

4-102. The density of buildings, rubble, and street patterns dictate the frontage of the unit. The frontage for a platoon is typically one to two city blocks long. Depending on METT-TC variables, platoons can occupy about three small structures or one larger two- or three-story building. (See FM 3-06.11 for details on defensive urban operations.)

PLANNING CONSIDERATIONS

4-103. General defensive considerations in urban terrain are similar to any other defensive operation. The defense of an urban area should be organized around key terrain features, buildings, and areas that preserve the integrity of the defense and provide the defender ease of movement. Because of the many possible avenues of approach into his position, the platoon leader usually establishes positions with 360-degree security. When planning a defense in an urban area, leaders identify—

- Threats from above and below.
- Positions and areas that must be controlled to prevent enemy infiltration.
- Sufficient covered and concealed routes for movement and repositioning of forces.
- Structures and areas that dominate the urban area.
- Open areas, such as broad streets, that provide fields of fire for tanks and antiarmor weapons.
- C2 locations.
- Protected areas for sustainment activities.
- Suitable structures that are defendable and provide protection for defenders.
- Contingency plans.

TASK ORGANIZATION

4-104. The platoon and squads are task organized based on METT-TC variables. They usually retain their regular organization of rifle squads, with the machine gun teams attached to rifle squads. If there is an armored threat, Javelin teams also may be organized.

POSITIONS

4-105. Defensive positions should block or restrict the enemy's ability to maneuver and control key areas. Planning of the defense must be detailed and centralized, while execution is decentralized. In UO, the defender must take advantage of inherent cover and concealment afforded by the urban terrain. He must also consider restrictions to the attacker's ability to maneuver and observe. By using the terrain and fighting from well-prepared and mutually supporting positions, a defending force can inflict heavy losses, delay, block, or fix a much larger attacking force.

4-106. Other considerations for defensive UO are as follows:

- **Battle positions.** The size and location of BPs within the AO depend mainly on the type of enemy encountered and the ability to move between positions to block threatened areas.
- **Areas of op erations.** Depending on METT-TC variables, units also may assign AOs to defend instead of BPs.
- **Engagement areas** . The decisive battle usually is fought in EAs. Depending on the threat, units can deploy on the forward edges of the urban area or in BPs in depth throughout the urban area.
- **Priorities of work**. Priorities of work during defensive UO are the same as other defensive operations.
- **Defensive positions** . Buildings should be chosen for their structural strength, their fields of fire, and for their position relative to other defended buildings. Mutual support between these positions is vital to prevent the attacker from maneuvering and outflanking positions, making them untenable.
- **Fighting positions.** When a building is used for defensive positions, consider the various possible firing positions inside a building. Choose defensive positions that force the enemy to make costly attacks or conduct time-consuming maneuvers to avoid them. A position that the enemy can readily avoid has no defensive value unless the enemy can be induced to attack it.
- **Weapon positions**. Each individual, crew-served, and vehicle-mounted weapon is given a primary firing position. Alternate and supplemental firing positions also may be assigned in accordance with METT-TC variables. Leaders must ensure that both mounted and dismounted avenues of approach are covered by fire. Specific considerations are as follows:

- **Position machine guns** and automatic weapons to cover dismounted avenues of approach. If possible, place machine guns near ground level to increase grazing fires.
- **Place AT weapons** where they can engage targets at maximum ranges with alternate firing points.
- **Assign BFVs** and other combat vehicles to primary, alternate, and supplementary positions as well as primary and secondary sectors of fire. They can provide depth to the defense and should be positioned in defilade behind rubble and walls or inside buildings for movement into and out of the area. Position Infantry to provide security against close AT fires and to detect targets for the armored vehicles.
- **Obstacles**. The use of obstacles during UO is a very effective way to block or channel the enemy into EAs or areas where they are at a disadvantage. The urban landscape provides abundant material to reinforce existing obstacles or create new obstacles.

SECTION VII – TECHNIQUES

4-107. The company team commander's analysis determines the most effective manner in which to defend. He will direct the platoons as to what defensive techniques to employ. (See FM 3-90.1 for details on defensive techniques.) Usually the platoon defends using one of the basic techniques described in this section.

DEFEND AN AREA OF OPERATION

4-108. The company team commander may assign an AO to the platoon. The platoon leader assumes responsibility for most tactical decisions and controlling maneuvers of his subordinate elements. He assigns them a series of subsequent defensive positions in accordance with guidance from the company team commander in the form of intent, specified tasks, and the concept of the operation. He also may use BPs to defend his AO. The company team commander normally assigns an AO to a platoon in the following situations:

- Fighting without the mutual support of other units.
- Multiple avenues of approach require a decentralized defense.
- The AO is too large for him to directly control his company.

DEFEND A BATTLE POSITION

4-109. A battle position is a defensive location oriented on a likely enemy avenue of approach. The commander may assign his subordinates BPs in situations that he needs to retain a greater degree of control over the maneuver than when only in an AO. Units do not usually hold BPs "at all costs." The commander assigning a unit to a BP should specify when and under what conditions the unit displaces from the position. If a unit is to defend a BP, its commander has the option of moving off the BP. If that unit is to retain a BP, its commander needs to know the specific conditions that must exist before his unit can displace.

4-110. Units as large as battalion task forces and as small as squads or sections use BPs. A unit defends a BP to—

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

4-111. The company team commander assigns platoon BPs to allow each platoon to concentrate its fires or to place it in an advantageous position for the counterattack. The size of the platoon BP can vary, but it should provide enough depth and maneuver space for subordinate elements to maneuver into alternate or supplementary positions and to counterattack.

4-112. The BP is a general position on the ground. The platoon leader places his BFVs on the most favorable terrain in the BP based on the higher unit mission and commander's intent. The platoon then fights to retain the position unless ordered by the company team commander to counterattack or displace. The following paragraphs detail basic methods of employing a platoon in a BP.

ONE BATTLE POSITION COVERING THE SAME AVENUE OF APPROACH

4-113. Bradley fighting vehicles and rifle squads are on the same BP covering the same avenue of approach (Figure 4-4). The advantages of collocating the BFVs and rifle squads are as follows:

- The platoon can defend against mounted and dismounted attacks and move rapidly to another position.
- The facilitation of squads remounting of BFVs.
- Within the BP, the BFV may be positioned with the squads forward or around the vehicles for security.
- The BFVs remain on the same BP as the squads when the terrain provides good observation, fields of fire, and cover and concealment to both rifle squads and BFVs.
- The proximity of both the BFVs and rifle squads and their orientation on the same avenue of approach facilitates C2.

ONE BATTLE POSITION COVERING DIFFERENT AVENUES OF APPROACH

4-114. When the terrain and mission dictate, Bradley fighting vehicles and rifle squads can occupy the same BP covering different avenues of approach (Figure 4-5).

4-115. Each element is positioned on terrain best suited to its capabilities. When the BP has two equally dangerous avenues of approach, one with long-range and one with short-range fields of fire, the BFVs are positioned to take advantage of their long-range fires while the rifle squads are placed for short-range fires. During reduced visibility, the platoon leader may direct repositioning of some rifle squad elements to provide local security for the BFVs. This method requires that plans be made to shift BFVs if a dismounted avenue of approach becomes the most dangerous avenue of approach.

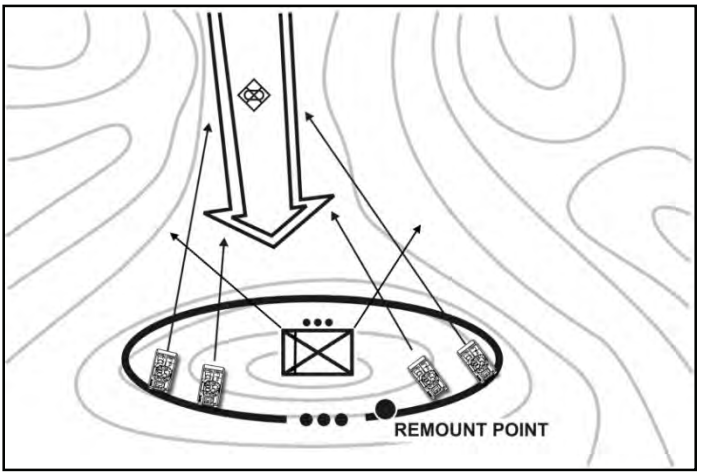

Figure 4-4. Same BP, same avenue of approach

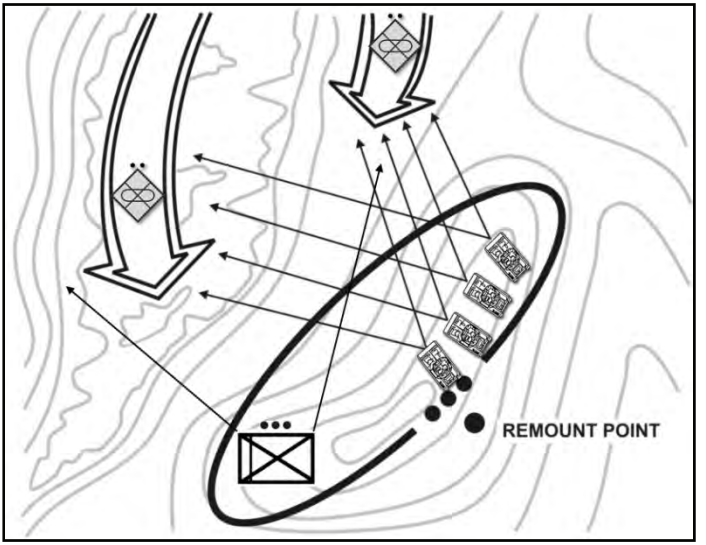

Figure 4-5. Same BP, different avenues of approach

TWO BATTLE POSITIONS COVERING THE SAME AVENUE OF APPROACH

4-116. Bradley fighting vehicles and rifle squads are on different BPs covering the same avenue of approach (Figure 4-6). If positioned on separate BPs, BFVs and rifle squads must fight in relation to each other when covering the same avenues of approach. BFVs can provide supporting fires to the rifle squads from their primary, alternate, or supplementary positions. Both elements are positioned to engage enemy

forces on the same avenue of approach, but at different ranges. The three techniques to accomplish this are:

- Place the rifle squads close enough to the EA to employ all their weapons. Place the BFVs in depth to enhance the antiarmor fires and to engage the enemy formation in depth. This technique enables the platoon to mass its fires on an enemy formation.
- Place the BFVs to engage the enemy in a specific EA and place the rifle squads in the most probable route the enemy infantry will use once the BFVs force the enemy to dismount their vehicles. This allows the platoon to take advantage of the long-range firepower of BFVs. The disadvantage is that rifle squads may not get into the fight and the platoon's firepower is not massed on the entire enemy formation.
- Place the rifle squads at chokepoints. Place the BFVs to support the Infantry by destroying enemy armored vehicles as they seek to bypass the chokepoints by engaging in a supplemental EA or by firing into the same EA as the rifle squads. The BFVs can be employed forward of the rifle squads on the same avenue of approach. Then move to supplemental positions. This technique is especially useful in restrictive or severely restrictive terrain (Figure 4-7).

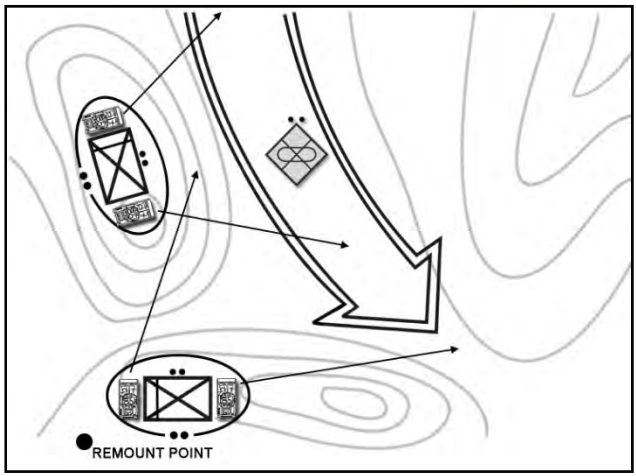

Figure 4-6. Different BPs, same avenue of approach

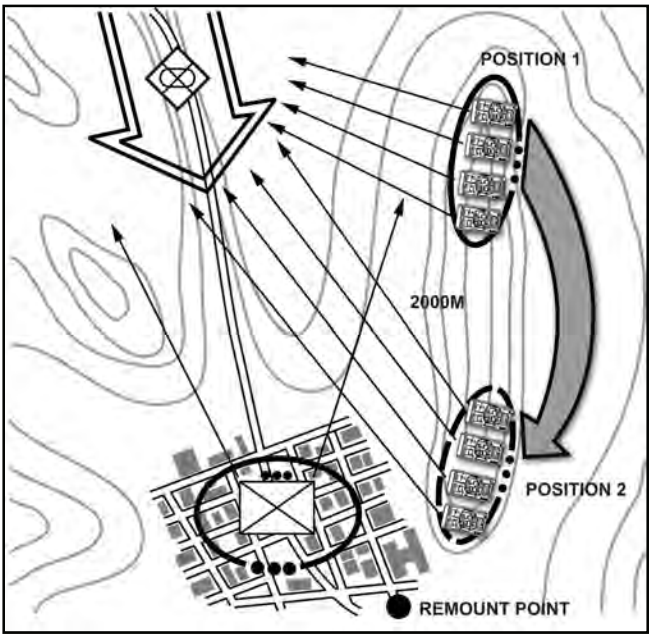

Figure 4-7. Bradley's displacing to support rifle squads

TWO BATTLE POSITIONS COVERING DIFFERENT AVENUES OF APPROACH

4-117. The platoon can employ Bradley fighting vehicles and rifle squads on different BPs covering different avenues of approach. If the platoon's BFVs and rifle squads are fighting in relationship to each other, then the platoon leader likely locates with the dismounted rifle squads, and the platoon sergeant will locate with the mounted element. When a platoon commander determines that the platoon's BFVs and rifle squads will not fight in relation to each other, he can consolidate control of both elements at the company team level. The commander may consolidate all rifle squads in one location and deploy only the platoon's BFVs with the platoon leaders if—

- A large number of dismounted Soldiers are required to hold a position.
- Primary positions for the rifle squads do not allow adequate fields of fire for BFV weapons.
- The rifle squads must occupy heavily wooded or rugged terrain the BFVs cannot traverse.
- Both a mounted and a dismounted avenue of approach must be defended, and the terrain cannot be defended from the same BP.

RIFLE SQUAD CONSIDERATIONS

4-118. Rifle squads use available time to prepare fighting positions and obstacles. When the enemy attacks, BFVs normally engage enemy formations and, at a

prearranged signal or event, move to alternate positions to the flank or to the rear of the rifle squads. The timing of this move is critical. While maximum advantage can often be gained by employing the mounted element forward, the BFVs become more vulnerable to enemy fire as the enemy closes. Rifle squads must be able to conduct operations without the support of the BFVs. The quantity and type of weapons, ammunition, mines, equipment, and supplies for the rifle squads must be considered.

MOUNTED ELEMENT CONSIDERATIONS

4-119. Bradley fighting vehicles may be employed well forward to perform a specific task such as a screen or guard. A section with a squad also can conduct security operations. Normally, this is done under the direction and control of the company team commander.

DEFEND A STRONGPOINT

4-120. Defending a strongpoint (Figure 4-8) is not a common mission for a mechanized Infantry force. Strongpoints sacrifice the mobility of the BFVs, require extensive engineer support (in terms of expertise, materials, and equipment), and take 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 strongpoint 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 strong point 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 team or task force scheme of maneuver.
- Provide a pivot to maneuver friendly forces.
- Block an avenue of approach.
- Canalize the enemy into one or more EAs.

Note. At the company team level a mechanized Infantry team normally executes a strongpoint defense in order to take advantage of the numerous Infantry squads and their ability to retain ground. The defensive can be used in conjunction with other techniques to make best use of the team's tanks and BFVs.

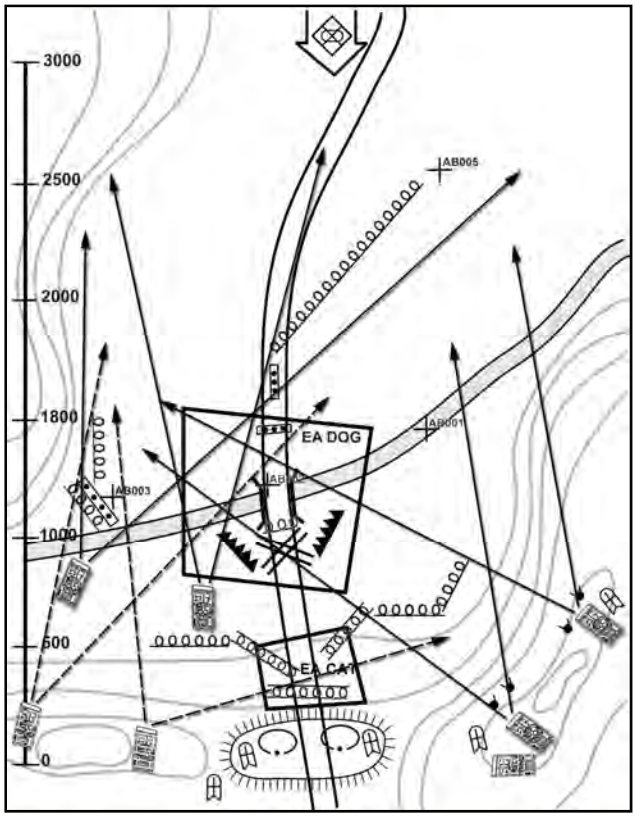

Figure 4-8. Defending a strongpoint (BFVs outside a strongpoint, rifle squad in reserve slope)

4-121. In laying out the strongpoint, the platoon leader designates weapon positions that support the company team's defensive plan. Once these primary positions have been identified, the platoon leader continues around the strongpoint, sighting weapons on other possible enemy avenues of approach and EAs until he has the ability to orient effectively in any direction. The fighting positions facing the company team EA may be along one line of defense or staggered in depth along multiple lines of defense (if the terrain supports positions in depth). Vehicle positions may be located abreast of the two-man fighting positions or, for greater depth, behind them. The platoon leader can create a broader strongpoint frontage by interspersing vehicle and rifle squad positions.

4-122. The platoon's reserve may be comprised of mounted sections, fire teams, or a combination of the two. The platoon leader must know how to influence the strongpoint battle by employing his reserve. He has several employment options, to include reinforcing a portion of the defensive line or counterattacking along a portion of the perimeter against an identified enemy main effort.

4-123. The platoon leader should identify routes or axes that enable 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 and include the direct fire control measures necessary to accomplish the maneuver. Final protective fires may be employed to assist in the displacement.

4-124. Engineers support strongpoint defense by reinforcing the existing obstacles. The task force obstacle plan provides the foundation for the company team strongpoint obstacle plan. The commander or platoon leader determines how he can integrate protective obstacles (designed to defeat mounted or dismounted 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.

4-125. Once the enemy has identified the strongpoint, he then masses 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 also may plan for interconnecting trench lines that allow Soldiers to move between positions without exposure to direct and indirect fires. Time permitting, these crawl trenches can be developed into fighting trenches or standard trenches.

DEFEND A PERIMETER

4-126. A perimeter defense (Figure 4-9) 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 mission variables as a strongpoint operation.

4-127. The perimeter defense is a relatively uncommon mission for a mechanized platoon because it allows only limited maneuver and limited depth. Nonetheless, the platoon may be called on to execute a perimeter defense under a variety of conditions, such as—

- 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 AA or reserve position.
- Preparing a strongpoint.
- Concentrating fires in two or more adjacent avenues of approach.
- Defending support or sustainment assets.
- Occupying a patrol base when dismounted.

4-128. 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.

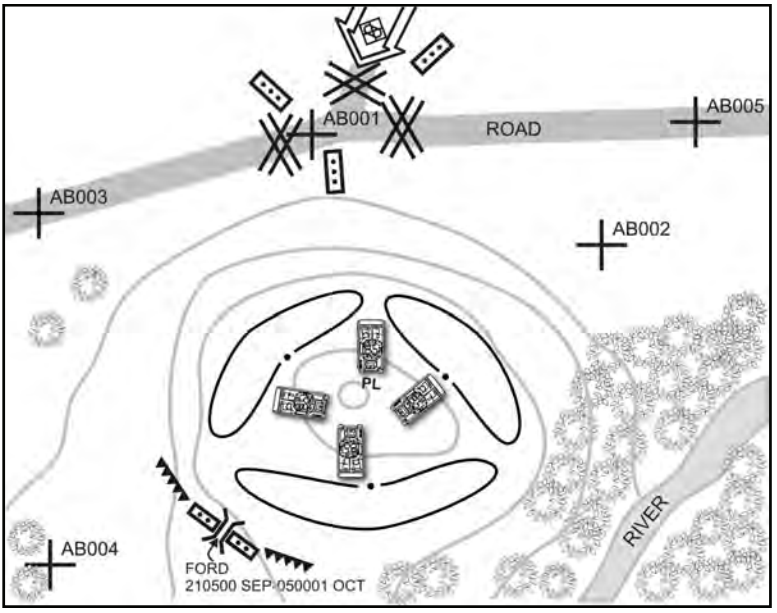

Figure 4-9. Perimeter defense with rifle squad in reserve

Note. A variant of the perimeter defense is the use of the shaped defense, which allows two of the team's platoons to orient at any particular time on any of three EAs.

DEFEND ON A REVERSE SLOPE

4-129. The platoon leader organizes a reverse slope defense on the portion of a terrain feature or slope with a topographical crest that masks the main defensive positions from enemy observation and direct fire (Figure 4-10). The platoon leader gives up his long-range fires to take advantage of the cover provided by the terrain. He also may want to reduce any salients in his line.

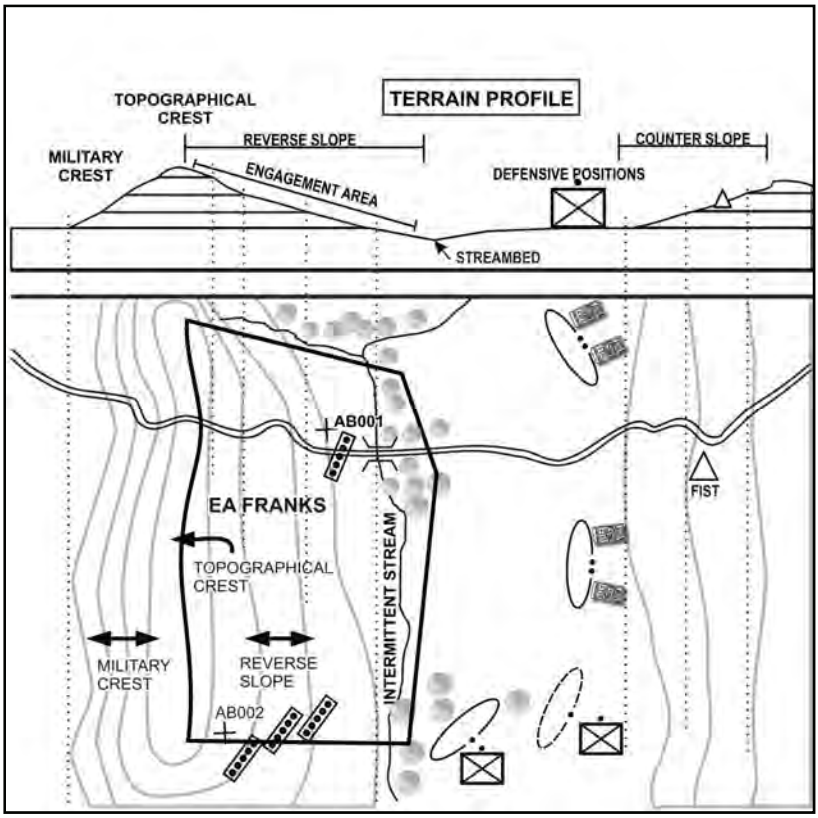

Figure 4-10. Reverse slope defense options

4-130. Bradley fighting vehicles offer the platoon additional opportunities with regard to positioning. They can begin positioned forward to take advantage of their protection from artillery and their ability to engage the enemy at long ranges. After an initial engagement, BFVs may move over or around the crest line and through the rifle squads on the reverse slope to a position either on the flanks or farther in depth to the rear.

4-131. Obstacles are necessary in a reverse slope defense. Since the enemy will be engaged at close range, obstacles should prevent the enemy from closing too quickly and overrunning the positions, and they should facilitate the platoon's disengagement.

SECTION VIII – FIGHTING POSITIONS

4-132. The defensive plan usually requires the unit to build fighting positions. The mechanized platoon uses fighting positions for its dismounted Infantry and for its BFV. (See FM 3-21.8 and FM 3-21.75 for information regarding fighting positions.)

DISMOUNTED

4-133. Fighting positions protect Soldiers by providing cover from direct and indirect fires and concealment through positioning and proper camouflage. Because the battlefield conditions confronting Soldiers are never standard, there is no single standard fighting position design that fits all tactical situations.

4-134. See FM 3-21.8 and FM 3-21.75 for details on the construction of—

- Hasty fighting positions.
- Fighting positions for crew-served weapons, to include machine guns and Javelins.
- Fighting positions for one, two, and three men.
- Shoulder-launched munitions positions.

MOUNTED

4-135. Vehicles use natural cover and concealment in hide positions initially to increase survivability. As time, assets, and situations permit, positions are prepared using organic excavation equipment or engineer support. Priority is given to those vehicles containing essential equipment or supplies. Crews use these fighting positions for individual protection as well.

4-136. Parapets positioned at the front of or around major weapons systems provide improved protection from direct fire and from blast and fragments of indirect fire, artillery, mortar, and rocket shells. At its base, the parapet should be at least 8 feet thick. The parapet functions as a standoff barrier for impact-detonating direct fire high explosive antitank and ATGM projectiles. The parapet should cause the fuzes to activate, thereby increasing survivability for the protected vehicles. If the enemy uses kinetic energy, direct fire armor-piercing, or hypervelocity projectiles, it is impractical to construct parapets thick enough for protection. To protect against these projectiles, the unit prepares deeply cut, hull defilade, or turret defilade positions. Units should construct fighting and protective positions for essential vehicles no larger than needed.

4-137. Battlefield success requires maneuver among fighting positions between main gun firings. Maximum use of terrain is required to conceal fighting vehicles maneuvering among fighting positions. After a major weapons system fires its main gun, the vehicle should move concealed to another position before firing again. If the major weapons system immediately reappears in the old position, the enemy knows where to fire his next round.

HASTY

4-138. Hasty fighting positions for combat vehicles, including armored personnel carriers and mortar carriers, take advantage of natural terrain features. These positions are prepared with a minimum of construction effort. A frontal parapet, as high as practical without interfering with the vehicle's weapons systems, shields the position from frontal attack and provides limited concealment if properly camouflaged. Protection improves if the position is made deeper and the parapet extended around the vehicle's sides. Parapets provide a false sense of security against kinetic energy and hypervelocity projectiles; therefore, hasty vehicle fighting positions with parapets are not recommended for tanks and BFVs. Hasty fighting positions offer protection from high explosive antitank projectiles and provide limited concealment if properly camouflaged. As the tactical situation permits, hasty positions are developed into deliberate positions.

DELIBERATE

4-139. Units need deliberate fighting positions to protect a vehicle from kinetic energy and hypervelocity projectiles. They construct the position in four parts: hull defilade, concealed access ramp or route, hide location, and turret defilade. (See Figures 4-11 and 4-12.)

POSITIONS FORMED BY NATURAL TERRAIN

4-140. Positions formed by natural terrain are usually best because they are easy to modify. If a position requires preparation, extensive engineer support performs the task. Either natural vegetation or a camouflage net conceals the position, and the soil is flattened out or hauled away. Units plan all fighting positions for fighting vehicles (tanks and BFVs) as deliberate positions. Since the lack of time usually does not allow full construction of a deliberate position, only some parts of the position are prepared. For example, the complete fighting position for a BFV requires the construction of a hull defilade, turret defilade, concealed access ramp or route, and hides location all within the same position. The maneuver team commander uses organic and engineer earthmoving assets and usually constructs part of the fighting position.

4-141. Digging hide locations and concealed routes between fighting positions usually is not practical due to the lack of engineer assets and time. Engineer assets are used to dig the hull and turret defilade positions. The ramps and concealed routes require only partial clearing and leveling with blade tanks or engineer equipment because natural concealed routes and hide locations are used. If time permits, the commander expands the fighting position to all four parts, including a hide and turret defilade location. The access ramp from the hide location to the hull defilade position usually provides turret defilade for a vehicle at some point on the ramp. This location can be marked with engineer tape and a chemical light so the driver knows when to stop.

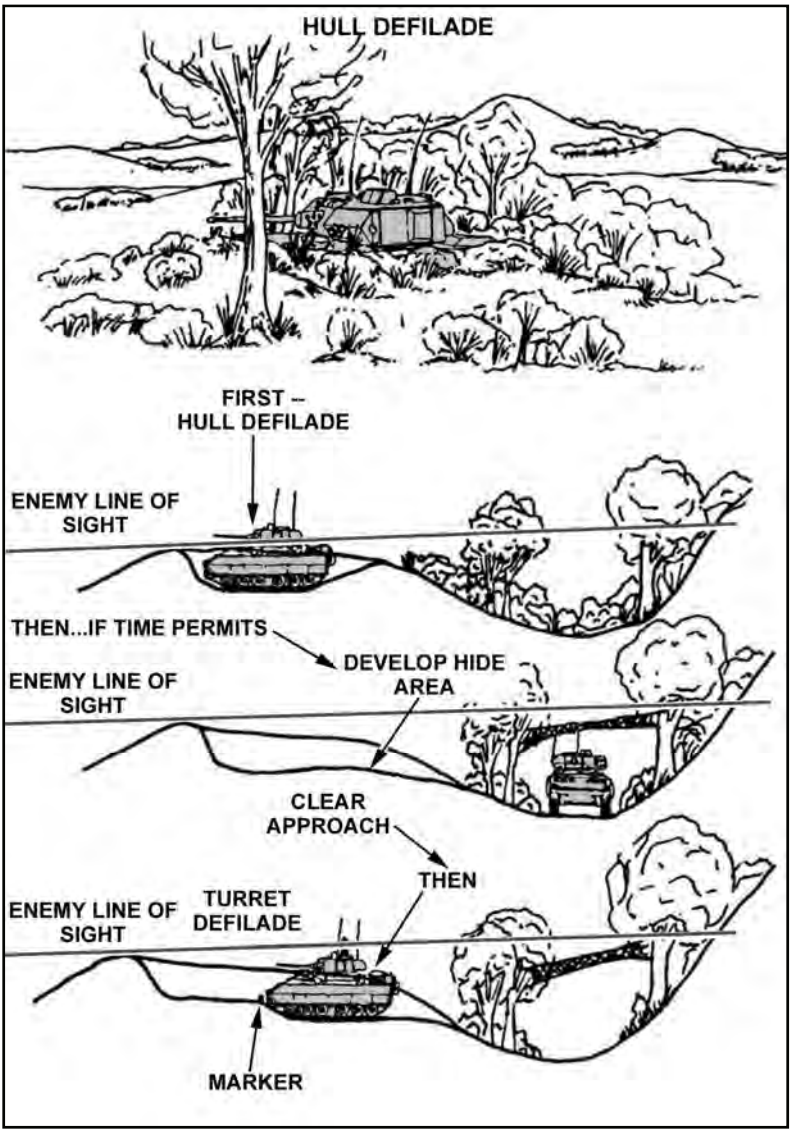

Figure 4-11. Developing deliberate fighting positions

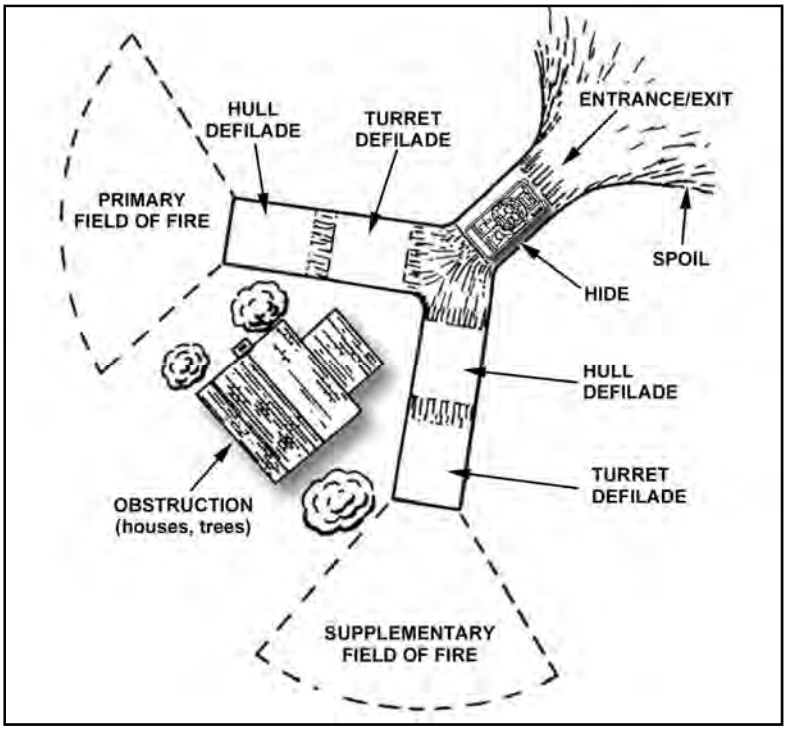

Figure 4-12. Top view of Y-shaped fighting position

SECTION IX – RETROGRADE OPERATIONS

4-142. The retrograde operation is a type of defensive operation that involves organized movement away from the enemy. The enemy may force these operations, or a commander may decide to execute them voluntarily. The mechanized platoon executes retrograde operations as a part of a larger force. The three forms of retrograde operations are withdrawal, delay and retirement.

WITHDRAWAL

4-143. A withdrawal is a planned operation that occurs when an element disengages from enemy contact to reposition itself for another mission. (See FM 3-21.8 for details.)

WITHDRAWAL NOT UNDER PRESSURE

4-144. In this type of withdrawal, a platoon may withdraw as part of the main body or serve as, or as part of, the detachment left in contact. Units use a detachment left in contact to deceive the enemy into thinking that the entire force is still in position. As a general guide, the detachment left in contact consists of about a third of the

main body and with half of the main body's firepower. When moving with the main body, the platoon is normally under the control of the company team commander. As the detachment left in contact, the platoon—

- Repositions BFV sections, squads, and weapons to cover the company's withdrawal.
- Repositions a squad and a BFV 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 BFV fire, dismounted Infantry fire, and indirect fire if the company is attacked during withdrawal.
- Withdraws by echelon once the company is at its next position. The BFV is specially suited for this purpose because of its protection, mobility, and organic weapons systems.

WITHDRAWAL UNDER PRESSURE

4-145. 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 (Figure 4-13). Soldiers, squads, or BFV sections not in contact are withdrawn first to provide suppressive fires and allow the Soldier, squad, or BFV sections in contact to withdraw.

DISENGAGEMENT

4-146. Based on orders from the CAB commander, the company team commander decides how long to retain defensive positions. It might be necessary for the company team to remain and fight as long as possible, or to disengage and displace to subsequent positions. As part of a company team, a platoon may disengage to—

- Defend from another BP.
- Prepare for a counterattack.
- Delay.
- Withdraw.
- Prepare for another mission.

4-147. 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 commander may move his platoons and mass fires to stop or slow the enemy advance before beginning the movement away from the enemy. The sequence for the rearward fire and movement is as follows:

4-148. A base of fire is established to cover units moving away from the enemy.

4-149. Units break contact and maneuver to their next position and establish a base of fire to cover the rearward movement of forward units.

4-150. Fire and movement are repeated until contact with the enemy is broken, the platoon conducts a passage of lines with another unit, or the platoon is in position to resume its defense.

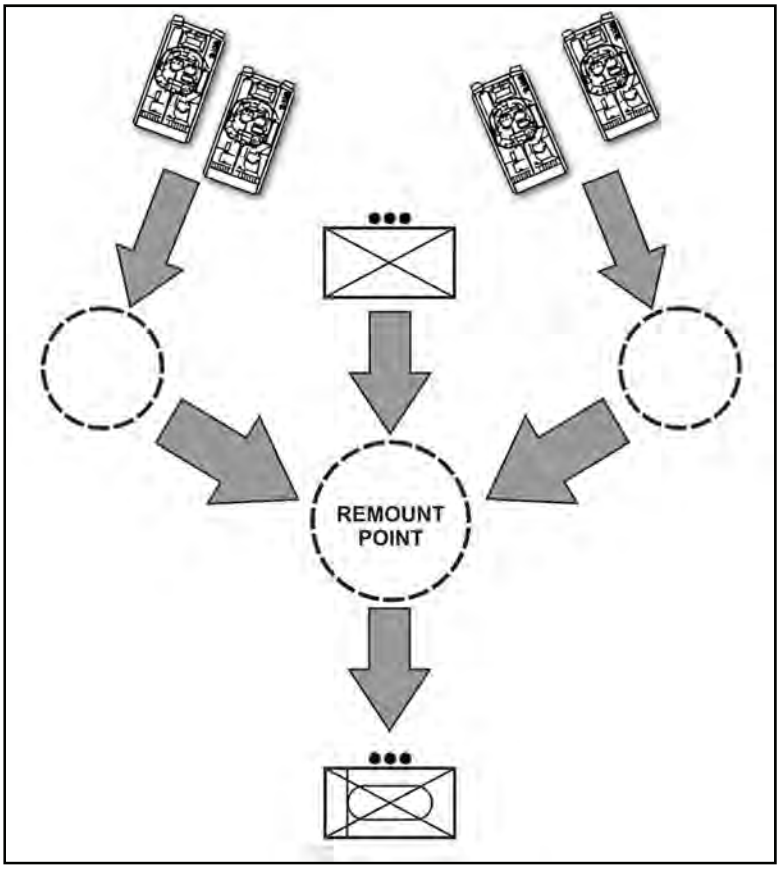

Figure 4-13. Bounding overwatch to the rear

4-151. Tactics used by the platoon to disengage from the enemy differ according to how the platoon is deployed, the commander's plan for disengagement, and other METT-TC variables. The following actions apply in all cases:

- Units make maximum use of the BFV's firepower to cover rearward movement.
- BFVs back out of position to cover or concealment, and move, keeping one terrain feature between the vehicle and the enemy.
- Turret weapons remain pointed in the direction of the enemy.
- Rapid movement and an effective base of fire enhance the mobility advantage and are key to successful disengagements.

4-152. When the platoon employs the BFV and rifle squads on separate positions, platoon remount points and routes to the remount points must be chosen prior to withdrawing (Figure 4-14). In addition, routes must be rehearsed and timed. Covered positions for vehicles and rifle squads should be chosen to allow for easy remounting even during limited visibility in the remount point. Squad leaders must ensure their men know where the remount point is located, where the vehicle is located, and routes to the point. The platoon remount point can be near the rifle squad's position, near the BFV position, or between the two.

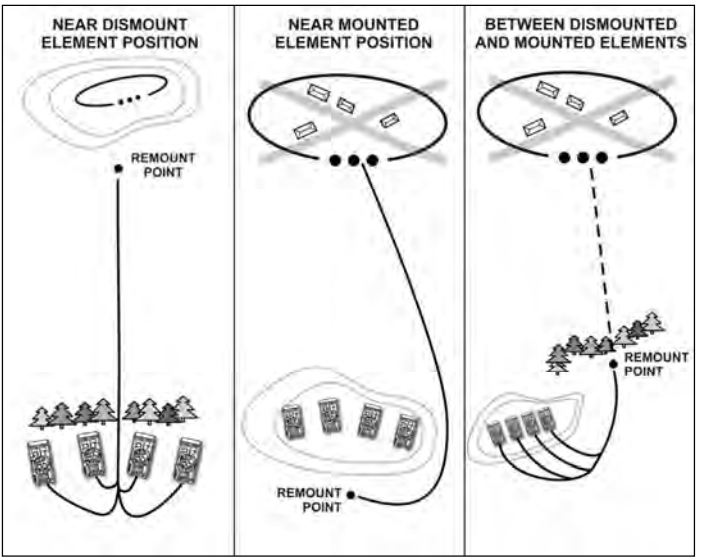

Figure 4-14. Platoon remount points

Methods

4-153. When the dismounted and fighting vehicle elements are separated, the dismounted element can disengage in any of three ways, which are discussed below.

Simultaneous Disengagement

4-154. When the squads simultaneously disengage, they assemble and move as one element to the remount point using appropriate movement techniques.

4-155. Simultaneous disengagement is favored when—

- Rapid movement is critical.
- The disengaging element has adequate overwatching fires.
- The enemy has not closed on the rifle squad or cannot fire effectively at it.
- There are obstacles to delay the enemy.

Disengagement by Squads or Teams

4-156. When the rifle platoon must cover its own movement, it uses the appropriate technique based on the enemy pressure. Disengaging by squads provides the most control, but exposes more Soldiers. Displacing by fire teams decreases control somewhat, but exposes fewer Soldiers at the same time. For example, when disengaging by squads, the following occurs:

- Two squads stay in position as a base of fire.
- The third squad moves to the rear.
- Squads left in position must fire into the entire element's AO to cover the movement of the other squad. Adjust sectors of fire for better coverage.
- Moving squad may displace by fire teams.
- Squad left in position sequentially disengages. Two squads provide a base of fire while one squad disengages.
- Movement to the rear by alternating squads continues until contact is broken.
- Disengagement is complete and the rifle squads move to the remount point using appropriate movement techniques.

Thinning the Lines

4-157. When enemy pressure is the greatest, the platoon disengages by thinning the lines. When disengaging by thinning the lines, selected Soldiers from each fire team (often one Soldier from each fighting position) disengage and move to the rear. The Soldiers still in position become the base of fire to cover the movement.

Bradley Fighting Vehicle Disengagement

4-158. When BFVs and rifle squads are employed on the same position, the squads normally move to the remount point while the BFVs provide a base of fire. The BFVs then quickly move to the remount point, link up with the rifle squads, load them, and move out. Squads use the disengagement techniques discussed previously. The method selected is dictated by the enemy situation, terrain, the fighting vehicle crews' ability to serve as a base of fire, and the type and amount of overwatching fires.

4-159. Because of the BFV's mobility, firepower, and protection against small arms fire and artillery shell fragments, it is usually best for the dismounted element (when deployed) to disengage while covered by the BFVs. If the BFVs are not in a position to support the dismounted element by fire, or if the dismounted element is heavily engaged, the fighting vehicle element may disengage first and move to a position that would allow them to assist the dismounted element in disengagement. Whichever method is used, the vehicle element can disengage by using simultaneous disengagement or by using disengagement by vehicle or section.

Simultaneous Disengagement

4-160. When BFVs disengage simultaneously, they move as a platoon as quickly as possible. This method normally is used when BFVs are covered by another force and speed is the most critical factor. If fire teams are already mounted, the entire platoon moves, using movement techniques, to a position designated by the commander. If fire teams are deployed, BFVs move to the remount point to pick them up, or they may attack the enemy by fire from a new position to allow the fire teams to disengage.

Disengagement by Vehicle or Section

4-161. When BFVs in the platoon must cover their own disengagement, one, two, or three vehicles can be left in position as a base of fire while the remaining elements move to the rear. BFVs left in position must cover the entire AO until the moving vehicles reach positions that they can use to provide a base of fire.

DELAY

4-162. A delay is a form of retrograde operation in which a force under pressure trades space for time by slowing the enemy's momentum and inflicting maximum damage on the enemy without becoming decisively engaged. (See FM 3-21.8 for details.) The considerations involved in planning and executing a delay at platoon level are the same as for offensive operations using bounding overwatch. There are two types of delay that the mechanized Infantry platoon can use: delay from alternate positions and delay from subsequent positions.

Delay from Alternate Positions

4-163. Units employ this method of delay when the AO is narrow and the commander has adequate forces to split between different positions. For example, as the first and second platoons engage the enemy, the third platoon occupies the next position in depth and prepares to assume responsibility for the fight. The first and second platoons disengage from the enemy, pass through/around the third platoon, and move to the next position. The advantage of this method is that it allows positioning in depth, allows for more time to conduct equipment and Soldier maintenance, and increases flexibility. The disadvantages are that it requires continuous coordination, requires a passage of lines, and engages only a portion of the enemy at one time.

Delay from Subsequent Positions

4-164. This method of delay is employed when the AO is wide and the forces available to the commander do not allow themselves to be split. All delaying subordinate units are committed to each of the series of BPs along the same phase line. The commander staggers the movement of delaying elements so that only some of them are moving at the same time. The advantage of this method is that the commander is able to mass the effects of all available combat power. The disadvantages are that there is limited depth to the delay positions, less available time to prepare subsequent positions, and less flexibility.

RETIREMENT

4-165. Units conduct a retirement when not in contact with the enemy. Platoons and squads retire as members of a larger unit using standard movement techniques.

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Chapter 5

Stability Operations

Stability operations are operations conducted outside the United States to maintain or reestablish a safe and secure environment, and provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief. Soldiers operate among populations, not adjacent to them or above them. They often face the enemy among noncombatants, with little to distinguish one from the other until combat erupts. Killing or capturing the enemy in proximity to noncombatants complicates land operations exponentially. Informing the public and influencing specific audiences is central to mission accomplishment. Battlefield success is no longer enough; final victory requires concurrent stability operations to lay the foundation for lasting peace.

SECTION I – TEXT REFERENCES

5-1. Much of stability operations are common among all Infantry units. Refer to the referenced sections of FM 3-21.8 or other referenced publications for details on these subjects. Table 5-1 consolidates the references to additional information.

Table 5-1. Guide for subjects referenced in text

Subject	***References***
Tactical Mission Tasks	FM 3-90
Checkpoints FM	3-21.8
Conducting Searches	FM 3-39.40
Cordon and Search	FM 3-06.20
Interaction with the Populace	FM 3-21.75
Detainee Processing	FM 3-39.40
Countering Explosive Devices	FM 3-21.75
Nonlethal Munitions	FM 3-22.40
Site Exploitation Operations ATTP	3-90.15

SECTION II – OVERVIEW

5-2. Stability operations are part of full spectrum operations and typically occur in conjunction with either offensive or defensive operations in foreign countries. They may be the decisive operation within a phase of a major combat operation. To ensure success of the operation, military forces initially might have to take the lead in conducting stability operations. The goal of the operations, however, is to transition to where the host nation (HN) or other instruments of power predominate.

PURPOSE

5-3. The five purposes for stability operations are to:

- Provide a secure environment.
- Secure land areas.
- Meet the critical needs of the populace.
- Gain support for HN government.
- Shape the environment for interagency and HN success.

SECTION III – ESCALATION OF FORCE

5-4. Escalation of force is the process friendly forces use to determine the proportionate force level(s) of response to use in reaction to a particular incident. The goal is to properly train and equip Soldiers at all levels to apply escalation of force principles to prevent unnecessary deadly force engagements. This builds and reinforces a positive image of military forces with the local nationals and other noncombatants. Over time, the appropriate use of force may increase the trust and confidence of HN civilians in U.S. Soldiers, reduce casualties, and increase the flow of information from HN civilians to U.S. Forces.

5-5. If force is warranted, determining what type and quantity of force to use can be confusing if all personnel are not trained in the proper execution of employing force. Escalation of force centers on the use of a proportionate amount of force needed to achieve a desired effect without endangering friendly personnel. If the desired effect is not achieved, the escalation of force process includes graduating the response by increased means of force until the desired effect is met.

5-6. Escalation of force is not a step-by-step process, but rather, a range of options. It provides a common concept meant to help Soldiers make quick decisions to protect themselves and other unit members while preventing unnecessary deaths and collateral damage during the application of force.

USE OF FORCE

5-7. The use of needless or illegal force weakens the credibility and acceptability of U.S. Forces both internationally and at home. It also may raise the level of violence in the region and create a situation in which US forces become part of the local problem.

PASSIVE AND ACTIVE FORCE

5-8. The passive use of force employs physical means that do not harm individuals, structures, or equipment. Examples of the passive use of force are: using vehicles to block the passage of civilian vehicles, and removing unauthorized persons from restricted areas.

5-9. The active use of force employs means that can physically harm individuals, structures, or equipment. Examples are the use of batons, rifle butts, or weapons fire.

PREPARATION

5-10. Leaders should take steps to train their Soldiers to be prepared to use active or passive force in each scenario they may encounter. All troops must be briefed and periodically updated on:

- Current potential threats.
- How to act in foreseeable emergencies.
- When active force may be required.
- Rules of engagement.

SELF-DEFENSE

5-11. The use of active force is always allowed in self-defense. As a guide, deadly force may be used in self-defense:

- When the safety of an individual member of the force or part of a force is in jeopardy.
- When attempts are made to disarm members by force.
- When attempts are made to arrest or abduct a member of U.S. Forces, to include civilian members.
- In the face of resistance to prevent, by forceful means, U.S. Forces from discharging their duties.
- When escalation of force measures have failed.

CONSIDERATIONS FOR RULES OF ENGAGEMENT

5-12. In all operations, effective command guidance and a detailed understanding of the ROE are critical. Although discussed in this chapter, ROE are not limited to stability operations. Even in general war, U.S. Soldiers may have limitations on the type and extent of weapons they can employ.

5-13. The ROE are directives that explain the circumstances and limitations under which U.S. Forces initiate and continue combat engagement with forces encountered. These rules reflect the requirements of the laws of war, operational concerns, and political considerations when the operational environment shifts from peace to conflict and back to peace.

5-14. The ROE must be briefed and trained to the lowest level. They should be established for, disseminated to, and thoroughly understood by every Soldier in the unit. Commanders must assume that the belligerents they encounter also understand

the ROE. These unfriendly elements will attempt to use their understanding of the ROE to their own advantage and to the disadvantage of friendly force.

SECTION IV – INTELLIGENCE SUPPORT

5-15. Units form a company intelligence support team to assist the company team commander, organize information, and coordinate with assets collecting information for him. The following paragraphs describe what the company intelligence support team does and what intelligence support and assets the company can employ.

COMPANY INTELLIGENCE SUPPORT TEAM

5-16. The company intelligence support team assists the company team commander in collating and analyzing data collected by CABs, other units, and his platoon and squads. The company intelligence support team is the primary filter and analysis center for raw data at the company level. It accomplishes this by—

- Being the centralized point for information in the company.
- Processing, analyzing, and organizing information.
- Turning gathered information into actionable intelligence by using any or several of the intelligence tools available.
- Supervising the collection effort by managing the company collection plan.
- Coordinating with lateral units to facilitate the flow of information at all levels.
- Establishing a patrol pre-brief and debrief process.
- Developing specific information requirements to task the patrols for collection.
- Developing and maintaining situational awareness of the AO by conducting information analysis and making predictions of future events.
- Developing lethal and nonlethal enemy COA as part of the intelligence preparation of the battlefield process.
- Developing information requirements.
- Identifying possible second and third order effects of the company's actions on their AO.
- Working closely with the battalion intelligence staff officer to facilitate the flow of information.

5-17. The mission of a company intelligence support team is to aid the commander in the decisionmaking process by—

- Focusing assets to gather specific information.
- Developing procedures to create intelligence from the information gathered from various assets.

- Recommending various COAs to the unit commander.
- Determining where to disseminate information and intelligence—
  - Throughout the company (patrols and missions).
  - To the battalion intelligence staff officer section.
  - To adjacent units.

SOURCES OF INFORMATION

5-18. The primary information collection assets of the company intelligence support team are the platoons, the battalion, and other attached units. The more accurate the information gathered, the better the quality of intelligence received. In return, the company intelligence support team organizes and analyzes the collected information and provides updated intelligence to platoons and other units operating in the company AO.

ATTACHED SUPPORT AND EQUIPMENT

5-19. During stability operations, the platoon may have a wide range of teams and equipment attached. The following are some of the most common:

- **Human intelligent collection teams** are integral to providing Army personnel with information about enemy forces, strength, capabilities, vulnerabilities and intentions, as well as potential battle areas. Human intelligent collectors conduct source operations, interrogations and debriefings to collect this information. The human intelligent collector is primarily responsible for supervising and conducting information collection operations.
- **Biometric s ystems id entification d atabase** is part of a biometric collection system that uses devices to collect three data elements: fingerprints, iris scans, and facial photographs. With these systems, Soldiers can input and access the name, age, address, religious sect, and birthplace of an individual and upload the information to a database. Anyone who previously has been entered into the system can then be identified by their previously-entered biometrics.
- **Joint doc ument and me dia e xploitation center** serves as the collection point for all enemy documents. Personnel perform in-theater screenings and exploitation of documents.
- **Linguists or interp reters** are assigned to subordinate elements for tactical site exploitation based on availability. It is important to create and maintain a good working relationship. They rely on company Soldiers for protection while Soldiers rely on them for accurate translations.
  - **Category I linguists** are locally hired personnel with an understanding of the English language. They are screened and hired in-theater and do not possess a security clearance.
  - **Category II linguists** are U.S. citizens who have a native command of the target language and a nearly native command of the English language. They undergo a screening process, which

includes a background check. Upon favorable findings, they are granted the equivalent of a secret collateral clearance.

- **Category III l inguists** are U.S. citizens who have a native command of the target language and a native command of the English language. These personnel undergo a screening process, which includes a special background check. Upon favorable findings, they are granted the equivalent of a top secret clearance.
- **Civil affairs teams** collect information and conduct assessments to target their relief efforts or stabilize the civil environment. They can help assess the company's operational environment and evaluate the effect of search operations on the region. They also can meet with local leaders to mitigate the impact of the search and outline the goals and objectives of the operation. They also can assist in identifying and targeting the enemy's nonlethal infrastructure.

- **Human terra in teams** increase the ability of brigades, battalions, companies, platoons, and squads to understand the local populace in which they live and operate. They consist of military personnel, linguists, area studies specialists, and civilian social scientists. The teams are brigade assets and support the commander with open-source, unclassified socio-cultural analysis.
- **Weapons intelligence tea m** includes personnel with specialized skills who can conduct analysis of IED sites. They analyze material located on the objective that can be tied to IED development. Their capabilities include developing methods for IED detection, post blast analysis, and IED defeat capabilities.
- **Combined exp losives exp loitation cell** is a joint agency tasked with the collection and exploitation of IEDs. It provides in-theater technical and operational analysis, including identification of enemy tactics and trends, to units in the field.
- **Law en forcement p ersonnel** are experienced criminal enterprise investigators, and serve as investigators, planners, advisors, and subject matter experts in support of designated U.S. Army units.
- **Explosive or dnance disposal personnel** may be called upon to render safe or dispose of potential explosive ordnance, or to aid in explosive ordnance material collection and exploitation.
- **Tactical psy chological operations teams** support units when conducting search operations by disseminating information to influence the population on or near the objective. They seek to influence targets directly through face-to-face encounters, dissemination of printed products, and loudspeaker broadcasts.
- **Combat camer a cre ws** are military personnel that document the contributions made by U.S. Forces.

SECTION V – PLATOON AND SQUAD TASKS

5-20. Stability operations are complex and demanding. The mechanized Infantry platoon in a stability operation must master skills from negotiating to establishing observation posts and checkpoints to escorting a convoy. The tasks and techniques in this section should assist the platoon leader in implementing these and other tasks.

5-21. Especially during stability operations, the platoon and squads conduct activities that place them in the forefront of intelligence gathering. Tasks that mechanized Infantry Soldiers perform—manning traffic control posts and checkpoints, roadblocks and combat outposts; patrolling; and conducting searches—provide key information.

Note. In this section, the term "enemy forces" refers to guerillas, terrorists, or insurgent forces that generally try to blend into the local populations and engage in asymmetric warfare.

CHECKPOINTS

5-22. One of the main missions conducted during stability operations is the vehicle checkpoint or traffic control post. Units consider these as standard tasks and, through repetitive execution, can perform them like battle drills. This is beneficial given the often constrained planning and preparation time at company and platoon levels. The four types of checkpoints are deliberate (Figure 5-1), hasty, snap, and vehicular traffic stops. (See FM 3-21.8 for details.)

PURPOSES

5-23. The mechanized Infantry platoon, by itself or as part of a larger force, may establish a checkpoint to—

- Obtain intelligence.
- Identify enemy combatants or seize illegal weapons.
- Disrupt enemy movement or actions.
- Deter illegal movement.
- Control movement into the AO or onto a specific route.
- Demonstrate the presence of U.S. Forces.
- Prevent smuggling of contraband.
- Enforce the terms of peace agreements.
- Serve as an observation post, patrol base, or both.
- Advantages.
- Command posts (CP) offer the following advantages regardless of the level of conflict. CPs—
  - Serve as an intimidating show of force.
  - Provide Soldiers and commanders with better situational awareness.
  - Provide reassurance to the friendly elements of the population.

- Serve to gain the initiative for limited periods.
- Help maintain friendly force vigilance.
- Keep the enemy off balance.

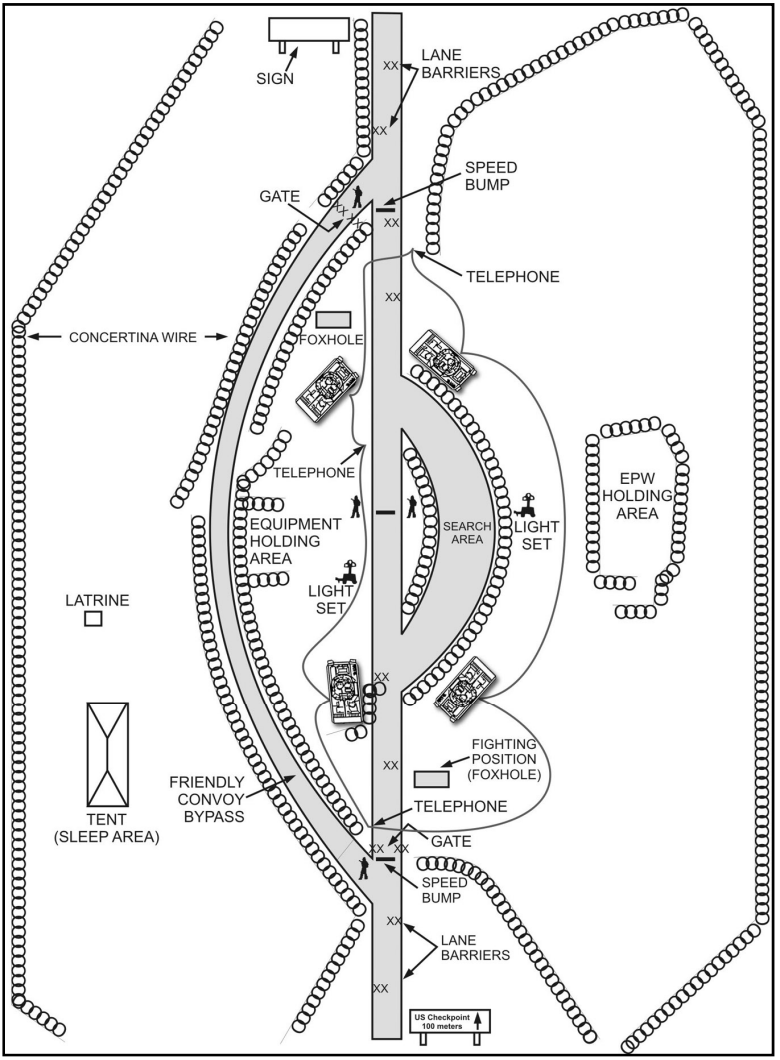

Figure 5-1. Example of deliberate checkpoint layout

DISADVANTAGES

- Command posts have the following disadvantages. They may—
- Create a pattern, which gives a potential enemy the opportunity to gather information on techniques and procedures used by friendly forces.
- Invite targeting for attack if Soldiers are undisciplined or lax.
- Incite the local populace to assist or join hostile elements.
- Commit forces needed elsewhere due to the level of effort required to conduct CPs.
- Increase the potential for direct attack due to their static locations.

ROADBLOCKS

5-24. A roadblock is used to limit the movement of vehicles along a route or to close access to certain areas or roads. They can be either deliberate or hasty, with the primary difference being the extent of planning and preparation conducted by the establishing force.

COMBAT OUTPOSTS

5-25. Constructing and operating combat outposts is a common task for BFV platoons. Each combat outpost is established for a specified time and purpose. Some combat outposts are overt (clearly visible) and deliberately constructed. Others are covert and designed to observe an area or target without the knowledge of the local population.

5-26. Each type of combat outpost must be integrated into supporting direct and indirect fire plans and into the overall observation plan. An overt combat outpost is similar in construction to a bunker and is supported by fighting positions, barriers, and patrols (Figure 5-2). Covert combat outposts may include sniper or designated marksman positions overwatching targeted areas of interest.

5-27. The establishment of a combat outpost requires similar planning material and procedures as a deliberate CP. Although the combat outpost usually is manned on a 24-hour basis, it may be manned only by day or night. During darkness, at least two persons must be in the combat outpost position—one observes while the other is resting. In remote areas, or if the situation in the area is tense, more personnel man the combat outpost for security and observation.

5-28. Based on the variables of METT-TC, deliberate and overt combat outposts may include specialized facilities, such as—

- Fighting positions.
- Observation towers.
- Ammunition and fuel storage areas.
- Power sources.
- Supporting helipads.
- Mess facilities, sleep areas, showers, and toilets.

Note. If necessary, the company team also can employ hasty OPs, which are similar to individual fighting positions.

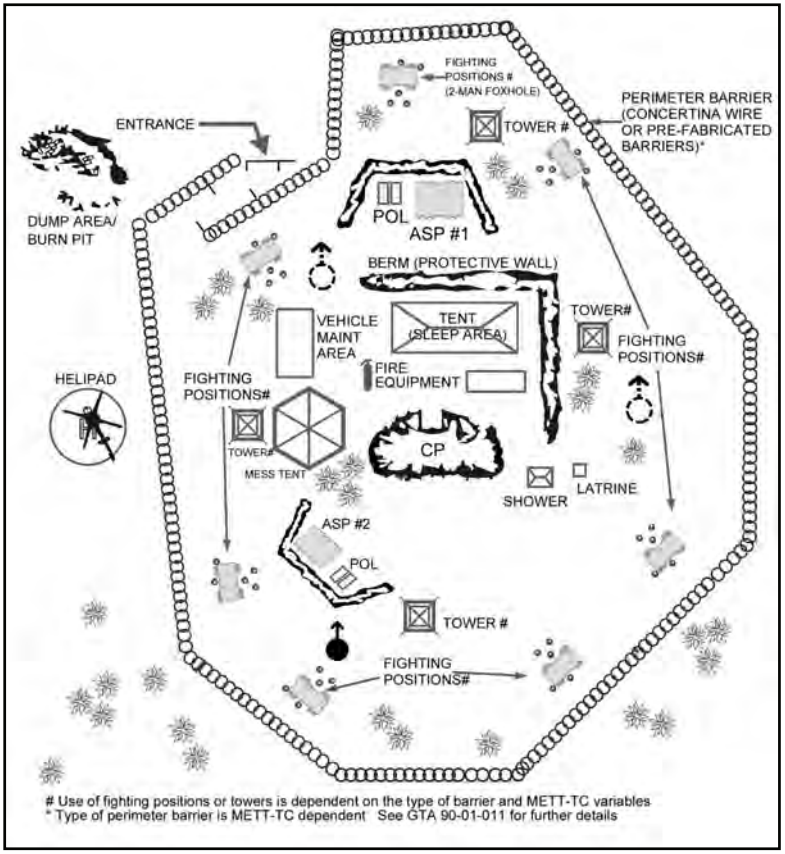

Figure 5-2. Example combat outpost

PATROLS

5-29. Mechanized platoons and squads conduct frequent patrols during offensive, defensive, and stability operations. Every patrol has a specific mission and is planned. (See Chapter 6 for details.)

5-30. The mechanized Infantry platoon can conduct mounted patrols with Infantry dismounting as needed, dismounted patrols, and dismounted patrols with BFVs in support. Mounted patrols are used in rural areas when there are large and open areas; however, they can be used in urban areas if leaders take into consideration their size, especially with slat armor, and maneuverability.

5-31. Reconnaissance patrols (sometimes called presence patrols) conducted overtly during stability operations provide a strong presence, enable regular and non-threatening contact with the local population, gather information, and develop a more thorough understanding of the unit's AO. (See Figure 5-3.)

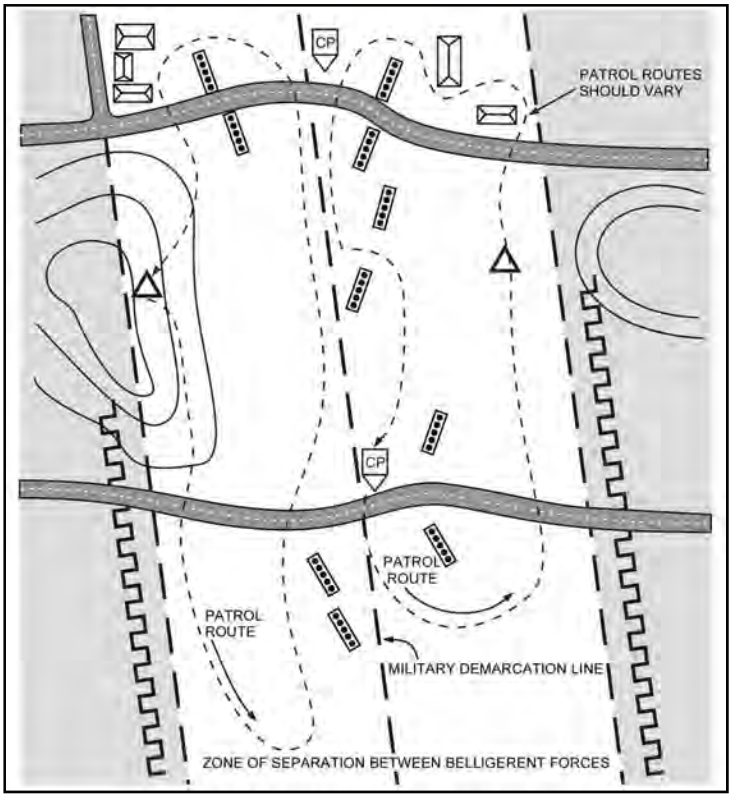

Figure 5-3. Example employment of patrols to enforce a zone of separation

PRESENCE PATROLS

5-32. U.S. Forces are deployed increasingly in UO and in support of stability operation missions all around the world. The Infantry platoons and squads conduct a presence patrol much the same as a reconnaissance patrol, and the planning considerations are similar. The main difference is that the patrol wants to both show force and lend confidence and stability to the local population.

5-33. The presence patrol also is a primary means by which the commander collects information about his AO. The presence patrol is armed, and it conducts the planning and preparation necessary for combat operations at all times. The platoon can conduct mounted or dismounted patrols planned by the commander to—

- Confirm or supervise an agreed ceasefire.
- Gain information.

- Show a stability force presence.
- Reassure communities.
- Inspect existing or vacated positions of former belligerents.
- Escort former belligerents or local populations through trouble spots.
- Deter or disrupt insurgent or enemy activity.

Attacks on Presence Patrols

5-34. Urban terrain provides multiple opportunities for attack against patrols in the stability environment. The locations of enemy firing points can be concealed by building characteristics, vehicles, civilian population, and noise. Therefore, the patrol must regain the initiative during an engagement by immediate and aggressive action.

5-35. Usually, an attack is initiated on a patrol only when the attacker has an open escape route. This emphasizes the need to maneuver teams quickly in order to provide depth and to cordon the area immediately after the initial reaction to the contact. The teams out of contact must rapidly envelop the firing point indicated by the contact team and try to close off the suspected escape route. The contact team must provide general directions or guidance to the other teams not in contact. Reacting quickly and aggressively based on limited information always beats giving the attacker a chance to escape.

5-36. Other factors of an attack on a patrol are:

- Most engagements last only for a brief time. The enemy typically breaks contact and runs after the initial engagement.
- Engagements may be initiated with some type of IED or other command-detonated explosive device.
- Indigenous personnel firing weapons may not always pose a threat, such as celebratory fire. Stay aware of the different situations in which weapons firing may not be threatening.

SEARCHES

5-37. Searches are an important aspect of populace and resource control. The need to conduct search operations or to employ search procedures is a continuous requirement. Searches orient on people, materiel, buildings, or terrain. A search usually involves both civil police and HN Soldiers, but may involve only U.S. Army Soldiers. (See FM 3-39.40 for details on conducting searches.)

5-38. Misuse of search authority can adversely affect the outcome of operations. Soldiers must lawfully conduct and record the seizure of contraband, evidence, intelligence material, supplies, or other minor items for their seizure to be of future legal value. Proper use of authority during searches gains the respect and support of the people. For procedures, leaders should consult available references, such as unit TACSOP, theater training requirements, handbooks, or the *Soldier's Manual of Common Tasks*.

SEARCHING HOUSES

5-39. The object of a house search is to locate controlled items and to screen residents to determine if any are suspected threat forces or sympathizers. Soldiers should take care to respect national customs. For instance, in a Muslim country, allow the male residents to take women out of the house prior to the search.

5-40. Units should make every effort to leave the house in the same or better condition than when the search began. In addition to information collection, the search team may use cameras or video recorders to establish the condition of the house before and after the search. Document all sensitive material or equipment found in the house before it is removed or collected, to include date, time, location, the person from whom it was confiscated, and the reason for the confiscation. Cameras also can assist in this procedure. The commander should have enough money to pay immediately for damages to locks, doors, and so on.

SEARCHING MALES

5-41. Anyone in an area to be searched could be an insurgent or a sympathizer. However, to avoid making an enemy out of a suspect who may support the HN government, searchers are tactful. The greatest caution is required during the initial handling of a person about to be searched. One member of the search team covers the member who makes the actual search.

5-42. During the search, apprehend and control detainees. Keep detainees out of unsearched rooms. Also, photograph detainees and enter physical data, such as a retinal scan and fingerprints, into the database through the handheld interagency identity detection equipment or similar systems.

SEARCHING FEMALES

5-43. The enemy uses females for all types of tasks when he thinks searches might be a threat. To counter this, use female searchers. If they are not available, use local females, doctors, medics, or male members of the local populace. If male Soldiers must search females, take all possible measures to prevent any perception of sexual molestation or assault.

SEARCHING VEHICLES

5-44. Equipment such as detection devices, mirrors, and tools may be necessary to search vehicles. Specially trained military working dogs can help locate narcotics or explosives. Prior to the search, the driver can be directed to open all compartments. A thorough search of a vehicle is a time-consuming process. Consider the impact on the population. Establish a separate vehicle search area to avoid unnecessary delays.

CORDON AND SEARCH

5-45. Cordon and search operations involve isolating the target area and searching suspected buildings to capture or destroy possible insurgents and contraband. (See FM 3-06.20 for details.) The platoon may be part of either the cordon element or the search element. The mechanized platoon can be, or be part of, an outer cordon, an inner cordon, or a combination of both.

DIRECT AND INDIRECT FIRE PLANNING

5-46. The commander's fire plan must explain how the unit will achieve its purpose while maintaining the safety of its members. Units accomplish this by knowing the planned location of all friendly elements and the effects of the weapons used and their corresponding risk estimated distance. Fires from the inner cordon and the search element should be especially controlled to prevent fratricide. During the operation, each element leader must maintain situational awareness of the other elements in the cordon and maintain positive fire control within his unit. Each Soldier must have positive target identification prior to engaging. Also, Soldiers must adhere to ROE.

5-47. Considerations for direct fire planning for the outer and inner cordon are:

- Outer cordon force leader establishes clear sectors of fire oriented away from the cordon. The platoon leader must analyze the area of the outer cordon and identify local conditions that restrict or limit direct fire capability. Adjust weapons mix and capabilities based on the analysis of the objective area.
- Inner cordon element must use strict and well-planned fire control measures to avoid fratricide with the search/assault element and the outer cordon. The personnel of the search/assault element must recognize the hazard to both the inner and outer cordon forces caused by firing through exterior doors and windows.

5-48. Indirect fires should be planned. Units can employ indirect fires (particularly guided munitions) against well-identified and located targets during cordon and search operations when units encounter significant enemy resistance. Planning for the clearance of indirect fires includes compliance with the ROE, the identification of the firing unit and requested munitions, communications channels, and airspace coordination.

CONDUCTING THE CORDON

5-49. The mission of the outer cordon is to isolate the search area. In this way, the outer cordon prevents the enemy outside the cordon from reinforcing the forces in the search area, penetrating the cordon, or otherwise affects the overall operation. To accomplish the mission, the outer cordon may have to be more terrain-oriented, focusing on the most probable avenues of approach into and out of the objective area.

5-50. The mission of the inner cordon is to contain the immediate vicinity of the target to prevent escape and to provide security to the search/assault element. If the cordon and search is opposed by a hostile force, the inner cordon provides support by fire. The inner cordon provides direct fires to suppress the enemy force and to allow maneuver of the search/assault element to the objective. Due to the congested nature of the urban environment, direct fire control measures can be complicated.

CONDUCTING THE SEARCH

5-51. The search should inconvenience targeted individuals enough to discourage them, their groups, and their sympathizers from remaining in the locale, but not enough to drive the rest of the populace to collaborate with belligerents.

5-52. A large-scale search of the urban area is a combined civil police and military operation at battalion level or higher. A large-scale search requires detailed planning, coordination, and rehearsal. In larger towns or cities, the local police might have detailed maps showing relative sizes and locations of buildings. Units avoid forecasting the search by conducting the same type and level of activity, such as patrols, in the target area.

CONTROLLING THE POPULATION

5-53. During an urban search, the BFV platoon conducting the search will have to control local civilians within the search area. The platoon uses the following basic methods to control the inhabitants within the search area:

Central Location

5-54. Assemble inhabitants in a central location if they appear to be hostile. This method provides the most control, simplifies a thorough search, denies the belligerents an opportunity to conceal evidence, and allows for detailed interrogation. It has the disadvantage of taking the inhabitants away from their dwellings, thus encouraging looting, which, in turn, engenders ill feelings.

Home Restriction

5-55. Restrict the inhabitants to their homes. This prohibits movement of civilians, allows inhabitants to stay in their dwellings, and discourages looting. The disadvantages of this method are that it makes control and interrogation difficult, and gives inhabitants time to conceal evidence in their homes.

Heads of Households

5-56. Control the head of each household. Often, this is the best method for controlling the populace during a search. Tell the head of the household to remain in the front of the house while bringing everyone else in the house to a central location. During the search, the head of the household can see that the search team steals nothing. This person also can open doors and containers to facilitate the search.

INTERACTING WITH THE POPULACE

5-57. Tactical questioning is the expedient, initial questioning of individuals to obtain information of immediate value. When interacting with the populace, conduct tactical questioning in a more conversational nature to build rapport with the local population while collecting information and understanding the environment.

5-58. Unit leaders must include specific guidance for tactical questioning in the OPORD for appropriate missions. The Soldier conducts tactical questioning according to the unit's TACSOP, ROE, and orders for that mission. (See FM 3-21.75 for details.)

DEBRIEFING AND REPORTING

5-59. Begin a detailed debriefing after returning from the objective or site. Everyone on the mission has a role to play in a debriefing. A practical method for debriefing is to review all patrol actions chronologically. Leaders should not consider the mission complete or release the personnel until the debriefings and reports are done.

5-60. Report all information collected by units in contact with the local population through the chain of command. Upon return from the mission, download photos, and lay out all material taken from the objective. Finally, make as detailed a sketch as possible for visual reference of debriefed patrol areas.

SITE EXPLOITATION

5-61. Site exploitation is the action taken to ensure that documents, material, and personnel are identified, collected, protected, and evaluated to facilitate follow-on actions. Conducting site exploitation is inherent in many tasks of the mechanized Infantry platoon and squads, and includes tactical questioning at the platoon and squad levels. It focuses on actions taken by Soldiers and leaders at the point of initial contact. (For more information, see ATTP 3-90.15, *Site Exploitation Operations*.)

5-62. When conducted correctly, site exploitation provides intelligence for future operations, answers information requirements, and gathers evidence. The unit and Soldiers should not focus all of their efforts on the specific requirements of the search; they should be aware of anything unusual and worth reporting and investigating.

DETAINEE PROCESSING

5-63. Detainee processing begins when U.S. armed forces capture an individual. Detainee processing is accomplished at the point of capture for security, control, intelligence, and the welfare of detainees while in evacuation channels. All detainee processing must be accomplished with care to collect critical intelligence effectively, preserve evidence, maintain accountability, and protect detainees from danger or harm. (See FM 3-39.40 for details.)

ROUTE CLEARANCE

5-64. Route clearance is a mobility operation that engineers usually conduct. The mechanized Infantry platoon, as part of a company team, may assist in route clearance and provide overwatch support.

PURPOSES

5-65. Route clearance can—

- Clear a route for the initial entry of the battalion into an AO.
- Clear a route ahead of a planned convoy to ensure that belligerent elements have not emplaced new obstacles since the last time the route was cleared.
- Secure the route for use as a main supply route.

PLANNING CONSIDERATIONS

5-66. The planning considerations for opening and securing a route resemble those for a convoy escort operation. The company team commander analyzes the route and develops contingency plans for such possibilities as likely ambush locations and sites that are likely to be mined. The size and composition of a team charged with opening and securing a route is based on METT-TC variables.

SECURITY FORCE ASSISTANCE

5-67. Security force assistance is the unified action to generate, employ, and sustain local, HN or regional security forces in support of a legitimate authority. As part of a larger force, the mechanized platoon may be involved in security force assistance operations. Some aspects of security force assistance operations include:

- Joint effort of military and other governmental agencies.
- Training of military, police, border security, and other paramilitary organizations.
- Training that includes conventional combat, combating internal threats, or serving as coalition partners or peacekeepers in other areas.

5-68. Mechanized rifle platoons may be assigned to the general types of security assistance operations discussed in the following paragraphs.

PARTNERING

5-69. Partnering attaches U.S. units at various levels with foreign units to leverage the strengths of both U.S. and foreign security forces. A partnering unit shares responsibility for a HN's AO and support its partner HN's operations. Partnering activities include combined planning, training, and operations. Partnering U.S. units may have to provide advisor teams as well as support maneuver units.

AUGMENTATION

5-70. Augmentation is an arrangement in which the HN provides individuals or elements to combine with U.S. units, or U.S. individuals or elements combine with the HN. Augmentation improves the interdependence and interoperability of U.S. and foreign security forces.

5-71. Augmentation can occur at many levels and in many different forms. Similarly, augmentation can be of short duration for a specific operation or of a longer duration for an enduring mission. Augmentation immerses HN personnel in a U.S. environment to provide language and cultural awareness to the U.S. unit.

ADVISING

5-72. Advising is the use of influence to teach, coach, and counsel while working by, with, and through an HN. Advising is the primary type of security force assistance and is the most efficient means of helping an HN to become an effective and legitimate branch of a developing foreign state. Advising requires relationship building and candid discourse to influence development of a professional security

force. Advisors conduct partnership shaping functions, shape discussions with their counterparts, and create opportunities for the partner units.

5-73. A mechanized platoon may be under the operational control of an advisor team. The platoon's primary mission is to provide security. However, it also can be assigned to accomplish some of the advisor team's missions, to include conducting individual and collective training of HN forces.

AREA SECURITY OPERATIONS

5-74. Area security operations protect specific critical and vulnerable assets or terrain from enemy observation and direct fire. These operations can consist of escorting friendly convoys; protecting critical points, such as bridges, C2 installations, or other key and vulnerable sites; or participating in protection of large areas, such as airfields. The platoon normally performs an area security operation when conventional security or combat operations would not work. The platoon may perform area security operations as part of a larger force or as an independent platoon mission.

5-75. Mechanized platoons usually conduct area security missions to protect high-value points, areas, or assets. Whether these (and the defensive technique chosen) require protection, and how much protection they require, depends on the METT-TC variables. The platoon leader must integrate his elements into the overall security plan for the area he must protect. Area security operations rely on various techniques, which may include reconnaissance, security, defensive tasks, and offensive tasks.

5-76. Generally, when deploying for area security, the platoon initially establishes a perimeter around the area to be secured. It then develops the defense based on the METT-TC variables and the priority of work. To further improve the position, the platoon employs hasty protective minefields, wire, and other obstacles (as appropriate and available). Once it sets up vehicle positions and obstacles, the platoon develops a fire plan and submits the plan to the company commander. This plan includes integrated direct and indirect fires.

5-77. In addition to setting up the platoon position around the asset to be secured, the platoon employs patrols and OPs to enhance security (Figure 5-4). Reconnaissance patrols and combat patrols define the AO, gain information about enemy forces, and destroy small, dismounted enemy reconnaissance elements. The platoon deploys OPs to observe likely avenues of approach, provide early warning of enemy activity, and aid in control of indirect fires.

COUNTERING EXPLOSIVE DEVICES

5-78. Improvised explosive devices (IED), mines, car bombs, unexploded ordnance, and suicide bombers pose deadly and pervasive threats to Soldiers and civilians primarily during stability operations in operational areas all over the world. Soldiers at all levels must know about these hazards and how to identify, avoid, and react to them properly. The company team commander and company intelligence support team personnel should develop procedures and drills to track and record IED activity in their respective AOs. Newly assigned leaders and Soldiers should read

everything available on current local threats and the operational environment. Leaders and Soldiers should learn the unit's policies, such as those found in the unit's TACSOP and in locally produced Soldier handbooks and leader guidebooks. (See FM 3-21.75 for details.)

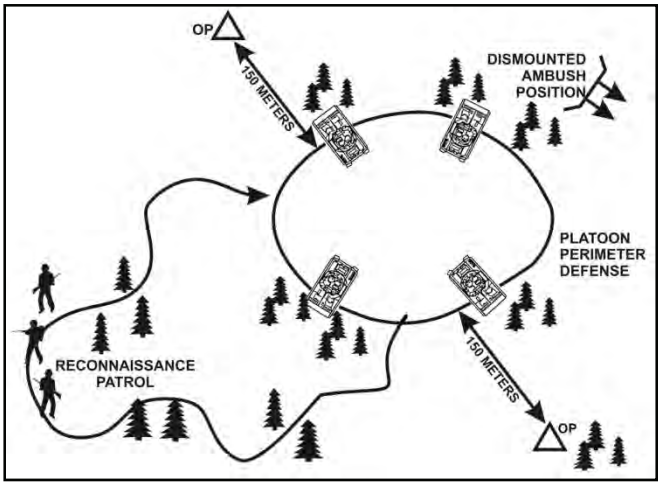

Figure 5-4. Platoon area security dispositions

LODGMENT AREAS OR FORWARD OPERATING BASES

5-79. A lodgment area (base camp) or forward operating base is a well-prepared position used as a base of operations and staging area for the occupying unit. Like an assembly area or defensive strongpoint, the lodgment area also provides some force protection because it requires all-around security.

5-80. Mechanized platoon and squads assist in the establishment and occupation of a lodgment area or forward operating base as part of a larger unit.

5-81. Some tasks they may conduct are:

- Providing security during and after construction.
- Manning entry points and observation points.
- Acting as a quick reaction force.
- Conducting patrols.

NEGOTIATION AND KEY LEADER ENGAGEMENT

5-82. The mechanized platoon leader may have to conduct negotiations and key leader engagements.

NEGOTIATION

5-83. A negotiation is a dialogue intended to resolve disputes, to find courses of action, to bargain for individual or collective advantage, and to craft outcomes to

satisfy various interests. Negotiations are not conducted in isolation. They support the unit's mission and the commander's intent.

5-84. Negotiations require leaders to thoroughly understand their authority to negotiate. The negotiator must know when he has reached the limits of his negotiating authority and turn over the discussion to a higher authority. Negotiations move up through the levels of authority until the issue is resolved.

5-85. In stability operations, the platoon leader, his subordinate leaders, and other Soldiers conduct some form of negotiations almost daily. The two main types of negotiations are situational and preplanned. At the platoon level, situational negotiations are far more common than preplanned ones.

Situational

5-86. Situational negotiations allow immediate discussion and resolution of an issue or problem. For example, members of an advance guard may have to negotiate the passage of a convoy through a checkpoint.

Preplanned

5-87. Preplanned negotiations allow discussion and resolution of an upcoming, specific issue or problem. For example, the mechanized platoon leader conducts a work coordination meeting between leaders of the belligerents to determine mine clearing responsibilities.

5-88. Before a preplanned negotiation, leaders must also know every aspect of the dispute or issue. The negotiator's goal is to reach an agreement that is acceptable to both sides and that reduces antagonism and the threat of renewed hostilities.

Identify the Purpose

5-89. Before contacting leaders of the belligerent parties to initiate the negotiation process, the leader must familiarize himself with both the situation and the area in which his unit will operate. This includes identifying and evaluating avenues of approach that connect the opposing forces. Before conducting negotiations, the platoon leader should be given detailed guidance on the purpose and limits of the planned negotiation.

Establish Proper Context

5-90. The platoon leader must earn the trust and confidence of each opposing party. This includes establishing an atmosphere (and a physical setting) that participants judge to be both fair and safe. The platoon leader should—

- Conduct joint negotiations on matters that affect both parties.
- Remain neutral when serving as a mediator.
- Learn as much as possible about the belligerents and the details of the dispute or issue under negotiation. Other factors include the geography of the area and specific limitations or restrictions, such as the ROE.
- Gain and keep the trust of the opposing parties by being firm, fair, and polite.

- Use tact and remain patient and objective.
- Follow applicable local and national laws and international agreements exactly.

Prepare

5-91. Thorough, exacting preparation is another important factor in ensuring the success of the negotiation process. Company personnel—

- Negotiate sequentially, from subordinate level to senior level.
- Select and prepare a meeting place that is acceptable to all parties.
- Arrange for interpreters and adequate communications facilities as necessary.
- Ensure that all opposing parties and the negotiating company use a common map (edition and scale).
- Coordinate all necessary movement.
- Establish local security.
- Keep higher HQ informed throughout preparation and during the negotiations.
- Arrange to record the negotiations (use audio or video recording equipment if available).

Negotiate

5-92. Negotiators must always maintain control of the session. They must be firm, yet even-handed, in leading the discussion. At the same time, they must be flexible, with a willingness to accept recommendations from the opposing parties and from their own assistants and advisors, who—

- Exchange greetings.
- Introduce all participants by name, including negotiators and any advisors.
- Consider the use of small talk at the beginning of the session to put the participants at ease.
- Allow each side to state its case without interruptions or prejudgments.
- Record issues presented by both sides.
- Produce evidence or proof to establish the fact if one side makes a statement that is incorrect.
- If the negotiating team or peacekeeping force has a preferred solution, present it and encourage both sides to accept it.
- Close the meeting by explaining to both sides what they have agreed to and what actions they must take. If necessary, be prepared to present this information in writing for their signatures.
- Do not negotiate or make deals in the presence of the media.
- Maintain the highest standards of conduct at all times.

KEY LEADER ENGAGEMENT

5-93. The mechanized platoon leader may be involved in key leader engagement. Key leader engagement is a method for building relationships with people and entities of influence in an AO. It is the leader's responsibility to respect and apply cultural norms as a means of obtaining information, influencing behavior and building an indigenous base of support for coalition and government objectives. The following are steps for a successful key leader engagement:

- Identify key leader(s).
- Prepare intelligence of the environment.
- Identify desired effects.
- Prepare.
- Execute.
- Debrief and report.
- Reengage.

COMPLIANCE MONITORING

5-94. Compliance monitoring involves observing belligerents and working with them to ensure they meet the conditions of one or more applicable agreements. Examples of the process include overseeing the separation of opposing combat elements, the withdrawing heavy weapons from a battle position, or clearing a minefield. Planning for compliance monitoring should cover, but is not limited to, the following considerations:

- Liaison teams, with suitable communications and transportation assets, are assigned to the HQ of the opposing sides. Liaison personnel maintain communications with the leaders of their assigned element and talk directly to each other and to their mutual commander.
- Platoon leaders position where violations are most likely to occur.
- Subordinates position where they can observe the opposing parties, instructing them to assess compliance and report any violations.
- As directed, the platoon leader keeps higher HQ informed of all developments, including his assessment of compliance and noncompliance.

RESERVE OR QUICK REACTION FORCE

5-95. Reserve and quick reaction force operations in the stability environment are similar to those in other tactical operations. They allow the mechanized platoon leader to plan for a variety of contingencies based on the higher unit's mission.

5-96. As a designated reserve, the mechanized platoon may play a critical role in almost any stability activity or mission, including lodgment area establishment, convoy escort, and area security. The reserve force must be prepared at all times to execute its operations within the time limits specified by the controlling HQ. The controlling HQ also can tailor the size and composition of the reserve to the mission. For a convoy mission, for example, the reserve might consist of a company.

5-97. A quick reaction force is a designated organization for any immediate response requirement that occurs in a designated AO. In contrast to a unit designated as a reserve, a quick reaction force is not committed to support one particular mission but rather is on call to respond to a multitude of contingencies within an operational area. A mechanized platoon is well equipped to act as a quick reaction force. It has organic vehicles for rapid mobility and increased protection and digital communications assets for operational control.

CROWD CONTROL

5-98. Large crowds or unlawful civil gatherings or disturbances pose a serious threat to U.S. troops. Leaders must consider the effects of mob mentality, the willingness of enemies to manipulate media, and the ease with which masses of people can overwhelm a small, isolated group of Soldiers. The police forces of each state and territory are normally responsible for controlling crowds involved in mass demonstrations; industrial, political, and social disturbances; riots; and other civil disturbances.

5-99. The prime role of U.S. troops in the control of unlawful assemblies or demonstrations is to support and protect the police, innocent bystanders, and property. Therefore, the following paragraphs describe protective and defensive measures rather than offensive measures.

5-100. Such operations are likely to call for the employment of nonlethal munitions. Some examples include various size projectiles made of substances such as rubber, foam, wood, and beanbags. (See FM 3-22.40 and FM 3-19.15 for details on nonlethal munitions.) The troops only use force as a last resort to disperse the crowd or prevent its advancing past a given point or line.

CIVIL AUTHORITY

5-101. Control at the scene of an incident normally falls under civil authority. The Army acts only upon receiving a formal request or when danger is immediate and pressing. The command of the U.S. military elements remains with the commander. The key to success is cooperation between military and civilian authorities. The controlling forces do not work side by side but, rather, from front to rear, with one element backing up the other. A military element might have to deploy without a police unit. If so, an authorized representative of the civil authority, such as a magistrate or police representative, should accompany the military.

Note. In the very early stages of stability operations, U.S. Forces might be the only civil or military authority present.

ISOLATION

5-102. Before going into the disturbed area, the mechanized platoon leader must try to isolate it and cut off reinforcement of dissidents. Roadblocks, checkpoints, or even a cordon can help, although complete isolation is probably unlikely.

DOMINATION

5-103. Where possible, the platoon should dominate the disturbed area by unobtrusively setting up rooftop OPs or patrols before starting the street operation. If prominent rooftops are inaccessible from the ground, the unit can deploy on helicopters.

INITIAL DEPLOYMENT

5-104. An initial deployment into an operational area has two phases: approach and show of force.

Approach

5-105. The company team conducts an approach march to a secure area out of view of the mob or gathering. The column formation is most suited for an approach in vehicles or on foot. The force moves one platoon behind the other on a single axis of advance, with company command post immediately behind the leading platoon. Barring immediate and pressing danger, a platoon leader should avoid allowing other incidents to divert him en route to his assigned AO.

5-106. It is unlikely that the original briefing, report, or order will give the platoon leader enough information to plan the deployment in detail before he arrives at the scene. Although rooftop OPs and patrols might have been established earlier, the platoon leader must conduct a quick reconnaissance on arrival in the deployment area. He must make contact with the police platoon leader or other local civil authority and plan the final deployment. Using helicopters for crowd and route surveillance helps the platoon leader adjust his deployment as the situation changes. It also helps him to identify the threat to the security of his forces when deployed.

Show of Force

5-107. Soldiers should deploy outside the range of hand thrown missiles (50 to 60 meters) but within full view of the crowd. They should deploy into the appropriate formation quickly, adopting the port arms or on-guard position to convey a sense of purpose to the crowd.

Chapter 6

Other Tactical Operations

Other tactical operations complement or support the platoon's primary mission and can be conducted during either the offense or defense. They include reconnaissance, linkup, passage of lines, relief in place, patrols and patrolling, air assault operations, CBRN operations, and air defense.

Squads and platoons may conduct these operations on their own or, more likely, as part of a larger force to set conditions for future operations or support the current operations of their higher headquarters. The planning, preparation, and execution for these operations are just as important and require the same level of detail as conducting offensive, defensive, or stability operations.

SECTION I – TEXT REFERENCES

6-1. A large amount of patrol planning and execution is common among all Infantry units. Refer to the referenced sections of FM 3-21.8 or other referenced publications for details on these subjects.

6-2. Table 6-1 consolidates the references to additional information.

Table 6-1. Guide for subjects referenced in text

Subject	*References*
Patrolling	FM 3-21.8 SH 21-76
Mounted and Dismounted Patrols	FM 3-21.8
Combat and Reconnaissance Patrols	FM 3-21.8
Post Patrol Activities	FM 3-21.8
Reconnaissance Operations	FM 3-20.96 FM 3-90
Air Assault Operations	FM 3-21.8
Helicopter Characteristics	FM 3-21.8
Convoy Escort	FM 3-20.151

SECTION II – PATROLS AND PATROLLING

6-3. A patrol is a detachment sent out by a larger unit to conduct a specific mission. Patrols operate semi-independently and return to the main body upon

completion of their mission. (See FM 3-21.8 for details on patrolling. A good general reference for patrolling that also includes specific details on procedures is SH 21-76.)

6-4. Mechanized units can conduct either mounted or dismounted patrols. The two types of patrols are combat and reconnaissance. A larger unit sends out a patrol to conduct a specific combat or reconnaissance mission. The planned action determines the type of patrol. A patrol's organization is temporary and matched to the immediate task. Regardless of the type of patrol being sent out, the commander must provide a clear task and purpose to the patrol leader.

PURPOSE

6-5. The primary purposes for patrolling are to—

- Gather information on the enemy, terrain, or populace.
- Regain contact with the enemy or with adjacent friendly forces.
- Engage the enemy in combat to destroy him or inflict losses.
- Reassure or gain the trust of a local population.
- Prevent public disorder.
- Deter and disrupt insurgent or criminal activity.
- Provide unit security.
- Protect key infrastructure or bases.

TASK ORGANIZATION

6-6. In general, a commander sends a patrol out from the main body to conduct a specific tactical task. Upon completion of that task, the patrol leader returns to the main body. He reports to the commander and describes the events that took place, the status of the patrol's members and equipment, and any observations.

6-7. If possible, patrols should be manned from the same unit so Soldiers are familiar with each other and their leaders. For example, a rifle squad may be given a reconnaissance patrol mission. The senior officer or noncommissioned officer acts as patrol leader. The patrol leader may designate an assistant, normally the next senior Soldier in the patrol, and any subordinate element leaders he requires.

6-8. A patrol can consist of a unit as small as a fire team. Squad- and platoon-sized patrols are more common. However, for combat tasks such as a raid, the patrol can consist of most of the combat elements of a rifle company. The following elements are common to all patrols:

- Headquarters.
- Aid and litter team(s).
- Detainee team(s).
- Surveillance team(s).
- En route recorder.
- Compass and pace man (when dismounted).

MOUNTED AND DISMOUNTED PATROLS

6-9. An analysis of the METT-TC variables determines if the patrol will be mounted or dismounted. Patrols also can be transported by helicopter. The planning and coordination required for both types of patrols is the same. Some factors to consider when determining which mode to use include:

- Mission, especially where distance and speed are factors.
- Onboard visibility, navigation, and communication.
- Firepower and protection.
- Stealth and surprise.
- Terrain.

DISMOUNTED PATROLS

6-10. The purpose, planning, organization, rehearsal, and conduct of a dismounted patrol are the same as those discussed in FM 3-21.8.

MOUNTED PATROLS

6-11. Mechanized Infantry units frequently may conduct mounted patrols. The same considerations that apply to any dismounted patrol apply to vehicle mounted patrols. Additionally, the platoon leader should consider the following:

- Organize and orient vehicle gunners and vehicle commanders to maintain all-around security and, for urban areas, high-low security. Carefully consider leader locations in each vehicle and within the convoy.
- Rehearse mounted battle drills, reaction to contact, and mounting and dismounting in contact. Include drivers in all rehearsals.
- Plan alternate routes to avoid civilian traffic and roadblocks.
- Remember that four is generally the minimum number of vehicles needed to conduct any operation. If one vehicle is disabled or destroyed, it can be recovered while the others provide security. Unit TACSOPs determine the number of vehicles required.
- Plan for actions required if a vehicle breaks down and has to be repaired or recovered. Review self-recovery procedures. Plan actions in case a vehicle gets stuck and cannot be recovered. Also, plan actions for catch-ups and breaks in contact.
- Establish alternative communications plans.
- Secure external gear to prevent theft. Inspect it to ensure it is not flammable. In the event of fire, bomb, or attack, burning material attached to the vehicle may create a greater hazard than the initial attack.
- Plan for heavy civilian vehicle and pedestrian traffic.
- Conduct a map reconnaissance and identify likely chokepoints, ambush sites (intersections), and overpasses.
- Plan primary and alternate routes to avoid potential hazards.

- Drive offensively, unpredictably, but within ROE restrictions.
- Avoid stopping; it can create a potential kill zone.
- Learn the characteristics of the vehicle, including how high a vehicle can clear curbs and other obstacles, its turning radius, its high-speed maneuverability, and its estimated width (especially with slat armor).

PATROLS WITH MOUNTED AND DISMOUNTED PHASES

6-12. Mechanized platoons and squads can conduct patrols with both mounted and dismounted phases. They are planned, and executed the same way as mounted or dismounted patrols. The mounted patrol normally moves to a dismount point (often the designated objective rally point) and conducts the same actions on the objective as a dismounted patrol. If possible, the BFVs establish a support by fire position to cover the objective, establish blocking positions, provide security, or otherwise support the actions of the dismounted element. It then returns to the vehicles, remounts, and returns to friendly lines or continues with another mission. Types of combat patrols that are especially suited for mounted movement include antiarmor ambushes and security patrols.

COMBAT PATROLS

6-13. A combat patrol provides security and harasses, destroys, or captures enemy troops, equipment, or installations. A combat patrol also collects and reports any information gathered during the mission, whether related to the combat task or not. When the commander gives a unit the mission to send out a combat patrol, he intends for the patrol to make contact with the enemy and engage in close combat.

6-14. A combat patrol always attempts to remain undetected while moving, but ultimately discloses its location to the enemy in a sudden and violent attack. For this reason, the combat patrol normally carries a significant amount of weapons and ammunition. It also may carry specialized munitions. (See FM 3-21.8 for details.)

PLANNING CONSIDERATIONS

6-15. Leaders plan and prepare for patrols using standard troop-leading procedures and an assessment of the situation. They must identify required actions on the objective, plan backward to the departure from friendly lines, and then forward to the reentry of friendly lines.

6-16. Planning includes—

- Coordination.
- Key travel and execution times.
- Primary and alternate routes.
- Location of leaders.
- Rally points.
- Communications and internal signals.
- Actions at the objective and danger areas.
- Actions on enemy contact.
- Departure and return to friendly lines.
- Identification of specified and implied tasks.

ORGANIZATION

6-17. The three essential elements for a combat patrol are:

- **Assault element** accomplishes the patrol's mission and must be able, through inherent capabilities or positioning relative to the enemy, to destroy or seize the target of the patrol.
- **Support element** suppresses or destroys the enemy on the objective with direct and indirect fires.
- Security element is a shaping force that—
  - Isolates the objective from enemy attempting to enter the objective area.
  - Prevents enemy from escaping the objective area.
  - Secures the patrol's withdrawal route.

TYPES

6-18. The three most common types of combat patrols are raid, ambush, and security.

Raid

6-19. A raid is a surprise attack against a position or installation for a specific purpose other than seizing and holding the terrain. Its purpose is to destroy a position or installation, to destroy or capture enemy soldiers or equipment, or to free prisoners. A raid patrol retains terrain just long enough to accomplish the mission. A raid always ends with a planned withdrawal from the objective and a return to the main body.

Ambush

6-20. An ambush is a surprise attack from a concealed position on a moving or temporarily halted target. An ambush patrol does not need to seize or hold any terrain. It only retains terrain long enough to conduct the ambush and then withdraws. An ambush allows a smaller force with limited means the ability to destroy a much larger force. The key to a successful ambush is surprise and quick, violent action in a short amount of time.

Security

6-21. Security patrols prevent surprise of the main body by screening to the front, flank, and rear of the main body, and detecting and destroying enemy forces in the local area. Security patrols do not operate beyond the range of communication and supporting fires from the main body, especially mortar fires.

RECONNAISSANCE PATROLS

6-22. Reconnaissance patrols make every effort to avoid direct combat with the enemy while seeking out information or confirming the accuracy of previously-gathered information. (See FM 3-21.8 for details.)

PLANNING CONSIDERATIONS

6-23. Leaders use TLP and the reverse planning process to plan reconnaissance patrols. The leader first determines the reconnaissance objective, which is an information requirement that corresponds to the terrain, populace, or enemy in a specific area, route, or zone. Once the leader has clarified the reconnaissance objective, he determines the observation plan that enables the patrol to obtain the information requirement. He then determines the tactical movement necessary to position the patrol to achieve his observation plan.

ORGANIZATION

6-24. Reconnaissance patrols are organized into reconnaissance and security elements; however, each element of a reconnaissance patrol always is responsible for its own local security. Depending on the size of the patrol, there may be a separate patrol HQ, or the HQ personnel may form a part of one of the subordinate elements. The leader's analysis of METT-TC variables determines the number and size of the various teams and elements.

6-25. The three ways to organize the reconnaissance and security elements are as follows:

- **Separate** the reconnaissance elements from security elements. Use this technique when the security element can support the reconnaissance element from one location. Usually, the reconnaissance objective is clearly defined and the area fairly open.
- **Organize** the reconnaissance elements and security elements together into reconnaissance and security teams. Use this technique when the reconnaissance objective is not clearly defined, or when the teams are not mutually supporting and each reconnaissance potentially needs its own security force. Within the reconnaissance and security team, one or two individuals can conduct reconnaissance while the rest of the element provides security. The number of Soldiers in a reconnaissance and security team may vary depending on the mission. A fire team is usually the minimum required for adequate reconnaissance and the provision of local security.
- **Establish** reconnaissance and security teams with an additional, separate security element. The separate security element also can act as a reserve.

TYPES

6-26. The most common types of reconnaissance patrols are area, route, and zone, which are discussed in the following paragraphs. Other types of patrols include:

- **Tracking patrols** follow the trail and movements of a specific enemy.
- **Contact patrols** make physical contact with adjacent units and report their location, status, and intentions.
- **Presence patrols** conduct a special form of reconnaissance, normally during stability or civil support operations. (See Chapter 5 for details.)

Area Reconnaissance

6-27. Area reconnaissance is a form of reconnaissance operation that is a directed effort to obtain detailed information concerning the terrain or enemy activity within a prescribed area (FM 1-02). That area may be given as a grid coordinate, an objective, or an overlay. In area reconnaissance, the patrol uses observation points around the objective to observe it and the surrounding area.

Route Reconnaissance

6-28. Route reconnaissance is a directed effort to obtain detailed information about a specified route and all terrain from which the enemy could influence movement along that route (FM 1-02). A reconnaissance patrol with a route mission focuses along a specific line of communication, such as a road, railway, or cross-country mobility corridor. A mechanized unit may conduct a route reconnaissance either mounted or dismounted. When mounted, the patrol can dismount elements to gather specific information.

Zone Reconnaissance

6-29. Zone reconnaissance is a form of reconnaissance that involves a directed effort to obtain detailed information on all routes, obstacles, terrain, and enemy forces within a zone defined by boundaries (FM 1-02). Zone reconnaissance techniques include the use of moving elements, stationary teams, or multiple area reconnaissance actions. A mechanized unit may conduct a zone reconnaissance either mounted or dismounted. When mounted, the patrol can dismount elements to gather specific information.

POST PATROL ACTIVITIES

6-30. Immediately on reentering the secure base or rejoining the unit, the patrol leader positively verifies that all members, equipment, and any included attachments or detainees of the patrol are present. He also reports the patrol's return and conducts a debrief with the whole patrol to capture all information while it is still fresh. He then submits or briefs his patrol report to his commander or designated representative. (See FM 3-21.8 for details.)

SECTION III – AIR ASSAULT OPERATIONS

6-31. Mechanized platoons and squads are not tied to the BFVs. They can conduct air assaults and air movement operations to drop off and pick up patrols, recover stay-behind forces, emplace and recover resupply, and evacuate casualties by using helicopters. They also can conduct any number of other operations. However, during these air assault operations, there must be a plan and operation to linkup the dismounted Infantry with their BFVs. The helicopters that Infantry platoon air assaults most commonly use are the UH-60 Blackhawk and the CH-47 Chinook. (See FM 3-21.8 for details on air assault operations and helicopter characteristics.)

STAGES

6-32. The five stages of this reverse planning sequence are discussed in the following paragraphs.

Note. The ground tactical plan is the key planning phase in an air movement operation. Units conduct all other planning in a backward manner from it.

GROUND TACTICAL PLAN

6-33. The foundation of a successful air assault operation is the commander's ground tactical plan, around which subsequent planning is based. It specifies actions in the objective area to accomplish the mission and address subsequent operations. The ground tactical plan contains essentially the same elements as any other Infantry attack, but capitalizes on speed and mobility to achieve surprise.

LANDING PLAN

6-34. The landing plan must support the ground tactical plan. This plan sequences elements into the area of operations to ensure platoons arrive at designated locations and times prepared to execute the ground tactical plan.

AIR MOVEMENT PLAN

6-35. The air movement plan is based on the ground tactical and landing plans. It specifies the schedule and provides instructions for air movement of Soldiers, equipment, and supplies from pickup zones and landing zones.

LOADING PLAN

6-36. The movement plan is the basis for the loading plan. The loading plan ensures that Soldiers, equipment, and supplies board the correct aircraft. Platoons maintain integrity when aircraft loads are planned. Cross loading may be necessary to ensure the survivability of platoon leadership and to ensure that the proper mix of weapons arrive at the landing zone in a ready-to-fight configuration. The platoon leader or squad leader should always ensure the aircraft is loaded so dismounting Infantrymen react promptly and contribute to mission accomplishment. If not directed by the commander, the platoon leader must develop a bump plan. A bump plan ensures that essential Soldiers and equipment board the aircraft ahead of less critical loads in case of aircraft breakdown or other problems.

STAGING PLAN

6-37. The staging plan is based on the loading plan and prescribes the arrival time of ground units, such as Soldiers, equipment, and supplies, at the pickup zone in the order of movement. The staging plan includes the disposition of vehicles left in the staging area and the platoon's linkup plan on return from the mission.

SAFETY

6-38. Infantry leaders must enforce strict safety measures when working with helicopters. Safety measures include:

- Avoiding the tail rotor. Never approach or depart to the rear of a helicopter except when entering or exiting a CH-47. Approach from three or nine o'clock is preferred when using UH-60s.
- Keeping a low body silhouette when approaching and departing a helicopter, especially on slopes.
- Keeping safety belts fastened when helicopter is airborne.
- Keeping muzzle pointing down and on SAFE.
- Keeping all radio antennas down and secure.
- Keeping hand grenades secured.
- Not jumping from a hovering helicopter until told to do so by an aircrew member.

SECTION IV – CONVOY ESCORT

6-39. Company and larger organizations usually perform convoy escort missions. Convoy escorts provide protection for a specific convoy. These missions include numerous tasks, such as reconnaissance, escort, and combat reaction forces, which become missions for subordinate units. The size of the unit performing the convoy escort mission depends on many factors, including the size of the convoy, the threat, the terrain, and the length of the route. (See FM 3-20.151 for details.)

6-40. Mechanized units are especially suited for convoy escort. BFVs have the speed to rapidly move to anticipate or react to an enemy action. Its Infantry can dismount and clear danger areas and secure positions, such as the area surrounding damaged vehicles.

6-41. Mechanized platoons may be assigned the mission of providing security for a convoy either as part of a company team or as a separate unit. If it is a separate mission, the platoon leader is the convoy security commander. He requires the platoon to provide a convoy with security and close-in protection from direct fire while on the move. The mechanized platoon's mobility, mounted firepower, and its ability to dismount full-sized Infantry squads provide very good security for a convoy in most situations. Tank vehicles attached to the platoon can provide added firepower.

COMMAND AND CONTROL

6-42. The task organization inherent in convoy escort missions makes battle command especially critical. The mechanized platoon leader may serve either as the convoy security commander or as overall convoy commander. In the latter role, he is responsible for the employment of maneuver enhancement, sustainment attachments, drivers of the escorted vehicles, and his own organic combat elements. He must incorporate all these elements into the various contingency plans developed

for the operation. He also must maintain his link with the controlling tactical operations center.

TACTICAL STANDING OPERATING PROCEDURES AND DRILLS

6-43. Effective TACSOPs and drills supplement OPORD information for the convoy. Since this is not a core mission, the platoon leader must ensure adequate time to conduct thorough rehearsals. Also, the platoon conducts pre-combat checks and inspections. The platoon leader also coordinates with units and elements in areas through which the convoy will pass. Theater or combatant commands provide baseline information and procedures for unit convoy TACSOPs. Table 6-2 shows an example convoy briefing checklist, which provides minimum essential information to all members of a convoy.

Table 6-2. Example convoy briefing checklist

SITUATION
Enemy
- Activity in the last 48 hours.
- Threats.
- Capabilities.

Friendly Units in Area or Along Route
Light and Weather Data

MISSION
Task and Purpose of Movement
Mission Statement

EXECUTION
Commander's Intent
End State
Concept of the Operation (Concept Sketch or Terrain Model)
Task to Maneuver Units
Fires
Close Air Support
Coordinating Instructions
- Timeline.
- Marshal.
- Rehearsals.
- Convoy briefing.
- Inspections.
- Initiation of movement.
- Rest halts.
- Arrival time.
- Order of movement and bumper numbers and individual manifesto.
- Movement formation.
- Speed and catch-up speed.
- Interval (open areas and in built-up areas).

EXECUTION (continued)
- Weapons orientation, locations of key weapons systems.
- Route.
- Checkpoints.
- Actions on contact.
- Actions on breakdowns.
- Actions at the halt (short halt and long halt).

SUSTAINMENT
MEDEVAC Procedures
- Nine-line MEDEVAC request.
- Location of medical support and combat lifesaver.
- Potential pickup and landing zone locations.
- Maintenance Procedures
- Location of maintenance personnel.
- Location and number of tow bars.
- Recovery criteria.
- Stranded vehicle procedures.

COMMAND AND SIGNAL
- Convoy commander.
- Sequence of command.
- Location of convoy commander.
- Call signs of every vehicle and unit in the convoy.
- Convoy frequency.
- MEDEVAC frequency.
- Alternate frequencies.

OPERATION ORDER

6-44. If possible, the convoy commander issues an OPORD to all personnel before the mission begins, but at least to all leaders and vehicle commanders in the convoy. Leaders and vehicle commanders then repeat the OPORD to their subordinates. This is vital because the convoy may be task organized from a variety of units and

because some vehicles might not have tactical radios. The order follows the standard five paragraph OPORD format. It may emphasize the following subjects:

- Inspection of convoy vehicles.
- Route of march, to include a strip map or digital route overlay for each vehicle commander.
- Order of march.
- Actions at halts (scheduled and unscheduled).
- Actions in case of vehicle breakdown.
- Actions for a break in column.
- Actions in built-up areas.
- Actions on contact, covering such situations as snipers, enemy contact (including near or far ambush), indirect fire, mine strike, and minefields.
- Riot drill.
- Refugee control drill.
- Evacuation drill.
- Actions at the delivery site.
- Chain of command.
- Guidelines and procedures for negotiating with local authorities.
- Communications and signal information.
- Tactical disposition.
- Fire support plan.

REHEARSALS

6-45. Rehearsals are essential in ensuring thorough preparation, coordination, and understanding of the mission. When time is limited or when the tactical situation affects attendance, the rehearsal may be limited to covering actions on contact and vehicle recovery.

SECURITY

6-46. In any escort operation, the basic mission of the convoy commander (and, as applicable, the convoy security commander) is to establish and maintain security in all directions and throughout the length of the convoy. He must be prepared to move the security force to fit the situation. Several factors apply, including convoy size, organization, and composition. Sometimes, he positions the security elements to the front, rear, or flanks of the convoy. He also may disperse the combat vehicles throughout the convoy body.

TACTICAL DISPOSITION

6-47. During all escort missions, the convoy security commander and platoon leader must establish and maintain security in all directions and throughout the platoon. As noted, several factors, including convoy size, affect this disposition. The key consideration is whether the platoon is operating as part of a larger escort force or is executing the escort mission independently. Additional METT-TC

considerations include the employment of BFVs by section and the employment of rifle squads during the mission (fire teams ride in BFVs or escorted vehicles).

ACTIONS ON CONTACT

6-48. As the convoy moves to its new location, the enemy may attempt to harass or destroy it. This contact usually occurs in the form of an ambush, often with the use of a hastily prepared obstacle. The safety of the convoy rests on the speed and effectiveness with which escort elements can execute appropriate actions on contact. Based on METT-TC variables, portions of the convoy security force, such as the BFV platoon or a BFV section, may be designated as a reaction force. The reaction force performs its escort duties, conducts tactical movement, or occupies an assembly area, as required, until enemy contact occurs and the convoy commander gives it a reaction mission.

LARGE-SCALE ESCORT MISSIONS

6-49. When sufficient escort assets are available, the convoy commander usually organizes the convoy into the following three distinct elements:

- The advance guard reconnoiters and proofs the convoy route, provides early warning, and (within its capability) clears the route of the enemy. A mechanized platoon, section, or even an individual BFV may be designated as part of the advanced guard and may receive a tank with a mine plow or mine roller
- The BFV platoon normally will be tasked organized to operate within the close-in protective group and provide immediate, close-in protection for the vehicle column.
- The rear guard follows the convoy and provides rear security and security for the vehicle recovery assets.

Note. The convoy commander also may designate the BFV or tank platoon as part of a reserve (response) force for additional firepower on enemy contact. The reserve either will move with the convoy or be located at a staging area close enough to provide immediate interdiction against the enemy.

INDEPENDENT CONVOY ESCORT

6-50. When the BFV platoon executes a convoy escort mission independently, the convoy commander and platoon leader disperse the BFVs throughout the convoy formation to provide forward, flank, and rear security. Whenever possible, wingman BFVs should maintain visual contact with their leaders. Engineer assets, if available, should be located near the front to respond to obstacles. At times, engineer assets may be required to move ahead of the convoy with scouts to proof the convoy route.

ACTIONS AT AN AMBUSH

6-51. An ambush is one of the more effective ways to interdict a convoy. Reaction to an ambush must be immediate, overwhelming, and decisive. Actions on contact must be planned for and rehearsed so the unit can execute them quickly.

6-52. In almost all situations, the platoon takes several specific, instantaneous actions when it reacts to an ambush. These steps include the following:

- As soon as they acquire an enemy force, the escort vehicles take action toward the enemy. They seek covered positions between the convoy and the enemy, and suppress the enemy with the highest volume of fire that the ROE permit. The squads dismount as required. The leader in contact reports the contact as quickly as possible.
- The convoy commander retains control of the convoy vehicles and continues to move them along the route at the highest possible speed (Figure 6-1).
- Convoy vehicles, if armed, may return fire only if the escort has not positioned itself between the convoy and the enemy force.
- The platoon leader or the convoy commander may request that any damaged or disabled vehicle be abandoned and pushed off the route (Figure 6-2).
- The escort leader uses spot reports to keep the convoy security commander informed. If necessary, the escort leader or the convoy security commander can request support from the reaction force, and call for and adjust indirect fires.

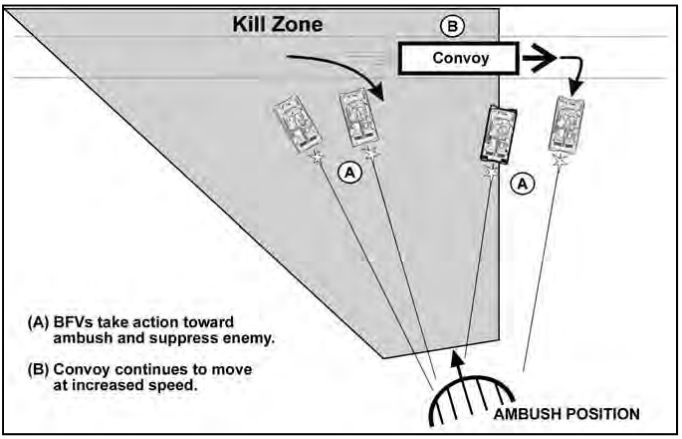

Figure 6-1. Convoy escort actions toward ambush

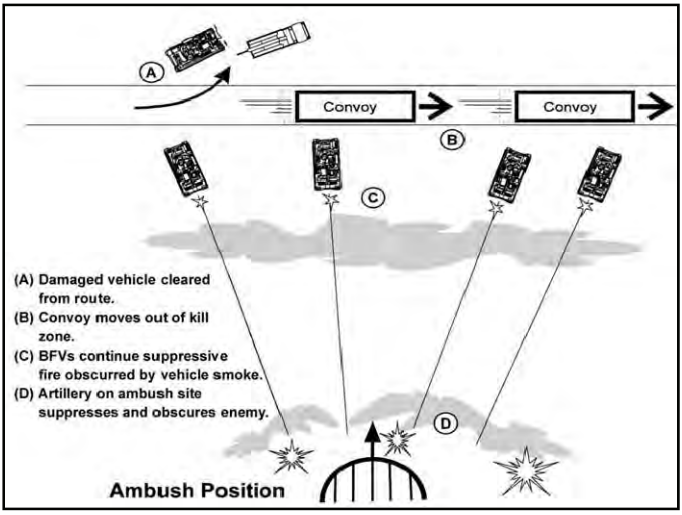

Figure 6-2. Convoy continues to move

6-53. Once the convoy is clear of the kill zone, the escort element executes one of the following courses of action:

- Continues to suppress the enemy as combat reaction forces move to support (Figure 6-3).
- Assaults the enemy.
- Breaks contact and moves out of the kill zone.

6-54. In most situations, BFVs continue to suppress the enemy or execute an assault. Contact should be broken only with the approval of the BFV platoon's higher commander.

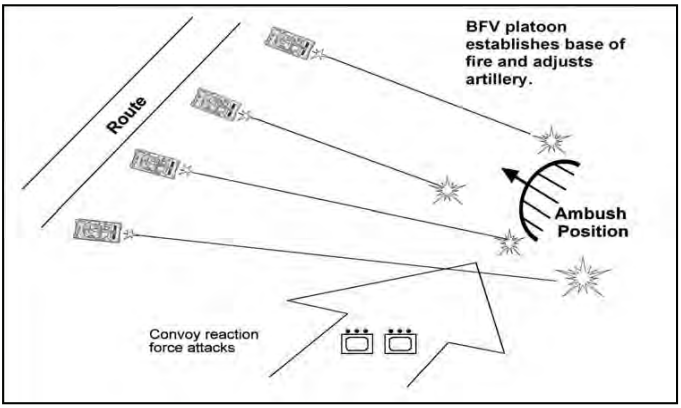

Figure 6-3. Escort suppresses ambush for reaction force attack

ACTIONS AT AN OBSTACLE

6-55. The purpose of reconnaissance ahead of a convoy is to identify obstacles and either breach them or find bypasses. Obstacles are a major impediment to convoys. In some cases, the enemy or its obstacles may avoid detection by the reconnaissance element.

6-56. When the convoy escort identifies an obstacle, it faces two problems: reducing or bypassing the obstacle, and maintaining protection for the convoy. Security becomes critical, and the convoy escort must accomplish actions at the obstacle very quickly. The convoy commander must assume that the enemy is covering the obstacle with direct and indirect fire weapons systems. Actions at the obstacle include:

- The lead section identifies the obstacle and directs the convoy to make a short halt and establish security. The convoy escort overwatches the obstacle (Figure 6-4) and requests the breach element force to move forward. The platoon may dismount Soldiers for additional security.
- The convoy escort maintains 360-degree security of the convoy and provides overwatch as the breach force reconnoiters the obstacle in search of a bypass.
- Once all reconnaissance is complete, the convoy commander determines which of the following courses of action he will take:
  - Bypass the obstacle.
  - Breach the obstacle with assets on hand.
  - Breach the obstacle with reinforcing assets.
- The convoy security commander relays a spot report and requests support by combat reaction forces, engineer assets (if they are not part of the convoy), and aerial reconnaissance elements. Artillery units are alerted to prepare to provide fire support.

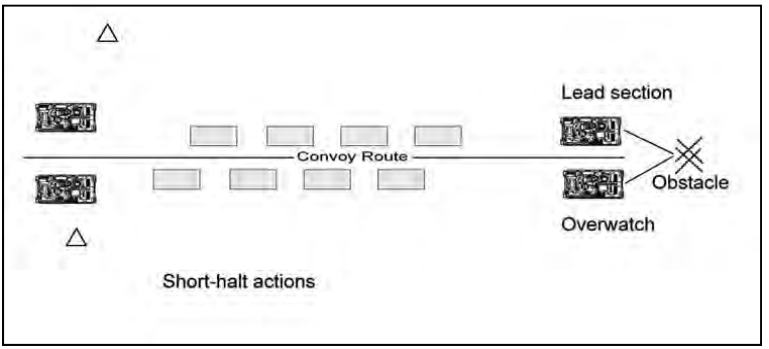

Figure 6-4. Convoy escort overwatches an obstacle

ACTIONS DURING HALTS

6-57. During a short halt, the convoy escort remains alerted for possible enemy activity. If the halt is for any reason other than an obstacle, the following actions should be taken:

- The convoy commander signals the short halt and transmits the order via tactical radio. All vehicles in the convoy assume a herringbone formation.
- If possible, escort vehicles are positioned up to 100 meters beyond the convoy vehicles that are just clear of the route. Escort vehicles remain at the ready and establish local security.
- When the commander gives the order to move out, convoy vehicles reestablish movement formation, leaving space for escort vehicles. Once the convoy is in column, local security elements (if used) return to their vehicles, and the escort vehicles rejoin the column.
- The convoy resumes movement.

SECTION V – RECONNAISSANCE

6-58. Reconnaissance is a mission units conduct to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary; and/or to secure data concerning the hydrographic or geographic characteristics of a particular area (FM 3-0). Effective reconnaissance focuses on gathering timely, accurate information about the enemy, population, and the terrain in the AO. With the assets available to the HBCT, reconnaissance should result in near real time situational updates. A focused collection effort by the reconnaissance squadron, the battalion reconnaissance platoon, and the Infantry companies should provide the squads and platoons with the critical information they need to conduct operations. The mechanized Infantry platoon and squads normally use a patrol to conduct reconnaissance.

6-59. Every leader is responsible for conducting reconnaissance to gain the information he needs, and his unit should synchronize the effort as part of the higher HQ effort. The platoon may conduct other reconnaissance operations to gather information for the commander. (See FM 3-20.96 and FM 3-90 for details on reconnaissance operations.)

PLANNING CONSIDERATIONS

6-60. Before an operation, the company team commander determines what he must know about the enemy. The commander first requests the information needed from the next higher HQ. If they cannot provide or gather the information needed, the commander may send a reconnaissance element forward (METT-TC dependent). For example, the commander may send an element to reconnoiter a choke point the night before the attack. At this point, the commander's intent for reconnaissance is now integrated into the CAB reconnaissance plan. This ensures that each portion of the focused effort is aware of the other parts, thereby reducing possible duplication of effort and fratricide.

EXECUTION

6-61. Before or after an operation, the platoon may conduct reconnaissance:

- By a quartering party of an AA and the associated route to it.
- From the AA to, and in the vicinity of, the LD before an offensive operation (leader's reconnaissance).
- By rifle squads to probe enemy positions for gaps open to attack or infiltration.
- By rifle squads to observe forward positions and to guide elements to key positions on the battlefield, such as support or assault positions.
- By rifle squads to locate bypasses around obstacle belts or to determine the best locations and methods for breaching operations.
- By rifle squads of choke points or other danger areas in advance of the remainder of the company.
- Of defensive positions or EAs for conducting the defense (leader's reconnaissance).
- As part of security operations to secure friendly obstacles, to clear possible enemy OPs, or to cover areas not observable by stationary OPs.

SECTION VI – LINKUP OPERATIONS

6-62. Linkup entails the meeting of friendly ground forces or their leaders, or designated representatives. It may occur in, but is not limited to, the following situations:

- Advancing forces reaching an objective area previously secured by air assault, airborne, or infiltrating forces.
- Units conducting coordination for a relief in place.
- Cross-attached units moving to join their new organization.
- Advancing forces during follow and support missions.
- A unit moving to assist an encircled force.
- Units converging on the same objective during the attack.
- Units conducting a passage of lines.
- Units conducting reconnaissance forward of the main body.

STEPS

6-63. The platoon conducts linkup activities independently or as part of a larger force. The following paragraphs detail the three steps in a linkup operation.

FAR RECOGNITION SIGNAL

6-64. The units or elements involved in the linkup establish communications before they reach direct fire range. The lead element of each linkup force monitors the radio frequency of the other friendly force. Units equipped with Force XXI Battle Command Brigade and Below (FBCB2) also may achieve far recognition through displayed icons and digital messages.

COORDINATION

6-65. Before initiating movement to the linkup point, the forces must coordinate necessary information, including:

- Known enemy situation.
- Type and number of friendly vehicles.
- Disposition of stationary forces (if either unit is stationary).
- Routes to the linkup point and rally point (if used).
- Fire control measures.
- Near recognition signal(s).
- Communications information.
- Sustainment responsibilities and procedures.
- Finalized location of the linkup point and rally point (if used).
- Special coordination requirements, such as maneuver instructions or requests for medical support.
- Visual linkup signals or alternate locations for linkup due to contact.

MOVEMENT TO THE LINKUP POINT AND LINKUP

6-66. All units or elements involved in the linkup must enforce strict fire control measures to help prevent fratricide. Linkup points and restrictive fire lines must be recognizable by moving and or converging forces. Linkup elements--

- Conduct far recognition using FM radio (and digital, if FBCB2-equipped).
- Conduct short-range recognition using the designated signal.
- Complete movement to the linkup point.
- Establish local security at the linkup point.
- Conduct additional coordination and linkup activities as necessary.

PLANNING CONSIDERATIONS

6-67. When planning a linkup, the platoon leader follows standard TLPs. The BFV's equipment (integrated sight unit or improved Bradley acquisition system) provides an improved operational picture between elements conducting the linkup operation. This improved operational picture aids in navigation and helps prevent fratricide. As the moving force closes on the linkup site, the stationary force is aware of its location thus reducing the possibility of fratricide. The moving unit does the same to reduce fratricide potential.

6-68. Infrared (IR) and thermal equipment enhance linkups conducted during limited visibility. IR lights aid the linkup by functioning as recognition signals. For example, the unit manning the linkup point can string IR lights high in a tree or on a piece of distinguishable terrain to help guide the moving unit to the linkup site. This is particularly advantageous when the moving unit has difficulty finding the linkup site due to bad weather or restrictive terrain. Both units must know the capabilities of the enemy, and they must exercise caution when using IR devices against an enemy with night vision capability.

6-69. Once the moving unit arrives close to the linkup location, the stationary unit should challenge it. For example, the stationary unit can give the moving unit a series of flashes using an IR source during limited visibility. The moving force responds with a pre-coordinated number of flashes. The challenge and password also may be accomplished with audible sounds or digitally (if FBCB2-equipped).

SECTION VII – PASSAGE OF LINES

6-70. A passage of lines entails movement of one or more units through another unit. This operation becomes necessary when the moving unit(s) cannot bypass the stationary unit and must pass through it. The primary purpose of the passage is to maintain the momentum of the moving elements. A passage of lines may be designated as either forward or rearward.

6-71. The controlling company team is responsible for planning and coordination of a passage of lines involving the platoon. In some situations, as when the platoon is using multiple passage routes, the platoon leader must take responsibility for planning and coordinating each phase of the operation.

PLANNING CONSIDERATIONS

6-72. When planning a passage of lines, the platoon leader must consider the following tactical factors and procedures:

- The passage should facilitate transition to follow-on missions through the use of multiple lanes or lanes wide enough to support doctrinal formations for the passing units.
- Deception techniques, such as the use of smoke, may be employed to enhance security during the passage.
- The controlling commander must clearly define the battle over handover criteria and procedures the unit used during the passage. His order should cover the roles of both the passing unit and the stationary unit, and also the use of direct and indirect fires. If necessary, he also specifies the location of the battle handover line as part of the unit's graphic control measures as follows:
  - For a forward passage, the battle handover line usually is the LD for the passing force.
  - In a rearward passage, it usually is a location in direct fire range of the stationary force.
  - In general, a defensive handover is complete when the passing unit is clear and the stationary unit is ready to engage the enemy.
  - Offensive handover is complete when the passing unit has deployed and crossed the battle handover line.
- The passing and stationary units coordinate obstacle information including the locations of enemy and friendly obstacles, existing lanes and bypasses, and guides for the passage.

- Air defense coverage is imperative during the high-risk passage operation. Normally, the stationary unit is responsible for providing air defense, allowing the passing unit's air defense assets to move with it.
- Both the passing and the stationary units must clearly know and understand their responsibilities for sustainment actions, such as vehicle recovery or casualty evacuation in the passage lane.
- To enhance C2 during the passage, the platoon collocates a C2 element, normally the platoon leader or platoon sergeant with a similar element from the stationary or moving unit.

RECONNAISSANCE AND COORDINATION

6-73. Detailed reconnaissance and coordination are critical in a passage of lines, both dealing with the planning factors outlined previously, and ensuring that the passage is conducted quickly and smoothly. The platoon leader normally conducts all necessary reconnaissance and coordination for the passage.

6-74. At times, he may designate the platoon sergeant or squad leader to perform liaison duties for reconnaissance and coordination. The following items of information must be coordinated:

- Unit designation and composition, to include type and number of passing vehicles.
- Passing unit arrival time(s).
- Location of attack positions or AAs, which reconnaissance should confirm.
- Current enemy situation.
- Stationary unit's mission and plan, to include OP, patrol, and obstacle locations.
- Location of movement routes, contact points, passage points, and passage lanes. The use of GPSs or position navigation waypoints may simplify this process and speed the passage.
- Guide requirements.
- Order of march.
- Anticipated actions on enemy contact.
- Requirements for supporting direct and indirect fires, including the location of the restrictive fire line, which reconnaissance should confirm.
- CBRN conditions.
- Available support and sustainment assets and their locations, which reconnaissance should confirm.
- Communications information, including—
  - Frequencies.
  - Digital data.
  - Near and far recognition signals.
- Criteria for battle handover and location of the battle handover line.
- Additional procedures for the passage.

FORWARD PASSAGE OF LINES

6-75. In a forward passage, the passing unit first moves to an AA or an attack position behind the stationary unit. Designated liaison personnel move forward to link up with guides and confirm coordination information with the stationary unit. Guides lead the passing elements through the passage lane.

6-76. The platoon conducts a forward passage by employing tactical movement. It moves quickly, uses appropriate dispersal and formations whenever possible, and keeps radio traffic to a minimum. It bypasses disabled vehicles as necessary.

6-77. The platoon holds its fire until it passes the battle handover line or designated fire control measure unless the commander has coordinated fire control with the stationary unit. Once clear of passage lane restrictions, the unit may temporarily halt at the designated attack position or continue its tactical movement in accordance with its orders.

REARWARD PASSAGE OF LINES

6-78. Because of the increased risk of fratricide during a rearward passage, coordination of recognition signals and fire restrictions is critical.

6-79. The passing unit contacts the stationary unit while it is still beyond direct fire range and conducts coordination as discussed previously. Units emphasize near recognition signals and location of the battle handover line. Also, units can employ additional fire control measures, such as restrictive fire lines, to further minimize the risk of fratricide.

6-80. Following coordination, the passing unit continues tactical movement toward the passage lane. The passing unit orients its gun tubes on the enemy, and is responsible for its own security until it passes the battle handover line. If the stationary unit provides guides, the passing unit may conduct a short halt to link up and coordinate with them. The passing unit moves quickly through the passage lane to a designated location behind the stationary unit.

SECTION VIII – RELIEF IN PLACE

6-81. A relief in place occurs when one unit replaces another unit during offensive or defensive operations in order to preserve the combat effectiveness of committed units. Whenever possible, conduct the relief at night or under other limited visibility conditions. In a relief involving the platoon, the company team commander directs when and how the operation will be conducted.

PLANNING CONSIDERATIONS

6-82. When planning a relief in place, the platoon leader—

- Issues a fragmentary order.
- Uses an advance party composed of key leaders to conduct detailed reconnaissance and coordination.

- Adopts the outgoing unit's normal pattern of activity as much as possible.
- Determines when the platoon will assume responsibility for the outgoing unit's position.
- Co-locates platoon HQ with the relieved unit's HQ.
- Maximizes operations security to prevent the enemy from detecting the relief operation.
- Plans to transfer excess ammunition; wire; petroleum, oil, and lubricants; and other materiel of tactical value to the incoming unit.
- Controls movement by reconnoitering, designating and marking routes, and providing guides.

COORDINATION

6-83. The incoming and outgoing leaders must meet to exchange tactical information, conduct a joint reconnaissance of the area, and complete other required coordination for the relief. The two leaders must address passage of command and jointly develop contingency actions for enemy contact during the relief. The leaders conduct the relief on the communications nets of the outgoing unit. This process usually includes coordination of—

- Location of vehicle and individual fighting positions, to include hide, alternate, and supplementary positions.
- Enemy situation.
- Outgoing unit's tactical plan, to include graphics, platoon and squad fire plans, and individual vehicles' sector sketches.
- Fire support, including indirect fire plans and the time of relief for supporting artillery and mortar units.
- Types of weapons systems being replaced.
- Time, sequence, and method of relief.
- Location and disposition of obstacles and the time that the responsibility will be transferred.
- Supplies and equipment to be transferred.
- Movement control, route priority, and placement of guides.
- Command and signal information
- Maintenance, logistic support, and evacuation for disabled vehicles.
- Limited visibility considerations.

6-84. Since a relief in place often is conducted during hours of limited visibility, the use of IR or thermal equipment may speed the operation. Units follow prescribed TACSOPs to mark positions and routes with IR lights to facilitate the occupation of or withdrawal from the position. These marking signals should be incorporated into the platoon leader's TACSOP.

6-85. During the exchange of positions, the departing unit hands over any vehicle or individual position range cards to the relief element.

Note. During the coordination between M2A3-equipped units (or units equipped with FBCB2), the units digitally exchange graphics to reduce time and increase accuracy. The units also exchange sector sketches. Transferring digital information does not relieve the leader of physically coordinating between units. These units also use the commander's tactical display and precision navigation system to move to and away from the position as explained in linkup operations discussed previously.

EXECUTION

6-86. The outgoing leader retains responsibility for the AO and the mission. He exercises operational control over all subordinate elements of the incoming unit while they complete their portion of the relief. Responsibility passes to the incoming commander when all elements of the outgoing unit are relieved and adequate communications are established. The two relief methods are sequential and simultaneous. Relief of individual elements can be conducted in either of the following two ways:

- By alternate element position, with the relieving element occupying a position separate from the relieved element.
- By alternate vehicle and or individual position, with the relieving element occupying vehicle or individual fighting positions in the same BP as the relieved element.

6-87. The two methods of relief are sequential relief and simultaneous relief.

SEQUENTIAL RELIEF

6-88. This is the most time-consuming method. The relieving unit moves to an AA to the rear of the unit to be relieved. Subordinate elements are relieved one at a time. This can occur in any order, with the relief generally following this sequence:

- The outgoing and incoming units collocate their HQ and trains elements to facilitate C2 and the transfer of equipment, ammunition, fuel, water, and medical supplies.
- The first element being relieved moves to its alternate fighting position or BP while the relieving element moves into the outgoing element's primary positions. The incoming element occupies individual fighting positions.
- Incoming and outgoing elements complete the transfer of equipment and supplies.
- The relieved element moves to the designated AA behind the position.
- Once each outgoing element clears the release point en route to its AA, the next relieving element moves forward.

SIMULTANEOUS RELIEF

6-89. This is the fastest, but least secure, method. All outgoing elements are relieved at once, with the incoming unit normally occupying existing positions,

including BPs and vehicle and individual fighting positions. The relief takes place in this general sequence:

- Outgoing elements move to their alternate BPs and or vehicle and individual positions.
- Incoming elements move along designated routes to the outgoing elements' primary positions.
- Units complete the transfer of equipment and supplies.
- Relieved elements move to the designated unit AA.

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Chapter 7

Direct Fires

The fighting vehicle Infantryman leads, supervises, and serves as a member of a fighting vehicle unit or activity employing vehicular and dismounted weapons in combat operations. The concept of integrating the dismounted elements into the heavy task force scheme of maneuver is not new. The leader is responsible for adequate planning and preparation to ensure proper training of all elements within the mechanized platoon. This helps units maximize the fire power of both the Bradley fighting vehicle and the weapons systems that the dismounted Infantry brings to the fight. Battlefield success and survival of BFV Infantry platoons and squads depend on how quickly and effectively they fire on the enemy. Units must control these fires so that the fires are distributed over the entire target and massed as required.

SECTION I –TEXT REFERENCES

7-1. Much of patrol planning and execution is common among all Infantry units. Refer to the referenced sections of FM 3-21.8 or other referenced publications for details on these subjects.

7-2. Table 7-1 consolidates the references to additional information.

Table 7-1. Guide for subjects referenced in text

Subject	*References*
Employing Direct Fires	FM 3-21.8
Fire Control Measures	FM 3-21.8 FM 3-21.75
Range Cards	FM 3-21.75 DA Form 5517-R

SECTION II – EMPLOYMENT CONSIDERATIONS

7-3. The mechanized Infantry leader must effectively plan to focus, distribute, and shift the overwhelming mass of his direct fire capability at critical locations and times to succeed on the battlefield. Effective and efficient fire control means that the platoon acquires the enemy and masses the effects of direct fires to achieve decisive results in the close fight. This section discusses the principles for

employment, the fundamental requirements needed to integrate indirect and direct fires, the complementary and reinforcing effects of fires, and the use of surprise.

PRINCIPLES

7-4. When planning and executing fires, Infantry leaders must know how to apply fundamental principles. These principles enable the platoon and squad to destroy the enemy while protecting itself and expending the least amount of ammunition. These principles are not intended to restrict the actions of subordinates. They are intended to help the platoon accomplish its primary goal in any engagement (acquire first, shoot first, and hit first) while giving subordinates the freedom to act quickly in the face of the enemy. (See FM 3-21.8 for details on employing direct fires.) The principles of fire control are as follows:

- Command and control. Command and control enables the platoon and squad to kill quickly or suppress the enemy with directed fire. It must be planned, and the unit must be trained to respond quickly to commands. C2 includes battle drills and procedures in TACSOP that have been practiced and are understood by everyone in the unit. Unit C2 measures for direct fires must be provided to any attached unit.
- Mass the effects of fire. Massed, aimed fire over the entire target reinforces surprise. It prevents the enemy from returning aimed fire and thus protects the force. Massing involves focusing fires at critical points, distributing the effects, and shifting to new critical points as they appear.
- Destroy the greatest threat first. The platoon and squad engage targets in direct relation to the danger they present. Enemy automatic and antiarmor weapons should be engaged first along with leaders. If two or more targets of equal threat present themselves, the unit should engage the closest target first.
- Avoid target overkill. Leaders avoid target overkill by—
  - Engaging a target with a single weapon at a time.
  - Establishing priorities of fire for selected weapons or selecting the best weapon for the target.
  - Designating rates of fire.
  - Directly controlling weapon fire.
  - Using control measures.
- Employ the best weapon for the target. Leaders plan and execute fires throughout the depth of the AO, engaging enemy targets early and continuously in accordance with individual weapon capabilities and standoff. Enemy target type, range, and exposure are key factors in determining which friendly weapons and munitions to employ. Using the appropriate weapon against the enemy target increases the probability of its rapid destruction or suppression.
- Minimize friendly exposure. Infantry units minimize their exposure by constantly seeking available cover, attempting to engage the enemy

from the flank, remaining dispersed, firing from multiple positions, and limiting engagement exposure times.

- Prevent fratricide. Infantry leaders must know the locations of their units. They establish procedures and use available resources, such as the FBCB2, to identify the locations of subordinate and adjacent friendly positions. The mechanized Infantry leader does not, however, totally rely on systems to avoid fratricide; he must establish procedures for positive control and identification for all of his subordinates.
- Plan for limited visibility conditions. Dense fog, rain, heavy smoke, blowing sand, and the enemy's use of smoke can significantly reduce the leader's ability to control the platoon's direct fires. Mechanized Infantry units are equipped with thermal sights and night vision systems that enable them to engage the enemy during limited visibility at nearly the same ranges engaged during the day.
- Develop contingencies for diminished capabilities. The Infantry leader develops plans to account for the loss of equipment or Soldiers. Key weapons systems, such as the SAW, are manned if the primary user is wounded. Weapons are given alternate sectors of fire in case another weapon becomes inoperable.
- Shifting fires. As the engagement proceeds, leaders shift direct fires to refocus and redistribute the effects based on evolving friendly and enemy information. The platoon leader and his subordinate leaders apply the same techniques and considerations to focus and distribute fires, including fire control measures. A variety of situations dictate shifting of fires, including:
  - Appearance of an enemy force posing a greater threat than the one currently being engaged.
  - Extensive destruction of the enemy force being engaged, creating the possibility of target overkill.
  - Destruction of friendly elements that are engaging the enemy force.
  - Change in the ammunition status of friendly elements that are engaging the enemy force.
  - Maneuver of enemy or friendly forces resulting in terrain masking.
  - Increased fratricide risk as a maneuvering friendly element closes with the enemy force.

COORDINATION OF DIRECT AND INDIRECT FIRES

7-5. The mechanized platoon and squads must employ both direct and indirect fires if they expect to survive and accomplish their missions. As long as he has communications, the U.S. Soldier has the ability to bring massive firepower that can destroy any enemy.

7-6. Prior to making contact with the platoon or company, the enemy's combat power should be severely reduced. This is a result of the battalion, brigade, or higher headquarters detecting and directing artillery fires, air support, and close

combat attacks against it. When the lead elements of the enemy approach the mechanized platoon, the heaviest friendly supporting fires are shifted to the enemy's rear to disrupt the enemy's own fires and combat support, and destroy any reserves. The brigade, battalion, and company continue to support the platoon with artillery, heavy mortars, and mobile ground system.

7-7. The enemy will devise methods to reduce the effects of U.S. combat power, to include—

- Using cover and concealment to remain undetected until U.S. units are close and heavily engaged. This prevents major elements of our firepower from participating in the close fight.
- Mingling with local civilians and conducting missions in population centers, thus jeopardizing our efforts to reduce collateral damage.
- Using raids and ambushes to hit our Soldiers and then rapidly displace.
- Using IEDs and vehicle-borne IEDs to injure our units.

COMPLEMENTARY AND REINFORCING EFFECTS

7-8. Mechanized platoon and squad leaders use organic and any available weapons to complement and reinforce each other. The impact of the combined weaponry on the enemy outweighs the individual effects of each separate weapons system. Leaders create—

- Complementary effects when they arrange elements with different characteristics together.
- Reinforcing effects when they combine the effect of similar capabilities. For example, a fire team leader reinforces the effects of his SAW with the fires of his rifleman.

7-9. Complementary and reinforcing effects cause a dilemma for the enemy. By using both direct and indirect fires, the mechanized leader forces the enemy to choose between two bad alternatives. To avoid the effects of direct fire, the enemy has to seek cover and return fire. To avoid indirect fires, the enemy has to keep moving. Therefore, once direct fires force the enemy to seek cover and return fire, he is fixed and can be destroyed by indirect high explosive fires.

USE OF SURPRISE

7-10. Bradley platoons and squads try to achieve surprise during the initial contact with the enemy. Well-aimed, distributed, massive direct fires from an unexpected location can destroy a much larger force or make it combat ineffective. During the attack, a base of fire located in an unexpected location can destroy or demoralize the enemy. Under the right circumstances, a unit in a well concealed defensive position may allow an enemy force to approach closely before initiating fires. When platoons and squads rapidly move to alternate positions, they can engage the enemy's flank and rear.

SECTION III – PLANNING CONSIDERATIONS

7-11. Platoon and squad leaders have to plan how to employ their units to destroy and defeat the enemy. They have to maneuver their unit to bring the maximum fires on the enemy. The platoon leader has to plan how to organize, sequence, and maneuver his units to best effect.

PLANNING AND EXECUTION

7-12. The commander plans direct fires in conjunction with development of his estimate of the situation and completion of the plan. Determining where and how the company team can and will mass fires is also an essential step as the commander develops his concept of the operation.

7-13. After identifying probable enemy locations, the commander determines points or areas where he will focus combat power. His visualization of where and how the enemy will attack or defend assists him in determining the volume of fires he must focus at particular points to have a decisive effect. In addition, if he intends to mass the fires of more than one subordinate element, the commander must establish the means for distributing fires effectively.

7-14. Based on where and how they want to focus and distribute fires, the commander and subordinate leaders establish the weapons ready postures for company team elements and triggers for initiating fires. The commander must evaluate the risk of fratricide and establish controls to prevent it; these measures include designation of recognition markings, weapons control status, and weapons safety posture.

7-15. Having determined where and how they will mass and distribute fires, the commander and subordinate leaders then must orient elements so they can rapidly and accurately acquire the enemy. They also can war-game the selected course of action or concept of the operation to determine probable requirements for refocusing and redistributing fires, and to establish other required controls. Also during mission preparation, the commander plans and conducts rehearsals of direct fires (and of the fire control process) based on his estimate of the situation.

7-16. The commander and his subordinate leaders must continue to apply planning procedures and considerations throughout execution. They must be able to adjust direct fires based on a continuously updated estimate of the situation, combining situational awareness with the latest available intelligence. When necessary, they must also apply effective direct fire TACSOPs.

TACTICAL STANDING OPERATING PROCEDURE

7-17. A well-rehearsed direct fire TACSOP ensures quick, predictable actions by all members of the company team. If the commander does not issue any other instructions, the company team begins the engagement using the TACSOP. The commander can subsequently use a fire command to refocus or redistribute fires.

7-18. The commander bases the various elements of the TACSOP on the capabilities of his force and on anticipated conditions. The commander adjusts the direct fire TACSOP when changes to anticipated and actual METT-TC factors are expected. Elements of the TACSOP are—

- Focusing fires.
- Distributing fires.
- Orienting forces.
- Preventing fratricide.

SECTION IV – CONTROL METHODS

7-19. To mass fires and kill the enemy with the least expenditure of ammunition, platoon and squad leaders must be able to distribute and control their unit's direct fires. The following paragraphs discuss the standard methods for controlling direct fires.

FIRE COMMANDS

7-20. Fire commands are oral orders issued by commanders and leaders to focus and distribute fires as required, achieving decisive effects against the enemy. They allow leaders to articulate their firing instructions rapidly and concisely using a standard format. Unit fire commands include the following:

- **Alert element** specifies the elements that are directed to fire.
- **Weapon or ammunition element** (optional) identifies the weapon and ammunition to be employed by the alerted elements.
- **Target description element** designates which enemy elements are to be engaged.
- **Orientation element** identifies the location of the target.
- **Range element** (optional) identifies the distance to the target.
- **Control element** (optional) may be used to direct desired target effects, distribution methods, or engagement techniques.
- **Execution element** specifies when fires will be initiated.

FIRE CONTROL MEASURES

7-21. Fire control includes all actions in planning, preparing, and applying fire on a target. The squad or team leader selects and designates targets. He also designates the midpoint and flanks or ends of a target, unless they are obvious. When firing, Soldiers should continue to fire until the target is neutralized or until signaled to do otherwise by their leader. The following paragraphs describe standard direct fire control measures. (See FM 3-21.75 and FM 3-21.8 for details on direct fire control measures.)

RULES OF ENGAGEMENT

7-22. Rules of engagement (ROE) identify when and under what circumstances lethal force is authorized. ROE are especially important during stability operations. (See Chapter 5 of this manual for details.)

TERRAIN-BASED

7-23. The platoon leader uses terrain-based fire control measures to focus and control fires by directing the unit to engage a specific point or area rather than an enemy element. Terrain-based fire control measures include:

- Target reference points.
- Engagement areas.
- Sectors of fire.
- Maximum engagement lines.
- Final protective lines.
- Principal direction of fires.
- Final protective fires.
- Restrictive fire lines.

THREAT-BASED

7-24. The platoon leader uses threat-based fire control measures to focus and control fires by directing the unit to engage a specific, templated enemy element rather than a point or area. Threat-based fire control measures may be difficult to employ against an asymmetric threat. Threat-based fire control measures include the following:

- Fire patterns are designed to distribute the fires of a unit simultaneously among multiple, similar targets. Platoons most often use fire patterns to distribute fires across an enemy formation. The basic fire patterns are—
  - Frontal fire.
  - Cross fire.
  - Depth fire.
- Weapons control status identifies the conditions, based on target identification criteria, under which friendly elements may engage. The three levels are—
  - Weapons hold: Engage only if engaged or ordered to engage.
  - Weapons tight: Only engage targets positively identified as enemy.
  - Weapons free: Engage any targets not positively identified as friendly.
- Engagement priorities identify the types of targets to engage in priority. These may be targets that offer the greatest payoff or those that are the greatest threat to the unit. Engagement priorities also may be weapon specific.
- Triggers.
- Weapons ready posture.

- Weapons safety status identifies the ability of an individual weapon to fire. Each status has a color code, which are—
  - Red**:** magazine in, round chambered, weapon on safe.
  - Amber: magazine in, no round chambered, weapon on safe.
  - Green: cleared, no magazine, bolt forward, weapon on safe.
- Range selection is based on the squad or team leader's estimate of the situation to specify the range and ammunition the unit needs to engage the enemy. Terrain, visibility, weather, and light conditions affect range selection, and the amount and type of ammunition.

SECTION V – RANGE CARDS AND SECTOR SKETCHES

7-25. Units use range cards to record firing data for individual or crew-served weapons. They use sector sketches to record a unit's positioning of its weapons and direct fire control measures.

RANGE CARDS

7-26. A range card (DA Form 5517-R) is a sketch of the assigned area for a direct fire weapons system on a given sector of fire. (See FM 3-21.75 for details regarding the development of a range card.) A range card aids in planning and controlling fires, and aids the crews and squad gunners in acquiring targets during limited visibility. Range cards show possible target areas and terrain features plotted in relation to a firing position. The process of walking and sketching the terrain to create a range card allows the individual Soldier or gunner to become more familiar with his AO. The Soldier should continually assess the area and, if necessary, update his range card. The range card is also an aid for replacement personnel or platoons or squads to move into the position and orient on their AO. The individual Soldier or BFV gunner should make the range card so that he becomes more familiar with the terrain in his AO. To prepare a range card, the individual Soldier or BFV gunner must know the following information:

- **Sectors of fire.** A sector of fire is a piece of the battlefield for which a gunner is responsible.
- **Target r eference p oints**. Leaders designate natural or man-made features as reference points. A Soldier uses these reference points for target acquisition and range determination.
- **Dead space**. Dead space is any area that cannot be observed or covered by direct fire systems within the sector of fire.
- **Maximum engagement line.** The maximum engagement line is the depth of the area and usually is limited to the maximum effective engagement range of the weapons systems.
- **Weapons refer ence p oint.** The weapons reference point is an easily recognizable terrain feature on the map that leaders use to assist them in plotting the vehicle, squad, or weapon position.

PREPARATION PROCEDURES

7-27. The Soldier or gunner prepares the range card according to FM 3-21.75. He prepares two copies of the range card. If the unit leader assigns the Soldier or gunner to alternate and supplementary firing positions, the Soldier or gunner must prepare two copies for these as well. The Soldier keeps one copy with the vehicle or weapons position, and gives the other copy to the section leader for his sketch.

7-28. Figure 7-1 provides an example range card for a BFV. It incorporates all of the standard components of a range card but with more detail for the maximum engagement line and data section.

Maximum Engagement Line

7-29. Although the maximum engagement line typically is limited to the maximum effective engagement range of the weapons systems, it can be less if there are objects that prevent the Soldier from engaging targets at maximum effective ranges of his assigned weapon. The BFV's range card includes three different weapons and their maximum engagement line: the 25-mm; the TOW; and the 7.62-mm coaxial machine gun.

Data Section

7-30. The gunner completes the position identification, date, weapon, and circle value in accordance with FM 3-21.75. The table information is as follows:

- **Number**. Start with L and R limits, then list TRPs and reference points in numerical order.
- **Direction and deflection**. The direction is in degrees and taken from a lensatic compass. The most accurate technique is to have the gunner aim at the terrain feature, and to have the driver dismount and align himself with the gun barrel and the terrain feature to measure the azimuth. To achieve correct deflection and elevation readings of the terrain feature, select TOW. Show the deflection reading taken from the BFV's azimuth indicator in the deflection block next to the magnetic azimuth.
- **Elevation**. Show the gun elevation reading in tens or hundreds of mils. The smallest increment of measure on the elevation scale is tens of mils. Any number other than "0" is preceded by a "plus" or "minus" symbol to show whether the gun needs to be elevated or depressed. Ammunition and range must be indexed to have an accurate elevation reading.
- **Range.** This is the distance, in meters, from vehicle position to L and R limits and TRPs and reference points.
- **Ammunition.** List types of ammunition used.
- **Description**. List the name of the object.
- **Remarks**. Enter the weapons reference point data. At a minimum, weapons reference point data include a description of what the weapons reference point is, a six-digit or eight-digit grid coordinate of the

weapons reference point, the magnetic azimuth, and the distance from the weapons reference point to the vehicle position.

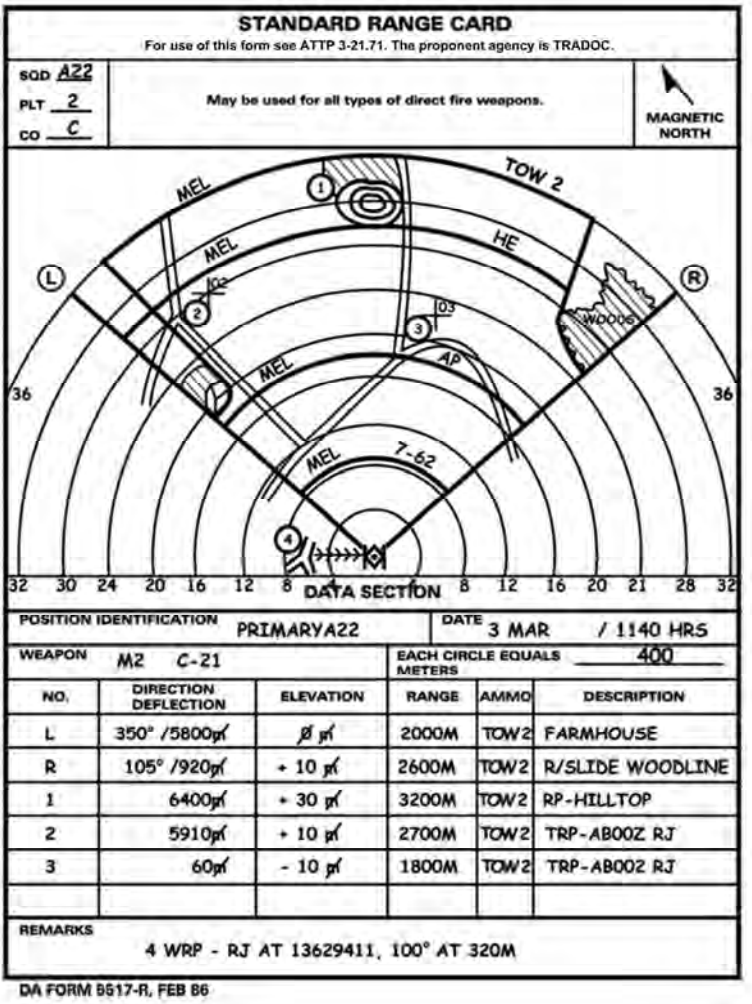

Figure 7-1. Example of a completed range card

SECTOR SKETCHES

7-31. Individual Soldiers in squads and BFV gunners prepare range cards. Squad and platoon leaders prepare sector sketches. Section leaders may have to prepare sector sketches if they are assigned separate positions. The platoon leader reviews his squad's sector sketches and if applicable, his section's sector sketches to ensure

the sketches are accurate and meet his requirements. If he finds any gaps or other flaws, the platoon leader adjusts weapons locations within the AO. Once the platoon leader approves the squad and section sector sketches, he prepares a consolidated report for the company team commander and incorporates this into a consolidated platoon sector sketch. The platoon leader or platoon sergeant physically prepares the platoon sector sketch. The sector sketch can be on acetate taped to a map or it can be a hand drawn sketch. Accurate and detailed sketches aid direct fire planning, and in direct fire control and distribution.

SQUAD SECTOR SKETCH

7-32. The squad leaders and section leaders make two copies of their sector sketches; one copy goes to the platoon leader and the other remains at the position. The squad leaders and section leaders draw sector sketches (Figure 7-2) as close to scale as possible, showing the following.

- Main terrain features in the AO and the range to each.
- Each primary position.
- Engagement area or primary and secondary sectors of fire covering each position.
- M240B machine gun final protective line or principle direction of fire.
- M249 SAW final protective lines or principle direction of fires.
- Type of weapon in each position.
- Reference points and TRPs in the AO.
- Observation post locations.
- Dead space.
- Obstacles.
- Maximum engagement lines for all BFV weapons systems.
- Maximum engagement lines for Javelin (if applicable) and AT4s.
- Indirect fire targets.

PLATOON SECTOR SKETCH

7-33. Squad leaders and section leaders prepare their sketches and submit them to the platoon leader. The platoon leader combines all sector sketches (and possibly separate range cards) to prepare a platoon sector sketch, includes a target list for direct and indirect fires. One copy is submitted to the company team commander, one copy is given to the platoon sergeant (controlling the mounted element), and one copy is given to the leader of the dismounted element (usually the platoon leader). At a minimum, the platoon sector sketch should show—

- Primary and secondary sectors of fire or EAs.
- Primary, alternate, and supplementary BFV and squad positions.
- Remount points.
- Javelin, M240B, and M249 positions with primary directions of fire.
- M240B and M249 final protective lines or principle direction of fires.
- Maximum engagement lines for 25-mm, M240C, and TOW.
- Observation posts.

- Target reference points.
- Mines and other obstacles.
- Indirect fire target locations and final protective fire location (if applicable).
- Position and area of flanking unit vehicles.
- Priority engagement by weapons system and crew.

Note. FBCB2 in M2A3-equipped units provides leaders a more accurate means for recording and sharing sector sketch and range card data. The platoon sector sketch information is forwarded to company and battalion using FBCB2 to plot the requisite no-fire areas and graphic fire control measures.

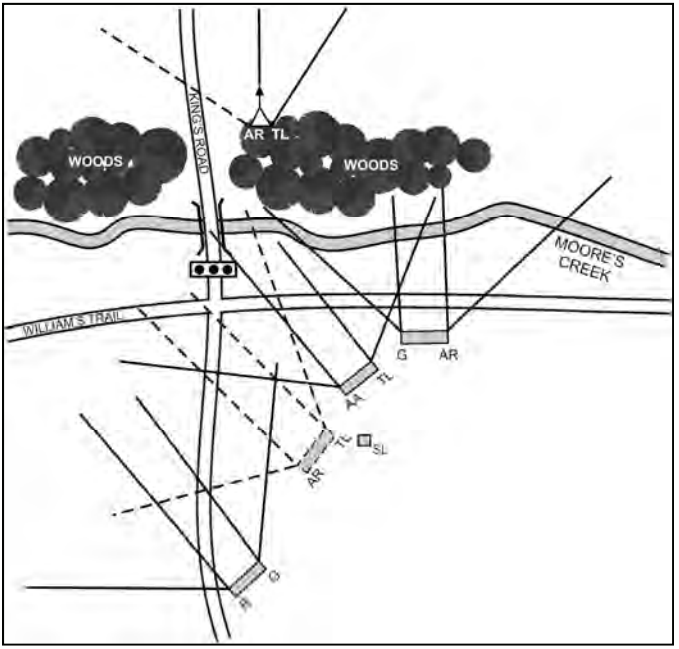

Figure 7-2. Squad sector sketch

COORDINATION WITH ADJACENT UNITS

7-34. Platoon leaders coordinate with adjacent platoons. Squad leaders coordinate with adjacent squads so that all positions and all platoons and squads are mutually supporting. The platoon leader must ensure that this coordination takes place. Coordination usually is initiated from left to right with gaps between positions covered by direct or indirect fire assets. Units establish contact points to ensure friendly forces meet at some specific point on the ground to tie in their flanks. In

many cases, the exchange of sector sketches accomplishes most of this. Typical information that is exchanged includes—

- Locations of primary, alternate, and supplementary positions; sectors of fire for BFVs, M240Bs, and Javelins.
- Location of dead space between platoons and how it is to be covered.
- Locations of observation posts.
- Locations and types of obstacles and how to cover them.
- Patrols (size, type, time of departure and return, and routes).

DETECT, IDENTIFY, DECIDE, ENGAGE, AND ASSESS PROCESS

7-35. Engagement is the process of detecting, identifying, engaging, and assessing (DIDEA) targets on the battlefield to ensure their rapid destruction. DIDEA provides an iterative, standardized, and systematic approach to target engagement activities across the surface-to-surface, surface-to-air, air-to-surface, and air-to-air mission areas. DIDEA applies across the user spectrum, from the individual infantryman, to direct fire surface platforms, to aviation platforms, to indirect fire controllers. The individual actions of the DIDEA process are summarized below.

- **Detect**–the acquisition and location of an object in the operational environment (OE).
- **Identify**–a systematic process by which units characterize detected objects as friend, enemy, or neutral.
- **Decide**–determining appropriate application of military options and weapons resources on identified objects.
- **Engage**–the specific application of military options and weapons resources.
- **Assess**–the process used to determine if the applied weapons resources brought about the desired effect. (For more information, refer to FM 3-20.21, *HBCT Gunnery*.)

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Chapter 8

Fires

The fires warfighting function comprises the related tasks and systems that provide collective and coordinated use of Army indirect fires, joint fires, and C2 warfare (including nonlethal fires) through the targeting process. Fire support (FS) assets include mortars, field artillery (FA), close air support, and naval surface fire support. Indirect fire support procedures do not change significantly with the mechanized Infantry platoon. Typically, fire support assets organic to the BCT, such as mortars and field artillery, provide the most responsive support.

SECTION I – TEXT REFERENCES

8-1. Some of the material on the employment of fires is common among all Infantry units. Refer to the referenced sections of FM 3-21.8 or other referenced publications for details on these subjects.

8-2. Table 8-1 consolidates the references to additional information.

Table 8-1. Guide for subjects referenced in text

Subject	***References***
Fire Support Coordination Measures	FM 3-21.8 FM 1-02
Fire Support Assets	FM 6-30 FM 3-21.8
Close Air Support	FM 3-21.8
Indirect Fire Support	FM 3-21.8 FM 6-30 Individual Task 061-283-6003
Fire Support Coordination Measures	FM 3-21.8 FM 1-02

SECTION II – FIRE SUPPORT TEAM

8-3. The mission of the fire support team is to provide fire support for the supported maneuver company team. The fire support officer (FSO) is in charge of the fire support team and is the principal fire support advisor to the company team commander. The fire support team has forward observers (FO) that are attached to BFV platoons. To accomplish the fire support mission, the fire support team is responsible for the following:

- **Fire support planning.** Fire support planning includes developing fire plans (target lists and overlays) and determining FO control options to ensure fire support is integrated into the company team commander's scheme of maneuver and can be executed in a timely manner.
- **Fire support coordination.** The fire support team maintains situational awareness and monitors requests for fire support within the company team to prevent fratricide as the result of friendly fire support. The fire support team advises the commander on fire support coordination measures in effect.
- **Target location and calls for indirect fire.** The FSO recommends to the commander the allocation of forward observers to platoons to locate, call for, and adjust fires onto the enemy.
- **Battlefield information reporting.** The FOs are a major source of battlefield information, which they report through their chain of command.
- **Emergency control of close air support and naval gunfire.** The fire support team controls close air support and naval gunfire when forward air controllers and naval gunfire support spotters are not available.

FIRE SUPPORT OFFICER

8-4. The company FSO works directly with the company team commander during combat operations to successfully accomplish all company level FS tasks. While the maneuver commander is responsible for integrating FS and maneuver, the FSO must understand the scheme of maneuver as well as the company team commander does. Based on the commander's guidance, the FSO devises his FS plan, which the commander must approve. FSO responsibilities are to—

- Plan, coordinate, and execute FS.
- Advise the company commander on FS matters, to include capabilities, limitations, and employment of all FS assets available to support his operation.
- Develop the company FS plan as an integral part of the company operation order or operation plan.
- Ensure that essential FS tasks are adequately addressed in maneuver company rehearsals.
- Make recommendations to integrate FS assets into the maneuver commander's battle plan.
- Keep key personnel informed of pertinent information (by spot reports and situation reports).
- Train the fire support team and FOs in applicable FS matters.
- Request, adjust, and direct all types of FS.
- Ensure the FS plan or execution matrix is prepared and disseminated to key personnel.
- Advise the company commander on positioning and use of company mortars.

- Recommend to the commander the allocation of FOs and other observers to maintain surveillance of target and named areas of interest.
- Integrate and employ combat observation and lasing teams or other assets, when allocated, into planned operations.
- Plan, direct, and manage the employment of observer platforms and laser equipment where they will support the commander's concept of operation best.
- Provide emergency control of close air support and naval gunfire in the absence of qualified personnel.

FORWARD OBSERVER

8-5. Usually, one FO is attached to each BFV platoon. The primary duty of the platoon FO is to locate identified targets, and call for and adjust indirect FS. Additional responsibilities are to—

- Refine or submit key targets for inclusion in the company fire plan.
- Prepare, maintain, and use situation maps.
- Establish and maintain communications with company FS team.
- Advise the platoon leader as to the capabilities and limitations of available indirect FS.
- Report battlefield intelligence.

SECTION III – FIRE SUPPORT PLANNING AND COORDINATION

8-6. Units conduct fire support planning concurrently with maneuver planning at all levels. A clearly defined maneuver purpose enables the maneuver commander to articulate precisely how he wants indirect fires to affect the enemy. This, in turn, allows FS planners to develop an effective plan to support the intended purpose. The company commander develops guidance for FS in terms of task and purpose. In turn, the FS planner determines the method for accomplishing each task. He also specifies an end state that quantifies task accomplishment.

8-7. A carefully developed method of fire is equally valuable during execution of the FS mission; it assists the firing elements as well as the observers responsible for monitoring the effects of the indirect fires. With a clear understanding of the intended effects, FS assets and observers can work together effectively, planning and adjusting fires as necessary to achieve desired effects on the enemy.

FIRE SUPPORT TASKS

8-8. The following paragraphs describe several types of targeting effects associated with fire support tasks.

FINAL PROTECTIVE FIRES

8-9. Final protective fires are designed to create a final barrier, or “steel curtain,” to prevent a dismounted enemy from penetrating defensive lines. They are fires of

last resort and take priority over all other fires. Final protective fire planning usually is delegated to the company that is allocated the support.

8-10. The employment of final protective fires presents several potential problems. They are linear fires, with coverage dependent on the firing sheaf of the FS asset(s). In addition, while final protective fires may create a barrier against penetration by enemy infantry, armored vehicles may simply button up and move through the fires into the friendly defensive position.

TARGET REFINEMENT

8-11. The platoon leader is responsible for planning the employment of indirect fires in his zone or AO. The most critical aspect of this responsibility is target refinement, in which the platoon leader makes changes to the FS plan to ensure targets accomplish the commander's intended battlefield purpose. The platoon leader must be ready to support the commander's intent by adjusting existing targets or nominating new targets that allow engagement of specific enemy forces.

FIRE SUPPORT PREPARATION

8-12. As noted, although the company and battalion commanders establish target tasks and purposes, and allocate appropriate FS assets, the platoon leader must ensure execution of assigned targets. Successful execution demands detailed preparation that focuses on the items discussed in the following paragraphs.

Observation Plan

8-13. When developing the observation plan, the platoon leader must ensure both a primary and an alternate observer for redundancy to cover all targets. The plan must provide clear, precise guidance for the observers. Positioning is perhaps the most important aspect of the plan.

8-14. Observers' positions must allow them to see the trigger for initiating fires, the target area, and the enemy forces on which the target is oriented. The platoon leader must consider other aspects of observer capabilities, including available equipment, communication, and security of the teams.

8-15. In addition to providing the specific guidance outlined in the observation plan, the platoon leader must ensure that each observer understands the target task and purpose. For example, observers must understand that once the first round impacts, the original target location is of no consequence. They must orient on the targeted enemy force to ensure that fires achieve the intended battlefield purpose.

Rehearsals

8-16. The platoon leader is responsible for involving his observers in platoon-level and company-level rehearsals. He also uses rehearsals to ensure that the platoon's primary and backup communications systems adequately support the plan.

Target Adjustment

8-17. In the defense, the commander confirms target location by adjusting fires as part of EA development.

TARGET LIST DEVELOPMENT

8-18. Digitization improves the company's and the platoon's abilities to conduct FS planning. The platoon leader and FO receive the company team's indirect fire plan through the FBCB2 as soon as the company FSO enters it into the database on his handheld terminal unit.

8-19. The platoon leader and platoon FO call up the operational graphics and the latest enemy situational graphics to aid their planning, enter the platoon's proposed targets into the handheld terminal unit, and forward them to the company FSO's handheld terminal unit. The company FSO reviews the proposed targets with the company team commander. The company team commander accepts, rejects, or adjusts the platoon leader's proposed targets.

8-20. If the company commander accepts or adjusts the targets, he incorporates them into the company fire plan. The company FSO uses his handheld terminal unit to forward them to the battalion FSO's fire control system as part of the company fire plan. The FSO is responsible for ensuring that only valid targets remain on the digital FS graphics.

8-21. Once the battalion and company finalize the targets, the company FSO puts out a net call over his commander's tactical display to inform the platoon leaders and platoon FOs that the FS graphics have been finalized. All leaders review the digital FS graphics on their commander's tactical display to become familiar with any changes and to ensure graphics are updated for subsequent fire missions.

PLOT-CR

8-22. PLOT-CR is a memory device that defines each target. For each target in his AO, the platoon leader and squad leaders should know the—

- **Purpose** of the target and how the target assists the maneuver element or contributes to the higher HQ's concept of operation.
- **Location** of the target.
- **Primary and alternate observer** with the appropriate communications to observe and adjust the mission.
- **Trigger** (event or time) that initiates the fires.
- **Communications** methods required for the observer and the supporting unit to communicate.
- **Resources** allocated and the desired effects.

FIRE SUPPORT COORDINATION MEASURES

8-23. The unit FS advisor recommends fire support coordination measures to the leader based on the leader's guidance, location of friendly forces, scheme of maneuver, and anticipated enemy actions. Once the leader establishes these measures, they are posted on all the unit's displays and entered into the database. Leaders use fire support coordination measures to facilitate both the engagement of targets and the protection of friendly forces. (See FM 1-02 and FM 3-21.8 for details.)

8-24. Boundaries are the most basic fire support coordination measures. Boundaries are both permissive and restrictive fire support coordination measures. The major categories of fire support coordination measures are—

- Permissive. Characteristics are a—
  - Coordinated fire line.
  - Fire support coordination line.
  - Free-fire area.
- Restrictive. Characteristics are a—
  - No-fire area.
  - Restrictive fire area.
  - Restrictive fire line.

SECTION IV – FIRE SUPPORT ASSETS

8-25. Mortars and field artillery are the main indirect fire support available to the platoon (Table 8-2). This section discusses the responsibilities, considerations, and procedures for employing all the indirect fire assets supporting the platoon. (See FM 6 30 and FM 3-21.8 for details.)

MORTAR SUPPORT

8-26. The battalion mortar platoon has 120-mm and 81-mm mortars. The battalion mortars provide immediate indirect FS. Using mortars, the platoon can quickly place a heavy volume of accurate, sustained fire on the enemy. Mortar rounds can strike targets that low-angle fires cannot reach. These include targets on reverse slopes, in narrow ravines or trenches, and in forests or towns. The platoon receives the predominance of indirect FS from mortars.

TYPES OF SUPPORT

8-27. Mortars provide the following types of effective support:

- Suppression and immediate suppression.
- Smoke.
- Illumination.

CAPABILITIES AND LIMITATIONS

8-28. The advantages of using the mortar platoon include its close working relationship with the platoons, and availability for low-density targets.

8-29. Capabilities of mortar fire include:

- Responds immediately.
- Uses high volume of fire.
- Covers dead space.
- Kills dismounted enemy.
- Forces enemy armor to button up.

Table 8-2. Indirect fire weapons capabilities

Caliber	***60-mm (M224)***	***81-mm (M252)***	***105-mm (M119)***	***120-mm (M121)***	***155-mm SP (M109A6)***
Location	IBCT, SBCT	CAB, SBCT	IBCT	CAB, SBCT	HBCT
Max Range (HE)(m)	3490 (Conventional) 1340 (Handheld)	5,608	14,000	7,200	24,000
Planning Range (m)	(2/3 max)	(2/3 max)	8500	(2/3 max)	14,600
Projectile	HE, Smoke (WP), Illumination, IR Illumination	HE, Smoke (WP & RP), Illumination, IR Illumination	HE, Smoke (WP), Illumination, Chemical, RAP	HE, Smoke (WP), Illumination, IR Illumination	HE, Smoke (WP), Illumination, Chemical, RAP, Excaliber, FASCAM
Max Rates of Fire	30 RPM for 4 min (M720/M888); 30 RPM for 1min, 18 RPM next 4 min (M49A4)	30 RPM for 2 min	6 RPM	16 RPM for 1 min	4 RPM
Sustain Rate of Fire	20 (M720/M888) 8 (M49A4)	15	3 RPM	4	1
Minimum Range (m)	70 (Conventional) 75 (Handheld)	83	Direct fire	200	Direct fire
Fuzes	PD, time, dly, MTSQ, MO	PD, VT, time, dly, MO		PD, VT, time, dly, MO	PD, VT, dly Concrete Piercing, MT, MTSQ

dly	delay	MTSQ	mechanical time super quick
Excaliber	precision guided/ extended range	PD	point detonating
FASCAM	family of scatterable mines	RAP	rocket-assisted projectile
IR	infrared	RP	red phosphorous
min	minute	RPM	rounds per minute
MO	multioption	Time	adjustable time delay
MT	mechanical time	VT	variable time

60-mm Mortar data found in FM 3-22.90 (Dec. 2007). 105-mm Howitzer data found in FM 6-50 (Dec. 1996)

8-30. Limitations of mortars are as follows:

- Mortars have a shorter range than field artillery.
- Mortars are vulnerable to radar detection because of its high-angle fire.
- Fewer types of ammunition are available.
- Mortar elements can carry only limited amounts of ammunition.

FIELD ARTILLERY SUPPORT

8-31. The mechanized platoon must know how to use artillery support to its best advantage. Artillery often offers the best way to impede and disrupt threat formations and suppress threat positions. It can provide immediate, responsive, and accurate fires with a wide variety of munitions. An artillery task force in direct support of a committed maneuver brigade provides field artillery support. The reconnaissance platoon might receive field artillery priority of fire.

CAPABILITIES AND LIMITATIONS

8-32. In support of the platoon, field artillery elements can—

- Provide fires in all weather conditions and types of terrain.
- Shift and mass fires rapidly.
- Support the operations in depth with long-range fires.
- Provide a variety of conventional shell and fuze combinations.
- Provide continuous fires by careful positioning and timely displacement.

8-33. Limitations of field artillery support are its limited capability against moving targets and its vulnerability to detection due to its firing signature.

MUNITIONS

8-34. Field artillery employs a wide variety of munitions that the platoon can tailor to engage different types of targets. These include the following:

- **High explosive** is best against personnel, field fortifications, and light armored vehicles.
- **Smoke** is best for obscuring and screening friendly Soldiers.
- **Illumination** includes both white light and IR illumination. Ideally, these illuminate the enemy, not friendly forces.
- **White phosphorus** effectively obscures friendly Soldiers or actions, marks locations, and burns obstacles and equipment.
- **Cannon-launched guided projectiles**, such as Excalibur, work best against moving or point targets, but require a laser designation system.
- **Improved conventional munitions** are best against personnel targets.
- **Dual-purpose** improved conventional munitions are best against personnel and light armored vehicles in the open.
- **Scatterable mines** include area denial munitions for use against personnel and remote antiarmor mines for use against armored vehicles. A field artillery battery cannot mix other fire missions with scatterable

mine missions. Scatterable mines require more lead time than other field artillery-delivered munitions.

Note. The commander or leader must consider the danger to friendly troops in areas where friendly forces fire antipersonnel munitions. The potential dud rate of improved conventional munitions makes maneuver in their impact area hazardous.

CLOSE AIR SUPPORT AND NAVAL SURFACE FIRES

8-35. All services can provide close air support to the battalion. Close air support missions are flown against hostile targets near friendly forces. The forward air controller is the battalion commander's expert in planning, requesting, and executing close air support missions. The forward air controller serves as a link between the maneuver element and the attacking aircraft. A joint terminal air controller also may be attached to the platoon to facilitate communications. (See FM 3-21.8 for details.)

8-36. Naval surface FS can provide large volumes of immediate fires close to coastal waters. Normally, naval fires are controlled by a naval surface fire support liaison officer attached to the fires coordination cell for a specific operation.

SECTION V – INDIRECT FIRE SUPPORT

8-37. The battalion fire support execution matrix may require the platoon to call for and adjust its own indirect FS. The matrix also may designate platoon targets. The platoon uses these preplanned artillery targets to call for and adjust indirect fire. (See FM 6-30, FM 3-21.8, and Individual Task 061-283-6003 for details.)

CALL FOR FIRE

8-38. Mechanized units can conduct calls for fire by voice FM radio, with the observer initiating fires and making corrections by transmitting to the fire direction center or fire support team. They also can conduct calls for fire digitally, with the FO entering data and corrections. Both methods require the same information.

VOICE FM CALLS FOR FIRE

8-39. Using FM radios for calls for fire is the traditional method. It requires the fire direction center to transcribe data into the mortar fire control system or the advanced field artillery tactical data system, resulting in a slower response and possible transcription errors.

8-40. Either a Soldier or an FO can prepare and request a call for fire. However, to receive immediate indirect FS, the observer must plan targets and follow call for fire procedures. If available, he should use a GPS and laser range finder.

Required Elements

8-41. The main required elements of an FM voice call for fire include observer identification and WARNO, target location, and target description. (See FM 3-21.8 for details.)

DIGITAL CALLS FOR FIRE

8-42. Digital calls for and adjustments to fires are more accurate and faster because fewer steps are in the process. The data that the FO enters into the system is reviewed, approved, and sent to the firing unit without being transcribed. The steps and the elements needed for a mission are the same in both FM voice and digital systems.

ADJUST FIRE

8-43. Once he calls for fire, the observer adjusts the fire onto the target. If he has accurately located the target, he requests fire for effect. If the observer cannot locate the target because of deceptive terrain, lack of identifiable terrain features, poor visibility, or an inaccurate map, he adjusts the impact point of the rounds.

8-44. One artillery piece or mortar adjusts fire. The observer chooses an adjusting point. For a point target, such as suppression or destruction mission (precision fire), the target is the adjusting point. For an area target (area fire), the observer picks a well-defined adjusting point close to the center. The observer spots the first and each successive adjusting round. He then sends range and deviation corrections back to the fire direction center until the rounds are within 50 meters or the rounds hit the target. The observer spots by relating the round's point of impact to the adjusting point.

Chapter 9

Sustainment

In any military unit, sustainment operations maintain the force during continuous combat operations. The Bradley fighting vehicle platoon can deploy in either the mounted or dismounted roles. In the BFV-equipped Infantry platoon, the platoon leader is responsible for sustainment; the platoon sergeant is the platoon's main sustainment operator. The platoon sergeant works closely with the company team executive officer and first sergeant to ensure the platoon receives the required support for its assigned mission. Sustainment responsibilities and procedures in the platoon remain basically the same. The company normally forecasts supplies and "pushes" rather than "pulls" them to the platoon.

SECTION I – TEXT REFERENCES

9-1. Much of the sustainment planning and execution are common among all Infantry units. Refer to the referenced sections of FM 3-21.8 or other referenced publications for details on these subjects.

9-2. Table 9-1 consolidates the references to additional information.

Table 9-1. Guide for subjects referenced in text

Subject	***References***
Sustainment Planning	FM 3-21.8
Individual Responsibilities	FM 3-21.8
Classes of Supply	FM 3-21.8
Resupply Operations	FM 3-21.8
Soldier's Load	FM 21-18
Force Health Protection	FM 4-02.17
Combat and Operational Stress Control	FM 4-02.51 FM 6-22.5
Casualty Evacuation Procedures	FM 3-21.8
Detained Persons	FM 3-21.8

SECTION II – PLANNING AND RESPONSIBILITIES

9-3. Planning sustainment operations is primarily a company-level and battalion-level operation. While the company team commander and executive officer plan the

operation, the platoon leader is responsible for his platoon's execution of the plan at platoon level. (See FM 3-21.8 for details on sustainment planning.)

9-4. The following characterize sustainment at the Infantry platoon level:

- Responsiveness.
- Economy.
- Flexibility.
- Integration.
- Survivability.

PLANNING CONSIDERATIONS

9-5. Planning considerations include the development of the sustainment plan and answers to operational questions regarding—

- Types of support.
- Quantities.
- Threat.
- Terrain and weather.
- Time and location.
- Requirements.
- Risk.
- Resupply techniques.

INDIVIDUAL RESPONSIBILITIES

9-6. Individual responsibilities within the mechanized platoon's sustainment chain are as follows. (See FM 3-21.8 for details.)

- **Platoon leader** has overall responsibility for his platoon's sustainment. He is specifically responsible for its planning.
- **Platoon sergea nt** is the platoon's main sustainment operator. He executes the platoon's logistics plan based on platoon and company TACSOP.
- **Combat medic** is attached from the battalion's medical platoon to the rifle platoon and provides emergency medical treatment for sick, injured, or wounded platoon personnel.
- **Combat lifesaver** is a nonmedical Soldier trained to provide advanced first aid and lifesaving procedures beyond the level of self aid or buddy aid.

SECTION III – SUPPLY OPERATIONS

9-7. Although the mechanized platoon and squads require greater sustainment support than their Infantry counterpart, the classes of supply and supply operations remain the same.

CLASSES OF SUPPLY

9-8. The platoon sergeant obtains supplies and delivers them to the platoon. The platoon leader establishes priorities for delivery; however, combat demands that Classes I, III, V, and IX supplies and equipment take priority because they are the most critical to successful operations. (See FM 3-21.8 for details.) The classes of supply are—

- **Class I.** Rations, water, and ice.
- **Class II.** Clothing, individual equipment, mission-oriented protective posture suits, tentage, tool sets, administrative and housekeeping supplies, and equipment.
- **Class III**. Petroleum, oils, and lubricants.
- **Class IV** . Construction and engineering materials, such as pickets, sandbags, and concertina wire.
- **Class V**. Ammunition and mines, including explosives.
- **Class VI** . Personal-demand items normally sold through the exchange system, which can include candy, soaps, cameras, and film.
- **Class VII**. Major end items, such as BFVs.
- **Class VI II**. Medical materiel, including medical peculiar repair parts, supplied through the battalion medical platoon.
- **Class IX** . Repair parts and documents required for equipment maintenance operations.
- **Class X**. Materials to support nonmilitary programs.
- **Miscellaneous**. Anything that does not fall into one of the existing classes of supply.

RESUPPLY OPERATIONS

9-9. Resupply operations fall into one of three classifications: routine, emergency, or pre-stock. The company and platoon TACSOP should specify cues and procedures for each method. The platoon rehearses resupply operations during platoon training exercises. The actual method selected for resupply in the field depends on the METT-TC variables.

ROUTINE

9-10. Routine resupply operations cover items in Classes I, III, V, and IX; mail; and other items requested by the platoon. When possible, the platoon should conduct routine resupply daily. Ideally, it does so during periods of limited visibility. BFVs and other large combat vehicles use large amounts of fuel, so the platoon must resupply Class III at every opportunity.

9-11. The logistics package (LOGPAC) technique offers a simple, efficient way to accomplish routine resupply operations. The key feature, a centrally organized resupply convoy, originates at the task force trains. The convoy carries all items needed to sustain the platoon for a specific period (usually 24 hours) or until the next scheduled LOGPAC. The task force TACSOP specifies the LOGPAC's exact composition and march order.

9-12. As directed by the commander or executive officer, the first sergeant establishes the company team resupply point. He uses the service station, tailgate, or the in-position methods, and briefs each LOGPAC driver on which method to use. When he has the resupply point ready, the personnel staff officer informs the commander. The company team commander then directs each platoon or element to conduct resupply based on the tactical situation.

Service Station Method

9-13. The service station method (Figure 9-1) allows vehicles with their squads to move individually, or in small groups, to a centrally located resupply point. Depending on the tactical situation, a vehicle, section, or platoon moves out of its position, conducts resupply operations, and moves back into position. This process continues until the entire platoon has received its supplies. When using this method, vehicles enter the resupply point following a one-way traffic flow. Only vehicles that require immediate maintenance stop at the maintenance holding area. Vehicles move through each supply location. The crews rotate individually to eat, pick up mail and sundries, and refill or exchange water cans. When all platoon vehicles and crews have completed resupply, they move to a holding area. There, time permitting, the platoon leader and the platoon sergeant conduct a precombat inspection.

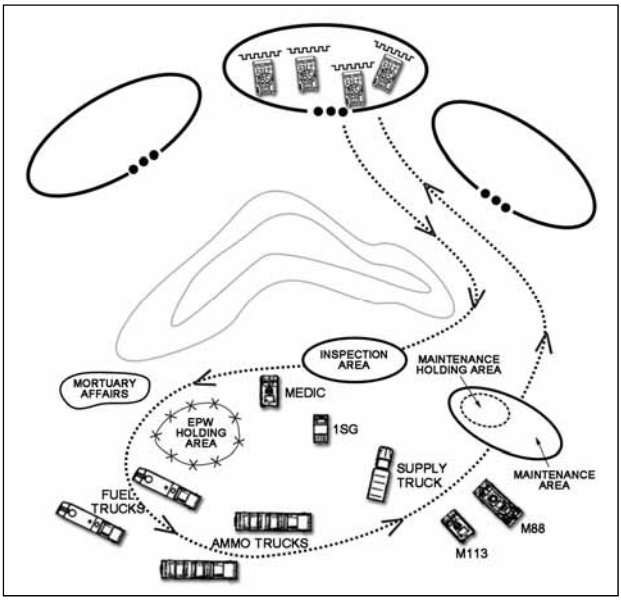

Figure 9-1. Service station method

Tailgate Method

9-14. In assembly areas, the first sergeant usually uses the tailgate method (Figure 9-2). Combat vehicles remain in their vehicle positions, or they back out a short distance to allow trucks carrying Classes III and V supplies to reach them.

Individual Soldiers rotate through the feeding area. While there, they pick up mail and sundries, and refill or exchange water cans. They centralize and guard any enemy prisoner of war. They take Soldiers killed in action and their personal effects to the holding area, where the personnel staff officer assumes responsibility for them.

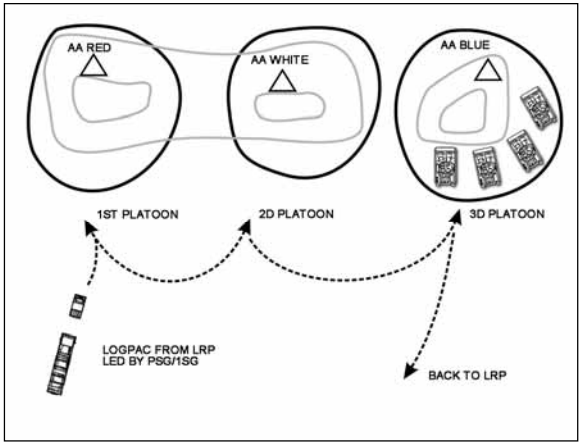

Figure 9-2. Tailgate method

In-Position Method

9-15. Occasionally, during operations when contact with the enemy is imminent, units might need to use the in-position resupply method to ensure adequate supplies are available. This method enables leaders to keep squad members in their fighting positions. It requires the company to bring forward supplies, equipment, or both to individual BFVs and fighting positions. The platoon normally provides a guide to ensure the supplies are distributed to the most critical position first. Use this method when an immediate need exists and to resupply single classes of supply.

EMERGENCY

9-16. Occasionally (usually during combat operations), the platoon might have such an urgent need for resupply that it cannot wait for a routine LOGPAC. Emergency resupply could involve CBRN supplies, equipment, Classes III, V, VIII, and water.

PRESTOCK

9-17. In defensive operations, or other times as appropriate, platoons usually need prestocked supplies, also known as pre-positioned or "cached" resupply. Normally, the platoon only pre-positions Classes IV and V items, but they also can pre-position Class III supplies. However, they must refuel platoon vehicles before they move into fighting positions, while first occupying the battle position, or while moving out of their fighting position to refuel.

9-18. All levels must carefully plan and execute prestock operations. All leaders, down to vehicle commanders and squad leaders must know the exact locations of prestock sites. During reconnaissance or rehearsals, they verify these locations. The platoon takes steps to ensure the survivability of the prestocked supplies. These measures include selecting covered and concealed positions, and digging in the prestock positions. The platoon leader must have a removal and destruction plan to prevent the enemy from capturing pre-positioned supplies.

9-19. During offensive operations, the platoon can pre-position supplies on trucks or BFVs well forward on the battlefield. This works well if the platoon expects to use a large volume of fire, with corresponding ammunition requirements, during a fast-moving operation.

AIR MOVEMENT

9-20. Air movement is an aviation mission that consists of moving personnel, equipment, material, and supplies by rotary wing and fixed-wing assets for use in operations other than air assault. Overland resupply might not work due to terrain or the existing enemy threat. The platoon must initiate a request for resupply and must push it through company to battalion. The platoon must prepare to receive the supplies at the specified time and location.

SECTION IV – LOAD CONSIDERATIONS

9-21. The combat, basic, and Soldier's load is a main concern of the leader. Leaders must learn to prepare for the most likely contingencies based on available information because they cannot be prepared for all possible operations.

COMBAT LOAD

9-22. The platoon's combat load varies by mission and includes the supplies physically carried into the fight. The company team commander directs some minimum requirements for the combat load. The unit TACSOP or the platoon leader specifies most items.

BASIC LOAD

9-23. The basic load includes supplies kept by the platoon for use in combat. The quantity of most basic load supply items depends on how many days in combat the platoon might have to sustain itself without resupply. For Class V ammunition, the higher commander or TACSOP specifies the platoon's basic load.

SOLDIER'S LOAD

9-24. The Soldier's load is of crucial concern to the leader. The amount carried, the distance carried, and the configuration in which it is carried are critical mission considerations that require emphasis and inspection. Mechanized Infantry Soldiers can reduce their load by carrying only mission essential equipment when they exit the BFV.

9-25. Research shows that a Soldier can carry 30 percent of his body weight and retain much of his agility, stamina, alertness, and mobility. For the average Soldier, who weighs 171 pounds, this means carrying 51 pounds. Success and survival in small unit operations demand that Soldiers retain these capabilities. When they cannot move with stealth, agility, and alertness, the unit is at risk.

9-26. For each pound over 30 percent of his body weight, the Soldier loses function. When his load exceeds 45 percent of his body weight (77 pounds for the average Soldier), his functional ability drops rapidly and his chances of becoming a casualty increase. Research also shows that training can only improve load carrying capability by 10 to 20 percent at best. With weight increases due to increased protective gear and new systems, the 30 and 45 percent goals are difficult to achieve. Often, Soldiers exceed the recommended weight due to the combination of protective gear, weapons, ammunition, and other items required for the mission.

9-27. Commanders must be aware of how excess weight increases risks and impacts the unit's effectiveness. With increased loads, Soldiers become fatigued more quickly, their speed is slowed, and their mobility is degraded. Leaders must decide what equipment is necessary for the Soldiers to carry, making every effort to reduce the load of their Soldiers whenever possible. During operations, leaders must monitor their Soldiers to ensure that their loads do not adversely affect their performance. (See FM 21-18 for details.)

SECTION V – MAINTENANCE

9-28. The maintenance of weapons and equipment is continuous. Every Soldier must know how to maintain his weapon, vehicle, and equipment in accordance with the applicable technical manual.

9-29. Maintenance includes inspecting, testing, servicing, repairing, requisitioning, recovering, and evacuating vehicles and equipment. Maintenance at the platoon and squad levels consists of thorough preventive maintenance checks and services, and accurate reporting of maintenance problems to the company.

MAINTENANCE REPAIR FLOW

9-30. Maintenance and the early identification of problems prevent equipment down time and the reduction of combat effectiveness. The results of good PMCS are properly completed equipment inspection and maintenance forms. These forms [DA Form 2404 (Equipment Inspection and Maintenance Worksheet) or DA Form 5988-E (Equipment Inspection and Maintenance Worksheet (EGA))] are the primary means through which platoons and squads obtain maintenance support or repair parts. The forms follow a pathway from the crew level to the brigade support area and back. Per unit TACSOP, the company executive officer or personnel staff officer supervises the flow of these critical maintenance documents and parts.

9-31. The flow of reporting and repairing equipment includes the following:

- The squad leaders or vehicle commanders collect the maintenance forms and send them via FBCB2, or give them to the platoon sergeant who consolidates the forms for the platoon.
- The platoon sergeant forwards an electronic version or gives a hard copy of the forms to the executive officer or personnel staff officer, who reviews and verifies problems and deficiencies and requests parts needed for maintenance and repairs.
- The electronic versions of the forms are consolidated at the company level and then transmitted to the battalion and it's supporting combat repair team.
- During the next LOGPAC operation, the completed hard copy forms are returned to the combat repair team to document completion of the repair.
- In the brigade support area, any required repair parts are packaged for delivery during the next scheduled resupply or through emergency resupply means.
- If the repair or installation of the part requires higher skills and equipment than those of the operator, a combat repair team dispatches to assess the repair and to install the part on site.
- The operator conducts initial maintenance, repair, and recovery actions on site. If it is determined that the crew cannot repair or recover the vehicle or equipment, the platoon contacts the executive officer or personnel staff officer. If additional assistance is needed, the combat repair team assesses the damaged or broken equipment and makes the repairs needed to return the piece of equipment to fully mission-capable or mission-capable status, if appropriate.

OPERATIONS

9-32. The unit TACSOP should detail when maintenance is performed, to what standards, and who inspects it. The squad leader is most often the one who inspects maintenance work, with the platoon sergeant and platoon leader conducting spot-checks. In addition to operator maintenance, selected Soldiers are trained to perform limited maintenance on damaged weapons, and battle damage assessment and repair.

9-33. Units fix inoperative equipment as far forward as possible. When a piece of equipment is damaged, it should be inspected to see if it can be repaired on the spot. If equipment cannot be repaired forward, it is evacuated immediately or returned with a LOGPAC. Even if the item cannot be evacuated at once, the maintenance system is alerted to the need for repair or replacement. If a replacement is available (from an evacuated Soldier or inoperative equipment), it is sent forward. If not, the leader must work around it by prioritizing the use of remaining equipment. For example, using a squad radio for the company FM command net if the platoon radio is broken.

SCHEDULED SERVICES

9-34. Units perform scheduled services on HBCT equipment to maintain equipment reliability. Equipment services are specified maintenance actions performed when required where equipment, components, and systems are routinely checked, adjusted, lubed, and so on, according to engineer specifications. Maintenance personnel use scheduled services to replace faulty items and avoid projected component failures based on analysis and engineering documentation.

TWO-LEVEL MAINTENANCE

9-35. The goal of the two-level maintenance system is to reduce repair cycle times by repairing or replacing components, modules, and assemblies as far forward as possible, maximizing reliance on rapid repair parts distribution and visibility. There are no fixed repair time guidelines for performing field or sustainment tasks. Faults that do not render a system non-mission capable will be deferred until augmentation arrives or the tempo or operational pace permits. To be most efficient and to generate combat power, the combat repair team often focuses on the replacement of parts and major assemblies, but, when appropriate, may perform on-system repairs of components. The majority of the maintenance support assets are located in the brigade support area to reduce the burden placed on maneuver elements. The critical maintenance nodes remain in the company's maintenance collection points. Each of these elements has a combat repair team. Combat repair teams assess and report maintenance requirements and repair non mission critical equipment with battle damage repair and parts/major assembly replacement. The combat repair teams carry a load of minimal parts to perform this function.

SECTION VI – ARMY HEALTH SYSTEM SUPPORT

9-36. Effective and timely medical care is an essential factor in sustaining the mechanized platoon's combat power during continuous operations. The platoon leader must ensure that his platoon leaders and medical personnel are aware of potential health threats. Platoon leaders and medical personnel also must implement field sanitation and preventive medicine measures to keep Soldiers healthy. Leaders must be prepared to care for wounded personnel and/or non-battle injuries through self aid, buddy aid, enhanced first aid, or emergency medical treatment, and also prepare casualties for evacuation. Army health system support provides for both the conservation of Soldier's health through force health protection and for treating wounded, sick or injured Soldiers through health service support.

FORCE HEALTH PROTECTION

9-37. Maintaining the health and fighting fitness of Soldiers is a vital responsibility of all leaders. The unit TACSOP should establish physical hygiene standards, sleep plans, safety procedures, and other measures to maintain the unit. Platoon and squad leaders ensure the health and fitness of their Soldiers by maintaining preventive medical measures, safety standards, and providing access to medical care. Small unit leaders are especially concerned about preventive health measures and stress control. (See FM 4-02.17 for details.)

COMBAT AND OPERATIONAL STRESS CONTROL

9-38. Many factors cause operational stressors, including potential and actual enemy actions, the natural environment, and conducting operations in a combat environment. Sound leadership works to keep these operational stressors within tolerable limits and prepares troops mentally and physically to endure them. Some of the most potent stressors are interpersonal in nature and can be due to conflict in the unit or at home. For behavioral health, and combat and operational stress control support, Soldiers should contact the supporting medical company through the medical support section. (See FM 4-02.51 and FM 6-22.5 for details.)

HEALTH SERVICE SUPPORT

9-39. A major function of the health service support is the care of the sick, wounded, or injured Soldiers. It encompasses the treatment and evacuation of casualties. It also covers the training of nonmedical personnel in combat life-saving in order to care for injured personnel until treatment by medical personnel is available.

CASUALTY PROCEDURES

9-40. When combat begins and casualties occur, the platoon must first provide care to those wounded in action. To do this, platoon members administer first aid through self aid and buddy aid. The CLS performs enhanced first aid, and the platoon combat medic performs emergency medical treatment.

9-41. Platoon sergeants and squad leaders arrange for evacuation of those wounded in action to the company casualty collection point. The company normally sets up the casualty collection point in a covered and concealed location to the rear of the platoons. At the company casualty collection point, the senior medic triages all casualties, provides emergency medical treatment, and coordinates the evacuation of patients requiring additional treatment to the battalion aid station. (See FM 3-21.8 for details.)

> ***Note.*** Before the platoon evacuates casualties to the casualty collection point or beyond, leaders should remove all key operational items and equipment from their persons. This includes signal operating instructions, maps, position-locating devices, and laser pointers. Every unit should establish a TACSOP for handling the weapons and ammunition of its wounded in action.

PREVENTIVE MEDICINE

9-42. Leaders reduce the health threat by emphasizing preventive measures. Platoon and squad leaders monitor and enforce hygiene and sanitation practices. Also, they are actively involved in counseling for treatment of stress, and combat and operational stress reactions.

SECTION VII – DETAINED PERSONS

9-43. Detained persons and captured equipment and materiel often provide excellent combat information and intelligence. This information is of tactical value only if the platoon processes, accurately documents, and evacuates detainees and materiel to the rear quickly. (See FM 3-21.8 for details.)

9-44. In any tactical situation, the platoon will have specific procedures and guidelines for handling detainees and captured material. Units employ the five "S" procedure: search, segregate, silence, speed, and safeguard. This reminds Soldiers of the basic principles for handling detained personnel, to include tagging personnel and all captured equipment and materiel.

9-45. In addition to initial processing, the capturing unit provides guards and transportation to move detainees to the designated collection points. The capturing unit normally carries detainees on vehicles already heading toward the rear, such as tactical vehicles returning from LOGPAC operations. The capturing element must also feed, provide medical treatment, and safeguard detainees until they reach the collection point.

9-46. Once the detained personnel arrive at the collection point, the platoon sergeant assumes responsibility for them. He provides for security and transports them to the company collection point. He uses available personnel as guards, to include the walking, wounded, or Soldiers moving to the rear for reassignment.

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Appendix A

Tank Considerations

The fundamental mission of the tank platoon is to close with and destroy the enemy. The platoon's ability to move, shoot, and communicate—and do so with armored protection—is a decisive factor on the modern battlefield. The tank platoon moves, attacks, defends, and performs other essential tasks to support the company team mission. To accomplish its assigned missions, the tank platoon employs firepower, maneuver, and shock effect, and synchronizes its capabilities with those of other maneuver elements and warfighting functions. When properly supported, the platoon can conduct sustained operations against any sophisticated threat.

The tank platoon can survive and win in battle only if it is well trained, effectively led, and highly motivated. Crews must be aggressive, and their tactics must reflect the tempo and intensity of maneuver warfare. Platoon training must prepare them to operate effectively in hostile territory with the enemy to their front, flanks, and rear.

CAPABILITIES

A-1. Tanks offer an impressive array of capabilities on the modern battlefield, to include excellent cross-country mobility, sophisticated communications, enhanced target acquisition, lethal firepower, and effective armor protection. In combination, these factors produce the shock effect that enables Armor units to close with and destroy the enemy in most weather and light conditions.

A-2. Today's tanks can move rapidly in a variety of terrain conditions, negotiating soft ground, trenches, small trees, and limited obstacles. In addition, GPS and inertial position navigation systems enable tanks to move to virtually any designated location with greater speed and accuracy than ever before. Use of visual signals and SINCGARS facilitates rapid and secure communication of orders and instructions. This capability enables tank crews to quickly mass the effects of their weapons systems while remaining dispersed to limit the effects of the enemy's weapons.

A-3. On-board optics and sighting systems enable tank crews to acquire and destroy enemy tanks, armored vehicles, and fortifications using the main gun. They also enable tank crews to use machine guns to suppress enemy positions, personnel, and lightly armored targets. The tank's armor protects crew members from small arms fire, most artillery, and some antiarmor systems.

A-4. Perhaps the most important technological advance available to the tank platoon is the digital information capability of its vehicles. Some tank crews now

employ the FBCB2 system to improve situational understanding, command, control and navigation. The enhanced capabilities provided by these digitized systems represent a distinct advantage for the platoon leader. They enable him to gain and maintain the initiative on the battlefield by synchronizing his elements with other units through the use of faster, more accurate tactical information.

LIMITATIONS

A-5. Tanks require extensive maintenance, proficient operators, and skilled mechanics, as well as daily resupply of large quantities of petroleum, oils, and lubricants products. They are vulnerable to the weapons effects of other tanks, attack helicopters, mines, ATGM, AT guns, and close attack aircraft. When tanks operate in built-up areas, dense woods, or other restricted terrain, reduced visibility leaves them vulnerable to dismounted infantry attacks. In such situations, they may be restricted to trails, roads, or streets. This severely limits maneuverability and observation. Existing or reinforcing obstacles also can restrict or stop tank movement.

CHARACTERISTICS

A-6. The following paragraphs briefly discuss four of the main characteristics of the tank.

DIRECT FIRES

A-7. One of the primary assets that tanks offer when working with Infantry is their ability to provide accurate, lethal direct fires from a mobile, survivable platform. The weapons systems on each tank offer unique capabilities and limitations that must be considered in relation to Infantry support.

TARGET ACQUISITION

A-8. The target acquisition capabilities of the tank exceed the capabilities of all systems in the Infantry battalion. The thermal sight provides a significant capability for observation and reconnaissance. It also can be used during the day to identify heat sources (personnel and vehicles), even through light vegetation. Infantry units can use the tank's laser range finder to enhance their capabilities to establish fire control measures, such as trigger lines and target reference points, and to determine exact locations on the battlefield.

MACHINE GUNS

A-9. The tank commander's .50-caliber machine gun is effective against both personnel and materiel. The 7.62-mm coaxial machine gun is an effective antipersonnel weapon. These machine guns provide a high volume of supporting fires for the Infantry.

MAIN GUN

A-10. The main gun is the best AT weapon on the battlefield. On board main gun ammunition storage is limited. However, the main gun is extremely accurate and

lethal at ranges up to 2,500 meters. Tanks with stabilized main guns can fire effectively even when moving at high speeds across country.

A-11. All current tanks fire sabot and high explosive antitank rounds. These have great penetrating power against armored vehicles. However, they may not have the destructive capability needed to destroy prepared fighting positions or penetrate walls in built-up areas. The M908 HE-OR-T (high explosive obstacle reduction tank round) has enough destructive power to destroy most prepared positions and to create large holes in walls. The canister is an antipersonnel round that is extremely effective for area suppression.

ROLE OF THE TANK PLATOON

A-12. The tank platoon operates in both the offense and the defense.

OFFENSE

A-13. The tank platoon is an integral part of company team maneuver. The platoon conducts tactical movement, actions on contact, consolidation, and reorganization in support of higher operations. It can destroy, fix, or bypass an enemy as required by the commander's intent, the tactical situation, and the rules of engagement.

DEFENSE

A-14. Tank platoons participate in the company team defense by performing one or more of the following operations:

- Defend a battle position.
- Displace.
- Counterattack.
- Perform reserve missions.

A-15. When defending a battle position, the platoon may be tasked to destroy, block, or canalize enemy forces; to retain terrain; or to displace to occupy subsequent BPs based on the commander's intent. In a counterattack or reserve mission, the tank platoon conducts tactical movement to occupy BPs or attack by fire positions. It executes hasty attacks, assaults, or other actions on contact based on the commander's intent for the counterattack.

SAFETY

A-16. Risk is the chance of injury or death for individuals, and damage to or loss of vehicles and equipment. Risks, and the potential for risks, are always present in every combat and training situation a platoon faces. Risk management must take place at all levels of the chain of command during each phase of every operation; it is an integral part of tactical planning. The platoon leader, his noncommissioned officers, and all other platoon Soldiers must know how to use risk management techniques. They couple these with fratricide avoidance measures to ensure that they execute the mission in the safest possible environment within mission constraints.

A-17. Tank crewmen often are unable to see Infantry Soldiers operating close to their vehicle. This limitation is worse during limited visibility and when the hatches

are closed. In these conditions, the crew focuses on the enemy or on potential enemy locations rather than on any nearby Infantrymen. It is the Infantry's responsibility to stay alert and to maintain a safe position in relation to the vehicle.

A-18. Infantry Soldiers operating near tanks are exposed to the effects of any fires the enemy directs against the vehicles. This is true whether the Infantry and vehicles are moving or are stationary. Proximity also severely degrades the Infantry's ability to avoid detection by the enemy. It therefore becomes the responsibility of Infantry leaders to maintain sufficient distance to avoid the effects of fires directed against the tanks, even when they are required to provide security or close support.

A-19. Tanks fire high-velocity, armor-piercing, discarding sabot rounds that pose hazards to Infantry. Dismounted Soldiers should be at 70 meters to the left or right of the line of fire and at least 1,000 meters to the front of a firing tank (Figure A-1). Any Infantry within this danger area must have adequate cover from the rear as defined in DA Pamphlet 385-63.

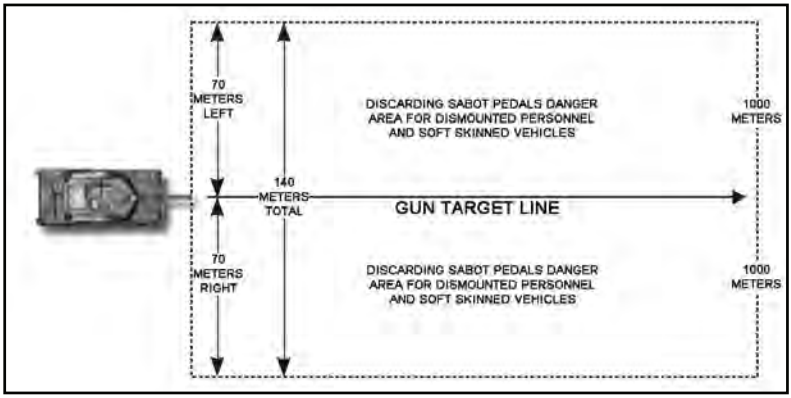

Figure A-1. Discarding Sabot danger area

A-20. The danger area for the discarding components of the M1028 canister round is similar to those of any kinetic energy sabot round as shown in Figure A-5.

A-21. The exhaust from an M1-series tank may reach more than 1,700-degrees. Dismounted Soldiers following behind the tank must position themselves either to the side of the exhaust grill or, if they are directly behind the vehicle, at a safe distance away. The use of an exhaust shield will overcome this problem. The shield is a critical element in tanks recovering other tanks, so they should be readily available in the tank platoons. Units should ensure fabrication of enough shields for all tanks because a leader will not know when he will be working with the Infantry.

Glossary

Section I - ACRONYMS

AA	assembly area
ALT GNR	alternate gunner
AO	area of operation
AT	antitank
ATGM	antitank guided missile
BCT	brigade combat team
BFV	Bradley fighting vehicle
BP	battle position
CAB	combined arms battalion
CBRN	chemical, biological, radiological and nuclear
C2	command and control
CLS	combat lifesaver
COA	course of action
CP	command post
dly	delay
DVR	driver
EA	engagement area
FASCAM	family of scatterable mines
FBCB2	Force XXI Battle Command Brigade and Below
FM	frequency modulation; field manual
FO	forward observer
FS	fire support
FSO	fire support officer

GRN	grenadier
GPS	global positioning system
HBCT	heavy brigade combat team
HE	high-explosive
HN	host nation
HQ	headquarters
IBCT	Infantry brigade combat team
IED	improvised explosive device
IR	infrared
LD	line of departure
LOGPAC	logistics package
MEDEVAC	medical evacuation
METT-TC	mission, enemy, terrain, troops and equipment, time available and civil considerations
MG	master gunner
min	minute
MO	multioption
MT	mechanical time
MTSQ	mechanical time super quick
OP	observation post
OPORD	operation order
PD	point detonating
PL	platoon leader
PLOT-CR	purpose, location, primary and alternate observer, trigger, communications, resources
PSG	platoon sergeant

RAP	rocket-assisted projectile
RLFM	rifleman
ROE	rules of engagement
RP	red phosphorous
RPM	rounds per minute
SAW	squad automatic weapon
SBCT	Stryker brigade combat team
SINCGARS	single-c subsystem channel ground and airborne radio
SL	squad leader
STP	Soldier training publication
TACSOP	tactical standing operating procedures
TLP	troop-leading procedures
TM LDR	team leader
TRP	target reference point
TOW	tube-launched, optically tracked, wire-guided
UAS	unmanned aircraft system
UO	urban operations
VT	variable time
WARNO	warning order
WP	white phosphorus

SECTION II - TERMS

advising
the use of influence to teach, coach, and advise while working by, with, and through an HN.

air movement
an aviation mission that consists of moving personnel, equipment, material, and supplies by rotary wing and fixed wing assets for the use in operations other than air assault.

ambush
an surprise attack from a concealed positions on a moving or temporarily halted target. Its main characteristics are surprise and short, violent action, usually with direct fire weapons and other lethal devices, such as claymore mines from a flank.

area reconnaissance
a form of reconnaissance operations that is a directed effort to obtain detailed information concerning the terrain or enemy activity within a prescribed area

Army Values
the principles, standards, and qualities considered essential for successful Army leaders. They are fundamental to helping Soldiers make the right decision in any situation.

augmentation
an arrangement in which the HN provides individuals or elements to combine with U.S. units, or U.S. individuals or elements combine with the HN.

battle position
a defensive location oriented on a likely enemy avenue of approach.

coil and herringbone
platoon-level formations employed when elements of the company team are stationary and must maintain 360-degree security.

combat lifesaver
a nonmedical Soldier trained to provide enhanced first aid/lifesaving procedures beyond the level of self-aid or buddy aid.

combat orders
orders that are the means by which the platoon leader receives and transmits information, from the earliest notification that an operation will occur through the final steps of execution.

command and control (C2)
the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of a mission.

company team
an organization that routinely includes a combination of two or more tank and mechanized Infantry platoons and may include other maneuver elements.

composite risk management
the Army's primary decisionmaking process for identifying hazards and controlling risks across the full spectrum of Army missions, functions, operations, and activities.

counterattack
an attack by part or all of a defending force against an enemy attacking force, with the general objective of denying the enemy his goal of attacking.

delay
a form of retrograde in which a force under pressure trades space for time by slowing the enemy's momentum and inflicting maximum damage on the enemy without becoming decisively engaged.

deliberate attack
an offensive action characterized by preplanned coordinated employment of firepower and maneuver to close with and destroy the enemy. It is a fully-coordinated operation that usually is reserved for situations in which the enemy defense cannot be overcome by a hasty attack

engagement area
the place where the platoon leader intends to destroy an enemy force using the massed fires of all available weapons.

escalation of force
the process friendly forces use to determine the proportionate force level(s) of response to use in reaction to a particular incident.

Force XXI Battle Command Brigade and Below
a network of computers, global positioning equipment, and communication systems that provides on-the-move, real time C2 information to units, Soldiers, and leaders.

fragmentary order
an order that provides timely changes of existing orders to subordinates, while providing notification to higher and adjacent commands.

fratricide
the employment of friendly weapons with the intent of killing the enemy or destroying his equipment, but that results in the unforeseen and unintentional death or injury of friendly personnel.

Javelin
a fire-and-forget, man-portable, medium antiarmor weapon consisting of a command launch unit and a round.

line of departure
a graphic control measure that is meant to coordinate the departure of attack elements.

lodgment area (base camp or forward operating base
a well-prepared position used as a base of operations and staging area for the occupying unit.

maintenance
inspecting, testing, servicing, repairing, requisitioning, recovering, and evacuating vehicles and equipment.

mission variables
those aspects of the operational environment that directly affect a mission.

modified wedge
a compression or flattening of the basic wedge.

movement technique
the fluctuating distances between vehicles, Soldiers, teams, and squads.

negotiation
a dialogue intended to resolve disputes, to find courses of action, to bargain for individual or collective advantage, and to craft outcomes to satisfy various interests.

operation order
a directive issued by a leader to his subordinates in order to affect the coordinated execution of a specific operation.

operational environment
a composite of the conditions, circumstances, and influences that affect the employment of the mechanized platoon and bear on tactical decisions.

patrol
a detachment sent out by a larger unit to conduct a specific mission.

perimeter defense
type of defenses that allows the defending force to orient in all directions.

PLOT-CR
a memory device that defines each target: namely, purpose, location, observer (primary and alternate), trigger, communications, resources.

raid
a surprise attack against a position or installation for a specific purpose other than seizing and holding the terrain. Its purpose is to destroy a position or installation, to destroy or capture enemy soldiers or equipment, or to free prisoners.

range card
a sketch of an area that a direct fire weapons system is assigned to cover.

reconnaissance
a mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the c, hydrographic, or geographic characteristics of a particular area.

relief in place
occurs when one unit replaces another unit during offensive or defensive operations in order to preserve the combat effectiveness of committed units.

retrograde
a type of defensive operation that involves organized movement away from the enemy. The enemy may force these operations, or a commander may decide to execute them voluntarily**.**

retrograde operations
organized movements away from the enemy. This includes delays, withdrawals, and retirements.

risk
the chance of injury or death for individuals, and damage to or loss of vehicles and equipment.

route clearance
a mobility operation that engineers usually conduct.

route reconnaissance
a directed effort to obtain detailed information of a specified route and all terrain from which the enemy could influence movement along that route

rules of engagement
directives that explain the circumstances and limitations under which U.S. Forces initiate and continue combat engagement with forces encountered.

search and attack
a type of movement to contact that employs multiple and coordinated small unit actions to find the enemy and then other units to fix and destroy him.

security in the defense
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.

shoulder-launched munitions
individual weapons effective against light armored vehicles, field fortifications, or other similar targets.

site exploitation
the action taken to ensure that documents, material, and personnel are identified, collected, protected, and evaluated to facilitate follow-on actions.

spoiling attack
attack that preempts or seriously impairs an enemy attack while the enemy is in the process of planning or preparing to attack.

stability operations
operations conducted outside the United States to maintain or reestablish a safe and secure environment, provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief.

tactical standing operating procedure
a set of instructions that standardized unit-level techniques and procedures without loss of effectiveness.

threats
nation-states, organizations, people, groups, conditions, or natural phenomena able to damage or destroy life, vital resources, or institutions.

warfighting function
a group of tasks and systems (people, organization, information, and processes) united by a common purpose that commanders use to accomplish missions and training objectives

warning order
a preliminary notice of an order or action that is to follow.

Warrior Ethos
the professional attitudes and beliefs that characterize the American Soldier. It echoes through the precepts of the Code of Conduct, and reflects a Soldier's selfless commitment to the Nation, mission, unit, and fellow Soldiers.

withdrawal
a planned operation that occurs when an element disengages from enemy contact to reposition itself for another mission.

zone reconnaissance
a form of reconnaissance that involves a directed effort to obtain detailed information on all routes, obstacles, terrain, and enemy forces within a zone defined by boundaries.

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FM 3-22.40, *Multi-Service Tactics, Techniques, and Procedures for the Tactical Employment of Nonlethal Weapons,* 24 October 2007.

FM 3-22.68, *Crew-Served Weapons*, 21 July 2006.

FM 3-22.90, *Mortars*, 07 December 2007.

TM 3-23.25 (FM 3-23.25), *Shoulder-Launched Munitions,* 15 September 2010.

FM 3-39.40, *Internment/Resettlement Operations*, 12 February 2010.

FM 3-90, *Tactics*, 4 July 2001.

FM 3-90.1, *Tank and Mechanized Infantry Company Team,* 9 December 2002.

FM 3-90.5, *The Combined Arms Battalion,* 7 April 2008.

FM 4-02.17, *Preventive Medicine Services*, 28 August 2000.

FM 4-02.51, *Combat and Operational Stress Control*, 6 July 2006.

FM 5-0, *The Operations Process*, 26 March 2010.

FM 5-19, *Composite Risk Management*, 21 August 2006.

FM 5-102, *Countermobility,* 14 March 1985.

FM 6-22.5, *Combat and Operational Stress Control Manual for Leaders and Soldiers,* 18 March 2009.

FM 6-30, *Tactics, Techniques, and Procedures for Observed Fire*, 16 July 1991.

FM 6-50, *Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery*, 23 December 1996.

FM 21-18, *Foot Marches*, 1 June 1990.

FM 21-60, *Visual Signals*, 30 September 1987.

FM 90-7, *Combined Arms Obstacle Integration*, 29 September 1994.

STP 21-1-SMCT, *Soldier's Manual of Common Tasks, Warrior Skills, Level 1*, 18 June 2009.

STP 21-24-SMCT, *Soldier's Manual of Common Tasks (SMCT), Warrior Leader Skills, Levels 2, 3, and 4,* 9 September 2008.

DOCUMENTS NEEDED

These documents must be available to the intended user of this publication.

ARMY REGULATIONS

AR 350-1, *Army Training and Leader Development*, 18 December 2009.

ARMY PAMPHLETS

DA PAM 385-63, *Range Safety,* 4 August 2009.

Department of the Army forms can be downloaded at the APD Website: http://www.apd/army.mil.

DA Form 2028, *Recommended Changes to Publications and Blank Forms.*

DA Form 2404, *Equipment Inspection and Maintenance Worksheet*.

DA Form 5517-R, *Standard Range Card (LRA).*

DA Form 5988-E, *Equipment Inspection and Maintenance Worksheet (EGA).*

INDIVIDUAL TASKS

Individual Task 061-283-6003, *Adjust Indirect Fire*.

READINGS RECOMMENDED

This source contains relevant supplemental information.

SH 21-76, *Ranger Handbook,* August 2010. (On the General Dennis J. Reimer Training and Doctrine Digital Library under Special Text.)

WEBSITES

Some of the documents and individual and collective tasks referred to in this publication may be accessed at one the following Army websites:

Army Knowledge Online, https://akocomm.us.army.mil/usapa/doctrine/index.html

StrykerNet, https://strykernet.army.mil

Digital Training Management System, https://dtms.army.mil/DTMS

Reimer Doctrine and Training Digital Library, http://www.train.army.mil

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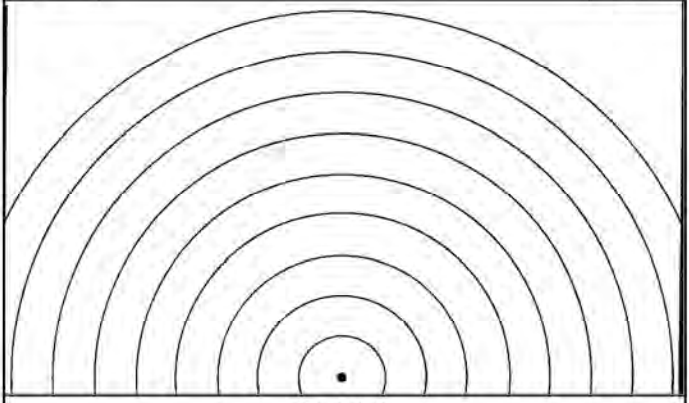
STANDARD RANGE CARD

For use of this form see ATTP 3-21.71; the proponent agency is TRADOC.

SQD: _____
PLT: _____
CO: _____

May be used for all types of direct fire weapons.

MAGNETIC NORTH



DATA SECTION

POSITION IDENTIFICATION			DATE		
WEAPON			EACH CIRCLE EQUALS _____ METERS		
NO	DIRECTION/ DEFLECTION	ELEVATION	RANGE	AMMO	DESCRIPTION

REMARKS:

DA FORM 5517-R, FEB 1986

ATTP 3-21.71
(FM3-21.71)
9 November 2010

By order of the Secretary of the Army:

GEORGE W. CASEY, JR.
General, United States Army
Chief of Staff

Official:

JOYCE E. MORROW
Administrative Assistant to the
Secretary of the Army
1029208

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